



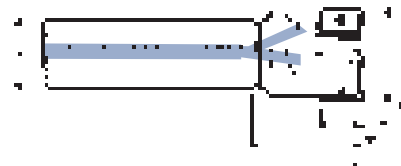
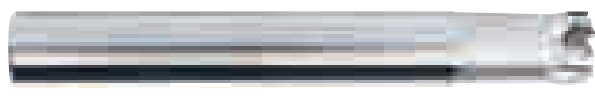
HIGH QUALITY TOOLS

CATALOGO 2023-2024

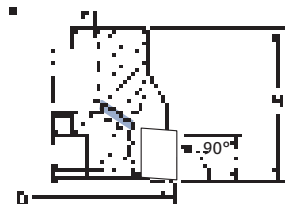
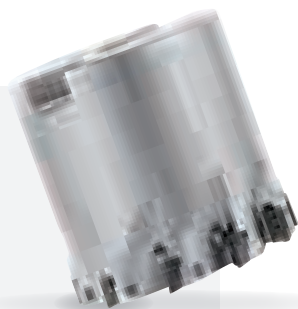


A technical drawing of a mechanical part, possibly a bracket or a housing, is shown in a light blue line-art style. The drawing includes various geometric features such as a circular hole with a crosshair, several rectangular slots, and a complex, irregular shape. The entire drawing is overlaid on a solid blue background.

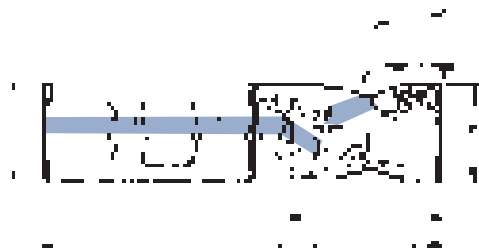
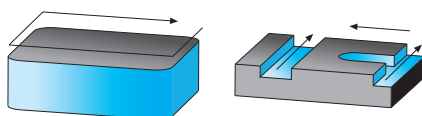
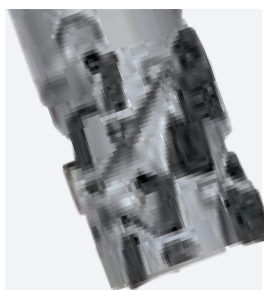
MILLING

ALTO AVANZAMENTO
HOCHVORSCHUB
HIGH FEED**741 C / W.N**

	D	d	L	L1	p	Z				KG		€
	(mm)											
741C W D10/2 N	10	10	80	28	5,2	2	APKT APMX 0602...	VT18	BT06	0,060	●	119,-
741C W D12/3 N	12	12	80	30	5,2	3				0,080	●	146,50
741C W D14/3 N	14	12	85	32	5,2	3				0,120	●	146,50
741W W D16/4 N	16	16	85	35	5,2	4				0,160	●	191,-
741W W D18/4 N	18	16	90	38	5,2	4				0,170	●	191,-
741W W D20/5 N	20	20	90	40	5,2	5				0,300	●	219,50
741W W D25/7 N	25	25	106	50	5,2	7				0,320	●	242,50
741W W D32/8 N	32	25	124	64	5,2	8				0,560	●	259,50

**741 M.N**

	D	d	H	p	z				KG		€	IT
	(mm)											
741M W D32/8 N	32	16	40	5,2	8	APKT APMX 0602...	VT18	BT06	0,250	●	269,50	
741M W D40/10 N	40	16	40	5,2	10				0,270	●	303,-	
741M W D50/11 N	50	22	40	5,2	11				0,430	●	326,50	

**941 W**

	D	dh6	L	L1	p	Fattore K	Z			KG		€
	(mm)											
941W W D16	16	16	80	19,8	5,2	2	8	APKT 0602...	VT18	BT06	0,160	● 436,50
941W W D20	20	20	90	24,6	5,2	3	15				0,300	● 657,-
941W W D25	25	25	100	29,4	5,2	5	30				0,320	● 822,50

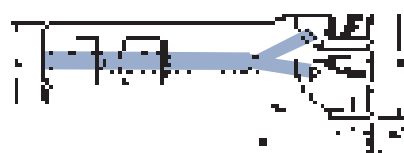
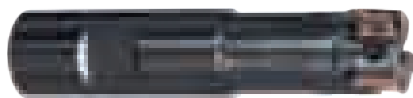
FRESE PER SPALLAMENTI _ECKFRÄSER_ SHOULDER MILLING CUTTERS



ART. 740 W



ART. 740 W ECO

740 W
740 W ECO

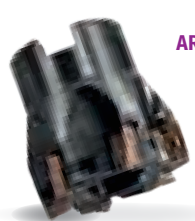
	D	d	L	L1	p	β	z				KG		STOCK	€
740W W D10/1	10	16	80	28	10	11,0°	1	APHT APHX APKT 1003...	VT25	BT08	0,100		●	88,50
740W W D11/1	11	16	80	28	10	11,0°	1				0,100		●	110,50
740W W D12/1	12	16	80	28	10	9,0°	1				0,120		●	88,50
740W W D13/1	13	16	80	28	10	8,5°	1				0,120		●	110,50
740W W D14/1	14	16	80	28	10	8,0°	1				0,120		●	110,50
740W W D15/2	15	16	85	28	10	4,0°	2				0,120		●	114,50
740W W D15,7/2	15,7	16	85	28	10	3,5°	2				0,120		●	114,50
740W W D16/2	16	16	85	37	10	3,5°	2				0,130		●	104,50
740W D16/2 ECO	16	16	85	37	10	3,5°	2				0,130	--	●	98,-
740W W D17/2	17	16	85	37	10	3,0°	2				0,130		●	117,-
740W W D18/2	18	20	90	40	10	2,5°	2				0,170		●	110,50
740W W D19,5/3	19,5	20	90	40	10	1,5°	3				0,180		●	151,50
740W W D19,7/3	19,7	20	90	40	10	1,5°	3				0,180		●	151,50
740W W D20/3	20	20	90	40	10	1,5°	3				0,200		●	139,50
740W D20/3 ECO	20	20	90	40	10	1,5°	3				0,200	--	●	128,50
740W W D22/3	22	25	95	49	10	1,5°	3				0,220		●	145,50
740W W D24,7/4	24,7	25	95	49	10	0,9°	4				0,320		●	204,50
740W W D25/3	25	25	105	49	10	0,9°	3				0,320		●	145,50
740W W D25/4	25	25	105	49	10	0,9°	4				0,340		●	163,50
740W D25/4 ECO	25	25	105	49	10	0,9°	4				0,340	--	●	146,-
740W W D28/4	28	25	105	49	10	0,9°	4				0,340		●	169,50
740W W D30/4	30	25	105	49	10	0,8°	4				0,340		●	180,50
740W W D31,7/5	31,7	25	110	54	10	0,6°	5				0,360		●	220,50
740W W D32/5	32	25	110	54	10	0,6°	5				0,380		●	198,50

Serie lunga - Lange Ausführung - Long models

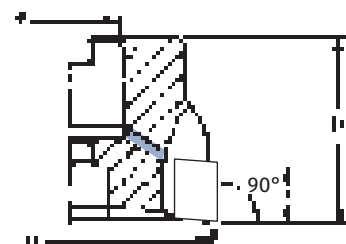
740W WL D10/1	10	16	150	50	10	11,0°	1	APHT APHX APKT 1003...	VT25	BT08	0,200		●	117,-
740W WL D12/1	12	16	150	50	10	9,0°	1				0,200		●	117,-
740W WL D16/2	16	16	150	100	10	3,5°	2				0,210		●	134,-
740W WL D18/2	18	16	150	50	10	2,5°	2				0,330		●	180,50
740W WL D20/3	20	20	150	100	10	1,5°	3				0,330		●	169,50
740W WL D25/4	25	20	150	100	10	0,9°	4				0,350		●	192,-
740W WL D32/5	32	25	150	55	10	0,6°	5				0,560		●	227,-



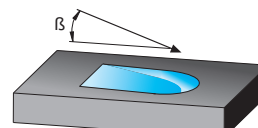
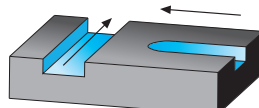
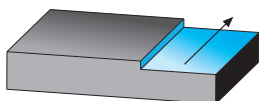
ART. 740 M

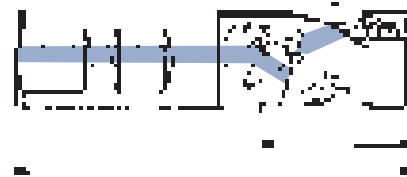


ART. 740 M ECO

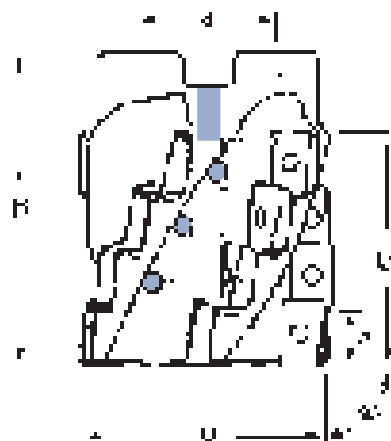
740 M
740 M ECO

	D	d	H	p	β	z				KG		STOCK	€
740M W D40/6	40	16	40	10	-	6	APHT APHX APKT 1003...	VT25	BT08	0,270		●	239,-
740M D40/6 ECO	40	16	40	10	-	6				0,270	--	●	189,-
740M W D50/7	50	22	40	10	-	7				0,430		●	274,-
740M D50/7 ECO	50	22	40	10	-	7				0,430	--	●	213,-
740M W D63/8	63	22	40	10	-	8				0,610		●	377,50
740M W D80/11	80	27	50	10	-	11				1,220		●	522,50
740M W D100/12	100	32	50	10	-	12				1,980		●	546,-

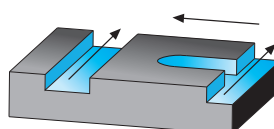
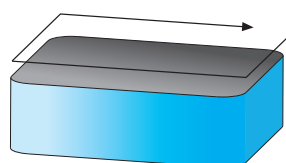


**900 W**

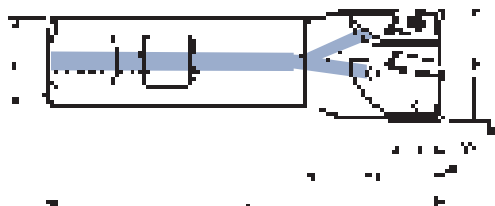
	D	d	L (mm)		p	Fattore K	z						
			L	L1									
900W W D20	20	20	87	28	10	1	4	APHT APHX APKT 1003...	VT25	BT08	0,200	●	376,50
900W W D25	25	25	105	37	10	2	8				0,360	●	437,-
900W W D32/2	32	32	115	46	10	2	10				0,600	●	562,-
900W W D32/3	32	32	115	46	10	3	15				0,600	●	677,-
900W W D40	40	32	130	55	10	3	18				0,780	●	775,50

**900 M**

	D	d	H (mm)		p	Fattore K	z						
			H	Lt									
900M W D40	40	16	50	37	10	3	12	APHT APHX APKT 1003...	VT25	BT08	0,250	●	680,-
900M W D50	50	22	60	46	10	3	15				0,510	●	826,50
900M W D63	63	27	60	46	10	4	20				0,940	●	987,-



FRESE PER SPALLAMENTI _ECKFRÄSER_ SHOULDER MILLING CUTTERS



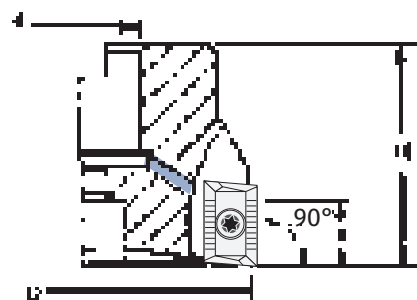
730 W	D	d	 (mm)		L	L1	p	β	z				 KG		STOCK	€
730W W D25/2	25	25	100	44	17	3,5°	2	APHT APHX APKT 1604...	VT40	BT15	0,380			141,50		
730W W D32/3	32	32	110	50	17	2,0°	3				0,640			153,50		
730W W D40/4	40	32	115	45	17	1,5°	4				0,760			194,-		
Serie lunga - Lange Ausführung - Long models																
730W WL D22/2	22	20	200	145	17	3,3°	2	APHT APHX APKT 1604...	VT40	BT15	0,440			230,-		
730W WL D25/2	25	25	200	140	17	3,5°	2				0,640			242,50		
730W WL D32/3	32	32	200	140	17	2,0°	3				1,120			282,-		
730W WL D40/4	40	32	200	60	17	1,5°	4				1,300			332,50		



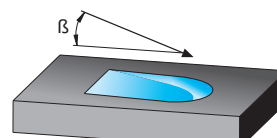
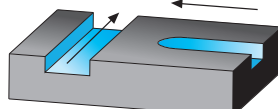
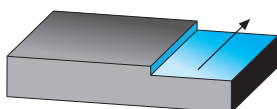
ART. 730 M

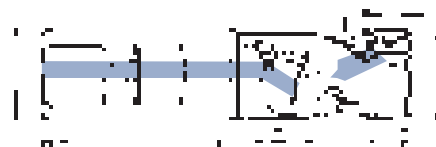


ART. 730 M ECO

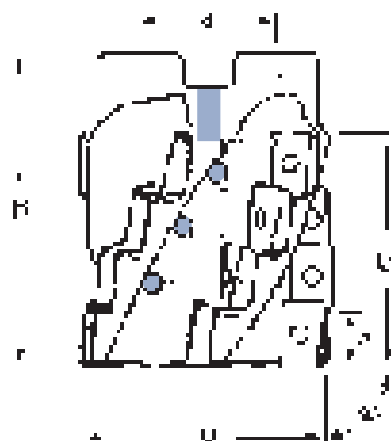
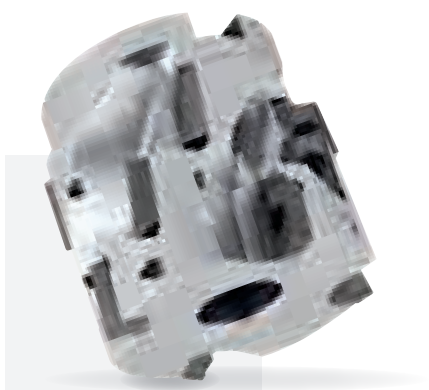


730 M 730 M ECO			↔ (mm)		p	β	z				KG		STOCK	€
	D	d	H	p										
730M W D40/4	40	16	40	17	1,8°	4	APHT APHX APKT 1604...	VT40	BT15		0,210	●	●	176,-
730M D40/4 ECO	40	16	40	17	1,8°	4					0,210	--	●	152,50
730M W D50/5	50	22	40	17	1,0°	5					0,290	●	●	194,-
730M D50/5 ECO	50	22	40	17	1,0°	5					0,290	--	●	176,50
730M W D63/6	63	22	40	17	0,7°	6					0,530	●	●	215,-
730M D63/6 ECO	63	22	40	17	0,7°	6					0,530	--	●	201,-
730M W D80/7	80	27	50	17	0,6°	7					1,180	●	●	279,-
730M W D100/8	100	32	50	17	0,4°	8					1,670	●	●	348,50
730M W D125/9	125	40	63	17	0,3°	9					3,110	●	●	407,-
730M D160/10	160	40	63	17	—	10					5,280	--	●	632,-
730M D200/12	200	60	63	17	—	12					10,200	--	●	954,-
730M D250/16	250	60	63	17	—	16					13,810	--	●	1466,50

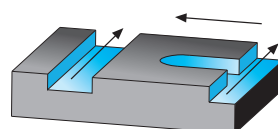
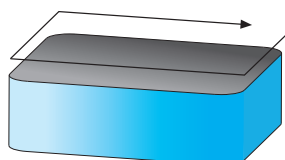




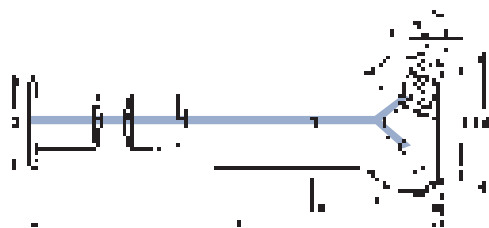
850 W	D	d	L (mm)		p	Fattore K	z				KG		€
850W W D25	25	25	105	29	17	1	2	APHT APHX APKT 1604...	VT40	BT15	0,320	●	388,-
850W W D32	32	32	115	44	17	2	6				0,520	●	520,50
850W W D40	40	32	130	58	17	2	8				0,760	●	604,50



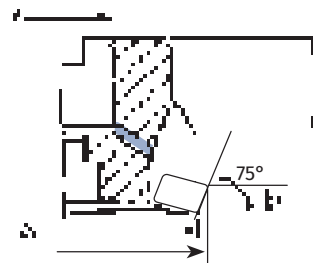
850 M	D	d	H (mm)		Lt	p	Fattore K	z			KG		€
850M W D50	50	27	56	30	16	3	6	APHT APHX APKT 1604...	VT40	BT15	0,460	●	495,-
850M W D63	63	27	60	44	16	4	12				0,820	●	604,50
850M W D80	80	32	60	44	16	5	15				1,380	●	808,-
850M W D100	100	40	60	44	16	6	18				1,730	●	1066,50



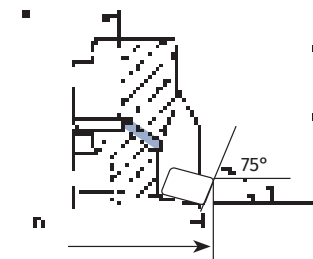
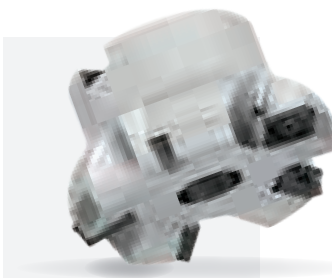
FRESE PER SPIANATURA 75° _ PLANFRÄSER 75° _ FACE MILLING CUTTERS 75°

**770 W**

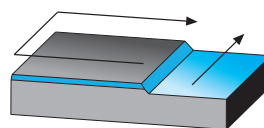
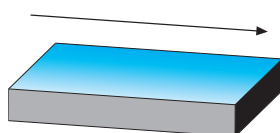
	D	De	d	L	L1	p	z				KG		STOCK	€
				(mm)										
770W W D25/2	25	28,6	20	95	25	4	2	APHT APHX APKT 1003	VT25	BT08	0,220		●	166,50
770W W D32/3	32	35,6	25	95	25	4	3	...			0,320		●	205,50
770W W D40/4	40	43,6	25	100	25	4	4	...			0,400		●	250,-

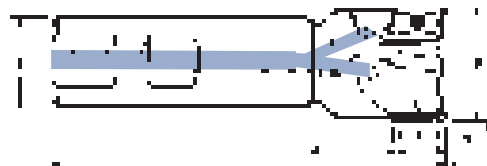
**770 M**

	D	De	d	H	p	z				KG		STOCK	€
				(mm)									
770M W D50/5	50	54	22	40	6,5	5	APHT APHX APKT 1003	VT25	BT08	0,360		●	256,-
770M W D63/6	63	67	22	40	6,5	6	...			0,600		●	288,50

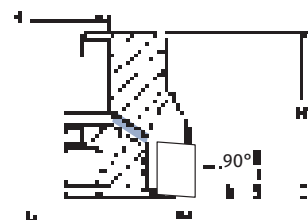
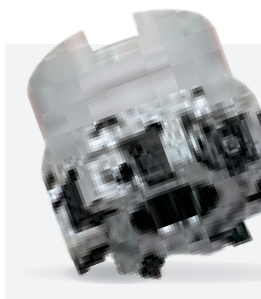
**760 M**

	D	De	d	H	p	z				KG		STOCK	€
				(mm)									
760M W D50/3	50	54	16	40	6,5	3	APHT APHX APKT 1604	VT40	BT15	0,310		●	199,50
760M W D63/4	63	67	22	40	6,5	4	...			0,540		●	238,-
760M W D80/5	80	84	27	50	6,5	5	...			1,150		●	276,-
760M W D100/6	100	104	32	50	6,5	6	...			1,800		●	314,50
760M W D125/7	125	129	40	63	6,5	7	...			3,140		●	377,50





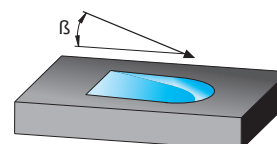
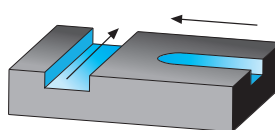
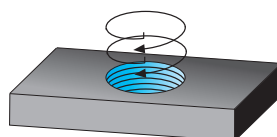
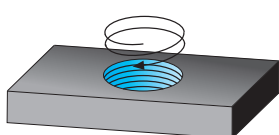
745 W	D	d	L (mm)		p	β	z				KG		€
745W W D20/3	20	20	100	30	9	4,0°	3	LNEX LNKX LNMX 1006...	VT30 745	BT09	0,220	●	162,50
745W W D25/3	25	25	115	35	9	3,5°	3				0,400	●	202,-
745W W D32/4	32	25	125	40	9	3,0°	4				0,520	●	227,-
745W WL D20/3	20	20	150	50	9	4,0°	3				0,340	●	188,50
745W WL D25/3	25	25	150	50	9	3,5°	3				0,520	●	226,-
745W WL D32/4	32	32	200	60	9	3,0°	4				1,160	●	254,-



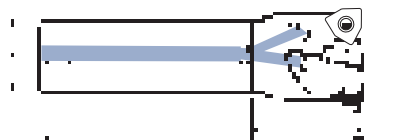
745 M	D	d	H	p	β	z				KG		€
745M W D40/5	40	16	40	9	2,0°	5	LNEX LNKX LNMX 1006...	VT30 745	BT09	0,260	●	266,50
745M W D50/7	50	22	40	9	1,5°	7				0,380	●	287,50
745M W D63/9	63	22	40	9	-	9				0,600	●	312,50



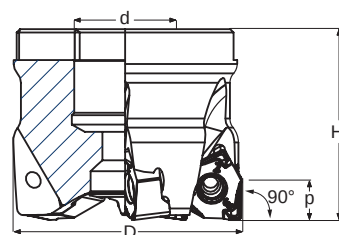
735 M	D	d	H	p	β	z				KG		€
735M W D50/5	50	22	40	14	2,0°	5	LNEX LNKX LNMX 1510...	VT40 735	BT15	0,320	●	266,50
735M W D63/6	63	22	40	14	2,0°	6				0,520	●	287,50
735M W D80/7	80	27	50	14	1,5°	7				1,120	●	312,50
735M W D100/8	100	32	50	14	-	8				1,830	●	394,-
735M W D125/10	125	40	63	14	-	10				3,520	●	627,50
735M W D160/11	160	40	63	14	-	11				5,280	●	811,-



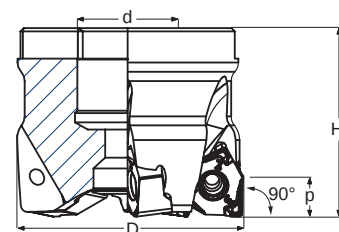
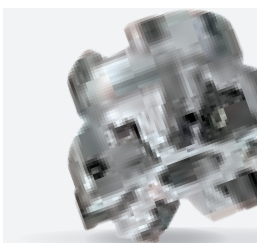
FRESE PER SPALLAMENTI _ECKFRÄSER_ SHOULDER MILLING CUTTERS

**830 W**

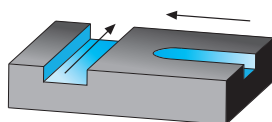
	D	d	L (mm)		p	z				KG		STOCK	€
			L	L1									
830W W D20/3	20	20	90	40	4	3	WNEU 0403 ...	VT25 830	BT08	0,350		●	172,-
830W W D25/4	25	25	100	44	4	4				0,600		●	209,-
830W W D32/5	32	32	110	50	4	5				1,150		●	232,50
830W WL D20/3	20	20	150	40	4	3				0,500		●	210,-
830W WL D25/4	25	25	170	50	4	4				0,750		●	252,-
830W WL D32/5	32	32	195	70	4	5				2,100		●	283,50

**830 M**

	D	d	H (mm)		p	z				KG		STOCK	€
830M W D32/6	32	16	40	4	6		WNEU 0403 ...	VT25 830	BT08	0,140		●	278,50
830M W D40/6	40	16	40	4	6					0,300		●	278,50
830M W D50/8	50	22	40	4	8					0,500		●	299,50
830M W D63/9	63	22	40	4	9					0,540		●	325,50
830M W D80/11	80	27	50	4	11					1,060		●	418,50

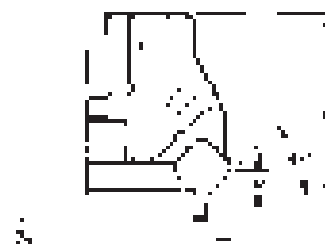
**835 M**

	D	d	H (mm)		p	z				KG		STOCK	€
835M W D40/4	40	16	40	7	4		WNEU WNMU WNEX 0806 ...	VT40 835	BT15	0,230		●	243,50
835M W D50/5	50	22	40	7	5					0,320		●	349,50
835M W D63/6	63	22	40	7	6					0,480		●	394,50
835M W D80/7	80	27	50	7	7					1,060		●	445,-
835M W D100/8	100	32	50	7	8					1,680		●	546,-
835M W D125/10	125	40	63	7	10					2,970		●	697,50
835M W D160/11	160	40	63	7	11					4,400		●	811,-
835M W D63F/7	63	22	40	7	7					0,480		●	497,-
835M W D80F/9	80	27	50	7	9					1,070		●	530,50
835M W D100F/10	100	32	50	7	10					1,650		●	662,50
835M W D125F/11	125	40	63	7	11					2,970		●	807,50
835M W D160F/12	160	40	63	7	12					4,350		●	1015,50



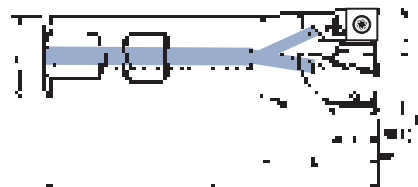
FRESE PER SPALLAMENTI _ECKFRÄSER_ SHOULDER MILLING CUTTERS

NEW

ALTO AVANZAMENTO
HOCHVORSCHUB
HIGH FEEDSULLA STESSA SEDE INSERTO POSSONO ESSERE MONTATE 2 TIPOLOGIE DI INSERTO.
AUF SELBEM PLATTENSITZ, KÖNNEN SIE 2 WENDEPLATTEN TYPLOGIE MONTIEREN.
ON THE SAME INSERT SEAT, IT COULD BE USED 2 INSERT TYPE.

845 M

	D	d	H	p	z				KG		€
845M W D40/4	40	16	40	7	4	XNEX WNEU WNMU WNEX 0806...	VT40 835	BT15	0,230	●	243,50
845M W D50/5	50	22	40	7	5				0,320	●	349,50
845M W D63/6	63	22	40	7	6				0,480	●	394,50
845M W D80/7	80	27	50	7	7				1,060	●	445,-
845M W D100/8	100	32	50	7	8				1,680	●	546,-

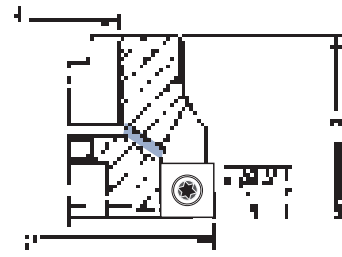
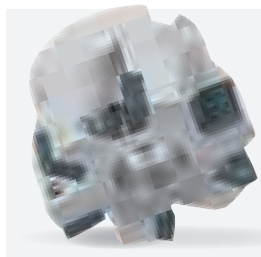


700 W

700 W													
	D	d	L	L1	p	z				KG		€	
700W W D10/1	10	16	80	24	6	1	SPGT SPMT 060304...	VT25	BT08	0,100			85,50
700W W D12/1	12	16	80	24	6	1				0,120			85,50
700W W D16/2	16	16	85	37	6	2				0,130			112,-
700W W D20/3	20	20	90	40	6	3				0,200			145,50
700W W D25/4	25	25	95	39	6	4				0,340			179,50
700W W D32/5	32	25	95	30	6	5				0,380			202,-

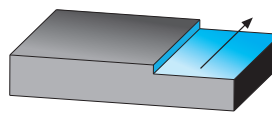
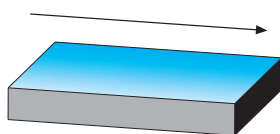
Serie lunga - Lange Ausführung - Long models

700W WL D16/2	16	16	150	101	6	2	SPGT SPMT 060304...	VT25	BT08	0,210	○	134,-
700W WL D20/3	20	20	150	101	6	3				0,330	○	179,50
700W WL D25/4	25	20	150	25	6	4				0,350	○	213,-
700W WL D32/5	32	25	150	30	6	5				0,560	○	236,-

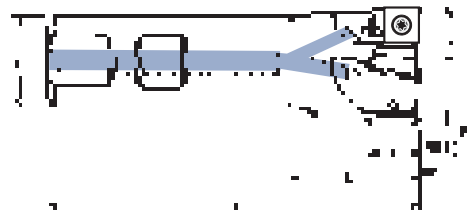


700 M

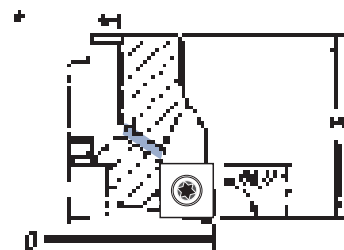
	D	d	H	p	z				KG		€
700M W D40/6	40	16	40	6	6	SPGT SPMT 060304...	VT25	BT08	0,270	○	237,-
700M W D50/7	50	22	40	6	7				0,430	○	265,50
700M W D63/8	63	22	40	6	8				0,610	○	366,-



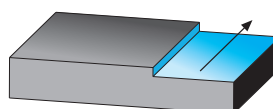
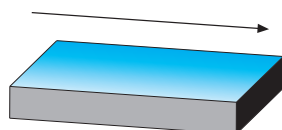
FRESE PER SPALLAMENTI _ECKFRÄSER_ SHOULDER MILLING CUTTERS

**705 W**

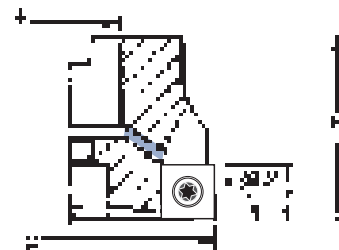
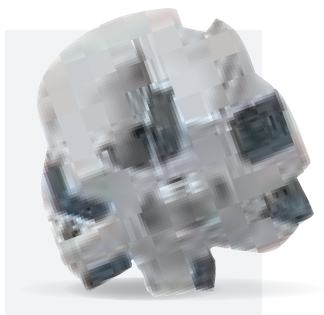
	D	d	L	L1	p	z				KG		STOCK	€
705W W D25/2	25	25	100	44	9	2	SPGT SPMT 09T308...	VT35S	BT15	0,380			146,50
705W W D32/3	32	32	110	50	9	3				0,640			175,-
705W W D40/4	40	32	115	45	9	4				0,760			224,50

**705 M**

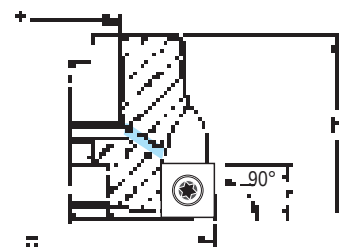
	D	d	H	p	z				KG		STOCK	€
705M W D40/4	40	16	40	9	4	SPGT SPMT 09T308...	VT35S	BT15	0,210			197,50
705M W D50/5	50	22	40	9	5				0,290			219,50
705M W D63/6	63	22	40	9	6				0,530			247,50
705M W D80/7	80	27	50	9	7				1,180			270,50
705M W D100/8	100	32	50	9	8				1,670			338,50



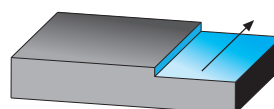
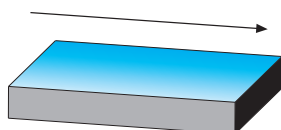
FRESE PER SPALLAMENTI _ECKFRÄSER_ SHOULDER MILLING CUTTERS



715 M	D	d	H	p	z						
715M W D50/5	50	22	40	12	5	SPGT SPMT 120408...	VT50	BT20	0,280	●	282,-
715M W D63/6	63	22	40	12	6				0,600	●	304,-
715M W D80/6	80	27	50	12	6				0,980	●	349,50
715M W D100/8	100	32	50	12	8				1,540	●	428,-
715M W D125/9	125	40	63	12	9				3,280	●	518,50

FRESE PER SPIANATURA - SPALLAMENTI 90°
PLANFRÄSER - ECKFRÄSER 90° _FACE - SHOULDER MILLING CUTTERS 90°

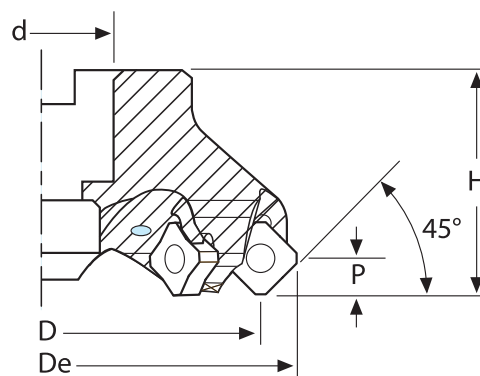
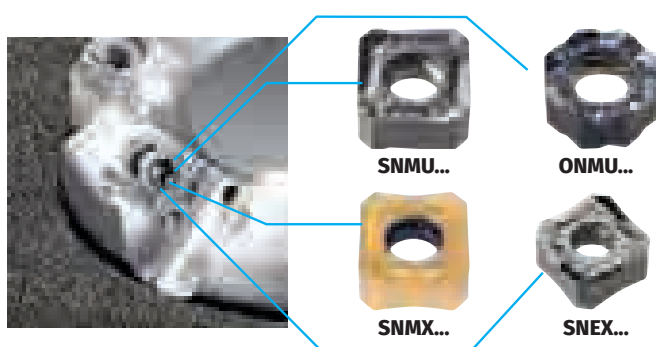
710 M	D	d	H	p	z						
710M W D40/4	40	16	45	10,5	4	SDMT 1205...	VT40 710	BT15	0,230	●	297,-
710M W D50/5	50	22	40	10,5	5				0,280	●	297,-
710M W D63/6	63	22	40	10,5	6				0,600	●	328,-
710M W D80/6	80	27	50	10,5	6				0,980	●	384,-
710M W D100/8	100	32	50	10,5	8				1,540	●	500,-
710M W D125/9	125	40	63	10,5	9				3,280	●	583,-



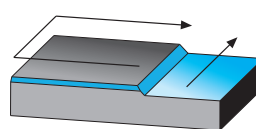
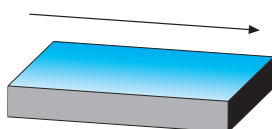
FRESE PER SPIANATURA 45° _ PLANFRÄSER 45° _ FACE MILLING CUTTERS 45°

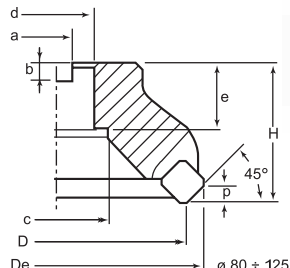
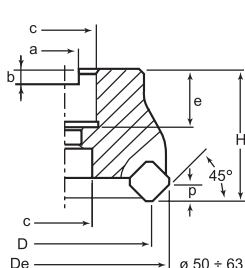
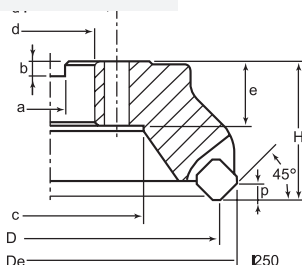
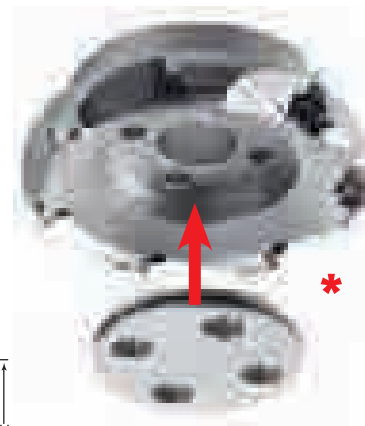
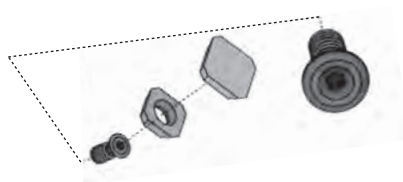
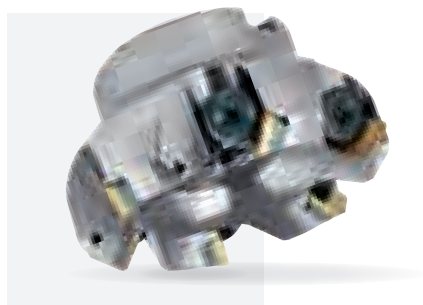


SULLA STESSA SEDE INSERTO POSSONO ESSERE MONTATE
2 TIPOLOGIE DI INSERTO: 8 TAGLIENTI E 16 TAGLIENTI.
AUF SELBEM PLATTENSITZ, KÖNNEN SIE 2 WENDEPLATTEN
TYPOLOGIE MONTIEREN: 8 SCHNEIDEN UND 16 SCHNEIDEN
ON THE SAME INSERT SEAT, IT COULD BE USED 2 INSERT TYPE:
8 CUTTING EDGE AND 16 CUTTING EDGE.



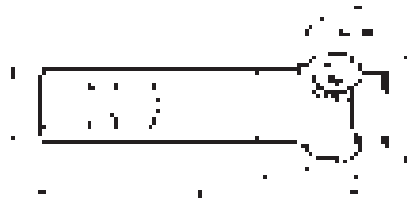
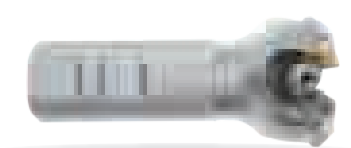
810 M													STOCK	€
	D	De	d	H	p	p	z							
810M W D50/4	50	63	22	40	6	3	4	SNEX SNKX SNMX 1206... SNMU 1206... ONMU 1205...	VT40S	BT20	0,520			210,-
810M W D63/6	63	76	22	40	6	3	6				0,640			247,-
810M W D80/7	80	93	27	50	6	3	7				1,250			294,-
810M W D100/8	100	113	32	50	6	3	8				1,830			331,-
810M W D125/10	125	138	40	63	6	3	10				3,920			378,-
810M W D160/12	160	173	40	63	6	3	12				5,280			790,-
810M W D200/14	200	213	60	63	6	3	14				10,200			1270,50
810M W D250/16	250	263	60	63	6	3	16				13,900			1596,-
810M W D50F/6	50	63	22	40	6	3	6				0,520			269,-
810M W D63F/8	63	76	22	40	6	3	8				0,640			306,50
810M W D80F/10	80	93	27	50	6	3	10				1,250			369,50
810M W D100F/12	100	113	32	50	6	3	12				1,830			434,-
810M W D125F/16	125	138	40	63	6	3	16				3,920			701,50
810M W D160F/20	160	173	40	63	6	3	20				5,280			1013,50





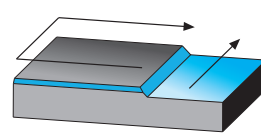
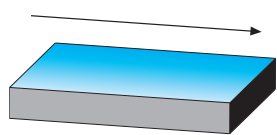
550 M	D	De	d	d1	c	e	a	b	H	p	z		KG		€
550M W D50-12/4	50	63	22	-	17	21	10,4	6,3	48	6	4		0,600	●	321,-
550M W D63-12/5	63	76	22	-	19	21	10,4	6,3	40	6	5		0,690	●	367,-
550M W D80-12/6	80	93	27	-	38	24	12,4	7	50	6	6		1,370	●	407,-
550M W D100-12/6	100	113	32	-	45	26	14,4	8	50	6	6		2,000	●	467,50
550M W D125-12/7	125	138	40	-	56	32	16,4	9	63	6	7		3,900	●	580,-
550M W D160-12/7 *	160	173	40	66,7	86	32	16,4	9	63	6	7		5,900	●	821,-
550M W D200-12/10 *	200	213	60	101,7	129	32	25,7	14	63	6	10		15,000	●	1452,-
550M W D250-12/13 *	250	263	60	101,7	178	32	25,7	14	63	6	13		15,000	●	1833,50

550 M-L	D	De	d	d1	c	e	a	b	H	p	z		KG		€
550M W D50-12L/4	50	63	22	-	17	21	10,4	6,3	48	6	4		0,600	●	385,-
550M W D63-12L/5	63	76	22	-	19	21	10,4	6,3	40	6	5		0,690	●	441,-
550M W D80-12L/6	80	93	27	-	38	24	12,4	7	50	6	6		1,370	●	489,-
550M W D100-12L/6	100	113	32	-	45	26	14,4	8	50	6	6		2,000	●	561,-
550M W D125-12L/7	125	138	40	-	56	32	16,4	9	63	6	7		3,900	●	695,50

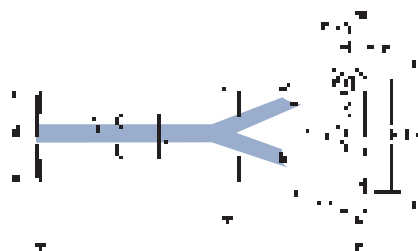
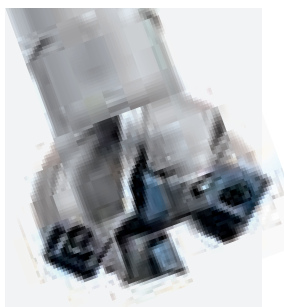


550 W	D	De	d	L	L1	p	z		KG		€
550W W D40-12/4	40	53	32	115	45	6	4		0,840	●	348,50

RICAMBI ERSATZTEILE SPAREPARTS	Sottopiacchetta Support	Vite di bloccaggio Insert locking screw	Vite sottopiacchetta Screw support	Chiave Key	Chiave Key
	AKE12,4	CVB55 (550M) (550W)	CVB55L (550M-L)	VF4	BT25 TORX PLUS
					BT08



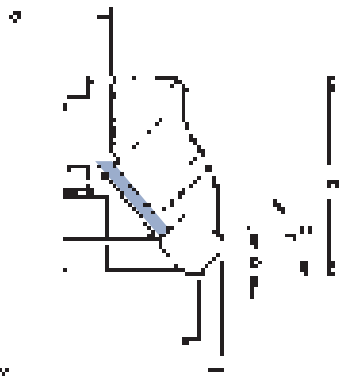
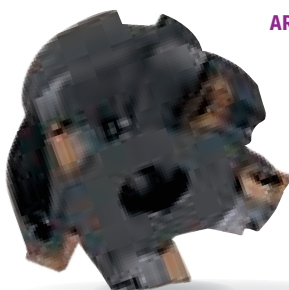
FRESE PER SPIANATURA 45° _ PLANFRÄSER 45° _ FACE MILLING CUTTERS 45°



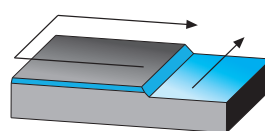
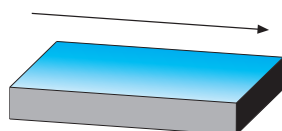
600 W	D	De	d	L	L1	p	z				KG		STOCK	€
600W W D25/2	25	38	25	100	44	6	2	SEHT SEHX SEKT 1204...	VT50	BT20	0,370		●	206,50
600W W D32/3	32	45	25	110	54	6	3				0,420		●	259,50
600W W D40/4	40	53	32	115	55	6	4				0,780		●	318,-

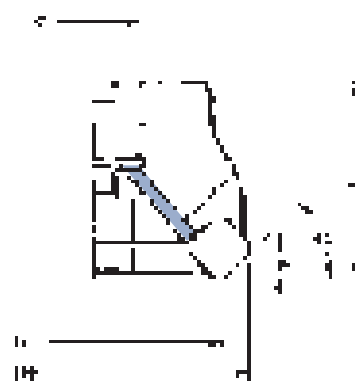
ART. 600 M

ART. 600 M ECO

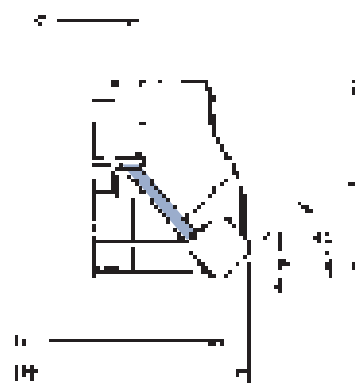


600 M 600 M ECO	D	De	d	H	p	z				KG		STOCK	€
600M W D40-12/3	40	53	16	40	6	3				0,270		●	175,-
600M W D50-12/4	50	63	22	48	6	4				0,480		●	198,50
600M D50-12/4 ECO	50	63	22	48	6	4				0,480	--	●	168,-
600M W D63-12/5	63	76	22	48	6	5				0,760		●	232,50
600M D63-12/5 ECO	63	76	22	48	6	5				0,760	--	●	197,-
600M W D80-12/6	80	93	27	50	6	6				1,270		●	279,-
600M D80-12/6 ECO	80	93	27	50	6	6				1,270	--	●	237,-
600M W D100-12/6	100	113	32	50	6	6				1,790		●	325,-
600M D100-12/6 ECO	100	113	32	50	6	6				1,790	--	●	276,-
600M W D125-12/7	125	138	40	63	6	7	SEHT SEHX SEKT 1204...	VT50	BT20	3,470		●	383,-
600M W D160-12/8	160	173	40	63	6	8				5,280		●	638,50
600M D200-12/12	200	213	60	63	6	12				7,800	--	●	1263,-
600M D250-12/16	250	263	60	63	6	16				11,100	--	●	1594,50
600M W D40-12F/4	40	53	16	40	6	4				0,270		●	232,50
600M W D50-12F/5	50	63	22	48	6	5				0,480		●	244,50
600M W D63-12F/6	63	76	22	48	6	6				0,760		●	279,-
600M W D80-12F/7	80	93	27	50	6	7				1,270		●	337,-
600M W D100-12F/8	100	113	32	50	6	8				1,790		●	409,50
600M W D125-12F/9	125	138	40	63	6	9				3,470		●	472,50
600M W D160-12F/10	160	173	40	63	6	10				5,280		●	812,-

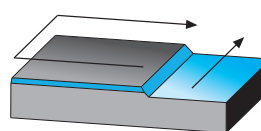
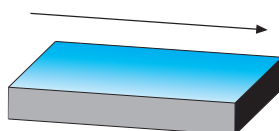




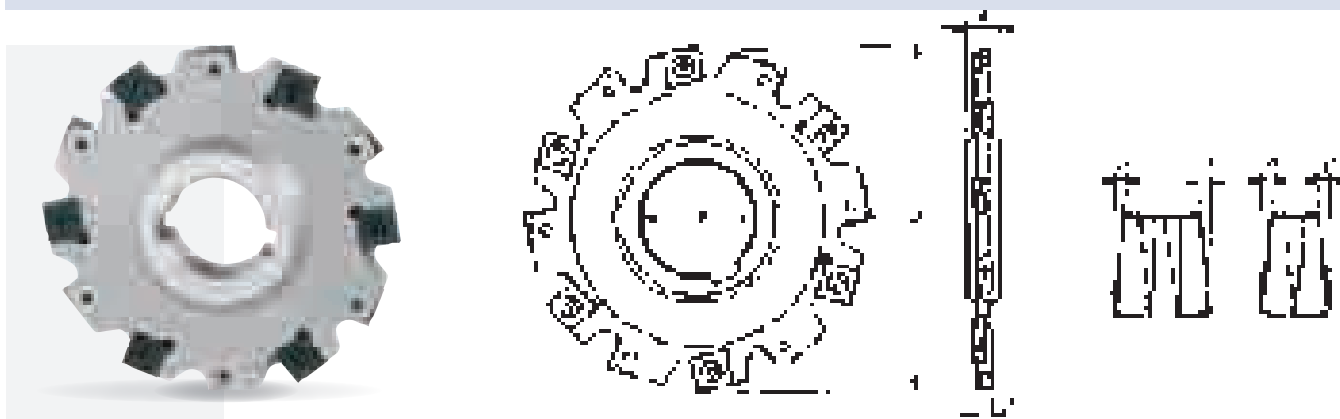
670 M	D	De	d	H	p	z				KG		€
670M W D50-12/4	50	63	22	48	6	4	SDHT SDKT 1204...	VT45	BT20	0,520	●	250,-
670M W D63-12/5	63	76	22	48	6	5				0,800	●	296,-
670M W D80-12/6	80	93	27	50	6	6				1,300	●	352,50
670M W D100-12/6	100	113	32	50	6	6				1,770	●	416,50
670M W D125-12/7	125	138	40	63	6	7				3,700	●	487,-
670M W D160-12/8	160	173	40	63	6	8				5,280	●	896,-
670M D200-12/12	200	213	60	63	6	12				14,000	--	1342,50
670M D250-12/16	250	263	60	63	6	16				14,000	--	1725,50



680 M	D	De	d	H	p	z				KG		€
680M W D50-13/4	50	63	22	40	6	4	SEHT SEHX 13T3...	VT3511	BT15	0,460	●	227,-
680M W D63-13/5	63	76	22	40	6	5				0,610	●	267,50
680M W D80-13/6	80	93	27	50	6	6				1,300	●	320,-
680M W D100-13/7	100	113	32	50	6	7				1,670	●	377,50
680M W D125-13/8	125	138	40	63	6	8				3,370	●	441,-
680M D160-13/10	160	173	40	63	6	10				4,500	--	812,-
680M D200-13/12	200	213	60	63	6	12				14,000	--	1263,-
680M D250-13/16	250	263	60	63	6	16				14,000	--	1594,50
680M W D50-13F/5	50	63	22	40	6	5				0,460	●	279,-
680M W D63-13F/6	63	76	22	40	6	6				0,610	●	331,-
680M W D80-13F/8	80	93	27	50	6	8				1,300	●	395,50
680M W D100-13F/10	100	113	32	50	6	10				1,670	●	470,50
680M W D125-13F/12	125	138	40	63	6	12				3,370	●	551,50
680M D160-13F/16	160	173	40	63	6	16				4,500	--	1015,50



FRESE PER SCANALATURE E TAGLIO _SCHEIBENFRÄSER_ GROOVING AND CUT OFF MILLS

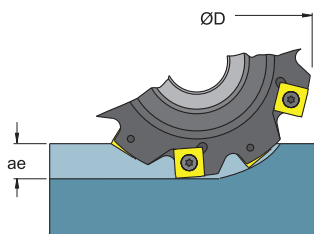


ANGOLO ASSIALE -3°
ANGOLO RADIALE -12°

AXIAL WINKEL -3°
RADIAL WINKEL -12°

AXIAL RAKE -3°
RADIAL RAKE -12°

610	D	d	s	A	B	Z	Fattore K	Max prof. di taglio				KG		STOCK	€
610 63 04	63	22	4	8	34	8	4	14	SNHX 1102T	VTX3503	BT09	0,070	--	○	788,50
05	63	22	5	8	34	8	4	14	SNHX 1103T	VTX3504	BT09	0,080	--	○	788,50
06	63	22	6	8	34	6	3	14	SNHX 1203T	VTX405	BT15	0,080	--	○	788,50
610 80 04	80	22	4	8	34	10	5	22	SNHX 1102T	VTX3503	BT09	0,200	--	○	855,-
05	80	22	5	8	34	10	5	22	SNHX 1103T	VTX3504	BT09	0,220	--	○	855,-
06	80	22	6	8	34	8	4	22	SNHX 1203T	VTX405	BT15	0,240	--	○	855,-
610 100 04	100	27	4	12	45	12	6	25	SNHX 1102T	VTX3503	BT09	0,240	--	○	984,50
05	100	27	5	12	45	12	6	25	SNHX 1103T	VTX3504	BT09	0,330	--	○	984,50
06	100	27	6	12	45	10	5	25	SNHX 1203T	VTX405	BT15	0,360	--	○	984,50
10	100	27	10	12	45	10	5	25	SNHX 1205T	VTX408	BT15	0,470	--	○	1051,-
610 125 04	125	40	4	12	58	12	6	31	SNHX 1102T	VTX3503	BT09	0,410	--	○	1182,50
05	125	40	5	12	58	12	6	31	SNHX 1103T	VTX3504	BT09	0,450	--	○	1182,50
06	125	40	6	12	58	12	6	31	SNHX 1203T	VTX405	BT15	0,500	--	○	1182,50
10	125	40	10	12	58	12	6	31	SNHX 1205T	VTX408	BT15	0,670	--	○	1182,50
610 160 04	160	40	4	12	68	18	9	44	SNHX 1102T	VTX3503	BT09	0,660	--	○	1309,-
05	160	40	5	12	68	18	9	44	SNHX 1103T	VTX3504	BT09	0,740	--	○	1309,-
06	160	40	6	12	68	16	8	44	SNHX 1203T	VTX405	BT15	0,840	--	○	1309,-
10	160	40	10	12	68	16	8	44	SNHX 1205T	VTX408	BT15	1,130	--	○	1309,-
14	160	40	14	14	68	15	5	44	SNHX 1205T	VTX408	BT15	1,600	--	○	1309,-
610 200 04	200	50	4	12	72	18	9	62	SNHX 1102T	VTX3503	BT09	0,860	--	○	1697,50
05	200	50	5	12	72	18	9	62	SNHX 1103T	VTX3504	BT09	0,990	--	○	1697,50
06	200	50	6	12	72	18	9	62	SNHX 1203T	VTX405	BT15	1,200	--	○	1697,50
10	200	50	10	12	72	18	9	62	SNHX 1205T	VTX408	BT15	1,800	--	○	1747,-
14	200	50	14	14	72	18	6	62	SNHX 1205T	VTX408	BT15	2,500	--	○	1747,-
610 250 10	250	50	10	12	72	24	12	87	SNHX 1205T	VTX408	BT15	2,800	--	○	2133,-

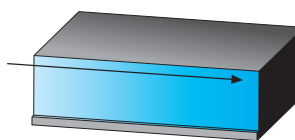
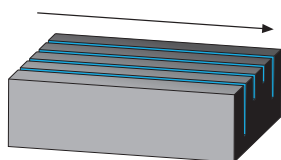


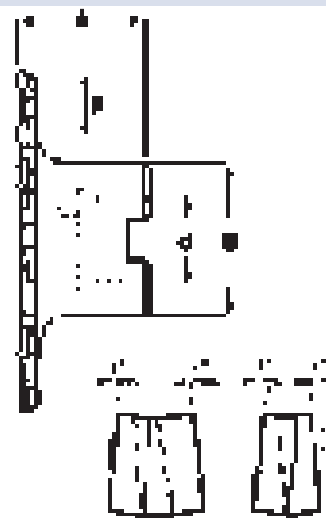
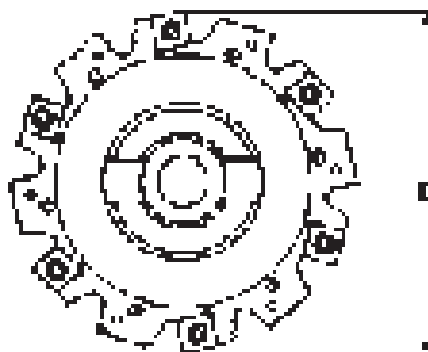
ae/D	0,5-1 50 - 100%	0,2 20%	0,1 10%	0,05 5%
Vc	Vc (min)-----Vc (max) R-----M-----F			

ae/D	0,3 30%	0,2 20%	0,1 10%	0,05 5%	0,02 2%
Kae	1,2	1,5	2,1	3	4,8

Ve = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED
n = giri/min (min-1) NUMERO DI GIRI - NUMBER OF REVOLUTIONS
fz = mm AVANZAMENTO AL DENTE - TOOTH FEED
fn = mm AVANZAMENTO AL GIRO - FEED/ REVOLUTION
Vf = mm/min VELOCITÀ DI AVANZAMENTO - FEED SPEED

Kae = FATTORE DICORREZIONE - CORRECTION FACTOR
F = FINITURA, LAV. LEGGERA - FINISHING, LIGHT MACHINING
M = LAV. MEDIA, GENERICA - MEDIUM MACHINING, GENERIC
R = SGROSSATURA, LAV. PESANTE - ROUGHING, HEAVY MACHINING



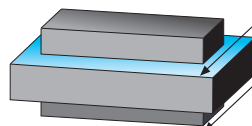
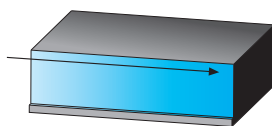
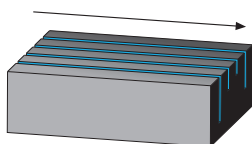


ANGOLO ASSIALE -3°
ANGOLO RADIALE -12°

AXIAL WINKEL -3°
RADIAL WINKEL -12°

AXIAL RAKE -3°
RADIAL RAKE -12°

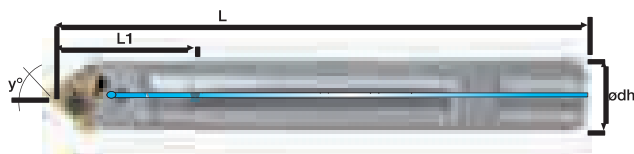
610 M	D	d	s	A	B	Z	Fattore K	Max prof. di taglio				KG		€
610M 50 04	50	16	4	50	32	4	2	8,5	SNHX 1102T	VTX3503	BT09	0,300	--	788,50
05	50	16	5	50	32	4	2	8,5	SNHX 1103T	VTX3504	BT09	0,300	--	788,50
06	50	16	6	50	32	4	2	8,5	SNHX 1203T	VTX405	BT15	0,300	--	788,50
10	50	16	10	50	32	4	2	8,5	SNHX 1205T	VTX408	BT15	0,300	--	833,50
610M 63 04	63	22	4	50	40	8	4	10,5	SNHX 1102T	VTX3503	BT09	0,390	--	788,50
05	63	22	5	50	40	8	4	10,5	SNHX 1103T	VTX3504	BT09	0,400	--	788,50
06	63	22	6	50	40	6	3	10,5	SNHX 1203T	VTX405	BT15	0,400	--	788,50
10	63	22	10	50	40	6	3	10,5	SNHX 1205T	VTX408	BT15	0,400	--	833,50
14	63	22	14	50	40	6	2	10,5	SNHX 1205T	VTX408	BT15	0,500	--	1039,50
610M 80 04	80	22	4	50	40	10	5	20	SNHX 1102T	VTX3503	BT09	0,430	--	919,50
05	80	22	5	50	40	10	5	20	SNHX 1103T	VTX3504	BT09	0,500	--	919,50
06	80	22	6	50	40	8	4	20	SNHX 1203T	VTX405	BT15	0,500	--	919,50
10	80	22	10	50	40	8	4	20	SNHX 1205T	VTX408	BT15	0,600	--	931,50
14	80	22	14	50	40	6	2	20	SNHX 1205T	VTX408	BT15	0,650	--	931,50
610M 100 04	100	27	4	50	48	12	6	24,2	SNHX 1102T	VTX3503	BT09	0,690	--	1136,-
05	100	27	5	50	48	12	6	24,2	SNHX 1103T	VTX3504	BT09	0,730	--	1136,-
06	100	27	6	50	48	10	5	24,2	SNHX 1203T	VTX405	BT15	0,740	--	1136,-
10	100	27	10	50	48	10	5	24,2	SNHX 1205T	VTX408	BT15	0,840	--	1136,-
14	100	27	14	50	48	9	3	24,2	SNHX 1205T	VTX408	BT15	1,000	--	1136,-
610M 125 04	125	40	4	50	70	12	6	23,7	SNHX 1102T	VTX3503	BT09	1,000	--	1255,-
05	125	40	5	50	70	12	6	23,7	SNHX 1103T	VTX3504	BT09	1,100	--	1255,-
06	125	40	6	50	70	12	6	23,7	SNHX 1203T	VTX405	BT15	1,100	--	1255,-
10	125	40	10	50	70	12	6	23,7	SNHX 1205T	VTX408	BT15	1,210	--	1255,-
14	125	40	14	50	70	12	4	23,7	SNHX 1205T	VTX408	BT15	1,450	--	1512,-
610M 160 04	160	40	4	50	70	16	8	41,2	SNHX 1102T	VTX3503	BT09	1,240	--	1446,-
05	160	40	5	50	70	16	8	41,2	SNHX 1103T	VTX3504	BT09	1,310	--	1446,-
06	160	40	6	50	70	16	8	41,2	SNHX 1203T	VTX405	BT15	1,450	--	1446,-
10	160	40	10	50	70	16	8	41,2	SNHX 1205T	VTX408	BT15	1,720	--	1446,-
14	160	40	14	50	70	15	5	41,2	SNHX 1205T	VTX408	BT15	2,140	--	1743,-



A technical drawing of a mechanical part, likely a bracket or a support structure, rendered in a light blue line-art style on a dark blue background. The drawing includes various geometric features such as lines, arcs, and a circular cross-section. Dimensions are indicated with numbers and leader lines. The word "MINIMILL" is prominently displayed in the center in a bold, white, sans-serif font.

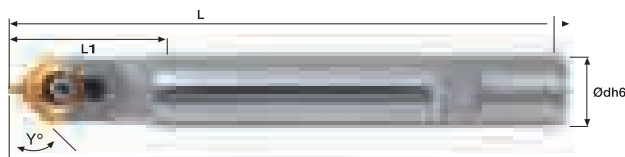
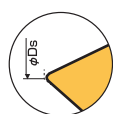
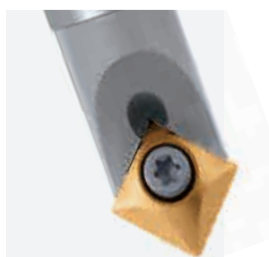
MINIMILL

FRESE PER SMUSSI, SCANALATURE A V E CENTRARE 45°/30° FAS-UND ZENTRIERFRÄSER 45°/30° _ CENTER DRILLING, CHAMFERING AND V GROOVING 45°/30°



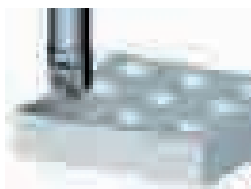
311 W

	Ødh6	DS	(mm)			Z	D _{min}	D _{max}				KG		STOCK	€
			L	L1	Y°										
311.020 WW	20	0,4 / 0,8	115	40	45°	1	0,4	20	TCMX	VT40	BT15	0,240		●	199,50
311.020 WWL	20	0,4 / 0,8	150	60	45°	1	0,4	20	16T3ZR...			0,320		●	224,50
311.020 WWXL	20	0,4 / 0,8	200	80	45°	1	0,4	20	16T308ZR...			0,430		●	256,-



160 W

	Ødh6	DS	(mm)			Z	D _{min}	D _{max}				KG		STOCK	€
			L	L1	Y°										
160.45 W	16	0,8	120	40	45°	1	0,8	17	SEEX	VT4010	BT15	0,190	--	●	138,50
160.30 W	16	0,8	120	40	30°	1	0,8	21	12T4			0,200	--	●	138,50



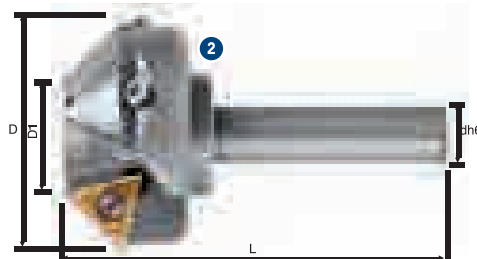
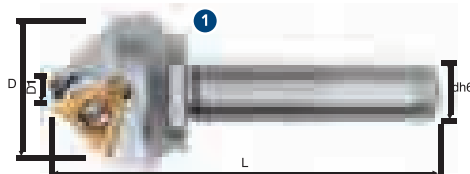
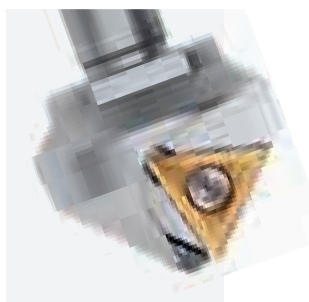
CENTRATURA
ZENTRIER-SENK
CENTER DRILLING

SMUSSO SU FORO
BOHRUNG ANFASEN
BORE CHAMFERING

SCANALATURA "V"
"V" - NUTENFRAESER
"V" - GROOVE CUTTING

SMUSSO LATERALE
ECKE ANFASEN
CORNER CHAMFERING

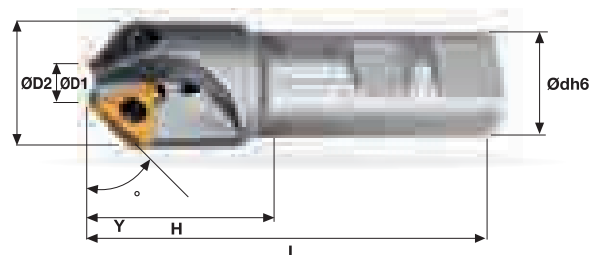
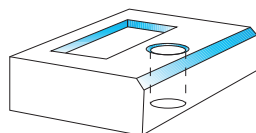
FRESA PER SBAVATURA 45° _ FASFRÄSER 45° _ CHAMFERING MILLING CUTTER 45°



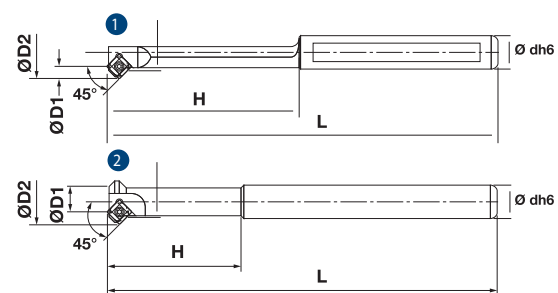
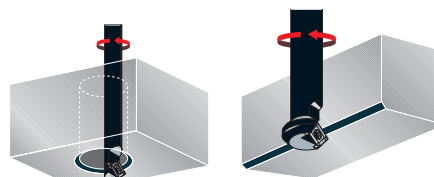
7745

7745	Fig.	ØD	ØD1	L	Ødh6	y°	Z						STOCK	€
7745VT16-C12-0525	1	25	5	78	12	45°	1	TCGX	VT40	BT15	0,140	--	●	189,-
7745VT16-C12-2545	2	45	25	78	12	45°	1	163504...			0,310	--	●	314,50

FRESE PER SMUSSI E SVASATURE 30°, 45° E 60° **FRÄSER ZUM FASEN 30°, 45° E 60° _ CHAMFERING MILLING CUTTER 30°, 45° AND 60°**



300 W	ØD1	ØD2	L H (mm)		Ødh6	Y°	Z							
300.016 WW	1,2	16	70	20	12	45°	1	TCMT 1102...	VT25B	BT08	0,060		●	102,50
300.021 WW	6,2	21	90	35	20	45°	2	TCMT 16T3...	VT40	BT15	0,180		●	139,50
300.032 WW	10,4	32,5	100	42	25	45°	2	TCMT 16T3...	VT40	BT15	0,380		●	226,-
310.016 WW	5,4	16	70	20	12	60°	1	TCMT 1102...	VT25B	BT08	0,060		●	102,50
310.027 WW	15,8	26	90	35	20	60°	2	TCMT 16T3...	VT40	BT15	0,180		●	139,50
310.032 WW	20	35	100	39	25	60°	2	TCMT 16T3...	VT40	BT15	0,380		●	226,-
315.032 WW	6	32	100	38	25	30°	2	TCMT 16T3...	VT40	BT15	0,380		●	226,-



320 W	Fig.	ØD1	ØD2	L H (mm)		Ødh6	Z							
320.004 WW	1	4	12	80	28	12	1	SCMT 060204	VT25B	BT08	0,060		●	135,-
320.011 WW	2	11	20	80	32	12	2	SCMT 09T308	VT40	BT15	0,070		●	198,50
320.012 WW	1	12	23,7	100	37	20	1	SCMT 09T308	VT40	BT15	0,190		●	125,50
320.016 WW	2	16	28,8	100	32	16	2	SCMT 09T308	VT40	BT15	0,150		●	177,-
320.025 WW	2	30	42,3	100	32	20	3	SCMT 09T308	VT40	BT15	0,270		●	205,50
Serie lunga - Lange Ausführung - Long models														
320.012 WWL	1	12	23,7	200	37	20	1	SCMT 09T308	VT40	BT15	0,420		●	152,50
320.016 WWL	2	16	28,8	200	32	16	2	SCMT 09T308	VT40	BT15	0,300		●	191,-
320.025 WWL	2	30	42,3	200	32	20	3	SCMT 09T308	VT40	BT15	0,480		●	242,50

321 W	Fig.	ØD1	ØD2	L H (mm)		Ødh6	Z							
321.004 WW	1	4	12	80	28	12	1	SPGT SPMT 060304	VT25	BT08	0,060		○	135,-
321.011 WW	2	11	20	80	32	12	2	SPGT SPMT 060304	VT25	BT08	0,070		○	198,50
321.012 WW	1	12	23,7	100	37	20	1	SPGT SPMT 09T308	VT35S	BT15	0,190		○	125,50
321.016 WW	2	16	28,8	100	32	16	2	SPGT SPMT 09T308	VT35S	BT15	0,150		○	177,-
321.025 WW	2	30	42,3	100	32	20	3	SPGT SPMT 09T308	VT35S	BT15	0,270		○	205,50

FRESE PER SMUSSI E SVASATURE REGISTRABILE DA 10° A 80° _ FASENFRÄSER, WINKELVERSTELLBAR VON 10° BIS 80° _ MILLING CUTTERS FOR CHAMFERING-FLARING 10° TO 80°

Fig. 1

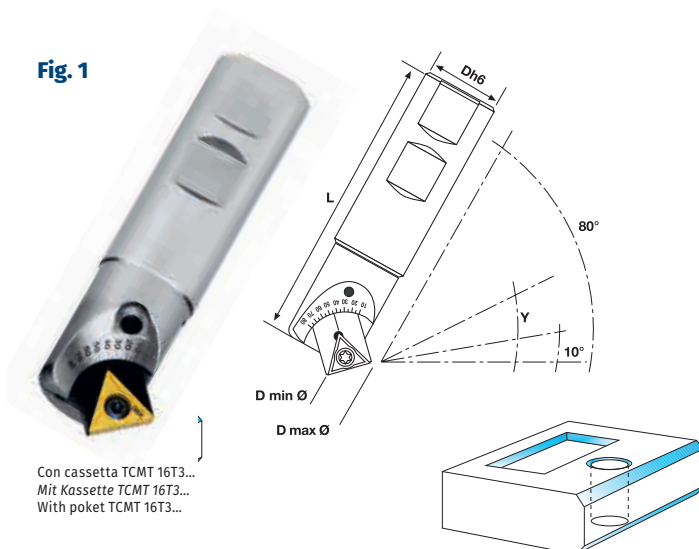
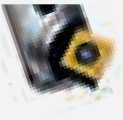


Fig. 2

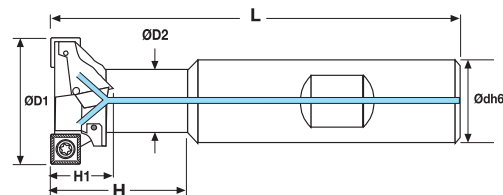
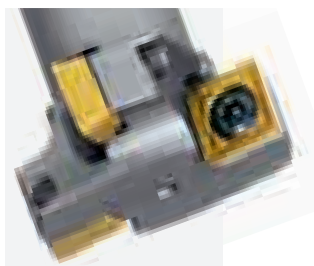


LE FRESE VENGONO SEMPRE FORNITE CON 2 CASSETTE T16 NEW + S12 NEW COMPRESE
DIE FRASER WERDEN IMMER MIT 2 KASSETTEN DELIEFERT T16 NEW + S12 NEW
IN THE MILLING CUTTERS ARE ALWAYS INCLUDED 2 POCKETS T16 NEW + S12 NEW

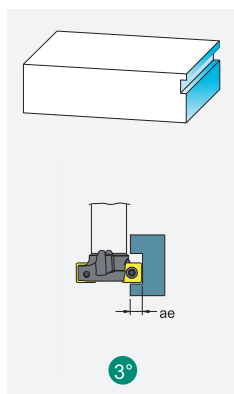
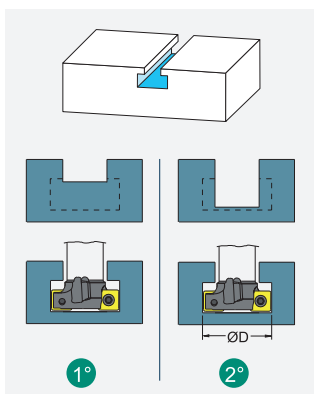
340 W NEW	D h6	L	Y	Fig. 1		Fig. 2			KG	STOCK	€
				Dmin. Ø	Dmax. Ø	Dmin. Ø	Dmax. Ø	E			
340.020 W NEW	20	95	"	"	"	"	"	"	0,320	--	● 348,50
			10°	5	32	7,5	30	2,7			
			20°	6	33	10	32	3,6			
			30°	7	34	13	32,5	4,3			
			40°	10	33	16,5	33,5	4,5			
340.025 W NEW	25	95	45°	11	33	17,5	33,5	4,6	0,330	--	● 348,50
			50°	13	32	19	33,5	4,6			
			60°	16	31	22	33,5	4,3			
			70°	19	29	24,5	33,5	3,8			
			80°	23	27	27	31	3			
340.025 WL NEW	25	145	"	"	"	"	"	"	0,530	--	● 377,50
340.025 WXL NEW	25	195	"	"	"	"	"	"	0,720	--	● 407,-

	Cassetta Pocket	Inserto Insert	Vite inserto Insert screw	Vite cassetta Pocket screw	Chiave Key
 Fig. 1 Con cassetta TCMT 16T3... Mit Kassette TCMT 16T3... With pocket TCMT 16T3...	 T16NEW	 TCMT16T3...	 VT40	 M6-16	 BT15
 Fig. 2 Con cassetta SCMT 1204... Mit Kassette SCMT 1204... With pocket SCMT 1204...	 S12NEW	 SCMT1204...	 VT40S	 M6-16	 BT20

FRESE PER CAVE A T _ FRÄSER FÜR T-NUTEN _ T SLOT MILLING CUTTER



250 W	ØD1	ØD2	L	H	H1	Ødh6	K	Z						
250.021 WW	21	11	76	26	9	16	1	2	SPGT SPMT 060304	VT25	BT08	0,100	●	283,-
250.025 WW	25	13	82	31	11	16	2	4				0,100	●	335,50
250.032 WW	32	17	88	38	14	20	2	4	SPGT SPMT 09T308	VT35S	BT15	0,200	●	362,50
250.040 WW	40	21	108	50	17	25	2	4				0,400	●	390,-
250.050 WW	50	27	120	56	22	32	2	4	SPGT SPMT 120408	VT50	BT20	0,670	●	444,-



	1°	2°	3°
ae/D	1 100%	0,5 50%	0,2 20%
Kae	1	1	1,5

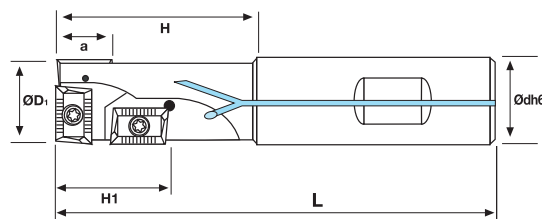
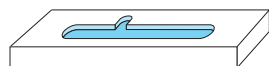
ae/D	0,5-1 50-100%	0,2 20%	0,1 10%	0,05 5%
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Vc	Vc (min)-----Vc(max)	R-----M-----F
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NOTE
Per cave a "T" secondo norme DIN 650-UNI 4788-ISO 299
Für "T" Nuten nach DIN 650-uni 4788-ISO 299 Normen
For "T" slot cutters according to DIN 650-UNI4788-ISO 299 norms

Ve m/min VELOCITÀ DI TAGLIO - CUTTING SPEED
n giri/min (min-1) NUMERO DI GIRI - NUMBER OF REVOLUTIONS
fz mm AVANZAMENTO AL DENTE - TOOTH FEED
fn mm AVANZAMENTO AL GIRO - FEED I REVOLUTION
Vf mm/min VELOCITÀ DI AVANZAMENTO - FEED SPEED
Kae FATTORE DI CORREZIONE - CORRECTION FACTOR
F FINITURA, LAV. LEGGERA - FINISHING, LIGHT MACHINING
M LAV. MEDIA, GENERICA - MEDIUM MACHINING, GENERIC
R SGROSSATURA, LAV. PESANTE - ROUGHING, HEAVY MACHINING
Z Numero di eliche / Schraubenanzahl / Number of flutes
K Fattore d'avanzamento / Vorschubfaktor / Factor of feed

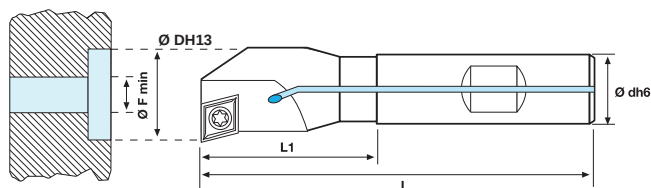
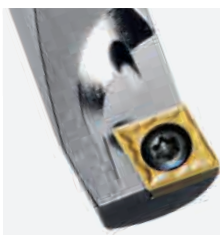
FRESE FORANTI _ BOHRNUTFRÄSER _ DRILLING ENDMILL



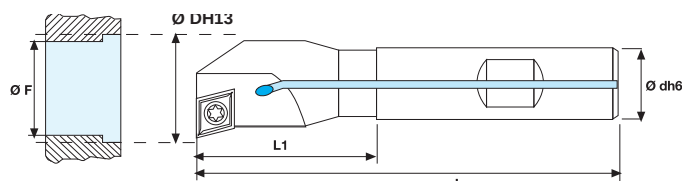
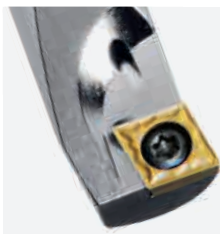
720 W	ØD1	Ødh6	L	H	H1	a	Z						
720W W D20	20	20	90	35	17	9	3	APKT 1003...	VT25	BT08	0,200	●	204,50
720W W D25	25	25	110	50	19	9	3				0,360	●	244,50
720W W D32	32	32	130	50	30	15	3	APKT 1604...	VT40	BT15	0,720	●	261,50
Serie lunga - Lange Ausführung - Long models													
720W WL D20	20	20	150	98	17	9	3	APKT 1003...	VT25	BT08	0,320	●	238,-
720W WL D25	25	25	150	94	19	9	3				0,500	●	262,50
Serie extra lunga - Extralange Ausführung - Extralong models													
720W WXL D20	20	20	180	125	17	9	3	APKT 1003...	VT25	BT08	0,390	●	254,50
720W WXL D25	25	25	200	140	19	9	3				0,680	●	271,-
720W WXL D32	32	32	220	160	30	15	3	APKT 1604...	VT40	BT15	1,250	●	287,50

FRESE PER LAMATURA ED ALESATURA

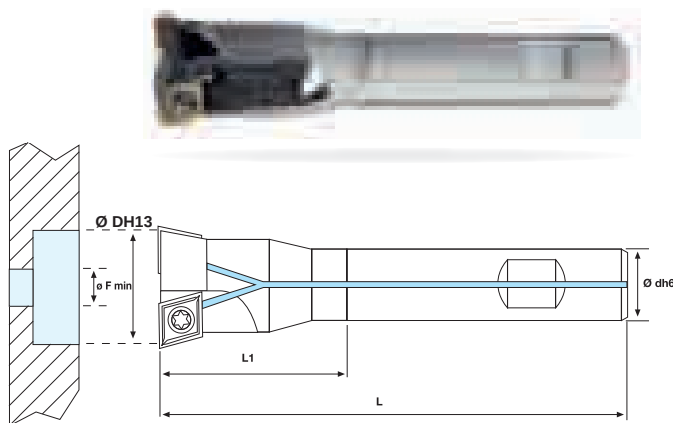
SENKFRÄSER UND AUSBOHRER _ SPOT FACING AND BORING MILLING CUTTERS



380 W	Ø D	L	L1 (mm)	Ø dh6	Ø Fmin	Z				KG		STOCK	€
380W W D10	10	85	15	12	4	1	CCMT 060204	VT25B	BT08	0,060	●	●	88,50
380W W D11	11	85	15	12	4	1				0,060	●	●	88,50
380W W D12	12	85	18	12	4	1				0,070	●	●	88,50
380W W D13	13	85	23	12	5	1				0,070	●	●	88,50
380W W D14	14	85	23	12	5	1				0,070	●	●	88,50
380W W D15	15	85	30	12	5	1				0,070	●	●	88,50
380W W D16	16	85	30	12	5	1				0,070	●	●	88,50
380W W D17	17	95	30	16	6	1				0,120	●	●	88,50
380W W D18	18	95	40	16	6	1				0,120	●	●	104,50
380W W D19	19	95	40	16	6	1				0,130	●	●	104,50
380W W D20	20	95	40	16	5	1	CCMT 09T304	VT40	BT15	0,140	●	●	104,50
380W W D21	21	95	42	16	5	1				0,140	●	●	129,-
380W W D22	22	95	42	16	6	1				0,140	●	●	129,-
380W W D23	23	95	42	16	6	1				0,170	●	●	129,-
380W W D24	24	95	42	16	6	1				0,280	●	●	129,-
380W W D25	25	95	42	16	8	1				0,300	●	●	129,-
380W W D26	26	120	56	20	8	1				0,300	●	●	129,-
380W W D27	27	120	56	20	9	1				0,310	●	●	129,-
380W W D28	28	120	56	20	10	1				0,320	●	●	129,-
380W W D29	29	120	56	20	11	1				0,320	●	●	134,-
380W W D30	30	120	56	20	12	1				0,340	●	●	134,-
380W W D31	31	120	56	20	12	1				0,360	●	●	134,-
380W W D32	32	120	56	20	13	1				0,360	●	●	134,-
380W W D33	33	120	56	20	14	1				0,360	●	●	134,-

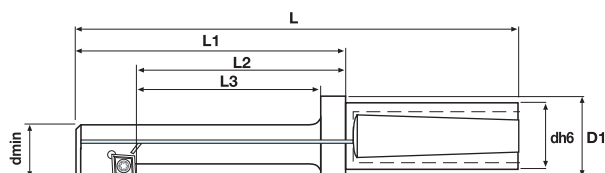
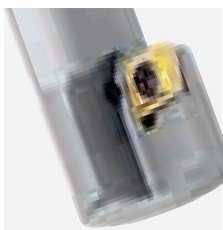


385 W	Ø D	L	L1 (mm)	Ø dh6	Ø Fmin	Z				KG		STOCK	€
385W W D10	9,8	90	23	8	4,5	1	CCMT 060204	VT25B	BT08	0,060	●	●	98,-
385W W D11	10,8	105	24	10	3,5	1				0,060	●	●	98,-
385W W D12	11,8	105	25	10	3	1				0,070	●	●	98,-
385W W D13	12,8	105	26	10	2,5	1				0,070	●	●	98,-
385W W D14	13,8	110	27	12	3	1				0,070	●	●	98,-
385W W D15	14,8	120	28	12	3,5	1				0,070	●	●	98,-
385W W D16	15,8	125	29	12	4	1				0,070	●	●	98,-
385W W D17	16,8	140	30	16	5	1				0,120	●	●	98,-
385W W D18	17,8	140	31	16	6	1				0,120	●	●	115,50
385W W D19	18,8	150	32	16	7	1				0,130	●	●	115,50
385W W D20	19,8	150	33	16	8	1	CCMT 09T304	VT40	BT15	0,140	●	●	115,50
385W W D21	20,8	160	34	16	9	1				0,140	●	●	142,-
385W W D22	21,8	160	35	20	10	1				0,140	●	●	142,-
385W W D23	22,8	165	36	20	11	1				0,170	●	●	142,-
385W W D24	23,8	170	37	20	12	1				0,280	●	●	142,-
385W W D25	24,8	180	38	20	13	1				0,300	●	●	142,-
385W W D26	25,8	185	39	20	14	1				0,300	●	●	142,-
385W W D27	26,8	190	40	20	15	1				0,310	●	●	142,-
385W W D28	27,8	190	41	20	16	1				0,320	●	●	142,-
385W W D29	28,8	200	42	20	17	1				0,320	●	●	149,-
385W W D30	29,8	200	43	25	18	1				0,340	●	●	149,-
385W W D31	30,8	200	44	25	19	1				0,360	●	●	149,-
385W W D32	31,8	200	45	25	20	1				0,360	●	●	149,-



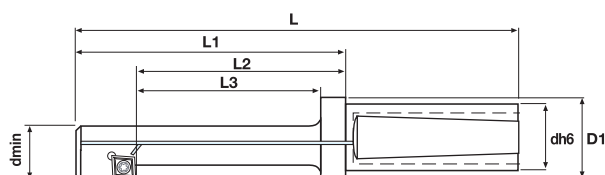
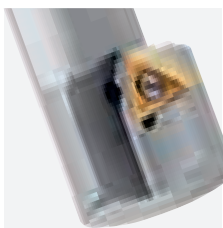
480 W	Ø D	L	L1	Ø dh6	Ø F min	Z						
480W W D15	15	92	30	12	5	2	CCMT 060204	VT25B	BT08	0,070	●	169,50
480W W D16	16	92	30	12	5	2				0,070	●	169,50
480W W D17	17	94	32	16	6	2				0,120	●	169,50
480W W D17,5	17.5	96	40	16	6.5	2				0,120	●	175,-
480W W D18	18	97	41	16	7	2				0,120	●	175,-
480W W D19	19	100	41	16	8	2				0,130	●	175,-
480W W D20	20	102	41	16	9	2				0,140	●	198,50
480W W D21	21	105	41	16	10	2				0,150	●	198,50
480W W D22	22	110	41	16	11	2				0,160	●	209,50
480W W D23	23	112	41	16	12	2				0,170	●	209,50
480W W D24	24	115	41	16	13	2				0,180	●	209,50
480W W D25	25	120	40	16	8	2				0,180	●	232,50
480W W D26	26	125	55	20	9	2				0,270	●	232,50
480W W D27	27	128	55	20	10	2				0,300	●	232,50
480W W D28	28	130	55	20	11	2				0,310	●	232,50
480W W D29	29	132	55	20	12	2	CCMT 09T304	VT40	BT15	0,330	●	244,50
480W W D30	30	134	55	20	13	2				0,340	●	244,50
480W W D31	31	136	55	20	14	2				0,350	●	244,50
480W W D32	32	138	55	20	15	2				0,370	●	244,50
480W W D33	33	140	55	20	16	2				0,390	●	244,50
480W W D34	34	140	60	25	16	2				0,540	●	244,50
480W W D35	35	140	60	25	17	2				0,550	●	244,50
480W W D36	36	140	60	25	18	2				0,560	●	244,50
480W W D37	37	140	60	25	19	2				0,580	●	244,50
480W W D38	38	140	60	25	20	2				0,590	●	244,50
480W W D39	39	140	60	25	21	2				0,610	●	267,50
480W W D40	40	140	60	25	22	2				0,620	●	267,50
480W W D41	41	140	60	25	23	2				0,640	●	267,50
480W W D42	42	140	60	25	24	2				0,650	●	267,50
480W W D43	43	150	70	25	24	2	CCMT 120404	VT50	BT20	0,670	●	314,50
480W W D44	44	150	70	25	24	2				0,690	●	314,50
480W W D45	45	150	70	25	24	2				0,700	●	314,50
480W W D46	46	150	70	25	24	2				0,720	●	324,-
480W W D47	47	150	70	25	24	2				0,740	●	324,-
480W W D48	48	150	70	25	24	2				0,760	●	324,-

FRESE PER LAMATURA A TIRARE 180° RÜCKWÄRTSSENKER 180° _ 180° BACK FACING MILLING CUTTERS

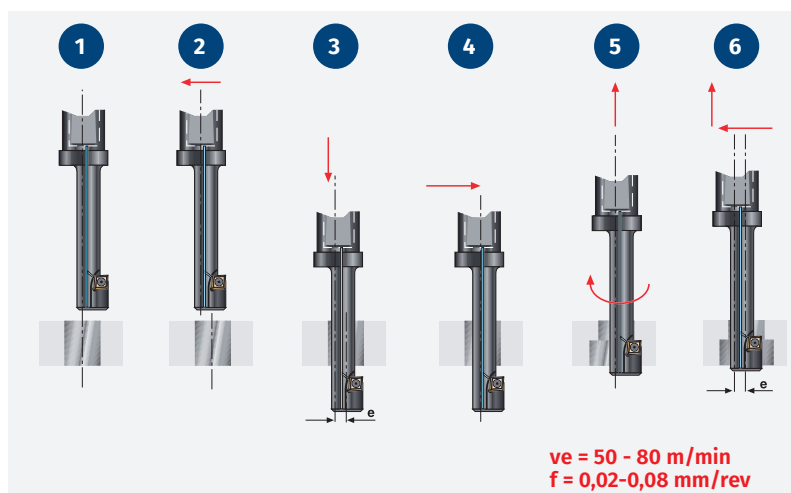
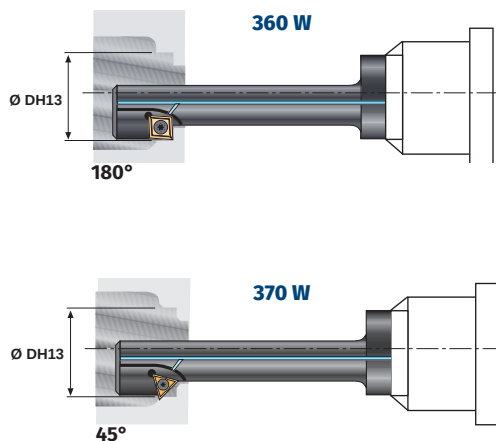


360 W																	
D	Dmin	L	L1	L2	L3	dh6	D1	e									
360W D15	(HE)	15	8.5	105	55	42	35	20	25	3.5	CPMT 05T104...	VT22	BT07	0,170	--	●	235,-
360W D18	(HE)	18	10.5	112	62	47	40	20	25	4				0,170	--	●	235,-
360W W D20	(HE)	20	13	117	67	52	45	20	25	3.75	CCMT 060204	VT25B	BT08	0,180	💧	●	235,-
360W W D24	(HE)	24	15	122	72	57	50	20	25	4.75				0,190	💧	●	248,50
360W W D26	(HE)	26	17	132	82	67	60	20	25	5				0,210	💧	●	264,-
360W W D30	(HE)	30	19	142	92	77	65	20	25	6				0,250	💧	●	288,50
360W W D33	(HE)	33	21	152	102	82	75	20	25	6.5	CCMT 09T304	VT40	BT15	0,270	💧	●	302,-
360W W D36	(HE)	36	23	173	113	93	85	32	40	7				0,630	💧	●	311,50
360W W D40	(HE)	40	25	183	123	103	95	32	40	8				0,670	💧	●	339,50
360W W D43	(HE)	43	30	183	123	103	95	32	40	7				0,860	💧	●	355,50
360W W D48	(HE)	48	33	223	163	143	135	32	40	8	CCMT 120404	VT50	BT20	1,120	💧	●	366,-
360W W D53	(HB)	53	36	210	140	--	110	40	--	9				1,420	💧	●	375,50
360W W D57	(HB)	57	39	220	150	--	120	40	--	9.5				1,620	💧	●	390,-
360W W D66	(HB)	66	45	245	165	--	135	50	--	11				2,620	💧	●	417,50
360W W D76	(HB)	76	52	265	185	--	155	50	--	12.5				3,250	💧	●	461,50

FRESE PER SMUSSO A TIRARE 45° _ RÜCKWÄRTSFAS 45° _ BACK CHAMFERING MILLING CUTTER 45°



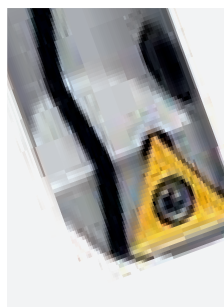
370 W																	
D	Dmin	L	L1	L2	L3	dh6	D1	e									
370W D15	(HE)	15	10	105	55	42	35	20	25	2.70	TCMT 0802...	VT22B	BT06	0,170	--	●	259,-
370W W D20	(HE)	20	14	110	60	47	40	20	25	3.20				0,180	💧	●	259,-
370W W D23	(HE)	23	17	120	70	57	50	20	25	3.20	TCMT 1102...	VT25B	BT08	0,190	💧	●	274,50
370W W D27	(HE)	27	21	140	90	77	70	20	25	3.20				0,210	💧	●	290,50
370W W D31	(HE)	31	24	150	100	87	80	20	25	3.70				0,250	💧	●	318,50



BARENI REGISTRABILI PER ALESATURA EINSTELLBARE FEINBOHRSTANGEN _ ADJUSTEMENT BORING BARS

MILLING

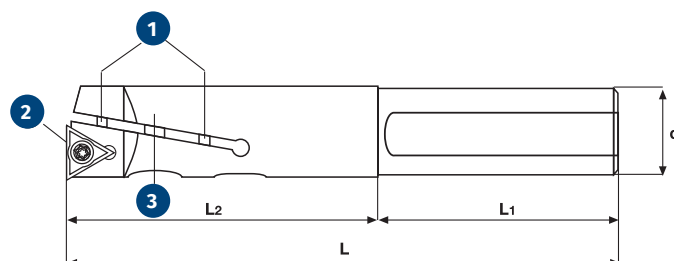
MINIMILL



R.A.I.



R.A.I. CCMT...



R.A.I.	L	L1	L2	d	Dmin	Dmax	1	2	3	INSERTO Wendeplatte insert	KG		€
R.A.I. 06	85	65	20	8	06	07	RE 11	VT24	BL 11	WCMT 0201...	0,020		230,-
R.A.I. 07	90	65	25	8	07	08	RE 9	VT20	BL 9	TPGX 0601 ..L	0,020		230,-
R.A.I. 08	90	65	25	8	08	10	RE 10	VT20	BL 10	TPGX 0601 ..L	0,030		230,-
R.A.I. 10	100	70	30	10	10	12	RE 0	VT20	BL 0	TPGX 0802 ..L	0,070		230,-
R.A.I. 12	105	65	40	12	12	15	RE 1	VT20	BL 1	TPGX 0802 ..L	0,100		245,50
R.A.I. 15	110	60	50	16	15	20	RE 2	VT20	BL 2	TPGX 0802 ..L	0,170		259,50
R.A.I. 20	120	60	60	20	20	25	RE 3	VT25	BL 3	TCMT 1102...	0,270		265,50
R.A.I. 25	140	70	70	25	25	30	RE 4	VT40	BL 4	TCMT 16T3...	0,480		282,-
R.A.I. 30	160	70	90	25	30	35	RE 5	VT40	BL 5	TCMT 16T3...	0,620		296,-
R.A.I. 35	170	70	100	32	35	40	RE 6	VT40	BL 6	TCMT 16T3...	1,050		339,50
R.A.I. 40	190	70	120	32	40	45	RE 7	VT40	BL 7	TCMT 16T3...	1,400		369,-
R.A.I. 45	220	70	150	32	45	50	RE 8	VT40	BL 8	TCMT 16T3...	2,040		428,-
R.A.I. 10 CCMT	100	70	30	10	10	12	RE 1	VT25B	BL 0	CCMT 0602...	0,070		230,-
R.A.I. 12 CCMT	105	65	40	12	12	15	RE 1	VT25B	BL 1	CCMT 0602...	0,100		245,50
R.A.I. 15 CCMT	110	60	50	16	15	20	RE 2	VT25B	BL 2	CCMT 0602...	0,170		259,50
R.A.I. 20 CCMT	120	60	60	20	20	25	RE 3	VT25B	BL 3	CCMT 0602...	0,270		265,50
R.A.I. 25 CCMT	140	70	70	25	25	30	RE 4	VT35	BL 4	CCMT 09T3...	0,480		282,-
R.A.I. 30 CCMT	160	70	90	25	30	35	RE 5	VT35	BL 5	CCMT 09T3...	0,620		296,-
R.A.I. 35 CCMT	170	70	100	32	35	40	RE 6	VT35	BL 6	CCMT09T3...	1,050		339,50
R.A.I. 40 CCMT	190	70	120	32	40	45	RE 7	VT35	BL 7	CCMT 09T3...	1,400		369,-
R.A.I. 45 CCMT	220	70	150	32	45	50	RE 8	VT35	BL 8	CCMT 09T3...	2,040		428,-

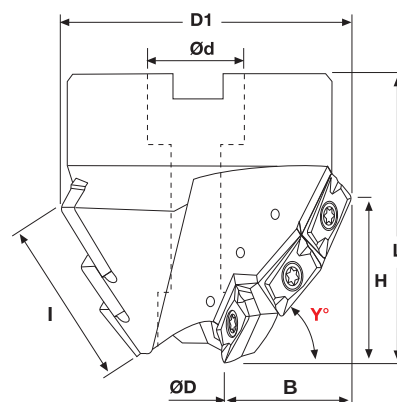
Serie lunga - Lange Ausführung - Long models

R.A.I. 12 SL	130	70	60	12	12	15	RE 1	VT20	BL 1	TPGX 0802 ..L	0,200		318,-
R.A.I. 15 SL	140	70	70	16	15	20	RE 2	VT20	BL 2	TPGX 0802 ..L	0,270		339,50
R.A.I. 20 SL	150	70	80	20	20	25	RE 3	VT25	BL 3	TCMT 1102...	0,370		354,50
R.A.I. 25 SL	170	70	100	25	25	30	RE 4	VT40	BL 4	TCMT 16T3...	0,580		369,-
R.A.I. 30 SL	190	70	120	25	30	35	RE 5	VT40	BL 5	TCMT 16T3...	0,720		392,-
R.A.I. 35 SL	220	70	150	32	35	40	RE 6	VT40	BL 6	TCMT 16T3...	1,150		437,-

FRESE PER SMUSSI _ FASENFRÄSER _ CHAMFERING MILLING CUTTERS



Ø d 16 = VT.FB.030
Ø d 22 = VT.FB.035



15°-20°-30°-40°-45°-60°-75°

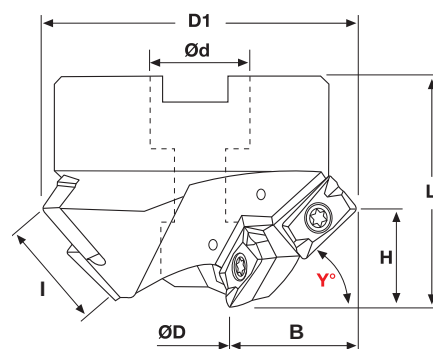
FB: 030	ØD	D1	Ød	 (mm)													STOCK	€
FB.030.001 W	17	56	22	50	17,8	27,5	45°	19	9	3	APHT APHX APKT 1003...	VT25	BT08	0,470			638,50	
FB.030.002 W	17	45	16	50	13	27,5	60°	24	9	3				0,280			638,50	
FB.030.003 W	17	65	22	50	24	27,5	30°	13	9	3				0,600			638,50	
FB.030.004 W	17	70	22	50	27	27,5	15°	7	9	3				0,770			638,50	
FB.030.005 W	19	33	16	60	7	27,5	75°	27	9	3				0,270			638,50	
FB.030.006 W	17	60	22	50	19	27,5	40°	17	9	3				0,520			638,50	
FB.030.007 W	17	69	22	50	26	27,5	20°	9	9	3				0,700			638,50	

Disponibile a richiesta anche FB 030 con gradazioni differenti Y°
Lieferbar auf Anfrage FB 030 mit verschiedenen Graden Y°
Available on request FB 030 with different grades Y°

K= Fattore d'avanzamento _ Vorschubfaktor _ Factor of feed



Ø d 22 = VT.FB.035
Ø d 27 = VT.FB.STANDARD
(DIN912 M12X 30)



10°-15°-20°-30°-40°-45°-50°-60°-75°

FB: 035	ØD	D1	Ød	 (mm)			Y°	H	Z	K				KG		STOCK	€
FB.035.001 W	35	77,8	27	50	21,4	30	45°	21,5	6	3	APHT APHX APKT 1604...	VT40	BT15	0,780			638,50
FB.035.002 W	35	65	27	50	15,1	30	60°	26,5	6	3				0,580			638,50
FB.035.003 W	35	88	27	50	26,5	30	30°	15,0	6	3				1,000			638,50
FB.035.004 W	35	94	27	50	29,5	30	15°	8,0	6	3				1,190			638,50
FB.035.005 W	35	50,7	22	60	8	30	75°	29,5	6	3				0,460			638,50
FB.035.006 W	35	84	27	50	24,5	30	40°	19	6	3				0,860			638,50
FB.035.007 W	35	91	27	50	28,5	30	20°	10	6	3				1,130			638,50
FB.035.008 W	35	73	27	50	18	30	50°	23	6	3				0,820			638,50
FB.035.009 W	35	98	27	50	32	30	10°	6	6	3				1,260			638,50

Disponibile a richiesta anche FB 035 con gradazioni differenti Y°
Lieferbar auf Anfrage FB 035 mit verschiedenen Graden Y°
Available on request FB 035 with different grades Y°

K= Fattore d'avanzamento _ Vorschubfaktor _ Factor of feed


**BOX
TCMT SET W**

Frese smussi e svasature
Fasen Fräser
Milling cutters for chamfering

Art. SET 300W W - 45°

n° 1  300.016 WW
n° 1  300.021 WW



0,270


STOCK
**SPECIAL
NET PRICE
PROMO**

**BOX
TCMT SET W**

Frese smussi e svasature
Fasen Fräser
Milling cutters for chamfering

Art. SET 310W W - 60°

n° 1  310.016 WW
n° 1  310.027 WW



0,270


STOCK
**SPECIAL
NET PRICE
PROMO**

**BOX
TCMX SET W**

Frese per smussi, scanalature a V e centrare 45°
Fas-und Zentrierfräser 45°
Center drilling, chamfering and V grooving 45°

Art. SET 311W W

n° 1  311.020 WW
n° 4  TCMX 16T3ZR TiN



0,330


STOCK
**SPECIAL
NET PRICE
PROMO**

**BOX
SEEX SET W**

Frese per smussi, scanalature a V e centrare 45° / 30°
Fas-und Zentrierfräser 45° / 30°
Center drilling, chamfering and V grooving 45° / 30°

Art. SET 160W W - 45°

n° 1  160.45 W
n° 5  SEEX 12T408 TiN



0,250


STOCK
**SPECIAL
NET PRICE
PROMO**

**BOX
TCGX SET W**

Fresa per sbavatura e smusso 45°
Fasen Fräser 45°
Chamfering Milling Cutter 45°

Art. SET 7745-0525

n° 1  7745VT16-C12-0525
n° 4  TCGX 163504...



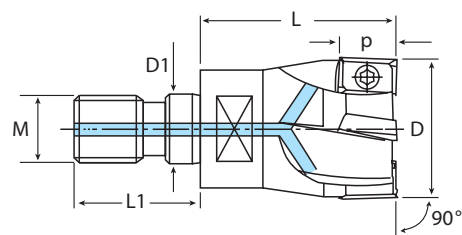
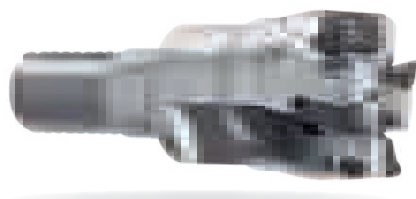
0,200


STOCK
**SPECIAL
NET PRICE
PROMO**

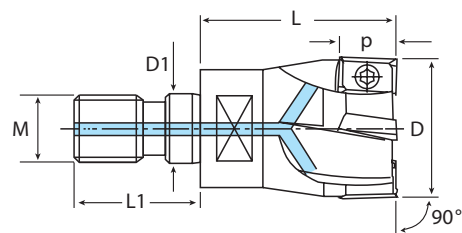
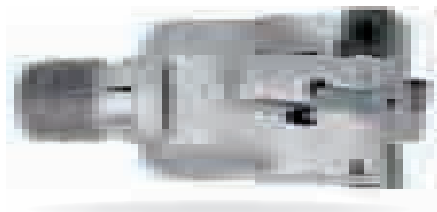
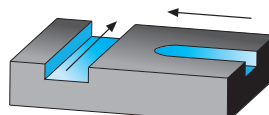
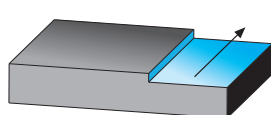
A technical drawing of a mechanical part, possibly a mold or a mill component, rendered in a light blue line-art style on a dark blue background. The drawing shows various geometric shapes, including circles, rectangles, and lines, with some parts labeled with numbers like 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100. The drawing is oriented diagonally, with the top-left corner of the part pointing towards the top-left of the frame.

MOULDMILL

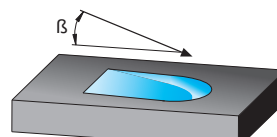
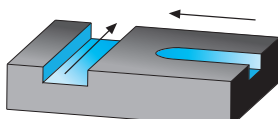
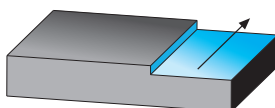
FRESE MODULARI PER SPALLAMENTO EINSCHRAUBKUGELGESENKFRÄSER _ THREADED TYPE MILLING CUTTERS



741MO.N													STOCK	€
741MO D10/2 N	10	6,5	16	14,5	M6	5,2	2	 APKT APMX 0602...	VT18	BT06	0,010			152,50
741MO D12/3 N	12	6,5	16	14,5	M6	5,2	3				0,010			197,50
741MO D16/4 N	16	8,5	21	17,5	M8	5,2	4				0,020			231,-
741MO D20/5 N	20	10,5	26	20	M10	5,2	5				0,050			247,50
741MO D25/7 N	25	12,5	30	22	M12	5,2	7				0,100			270,50
741MO D32/8 N	32	17	43	23	M16	5,2	8				0,240			291,50



740MO	D	D1	L		L1		M	p	β	Z				KG		STOCK	€
740MO D10/1	10	6,5	20	14,5	M6	10	11,0°	1	APHT APHX APKT 1003...	VT25	BT08	0,010			135,-		
740MO D12/1	12	6,5	20	14,5	M6	10	9,0°	1				0,010			135,-		
740MO D16/2	16	8,5	25	17,5	M8	10	3,5°	2				0,020			163,-		
740MO D20/3	20	10,5	30	20	M10	10	1,5°	3				0,050			205,-		
740MO D25/3	25	12,5	35	22	M12	10	0,9°	3				0,100			205,-		
740MO D25/4	25	12,5	35	22	M12	10	0,9°	4				0,900			243,50		
740MO D28/4	28	12,5	35	22	M12	10	0,9°	4				0,120			271,-		
740MO D30/4	30	17	43	24	M16	10	0,6°	4				0,210			271,-		
740MO D32/5	32	17	43	24	M16	10	0,6°	5				0,220			268,50		



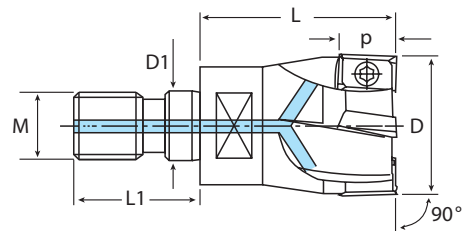
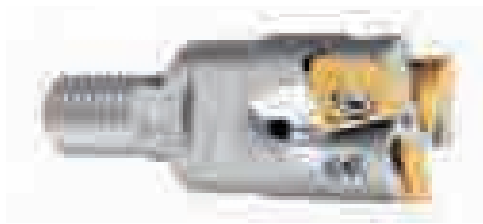
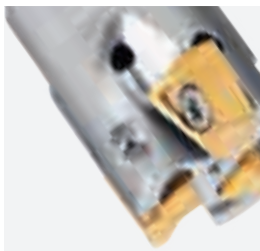
730MO	D	D1	L	L1	M	p	β	Z						STOCK	€
730MO D32/3	32	17	46	24	M16	17	2,0°	3	APHT APHX APKT 1604...	VT40	BT15	0,220			188,50
730MO D40/4	40	17	46	24	M16	17	1,5°	4				0,330			238,-

FRESE MODULARI PER SPALLAMENTO EINSCHRAUBKUGELGESENKFRÄSER _ THREADED TYPE MILLING CUTTERS

MILLING

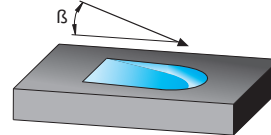
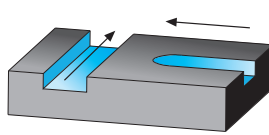
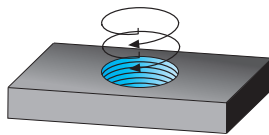
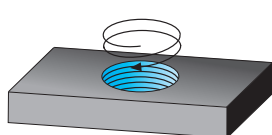
MINIMILL

MOULDMILL

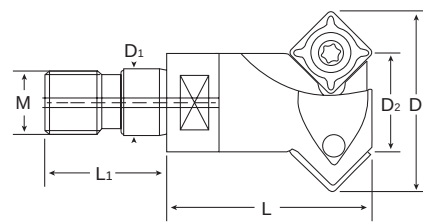


745MO

	D	D1	L	L1	M	p	β	z				KG		€
745MO D20/3	20	10,5	30	20	M10	10	4,0°	3	LNEX LNKX LNMX 10...	VT 30 745	BT09	0,050	●	186,-
745MO D25/3	25	12,5	35	22	M12	10	3,5°	3				0,100	●	227,-
745MO D32/4	32	17	43	24	M16	10	3,0°	4				0,230	●	261,50

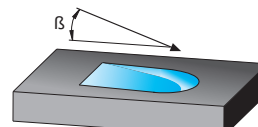
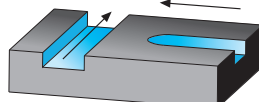
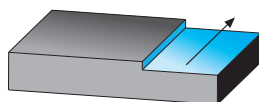


FRESE MODULARI PER SMUSSO EINSCHRAUBFASENFRÄSER _ THREADED TYPE MILLING CUTTERS

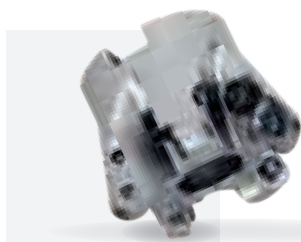


321MO

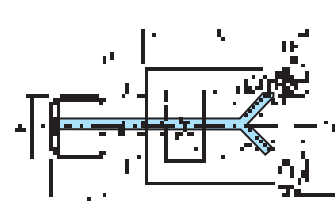
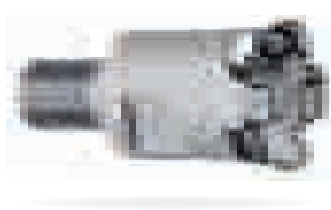
	D	D1	D2	L	L1	M	z				KG		€
321MO D12/1	23,7	8,5	12	30	17,5	8	1	SPGT SPMT 09T3...	VT35S	BT15	0,190	●	124,-
321MO D16/2	28,8	10,5	16	30	20	10	2				0,150	●	152,50
321MO D30/3	42,3	17	30	35	24	16	3				0,270	●	197,50



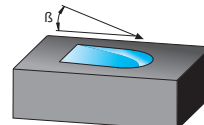
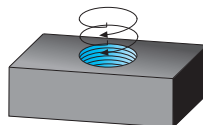
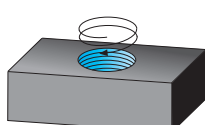
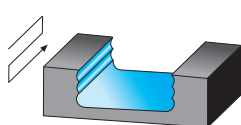
FRESE A COPIARE EINSCHRAUBKUGELGESENKFRÄSER FÜR RUND - WSP _ THREADET TYPE MILLING CUTTERS

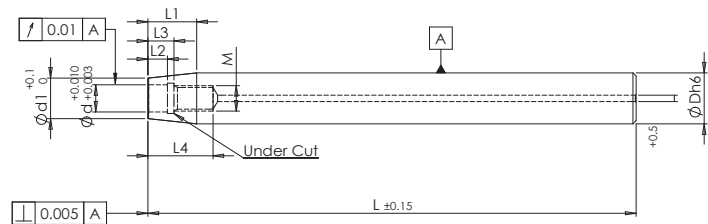


400M	D	d	H	p	β	z						KG		STOCK	€
400M 042-10/6	42	16	44	5	—	6	RD.. 1003...					0,240		●	279,-
400M 052-12/5	52	22	50	6	5,7°	5	RD.. 12T3...	VT35	--	CVB 35	BT15	0,360		●	274,-
400M 066-12/6	66	27	50	6	4,1°	6	RD.. 12T3...					0,610		●	310,-
400M 080-12/7	80	27	50	6	3,2°	7	RD.. 12T3...					1,080		●	346,50
400M 052-16/4	52	22	50	8	8,8°	4	RD.. 1604...					0,330		●	274,-
400M 066-16/5	66	27	50	8	6,0°	5	RD.. 1604...					0,500		●	395,50
400M 080-16/6	80	27	50	8	4,5°	6	RD.. 1604...	VT45	CVB 45	--	BT20	1,050		●	401,-
400M 100-16/7	100	32	55	8	3,7°	7	RD.. 1604...					1,800		●	441,-
400M 125-16/8	125	40	55	8	2,8°	8	RD.. 1604...					2,300		●	557,50
400M 160-16/9	160	40	55	8	1,8°	9	RD.. 1604...					4,460		●	859,-

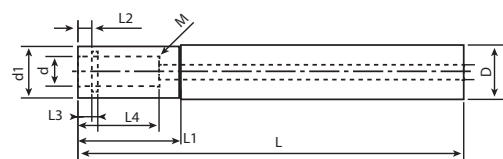


400MO	D	L	M	D1	L1	p	β	z					KG		STOCK	€
400MO D10/2	10	18	M6	6,5	14,5	2,5	28,9°	2	RD.. 0501...	VT18	--	--	0,010		●	163,50
400MO D20/5	20	30	M10	10,5	20	2,5	6,9°	5	RD.. 0501...		--	--	0,060		●	290,50
400MO D12/2	12	18	M6	6,5	14,5	3,5	22,7°	2	RD.. 07T1...				0,010		●	154,50
400MO D15/2	15	23	M8	8,5	17,5	3,5	20,0°	2	RD.. 0702...				0,020		●	154,50
400MO D15/3	15	23	M8	8,5	17,5	3,5	20,0°	3	RD.. 0702...				0,030		●	180,50
400MO D20/4	20	30	M10	10,5	20	3,5	11,0°	4	RD.. 0702...	VT2530	--	--	0,060		●	232,50
400MO D25/5	25	35	M12	12,5	22	3,5	7,3°	5	RD.. 0702...				0,100		●	267,50
400MO D30/5	30	43	M16	17	24	3,5	5,4°	5	RD.. 0702...				0,200		●	297,-
400MO D20/2	20	30	M10	10,5	20	5	39,0°	2	RD.. 1003...				0,050		●	163,50
400MO D25/2	25	35	M12	12,5	22	5	14,3°	2	RD.. 1003...				0,100		●	163,50
400MO D25/3	25	35	M12	12,5	22	5	14,3°	3	RD.. 1003...				0,090		●	180,50
400MO D30/4	30	43	M16	17	24	5	9,3°	4	RD.. 1003...	VT35	--	--	0,200		●	242,50
400MO D35/4	35	43	M16	17	24	5	7,3°	4	RD.. 1003...				0,200		●	247,50
400MO D35/5	35	43	M16	17	24	5	7,3°	5	RD.. 1003...				0,250		●	302,-
400MO D42/5	42	43	M16	17	24	5	5,4°	5	RD.. 1003...				0,250		●	305,50
400MO D24/2	24	35	M12	12,5	22	6	—	2	RD.. 12T3...				0,100		●	175,-
400MO D35/3	35	43	M16	17	24	6	—	3	RD.. 12T3...	VT35	--	CVB 35	0,200		●	196,-
400MO D42/4	42	43	M16	17	24	6	8,3°	4	RD.. 12T3...				0,250		●	254,-
400MO D32/2	32	43	M16	17	24	8	—	2	RD.. 1604...	VT45	CVB 45	--	0,200		●	196,-





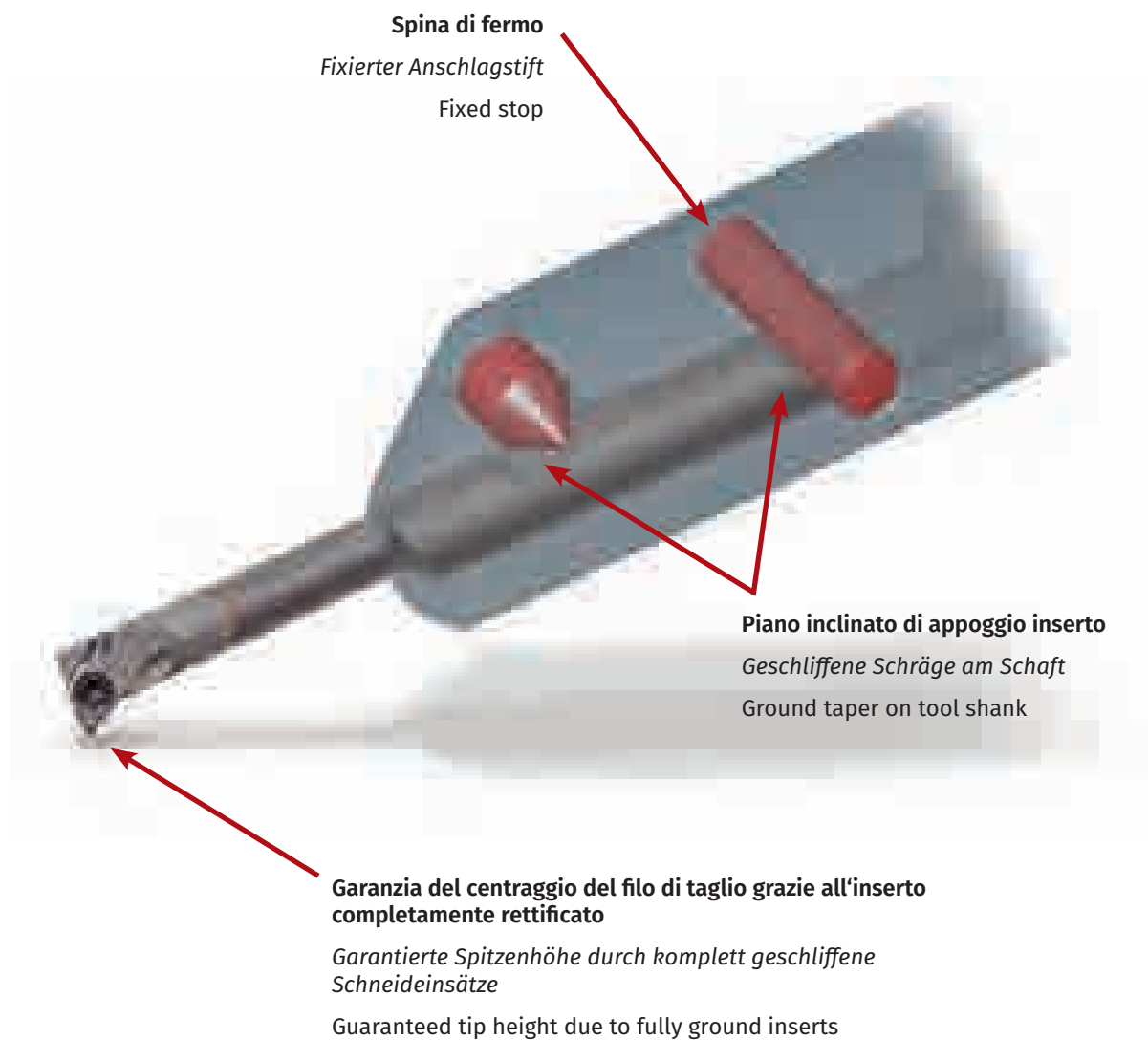
PCIMD	D	d	d1	L	L1	L2	L3	L4	M	KG		€
PCIMD12 060 M06	12	6,5	9,7	60	15	5	8	19	6	0,100	●	355,50
PCIMD12 080 M06	12	6,5	9,7	80	15	5	8	19	6	0,140	●	477,-
PCIMD12 100 M06	12	6,5	9,7	100	15	5	8	19	6	0,200	●	502,-
PCIMD12 150 M06	12	6,5	9,7	150	15	5	8	19	6	0,300	●	583,-
PCIMD16 080 M08	16	8,5	12,7	80	15	6	9	20	8	0,350	●	521,50
PCIMD16 100 M08	16	8,5	12,7	100	15	6	9	20	8	0,350	●	550,50
PCIMD16 120 M08	16	8,5	12,7	120	15	6	9	20	8	0,350	●	663,50
PCIMD16 150 M08	16	8,5	12,7	150	15	6	9	20	8	0,350	●	701,50
PCIMD16 200 M08	16	8,5	12,7	200	15	6	9	20	8	0,600	●	784,50
PCIMD20 100 M10	20	10,5	17,7	100	20	10	13	26	10	0,500	●	873,-
PCIMD20 140 M10	20	10,5	17,7	140	20	10	13	26	10	0,700	●	916,-
PCIMD20 200 M10	20	10,5	17,7	200	20	10	13	26	10	0,900	●	1352,-
PCIMD25 100 M12	25	12,5	20,7	100	30	10	13	26	12	0,500	●	1130,-
PCIMD25 150 M12	25	12,5	20,7	150	30	10	13	26	12	0,500	●	1379,-
PCIMD25 200 M12	25	12,5	20,7	200	30	10	13	26	12	0,900	●	1466,50
PCIMD25 250 M12	25	12,5	20,7	250	30	10	13	26	12	1,-0	●	1782,50
PCIMD32 100 M16	32	17	28,7	100	30	10	14	30	16	1,250	●	1563,-
PCIMD32 150 M16	32	17	28,7	150	30	10	14	30	16	1,900	●	2177,-



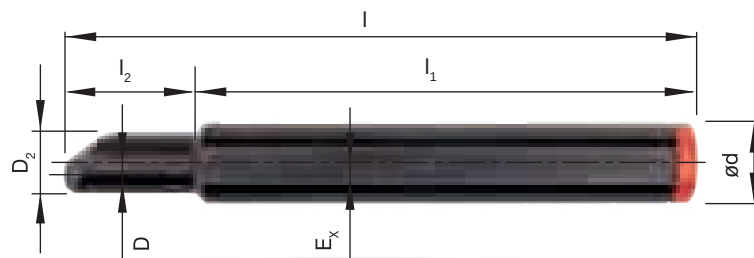
PCCMD	D	d	d1	L	L1	L2	L3	L4	M	KG		€
PCCMD10 150 M6	10	6,5	9,8	150	30	5	7	19	6	0,300	○	421,50
PCCMD12 150 M6	12	6,5	10,8	150	27	5	7	19	6	0,300	○	582,-
PCCMD16 150 M8	16	8,5	15	150	27	6	8	20	8	0,350	○	700,50
PCCMD16 200 M8	16	8,5	15	200	31	6	8	20	8	0,600	○	785,50
PCCMD20 200 M10	20	10,5	18	200	36	10	12	24	10	0,900	○	1347,-
PCCMD20 250 M10	20	10,5	18	250	44	10	12	24	10	1,-0	○	1447,50
PCCMD25 200 M12	25	12,5	22,5	200	36	10	12	26	12	0,500	○	1465,50
PCCMD25 250 M12	25	12,5	22,5	250	44	10	12	26	12	1,-0	○	1782,50
PCCMD32 250 M16	32	17	28,6	250	44	10	13	28	16	2,100	○	2949,-
PCCMD32 300 M16	32	17	28,6	300	52	10	13	28	16	2,300	○	3460,50

A technical drawing of a mechanical part, possibly a bracket or a housing, is shown in a light blue line-art style. The drawing includes various geometric features such as circles, lines, and arcs, representing different parts of the component. A semi-transparent blue rectangle is overlaid on the drawing, serving as a background for the text.

MICROTOOLS AMS



ADATTATORI AMS _ KLEMMHALTER AMS _ HOLDERS AMS



HAMS

	D	D2	d	l	l1	l2	Ex				KG		STOCK	€
--	---	----	---	---	----	----	----	--	--	--	----	--	-------	---

HAMS160401R/L

4

12

16

120

95

25

2,35

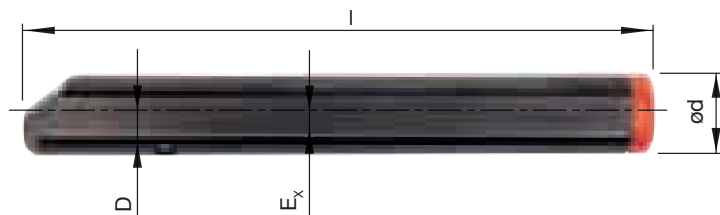
AS 0043

KVR 16

KP3111

0,150

318,50



HAMS

	D	d	l	Ex				KG		STOCK	€
--	---	---	---	----	--	--	--	----	--	-------	---

HAMS160401R/L

6

16

120

2,8

AS 0044

KVR 16

KP1111

0,160

318,50

HAMS160801R/L

8

16

120

2,8

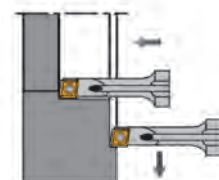
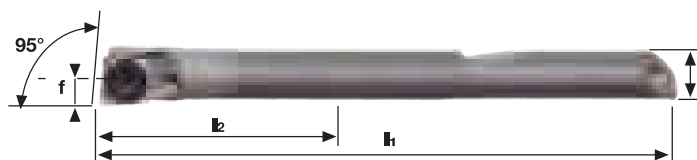
AS 0044

KVR 16

KP1111

0,160

318,50

BARENI PER TORNITURA INTERNA AMS
BOHRSTANGEN FÜR DIE INNENBEARBEITUNG AMS _ INTERNAL BORING BARS AMS

CARBIDE

E-SCLDR/L

	d	l1	l2	f	Dmin				KG		STOCK	€
--	---	----	----	---	------	--	--	--	----	--	-------	---

E04E-SCLDR/L/AMSAMS

4

46

24

2,4

4,8

CDGT 0401...

VT18B

BT06

0,015

240,50

E06E-SCLDR/L/AMSAMS

6

65

37

3,4

6,8

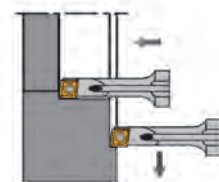
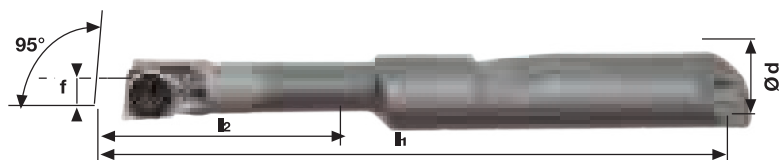
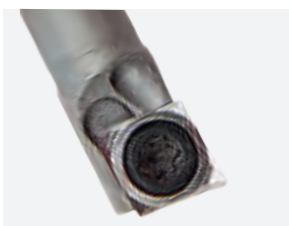
CDGT 0401...

VT18B

BT06

0,030

240,50



CARBIDE

E-SCLCR/L

	d	l1	l2	f	Dmin				KG		STOCK	€
--	---	----	----	---	------	--	--	--	----	--	-------	---

E04E-SCLCR/L/AMSAMS

8

57

26

2,5

5

CCGT 0301...

VT16

BT06

0,022

240,50

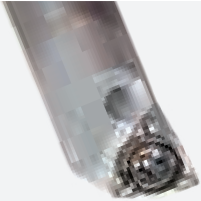
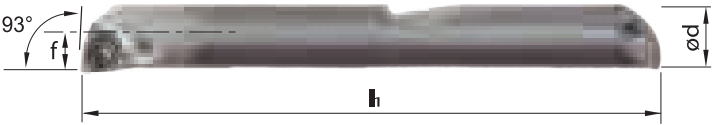
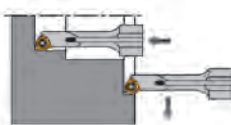
BARENI PER TORNITURA INTERNA AMS BOHRSTANGEN FÜR DIE INNENBEARBEITUNG AMS _ INTERNAL BORING BARS AMS

MILLING

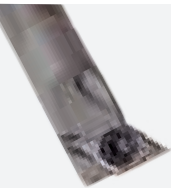
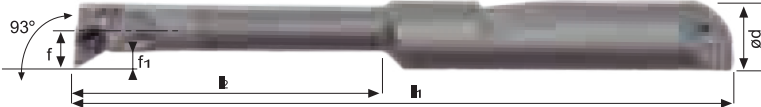
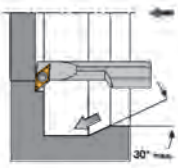
MINIMILL

MOULDMILL

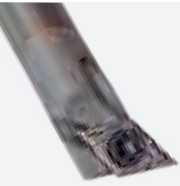
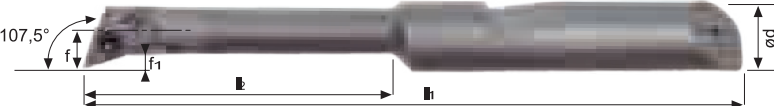
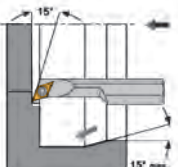
MICROTOOLS
AMS

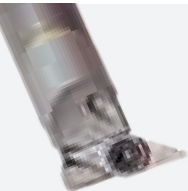
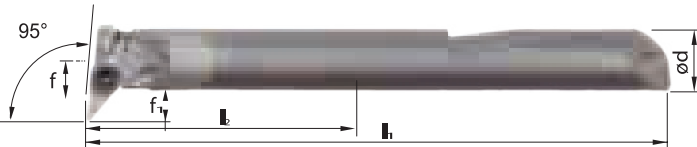
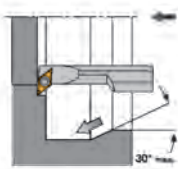
CARBIDE	E-SWUCR/L	Dimensions (mm)					Material	Screw	Clamp	Weight (KG)	Price (€)
		d	l1	l2	f	Dmin					
	E 06 SWUCR/L 02 AMS	6	65	37	3,9	7,8	WCMT WCGT 0201...	VT20B	BT06	0,030	● 240,50

CARBIDE	E-SDUCR/L	Dimensions (mm)						Material	Screw	Clamp	Weight (KG)	Price (€)
		d	l1	l2	f	f1	Dmin					
	E0406 SDUCR/L 04 AMS	6	56	26	3	1,5	5,6	DCGT 04T0...	VT1604	BT05	0,022	● 240,50
	E0408 SDUCR/L 04 AMS	8	57	26	3	1,5	5,6				0,022	● 240,50

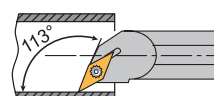
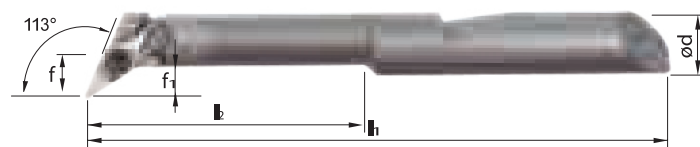




CARBIDE	E-SDQCR/L	Dimensions (mm)						Material	Screw	Clamp	Weight (KG)	Price (€)
		d	l1	l2	f	f1	Dmin					
	E0406 SDQCR/L 04 AMS	6	56	26	2,6	1,1	5,2	DCGT 04T0...	VT1604	BT05	0,022	● 240,50
	E0408 SDQCR/L 04 AMS	8	57	26	2,6	1,1	5,2				0,022	● 240,50

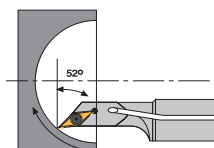
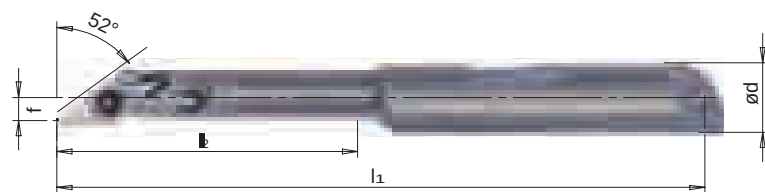




CARBIDE	E-SVLCR/L	Dimensions (mm)						Material	Screw	Clamp	Weight (KG)	Price (€)
		d	l1	l2	f	f1	Dmin					
	E0406 SVLCR/L 05 AMS	6	56	26	6	3	9,2	VCGT 0501...	VT1604	BT05	0,022	● 240,50
	E0408 SVLCR/L 05 AMS	8	57	26	5	3	9,2				0,031	● 240,50

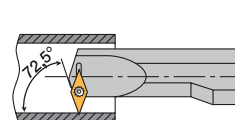
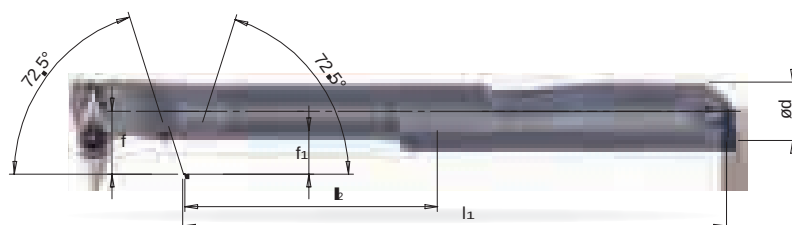
BARENI PER TORNITURA INTERNA AMS BOHRSTANGEN FÜR DIE INNENBEARBEITUNG AMS _ INTERNAL BORING BARS AMS



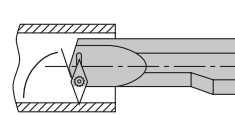
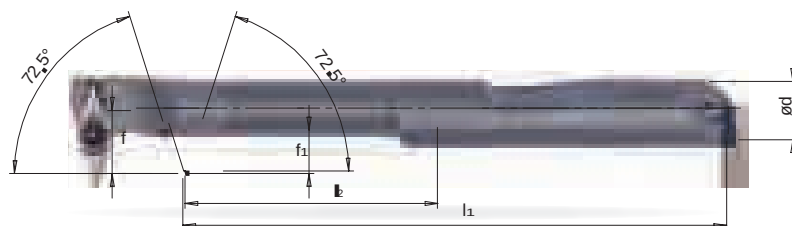
CARBIDE	E-SVXCR/L	(mm)						VCVT 0501...	VT1604	BT05	KG	STOCK	€
		d	l1	l2	f	f1	Dmin						
	E04004006SVXCR/LAMS	6	56	26	5	3	8,2				0,022	●	240,50
	E04004008SVXCR/LAMS	8	57	26	5	3	9,2				0,031	●	240,50



CARBIDE	E-SVJCR/L	(mm)						VCVT 0501...	VT1604	BT05	KG	STOCK	€
		d	l1	l2	f	Dmin							
	E04004006SVJCR/LAMS	6	56	26	2	5,5					0,021	●	240,50
	E04004008SVJCR/LAMS	8	57	26	2	5,5					0,028	●	240,50



CARBIDE	E-SVWCR/L	(mm)						VCVT 0501...	VT1604	BT05	KG	STOCK	€
		d	l1	l2	f	f1	Dmin						
	E04004006SVWCR/LAMS	6	56	26	6,5	4,5	10,3				0,024	●	240,50
	E04004008SVWCR/LAMS	8	57	26	5,5	3,5	10,2				0,035	●	240,50



CARBIDE	E-SV95CR/L	(mm)						VCVT 0501...	VT1604	BT05	KG	STOCK	€
		d	l1	l2	f	f1	Dmin						
	E04004006SV95CR/LAMS	6	56	26	6	4,5	9,2				0,024	●	240,50
	E04004008SV95CR/LAMS	8	57	26	5	3	9,2				0,037	●	240,50

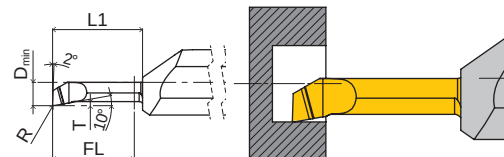
BARENI PER TORNITURA INTERNA AMS BOHRSTANGEN FÜR DIE INNENBEARBEITUNG AMS _ INTERNAL BORING BARS AMS

MILLING

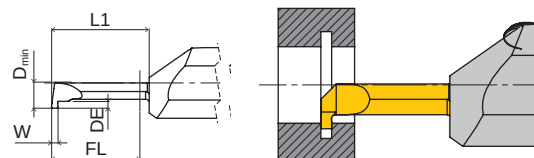
MINIMILL

MOULDMILL

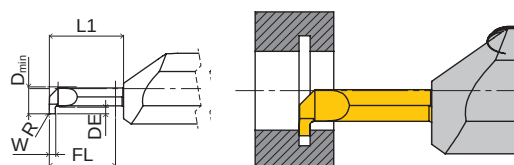
MICROTOOLS
AMS



TURNING 95°	↔ (mm)					L1	STO	K15K15	€	
	Dmin	FL	R	T					TiN TiN	TiAlN ALN
MIEMICS-D-250401-200.40R	2,5	20	0,1	0,4		22	○	79,50	82,50	82,50
MIEMICS-D-300401-200.40R	3,0	20	0,1	0,4		22	○	78,-	80,50	80,50
MIEMICS-D-390602-150.40R	3,9	15	0,2	0,6		17	○	71,50	73,50	73,50
MIEMICS-D-590802-200.60R	5,9	20	0,2	0,8		22	○	94,50	97,-	97,-
MIEMICS-D-590801-150.60R	5,9	15	0,1	0,8		17	○	89,50	92,-	92,-
MIEMICS-D-6005015-420.60R	6,0	42	0,15	0,8		44	○	106,50	109,-	109,-

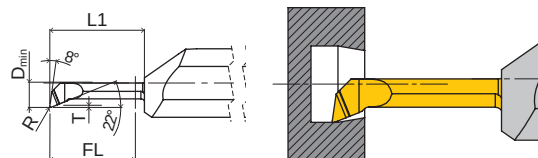


GROOVING	↔ (mm)					L1	STO	K15K15	€	
	Dmin	W	DE	FL					TiN TiN	TiAlN ALN
MIEMICS-S-39100800-100.40R	3,9	1	0,8	10		12	○	97,-	99,-	99,-
MIEMICS-S-59151800-100.60R	5,9	1,5	1,8	10		12	○	107,50	110,-	110,-
MIEMICS-S-69202500-150.80R	6,9	2	2,5	15		17	○	128,-	130,50	130,50
MIEMICS-S-79182500-250.80R	7,9	1,8	2,5	25		27	○	128,-	130,50	130,50



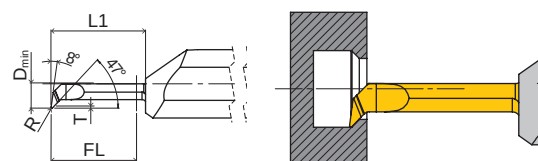
CIR-CLIP DIN471/472	↔ (mm)					L1	STO	K15K15	€	
	Dmin	W	DE	R	FL				TiN TiN	TiAlN ALN
MIEMICS-472-41139110-150.40R	4,1	1,39	1,1	0,05	15	17	○	94,-	96,50	96,50
MIEMICS-472-841119200-200.80R	8,4	1,19	2	0,05	20	22	○	131,50	133,50	133,50
MIEMICS-472-84169250-200.80R	8,4	1,69	2,5	0,05	20	22	○	136,-	138,50	138,50

BARENI PER TORNITURA INTERNA AMS BOHRSTANGEN FÜR DIE INNENBEARBEITUNG AMS _ INTERNAL BORING BARS AMS



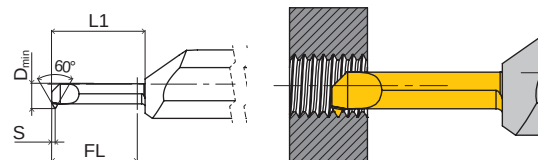
COPYING

	D_{min}	FL	$\longleftrightarrow$ (mm) R	T	L1	STOCK	MS	€ TIN	€ TALN
MCMC5408908152-40R	3,9	15	0,2	0,8	17	○	71,50	73,50	73,50
MCMC500500550-26R	5	25	0,2	0,5	26	○	111,-	113,-	113,-
MCMC5408908152-40R	5,9	20	0,2	1,8	22	○	92,50	94,50	94,50



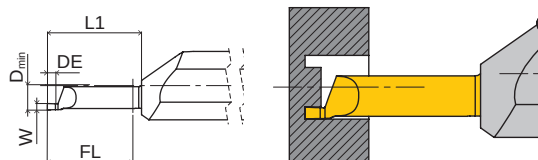
COPYING 45°

	D_{min}	FL	$\longleftrightarrow$ (mm) R	T	L1	STOCK	MS	€ TIN	€ TALN
MCMC5408908152-40R	3,9	20	0,4	1,3	22	○	85,-	87,-	87,-
MCMC5408908152-40R	4	15	0,4	0,6	17	○	77,-	79,-	79,-



THREADING 60°, METRIC PARTIAL PROFILE

	D_{min}	Th	P	S	FL	L1	STOCK	MS	€ TIN	€ TALN
MCMC5408908152-40R	4	M5	0,5-1,0	0,7	15	17	○	73,-	75,50	75,50
MCMC5408908152-40R	6	M8	0,5-1,5	0,8	20	22	○	92,-	94,-	94,-



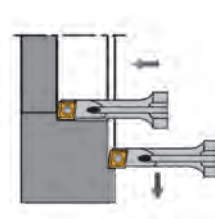
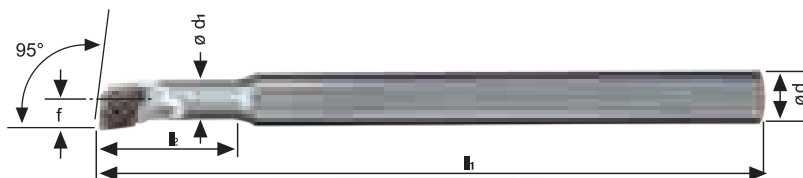
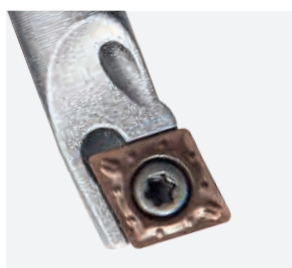
AXIAL GROOVING

	D_{min}	$\longleftrightarrow$ (mm) W	DE	FL	L1	STOCK	MS	€ TIN	€ TALN
MCMC5408908152-40R	7	1,5	2	20	22	○	86,50	89,-	89,-
MCMC5408908152-40R	9	1,5	2	25	27	○	117,50	119,50	119,50



MINITOOLS

BARENI PER TORNITURA INTERNA BOHRSTANGEN FÜR DIE INNENBEARBEITUNG _ INTERNAL BORING BARS



STEEL	A-SCLCR/L												STOCK	€
	d	d1	l1	l2	f	Dmin				KG				
	A 0608H SCLCR/L 06	8	6	100	21,5	4,2	8	CCMT CCGT 0602...	VT25B	BT08	0,050			88,-
	A 0810J SCLCR/L 06	10	8	110	27	6	11				0,070			88,-
	A 1012K SCLCR/L 06	12	10	125	32,5	7	13				0,100			99,-
A 1216M SCLCR/L 06	16	12	150	42	9	16	0,200						99,-	

HSS	AH-SCLCR/L											STOCK		
	d	d1	l1	l2	f	D _{min}								
	AH 0608H SCLCR/L 06	8	6	100	25	4	8,5	CCMT CCGT 0602...	VT25B	BT08	0,050			115,50
	AH 0810J SCLCR/L 06	10	8	110	32	6	12				0,070			123,50
	AH 1012K SCLCR/L 06	12	10	125	38	7	14				0,100			130,50
	AH 1216M SCLCR/L 06	16	12	150	50	9	18				0,200			159,50

STEEL	A-SCLDR/L												STOCK	€
	d	d1	 (mm)		f	D _{min}								
			l1	l2										
	A 0408H SCLDR/L 04	8	4	100	16	2,4	4,8	CDGT 0401...	VT18B	BT06	0,030		●	90,-
	A 0508H SCLDR/L 04	8	5	100	20	2,9	5,8				0,040		●	90,-
	A 0608H SCLDR/L 04	8	6	100	24	3,4	6,8				0,050		●	90,-

CARBIDE	E-SCLDR/L												
	d	d1	 (mm)		f	D _{min}						STOCK	€
	d	d1	l1	l2	f	D _{min}				KG			
	d	d1	l1	l2	f	D _{min}							
E 0408H SCLDR/L 04	8	4	100	24	2,4	4,8	CDGT 0401...	VT18B	BT06	0,040		●	217,50
E 0508H SCLDR/L 04	8	5	100	30	2,9	5,8				0,040		●	217,50
E 0608H SCLDR/L 04	8	6	100	36	3,4	6,8				0,050		●	217,50

STEEL	A-SCUPR/L											STOCK							
	d	d1	l1	l2	f	D _{min}													
	A 0608H SCUPR/L 05													8	6	100	20	4,5	8
	A 0810J SCUPR/L 05													10	8	110	26	6	11
	A 1012K SCUPR/L 05													12	10	125	32	7	13
A 1216M SCUPR/L 05						16	12	150	40	9	16								

CARBIDE	E-SCUPR/L											STOCK	€
	d	d1	 (mm)		f	D _{min}							
			l1	l2									
E 0608H SCUPR/L 05	8	6	100	28	4,5	8	CPMT CPGT 05T1...	VT22B	BT06	0,050			217,50
E 0810J SCUPR/L 05	10	8	110	36	6	11				0,090			236,50
E 1012K SCUPR/L 05	12	10	125	44	7	13				0,170			305,50
E 1216M SCUPR/L 05	16	12	150	55	9	16				0,300			491,-

STEEL	A-SCXPR/L											STOCK	€
	d	d1	l1	l2	f	D _{min}							
A 0608H SCXPR/L 05	8	6	100	20	4,5	8,5	CPMT CPGT 05T1...	VT22B	BT06	0,050			90,-
A 0810J SCXPR/L 05	10	8	110	26	6	11				0,070			90,-
A 1012K SCXPR/L 05	12	10	125	32	7	13				0,100			90,-
A 1216M SCXPR/L 05	16	12	150	40	9	16				0,200			97,-

CARBIDE	E-SCXPR/L	d	d1	 (mm)		f	D _{min}				 KG		 STOCK	
				l1	l2									
	E 0608H SCXPR/L 05	8	6	100	28	4,5	8,5	CPMT CPGT 05T1...	VT22B	BT06	0,050			217,50
	E 0810J SCXPR/L 05	10	8	110	36	6	11				0,090			236,50
	E 1012K SCXPR/L 05	12	10	125	44	7	13				0,170			305,50
E 1216M SCXPR/L 05	16	12	150	55	9	16	0,300						491,-	

BARENI PER TORNITURA INTERNA BOHRSTANGEN FÜR DIE INNENBEARBEITUNG _ INTERNAL BORING BARS

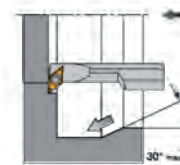
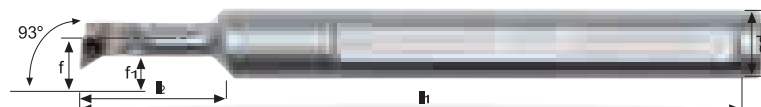
MILLING

MINIMILL

MOULDMILL

MICROTOOLS
AMS

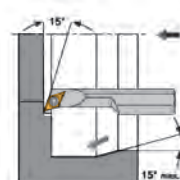
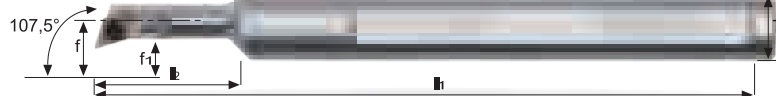
MINITOOLS



STEEL	A-SDUCR/L													
	d	l1	l2	f	f1	Dmin								
	 (mm)													
	d	l1	l2	f	f1	Dmin								
	d	l1	l2	f	f1	Dmin								
A 0408F SDUCR/L 04	8	80	15	3	1,5	5,6	DCGT 04T0...	VT1604	BT05	0,030		 105,-		
A 0810H SDUCR/L 07	10	100	22,5	6,5	4,4	12,5	DCMT			0,070		 88,-		
A 1012K SDUCR/L 07	12	125	27,5	9	5,9	15,5	DCGT	VT25B	BT08	0,100		 94,50		
A 1216M SDUCR/L 07	16	150	40,5	11	4,9	18	0702...			0,200		 99,50		

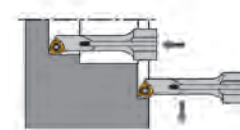
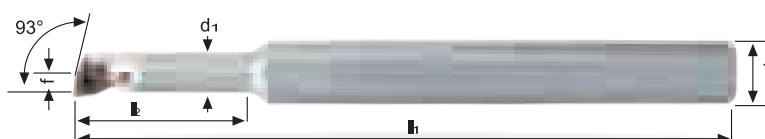
HSS	AH-SDUCR/L													
	d	l1	l2	f	f1	Dmin								
	(mm)													
	d	l1	l2	f	f1	Dmin				KG				
	d	l1	l2	f	f1	Dmin								
	AH 0810H SDUCR/L 07	10	100	22	7	5	12,5	DCMT	VT25B	BT08	0,070			132,-
	AH 1012K SDUCR/L 07	12	125	28	9	5	15,5	DCGT			0,100			146,50
	AH 1216M SDUCR/L 07	16	150	36	11	5	19,5	0702...			0,200			165,50

CARBIDE	E-SDUCR/L														
	d	l1	 (mm)		f	f1	Dmin						€	for	
	(mm)														
	d	l1	l2	f	f1	Dmin									
	d	l1	l2	f	f1	Dmin									
	E 0408F SDUCR/L 04	8	80	26	3	1,5	5,6	DCGT 04T0...	VT1604	BT05	0,042			236,-	



STEEL	A-SDQCR/L														
			d	l1	l2	f	f1							Dmin	
	A 0408F SDQCR/L 04		8	80	15	2,6	1,1	5,2	DCGT 04T0...	VT1604	BT05	0,030			105,-
	A 0810H SDQCR/L 07		10	100	22,4	6,4	3	12,5	DCMT			0,070			88,-
	A 1012K SDQCR/L 07		12	125	27,5	9	4	15,5	DCMT DCGT	VT25B	BT08	0,100			94,50
A 1216M SDQCR/L 07		16	150	39,5	11	5	19,5	0702...			0,200			99,50	

CARBIDE	E-SDQCR/L													
	d	l1	 (mm)		f	f1	Dmin						€	on
	(mm)													
	d	l1	l2	f	f1	Dmin								
	d	l1	l2	f	f1	Dmin								
	E 0408F SDQCR/L 04	8	80	26	2,6	1,1	5,2	DCGT 04T0...	VT1604	BT05	0,042		● 236.-	



STEEL	A-SWUCR/L													
	d	d1	 (mm)		f	Dmin								
	(mm)													
	d	d1	l1	l2	f	Dmin								
	d	d1	l1	l2	f	Dmin								
	A 0508H SWUCR/L 02	8	5	100	18	2,9	5,8	WCMT			0,040		●	90,-
	A 0608H SWUCR/L 02	8	6	100	24	3,9	7,8	WCGT 0201...	VT20B	BT06	0,050		●	90,-

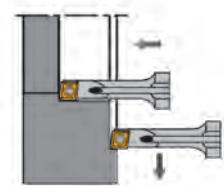
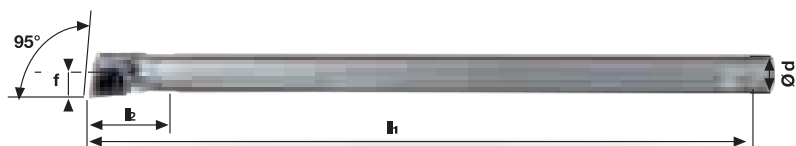
HSS

AH-SWUCR/L

d	d1	l1	l2	f	Dmin							
(mm)												
AH 0508H SWUCR/L 02	8	5	100	18	2,9	5,8	WCMT	VT20B	BT06	0,040		 126,-
AH 0608H SWUCR/L 02	8	6	100	24	3,9	7,8	WCGT 0201...			0.050		 126,-

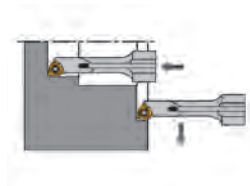
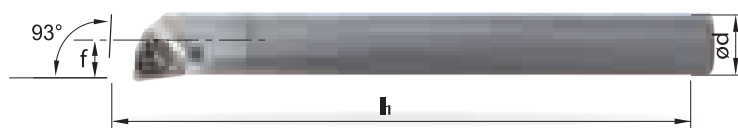
CARBIDE	E-SWUCR/L												
	d	d1	 (mm)		f	Dmin							
	(mm)												
	d	d1	l1	l2	f	Dmin							
	d	d1	l1	l2	f	Dmin							
	E 0508H SWUCR/L 02	8	5	100	24	2,9	5,8	WCMT			0,040		● 260,50
	E 0608H SWUCR/L 02	8	6	100	32	3,9	7,8	WCGT 0201...	VT20B	BT06	0.050		● 260,50

BARENI PER TORNITURA INTERNA BOHRSTANGEN FÜR DIE INNENBEARBEITUNG _ INTERNAL BORING BARS

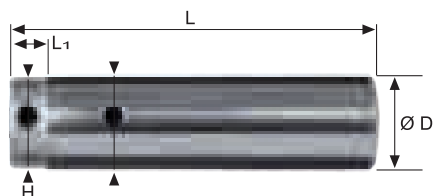
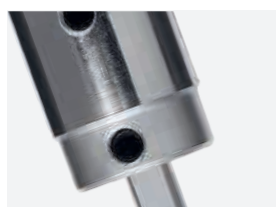


STEEL	A-SCLDR/L	d	(mm)			D _{min}				KG		STOCK	€
			l1	l2	f								
	A 04E SCLDR/L 04	4	70	-	2,4	4,8	CDGT 0401...	VT18B	BT06	0,030		●	86,-
	A 05E SCLDR/L 04	5	70	-	2,9	5,8				0,040		●	86,-
	A 06F SCLDR/L 04	6	80	-	3,4	6,8				0,050		●	86,-

CARBIDE	E-SCLDR/L	d	(mm)			D _{min}				KG		STOCK	€
			l1	l2	f								
	E 04F SCLDR/L 04	4	80	-	2,4	4,8	CDGT 0401...	VT18B	BT06	0,030		●	168,50
	E 05F SCLDR/L 04	5	80	-	2,9	5,8				0,040		●	168,50
	E 06G SCLDR/L 04	6	95	-	3,4	6,8				0,050		●	168,50

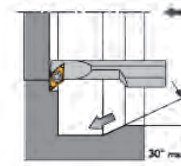
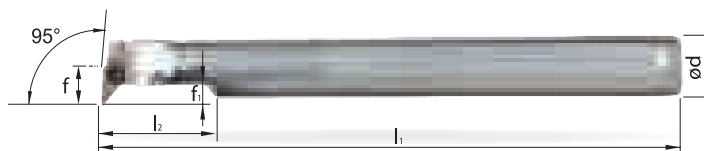


CARBIDE	E-SWUCR/L	d	(mm)			D _{min}				KG		STOCK	€
			l1	l2	f								
	E 05F SWUCR/L 02	5	85	-	2,9	5,8	WCMT WCGT 0201...	VT20B	BT06	0,040		●	168,50
	E 06G SWUCR/L 02	6	95	-	3,9	7,8				0,050		●	168,50



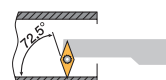
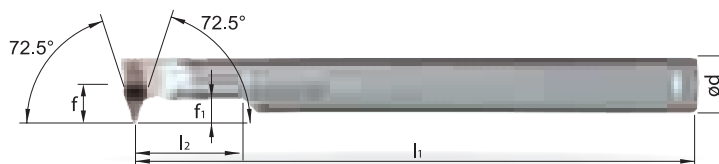
MINI COLLET		Ød	ØD	(mm)		L	L1	H	KG		STOCK	€
SC 04-16		4							0,010	--	●	122,50
SC 05-16		5	16			80	6	15	0,010	--	●	122,50
SC 06-16		6							0,010	--	●	122,50

BARENI PER TORNITURA INTERNA BOHRSTANGEN FÜR DIE INNENBEARBEITUNG _ INTERNAL BORING BARS



STEEL	A-SVLCR/L	d	l1	l2	f	f1	D _{min}				KG		STOCK	€
	A 08F SVLCR/L 05	8	80	15	5	3	9,2	VCGT 0501...	VT1604	BT05	0,040		●	86,-
	A 10H SVLCR/L 07	10	100	22	7	5	12,5	VCMT VCGT 0702...	VT20	BT06	0,080		●	80,50
	A 12K SVLCR/L 07	12	125	28	9	6	15,5				0,120		●	83,-
	A 16M SVLCR/L 07	16	150	36	11	5	19,5				0,250		●	97,-

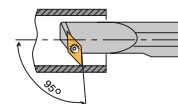
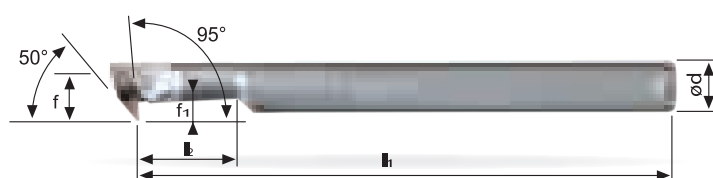
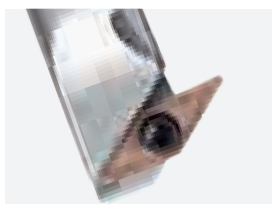
CARBIDE	E-SVLCR/L	d	l1	l2	f	f1	D _{min}				KG		STOCK	€
	E 08F SVLCR/L 05	8	80	26	5	3	9,2	VCGT 0501...	VT1604	BT05	0,070		●	225,50
	E 10H SVLCR/L 07	10	100	32	7	5	12,5	VCMT VCGT 0702...	VT20	BT06	0,170		●	229,50
	E 12K SVLCR/L 07	12	125	40	9	6	15,5				0,300		●	305,50
	E 16M SVLCR/L 07	16	150	55	11	5	19,5				0,500		●	507,-



STEEL	A-SVCR/L	d	l1	l2	f	f1	D _{min}				KG		STOCK	€
	A 08F SVCR/L 05	8	80	15	5,5	3,5	10,2	VCGT 0501...	VT1604	BT05	0,040		●	86,-
	A 10H SVCR/L 07	10	100	22	8	6	13,5	VCMT VCGT 0702...	VT20	BT06	0,080		●	80,50
	A 12K SVCR/L 07	12	125	28	9	6	15,5				0,120		●	83,-
	A 16M SVCR/L 07	16	150	36	11	6	19,5				0,250		●	97,-
	A 16M SVCR/L 11	16	150	40	13,9	9,5	23	VCMT VCGT 1103...	VT25B	BT08	0,250		●	151,50
	A 20Q SVCR/L 11	20	180	50	13,9	9,5	25	VCMT VCGT 1604...	VT40B	BT15	0,400		●	158,50
	A 25R SVCR/L 16	25	200	62,5	19,9	13	34				0,690		●	173,50

CARBIDE	E-SVCR/L	d	l1	l2	f	f1	D _{min}				KG		STOCK	€
	E 08F SVCR/L 05	8	80	26	5,5	3,5	10,2	VCGT 0501...	VT1604	BT05	0,070		●	225,50
	E 10H SVCR/L 07	10	100	32	8	6	13,5	VCMT VCGT 0702...	VT20	BT06	0,170		●	229,50
	E 12K SVCR/L 07	12	125	40	9	6	15,5				0,300		●	305,50
	E 16M SVCR/L 07	16	150	55	11	6	19,5				0,500		●	507,-

BARENI PER TORNITURA INTERNA BOHRSTANGEN FÜR DIE INNENBEARBEITUNG _ INTERNAL BORING BARS



STEEL	A-SV95CR/L						 (mm)							STOCK	€
	d	l1	l2	f	f1	Dmin									
A 08F SV95CR/L 05	8	80	15	5	3	9,2	VCMT 0501...	VT1604	BT05	0,040			134,50		
A 10H SV95CR/L 07	10	100	22	7	5	12,5	VCMT			0,080			134,50		
A 12K SV95CR/L 07	12	125	28	9	6	15,5	VCMT	VT20	BT06	0,120			134,50		
A 16M SV95CR/L 07	16	150	36	11	5	19,5	0702...			0,250			135,50		

BARENI PER TORNITURA INTERNA BOHRSTANGEN FÜR DIE INNENBEARBEITUNG _ INTERNAL BORING BARS

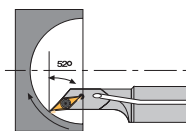
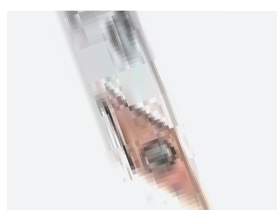
MILLING

MINIMILL

MOULDMILL

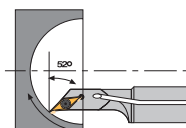
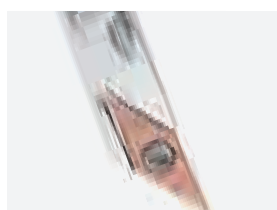
MICROTOOLS
AMS

MINITOOLS



STEEL	A-SVJBR/L												€
	d	l1	l2	f	D _{min}								
	A 16M SVJBR/L 11	16	150	31,4	2	22	VBMT VBGT 1103...	VT25B	BT08	0,250			128,-
	A 20Q SVJBR/L 11	20	180	38	2	24	VBMT VBGT 1103...	VT25B	BT08	0,500			129,-
	A 25R SVJBR/L 16	25	200	44	4,6	28	VBMT VBGT 1604...	VT40B	BT15	0,700			151,-

CARBIDE	E-SVJBR/L	d	 (mm)		f	D _{min}				 KG		 Price
			l1	l2								
	E16R SVJBR/L 11	16	200	31,4	2	22	VBMT VBGT 1103...	VT25B	BT08	0,500		 550,50
	E20S SVJBR/L 11	20	250	38	2	24				1,000		 921,-
	E25S SVJBR/L 16	25	250	44	4,6	28	VBMT VBGT 1604...	VT40B	BT15	1,800		 1497,-



STEEL	A-SVJCR/L	d	l1	l2	f	D _{min}							
	A 08F SVJCR/L 05	8	80	15	3	8	VCGT 0501...	VT1604	BT05	0,040			134,50
	A 10K SVJCR/L 07	10	125	18	1,5	13	VCMT VCGT 0702...	VT20	BT06	0,080			134,50
	A 12L SVJCR/L 07	12	140	18	2	13				0,120			134,50
	A 16M SVJCR/L 11	16	150	31,4	2	22	VCMT VCGT 1103...	VT25B	BT08	0,250			128,-
	A 20Q SVJCR/L 11	20	180	38	2	24				0,500			129,-
	A 25R SVJCR/L 16	25	200	44	4,6	28	VCMT VCGT 1604...	VT40B	BT15	0,700			151,-

HSS	AH-SVJCR/L	d	 (mm)		f	D _{min}							
	AH 16M SVJCR/L 11	16	150	30	4,6	22	VCMT VCGT 1103...	VT25B	BT08	0,250			232,50
	AH 20Q SVJCR/L 11	20	180	38	4,6	25				0,500			256,-
	AH 25R SVJCR/L 16	25	200	44	4,6	28	VCMT VCGT 1604...	VT40B	BT15	0,700			355,-

CARBIDE	E-SVJCR/L	d	l1 l2 (mm)	f	Dmin								
	E08F SVJCR/L 05	8	80	26	3	8	VCGT 0501...	VT1604	BT05	0,050			235,-
	E10K SVJCR/L 07	10	125	18	1,5	13	VCMT VCGT 0702...	VT20	BT06	0,170			241,50
	E12M SVJCR/L 07	12	150	18	2	13				0,300			308,-
	E16R SVJCR/L 11	16	200	31,4	2	22	VCMT VCGT 1103...	VT25B	BT08	0,500			550,50
	E20S SVJCR/L 11	20	250	38	2	24				1,000			921,-
	E25S SVJCR/L 16	25	250	44	4,6	28	VCMT VCGT 1604...	VT40B	BT15	1,800			1497,-

● Disponibile - Lieferbar - On stock

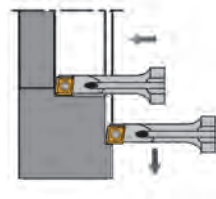
○ A richiesta - Auf Anfrage - On request

2023/24



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BARENI PER TORNITURA INTERNA BOHRSTANGEN FÜR DIE INNENBEARBEITUNG _ INTERNAL BORING BARS



A-SCLCR/L		d	l (mm)			D _{min}						KG		STOCK	€
STEEL	A 08H SCLCR/L 06	8	100	17,8	6	10	CCMT CCGT 0602...	--	--	VT25B	BT08	0,040			88,-
	A 10K SCLCR/L 06	10	125	17,7	7	12						0,080			88,-
	A 12L SCLCR/L 06	12	140	24,2	9	16						0,140			88,-
	A 16Q SCLCR/L 09	16	180	26,7	11	20	CCMT CCGT 09T3...	--	--	VT40B	BT15	0,250			101,50
	A 20R SCLCR/L 09	20	200	36,7	13	25						0,500			113,50
	A 25R SCLCR/L 12	25	200	40	17	32	CCMT CCGT 1204...	--	--	VT50	BT20	0,700			151,-
	A 32S SCLCR/L 12	32	250	30	22	40						1,400			249,50
	A 40T SCLCR/L 12	40	300	31,4	27	49						2,700			302,-

AH-SCLCR/L		d	l (mm)			D _{min}						KG		STOCK	€
HSS	AH 0410H SCLCR/L 03	10	100	24	2,5	5	CCGT 0301...	--	--	VT16	BT06	0,030			184,50
	AH 0610H SCLCR/L 03	10	100	24	2,5	7						0,040			186,50
	AH 08K SCLCR/L 06	8	125	20	5	10	CCMT CCGT 0602...	--	--	VT25B	BT08	0,040			136,50
	AH 10K SCLCR/L 06	10	125	20	6	12						0,080			137,50
	AH 12M SCLCR/L 06	12	150	20	7	14						0,120			159,50
	AH 16Q SCLCR/L 09	16	180	27	9	18	CCMT CCGT 09T3...	--	--	VT40B	BT15	0,250			232,50
	AH 20R SCLCR/L 09	20	200	27	11	23						0,500			256,-
	AH 25R SCLCR/L 12	25	200	40	15,5	28	CCMT CCGT 1204...	--	--	VT50	BT20	0,700			351,50

E-SCLCR/L		d	l (mm)			D _{min}						KG		STOCK	€
CARBIDE	E 04G SCLCR/L 03	4	90	10	2,5	5	CCGT 0301...	--	--	VT16	BT06	0,030			253,50
	E 05H SCLCR/L 03	5	100	10	3	6				BFTX 01604N		0,040			253,50
	E 06J SCLCR/L 03	6	110	10	3,5	7						0,050			260,50
	E 08K SCLCR/L 06	8	125	10	5	10	CCMT CCGT 0602...	--	--	VT25B	BT08	0,090			211,50
	E 10K SCLCR/L 06	10	125	10	6	12						0,170			215,50
	E 12M SCLCR/L 06	12	150	10	8	14						0,300			235,-
	E 16R SCLCR/L 09	16	200	16	10	18	CCMT CCGT 09T3...	--	--	VT40B	BT15	0,500			410,-
	E 20S SCLCR/L 09	20	250	16	12	23						1,000			889,-
	E 25S SCLCR/L 12	25	250	16	15	30	CCMT CCGT 1204...	--	--	VT50	BT20	1,800			1347,-
	E 32U SCLCR/L 12	32	350	26	22	39						3,700			2315,50

BARENI PER TORNITURA INTERNA BOHRSTANGEN FÜR DIE INNENBEARBEITUNG _ INTERNAL BORING BARS

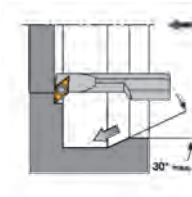
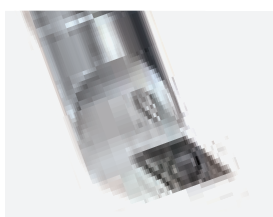
MILLING

MINIMILL

MOULDMILL

MICROTOOLS
AMS

MINITOOLS

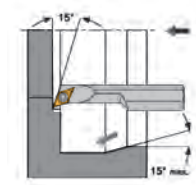
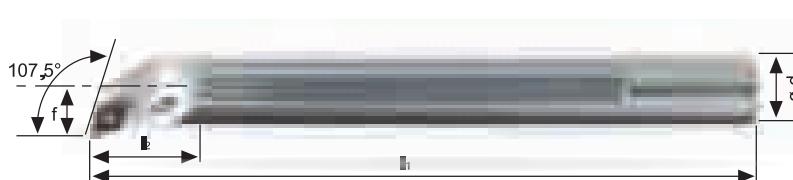
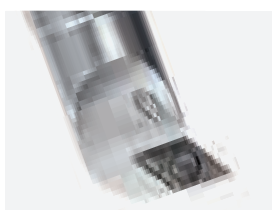


STEEL	A-SDUCR/L	d	(mm)			D _{min}										
			l1	l2	f											
	A 10K SDUCR/L 07	10	125	15,6	7	13,5								0,080	●	88,-
	A 12L SDUCR/L 07	12	140	22,6	9	16	DCMT DCGT 0702...	--	--	VT25B	BT08			0,120	●	88,-
	A 16Q SDUCR/L 07	16	180	27	11	20								0,250	●	101,50
	A 20R SDUCR/L 11	20	200	33,8	13	25	DCMT DCGT 11T3...	--	--	VT40B	BT15			0,500	●	113,50
	A 25R SDUCR/L 11	25	200	35,8	17	32								0,700	●	151,-
	A 32S SDUCR/L 11	32	250	18,5	22	40	DCMT DCGT 11T3...	US2311	GBS1111	SS1111	BT20			1,400	●	249,50
	A 40T SDUCR/L 11	40	300	18,5	27	49								2,700	●	302,-

HSS	AH-SDUCR/L	d	(mm)			D _{min}										
			l1	l2	f											
	AH 08K SDUCR/L 07	8	125	20	7,5	12								0,040	●	136,50
	AH 10K SDUCR/L 07	10	125	20	9	14	DCMT DCGT 0702...	--	--	VT25B	BT08			0,080	●	137,50
	AH 12M SDUCR/L 07	12	150	25	8	16								0,120	●	159,50
	AH 16Q SDUCR/L 07	16	180	25	10	20								0,250	●	232,50
	AH 20R SDUCR/L 11	20	200	30	13	26	DCMT DCGT 11T3...	--	--	VT40B	BT15			0,500	●	256,-
	AH 25R SDUCR/L 11	25	200	40	16	32								0,700	●	355,-

CARBIDE	E-SDUCR/L	d	(mm)			D _{min}										
			l1	l2	f											
	E 08K SDUCR/L 07	8	125	10	7,5	12,5								0,090	●	224,-
	E 10K SDUCR/L 07	10	125	10	7	12,5	DCMT DCGT 0702...	--	--	VT25B	BT08			0,170	●	224,-
	E 12M SDUCR/L 07	12	150	12,5	9	15								0,300	●	249,-
	E 16R SDUCR/L 07	16	200	16,5	11	19								0,500	●	410,-
	E 20S SDUCR/L 11	20	250	20,5	12,5	23,5	DCMT DCGT 11T3...	--	--	VT40B	BT15			1,000	●	889,-
	E 25S SDUCR/L 11	25	250	26	16	32								1,800	●	1347,-

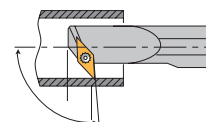
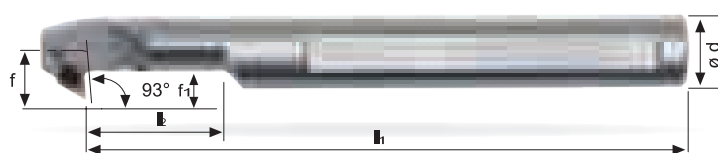
BARENI PER TORNITURA INTERNA BOHRSTANGEN FÜR DIE INNENBEARBEITUNG _ INTERNAL BORING BARS



STEEL	A-SDQCR/L	d	l (mm)				Dmin											
			l1	l2	f													
	A 10K SDQCR/L 07	10	125	16	7	14									0,080		●	88,-
	A 12L SDQCR/L 07	12	140	20	9	17	DCMT DCGT 0702...	--	--	VT25B	BT08				0,120		●	88,-
	A 16Q SDQCR/L 07	16	180	25	11	22									0,250		●	101,50
	A 20R SDQCR/L 11	20	200	32	13	26	DCMT DCGT 11T3...	--	--	VT40B	BT15				0,500		●	113,50
	A 25R SDQCR/L 11	25	200	40	17	31,5									0,700		●	151,-
	A 32S SDQCR/L 11	32	250	33,5	22	40	DCMT DCGT 11T3...	US2311	GBS1111	SS1111	BT15				1,400		●	249,50
	A 40T SDQCR/L 11	40	300	50	27	49									2,700		●	302,-

HSS	AH-SDQCR/L	d	l (mm)				Dmin											
			l1	l2	f													
	AH 08K SDQCR/L07	8	125	20	8	12									0,040		●	136,50
	AH 10K SDQCR/L07	10	125	20	7	13	DCMT DCGT 0702...	--	--	VT25B	BT08				0,080		●	137,50
	AH 12M SDQCR/L 07	12	150	20	8,5	16									0,120		●	159,50
	AH 16Q SDQCR/L 07	16	180	30	10	20									0,250		●	232,50
	AH 20R SDQCR/L 11	20	200	40	12,5	25	DCMT DCGT 11T3...	--	--	VT40B	BT15				0,500		●	256,-
	AH 25R SDQCR/L 11	25	200	40	16	32									0,700		●	355,-

CARBIDE	E-SDQCR/L	d	l (mm)				Dmin											
			l1	l2	f													
	E 08K SDQCR/L 07	8	125	10	7	12									0,090		●	224,-
	E 10K SDQCR/L 07	10	125	10	7	13	DCMT DCGT 0702...	--	--	VT25B	BT08				0,170		●	224,-
	E 12M SDQCR/L 07	12	150	12,5	8,5	16									0,300		●	249,-
	E 16R SDQCR/L 07	16	200	16,5	10	20									0,500		●	410,-
	E 20S SDQCR/L 11	20	250	13	12,5	25	DCMT DCGT 11T3...	--	--	VT40B	BT15				1,000		●	889,-
	E 25S SDQCR/L 11	25	250	17	16	32									1,800		●	1347,-



STEEL	A-SDXCR/L	d	l (mm)					Dmin										
			l1	l2	f	f1												
	A 08F SDXCR/L 04	8	80	15	5	3	9,20								0,040		●	135,50
	A 10H SDXCR/L 04	10	100	22	7	5	12,50	DCGT 04T0...	--	--	VT1604	BT05			0,060		●	135,50
	A 12L SDXCR/L 07	12	140	25	9	4,3	17	DCMT DCGT 0702...	--	--	VT25B	BT08			0,120		●	135,50
	A 16Q SDXCR/L 07	16	180	33	11	4,3	21								0,300		●	135,50
	A 20R SDXCR/L 11	20	200	40	13	10,7	25	DCMT DCGT 11T3...	--	--	VT40B	BT15			0,460		●	128,-
	A 25R SDXCR/L 11	25	200	50	17	10,7	31,5								0,740		●	146,-

BARENI PER TORNITURA INTERNA BOHRSTANGEN FÜR DIE INNENBEARBEITUNG _ INTERNAL BORING BARS

MILLING

MINIMILL

MOULDMILL

MICROTOOLS
AMS

MINITOOLS

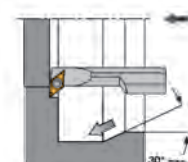


STEEL	A-STFCR/L	d	(mm)			D _{min}										
			l1	l2	f											
	A 10K STFCR/L 11	10	125	22,8	7	13								0,080		88,-
	A 12L STFCR/L 11	12	140	26,5	9	16	TCMT TCGT 1102...	--	--	VT25B	BT08		0,120		88,-	
	A 16Q STFCR/L 11	16	180	26,7	11	20							0,250		101,50	
	A 20R STFCR/L 16	20	200	36,6	13	25	TCMT TCGT 16T3...	--	--	VT40B	BT15		0,500		113,50	
	A 25R STFCR/L 16	25	200	41	17	32							0,700		151,-	
	A 32S STFCR/L 16	32	250	34,6	21,9	40	TCMT TCGT 16T3...	US5511	GBS1111	SS1111	BT15		1,400		249,50	
	A 40T STFCR/L 16	40	300	37,5	27	49							2,700		302,-	

HSS	AH-STFCR/L	d	(mm)			D _{min}										
			l1	l2	f											
	AH 10K STFCR/L 11	10	125	16	7	12							0,080		137,50	
	AH 12M STFCR/L 11	12	150	20	9	14	TCMT TCGT 1102...	--	--	VT25B	BT08		0,120		159,50	
	AH 16Q STFCR/L 11	16	180	25	11	18							0,250		232,50	
	AH 20R STFCR/L 11	20	200	32	13	23							0,500		256,-	
	AH 25R STFCR/L 16	25	200	40	17	28	TCMT TCGT 16T3...	--	--	VT40B	BT15		0,700		351,50	

CARBIDE	E-STFCR/L	d	(mm)			D _{min}										
			l1	l2	f											
	E 10K STFCR/L 11	10	125	16	6	12							0,170		235,-	
	E 12M STFCR/L 11	12	150	20	8	15	TCMT TCGT 1102...	--	--	VT25B	BT08		0,300		249,-	
	E 16R STFCR/L 11	16	200	25	10	19							0,500		410,-	
	E 20S STFCR/L 16	20	250	32	12	24	TCMT TCGT 16T3...	--	--	VT40B	BT15		1,000		889,-	
	E 25S STFCR/L 16	25	250	40	13,5	27							1,800		1347,-	

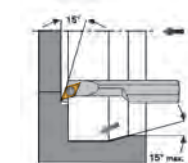
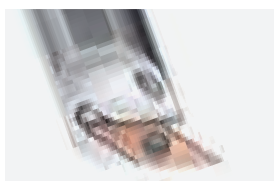
BARENI PER TORNITURA INTERNA BOHRSTANGEN FÜR DIE INNENBEARBEITUNG _ INTERNAL BORING BARS



STEEL	A-SVUBR/L	d	l1	l2	f	Dmin								STOCK	€	
	A 16Q SVUBR/L 11	16	180	16,5	11	21	VBMT VBGT 1103...	--	--	VT25B	BT08	0,250			122,50	
	A 20R SVUBR/L 11	20	200	20,5	13	24	VBMT VBGT 1604... US6522 GBS1111						0,500			128,50
	A 25R SVUBR/L 16	25	200	25,5	17	32							0,700			151,50
	A 32S SVUBR/L 16	32	250	33,5	22	40							1,400			249,50
	A 40T SVUBR/L 16	40	300	40	27	49							2,700			302,-

CARBIDE	E-SVUBR/L	d				Dmin								STOCK	€
	E 16R SVUBR/L 11	16	200	16,5	11	21	VBMT VBGT 1103...	--	--	VT25B	BT08	0,500			410,-
	E 20S SVUBR/L 11	20	250	20,5	13	25						1,000			889,-
	E 25S SVUBR/L 11	25	250	23	17	31,5						1,800			1366,-
STEEL	A-SVUCR/L	d				Dmin								STOCK	€
	A 16Q SVUCR/L 11	16	180	16,5	11	21	VCMT VCGT 1103...	--	--	VT25B	BT08	0,250			122,50
	A 20R SVUCR/L 11	20	200	20,5	13	25						0,500			128,50
	A 25R SVUCR/L 16	25	200	25,5	17	32	VCMT VCGT 1604...	US6522	GBS1111	VT40B		0,700			151,50
	A 32S SVUCR/L 16	32	250	33,5	22	40						SS1111	BT15	1,400	
	A 40T SVUCR/L 16	40	300	40	27	49				2,700					302,-

HSS	AH-SVUCR/L	d	(mm)				Dmin																																																																																																																																																																																																																																																																																																														<
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STEEL	A-SVQBR/L	d	 (mm)			Dmin								STOCK	€	
	A 16Q SVQBR/L 11	16	180	16,5	11	21	VBMT VBGT 1103...	--	--	VT25B	BT08	0,080		●	122,50	
	A 20R SVQBR/L 11	20	200	20,5	13	25	VBMT VBGT 1604...						0,120		●	128,50
	A 25R SVQBR/L16	25	200	40	17	32							0,250		●	151,50

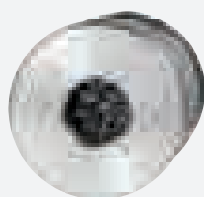
STEEL	A-SVQCR/L	d	 (mm)		f	Dmin								STOCK	€
	A 16Q SVQCR/L 11	16	180	16,5	11	21	VCMT VCGT 1103...	--	--	VT25B	BT08	0,250		●	122,50
	A 20R SVQCR/L 11	20	200	26,1	13	24	VCMT VCGT 1604... US6522 GBS1111						0,500	●	128,50
	A 25R SVQCR/L 16	25	200	43	17	31,5							0,700	●	151,50
	A 32S SVQCR/L 16	32	250	33,5	22	40							1,400	●	249,50
	A 40T SVQCR/L 16	40	300	40	27	49							2,700	●	302,-

BARENI PER TORNITURA INTERNA BOHRSTANGEN FÜR DIE INNENBEARBEITUNG _ INTERNAL BORING BARS

Specialmente con diametri di lavorazione di piccole dimensioni, i bareni N-PREMIUM impediscono l'accumulo di trucioli nel pezzo.

Speziell bei kleinen Bearbeitungsdurchmessern, verhindern N-PREMIUM Bohrstanen einen Spänestau im Werkstück.

Especially with small machining diameters, N-PREMIUM boring bars prevent chips jamming in the workpiece.



STANDARD

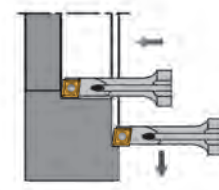
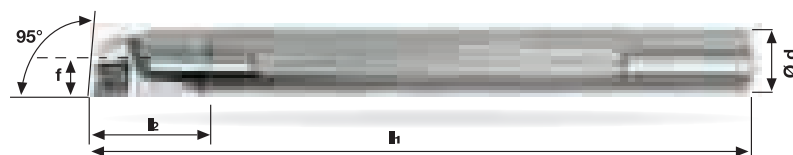
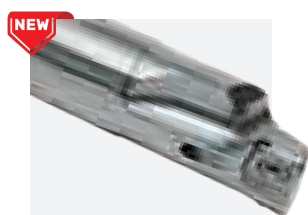


N-PREMIUM

Asportazione sicura dei trucioli mediante scanalature a spirale.
Gesicherte Spanabfuhr durch spiralisierten Spanraum.
Reliable chip evacuation due to spiral flutes.



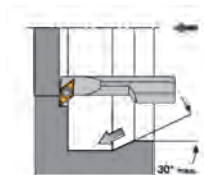
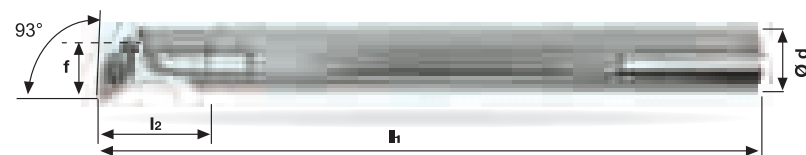
Ottimizzato per il minimo diametro del preforo.
Optimiert für kleinste Mindestvorbordurchmesser.
Optimised for the smallest minimum pre-drill diameter.



Stelo in acciaio _ Stahlschaft _ Steelshank

N-PREMIUM A-SCLCR/L

	d	l1	l2	f	D _{min}												
A08H SCLCR/L 06 N-PREMIUM	8	100	20	5	10												
A10K SCLCR/L 06 N-PREMIUM	10	125	20	6	12	CCMT CCGT 0602...	--	--	VT25B	BT08	0,080						
A12L SCLCR/L 06 N-PREMIUM	12	140	24,2	7	14						0,140						
A16Q SCLCR/L 09 N-PREMIUM	16	180	31	9	18						0,250						
A20R SCLCR/L 09 N-PREMIUM	20	200	36	11	22	CCMT CCGT 09T3...	--	--	VT40B	BT15	0,500						
A25R SCLCR/L 09 N-PREMIUM	25	200	43	13,5	27						0,700						
A25R SCLCR/L 12 N-PREMIUM	25	200	43	13,5	27	CCMT CCGT 1204...	--	--	VT50	BT20	0,700						

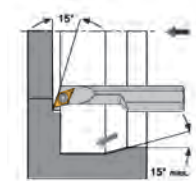
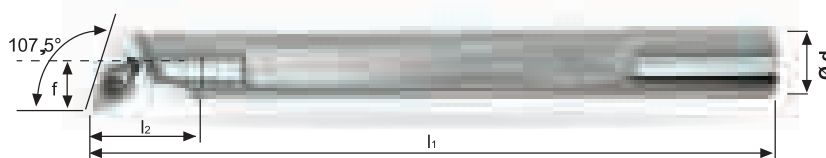


Stelo in acciaio _ Stahlschaft _ Steelshank

N-PREMIUM A-SDUCR/L

	d	l1	l2	f	D _{min}												
A10K SDUCR/L 07 N-PREMIUM	10	125	20	7	13						0,080						
A12L SDUCR/L 07 N-PREMIUM	12	140	25	8	15	DCMT DCGT 0702...	--	--	VT25B	BT08	0,120						
A16Q SDUCR/L 07 N-PREMIUM	16	180	28	10	19						0,250						
A16Q SDUCR/L 11 N-PREMIUM	16	180	28	14	23						0,250						
A20R SDUCR/L 11 N-PREMIUM	20	200	36	13	25	DCMT DCGT 11T3...	--	--	VT40B	BT15	0,500						
A25R SDUCR/L 11 N-PREMIUM	25	200	40	16	31						0,700						

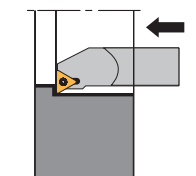
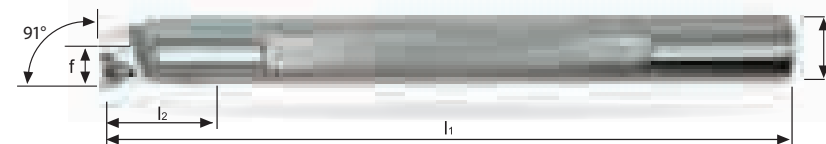
BARENI PER TORNITURA INTERNA BOHRSTANGEN FÜR DIE INNENBEARBEITUNG _ INTERNAL BORING BARS



Stelo in acciaio _ Stahlschaft _ Steelshank

N-PREMIUM A-SDQCR/L

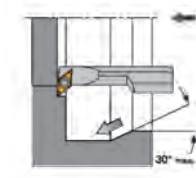
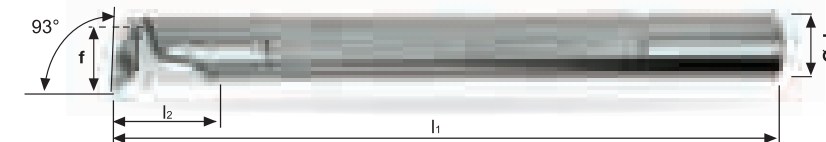
	d	l1	l2	f	Dmin						KG		STOCK	€
A10K SDQCR/L 07 N-PREMIUM	10	125	20	7	13	DCMT DCGT 0702...			VT25B	BT08	0,080		●	108,-
A12L SDQCR/L 07 N-PREMIUM	12	140	25	8	15						0,120		●	118,-
A16Q SDQCR/L 07 N-PREMIUM	16	180	28	10	19						0,250		●	141,50
A16Q SDQCR/L 11 N-PREMIUM	16	180	28	14	23	DCMT DCGT 11T3...			VT40B	BT15	0,250		●	141,50
A20R SDQCR/L 11 N-PREMIUM	20	200	36	13	25						0,500		●	157,50
A25R SDQCR/L 11 N-PREMIUM	25	200	40	16	31						0,700		●	205,-



Stelo in acciaio _ Stahlschaft _ Steelshank

N-PREMIUM A-STFCR/L

	d	l1	l2	f	Dmin						KG		STOCK	€
A10K STFCR/L 11 N-PREMIUM	10	125	22	6	12	TCMT TCGT 1102...			VT25B	BT08	0,080		●	108,-
A12L STFCR/L 11 N-PREMIUM	12	140	24,3	7	14						0,120		●	118,-
A16Q STFCR/L 11 N-PREMIUM	16	180	31	9	18						0,250		●	141,50
A20R STFCR/L 11 N-PREMIUM	20	200	36	11	22						0,500		●	157,50



Stelo in acciaio _ Stahlschaft _ Steelshank

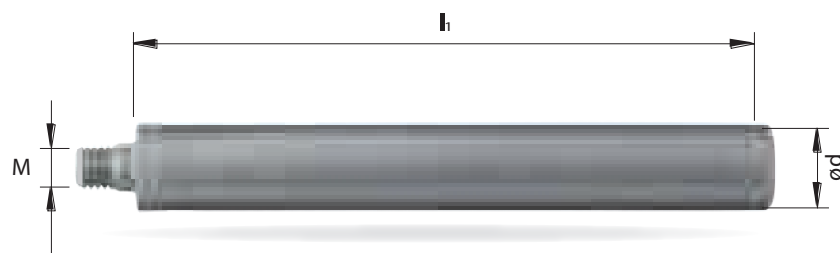
N-PREMIUM A-SVUBR/L

	d	l1	l2	f	Dmin						KG		STOCK	€
A16Q SVUBR/L 11 N-PREMIUM	16	180	31	11	20	VBMT VBGT 1103...			VT25B	BT08	0,250		●	141,50
A20R SVUBR/L 11 N-PREMIUM	20	200	36	13	24						0,500		●	157,50
A25R SVUBR/L 16 N-PREMIUM	25	200	40	17	31	VBMT VBGT 1604...			VT40B	BT15	0,700		●	205,-

N-PREMIUM A-SVUCR/L

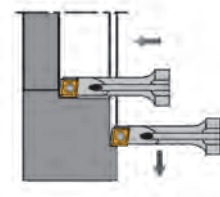
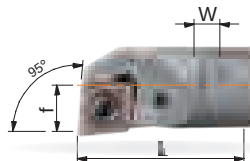
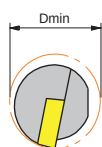
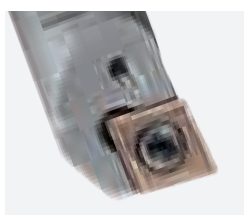
	d	l1	l2	f	Dmin						KG		STOCK	€
A16Q SVUCR/L 11 N-PREMIUM	16	180	31	11	20	VCMT VCGT 1103...			VT25B	BT08	0,250		●	141,50
A20R SVUCR/L 11 N-PREMIUM	20	200	36	13	24						0,500		●	157,50
A25R SVUCR/L 16 N-PREMIUM	25	200	40	17	31	VCMT VCGT 1604...			VT40B	BT15	0,700		●	205,-

GAMBI IN METALLO DURO INTEGRALE _ VHM SCHAFTEN _ SOLID CARBIDE SHANKS

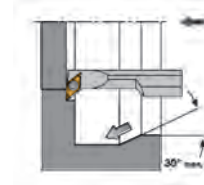
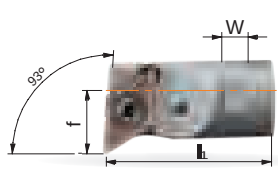
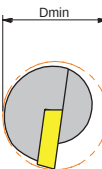
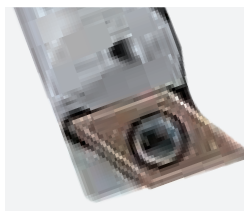


E..K	d	l1 (mm)	M	KG		€
E08K M4 R	8	112	M4	0,070	●	200,50
E10K M5 R	10	112	M5	0,110	●	222,-
E12M M6 R	12	137	M6	0,180	●	251,-
E16R M8 R	16	177	M8	0,500	●	467,50

TESTINA FILETTATA _ KÖPFE MIT GEWINDE _ HEADS WITH THREAD CONNECTION

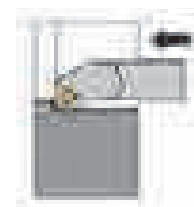
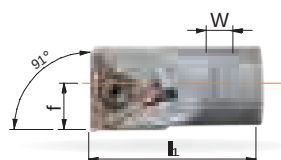
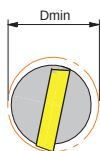
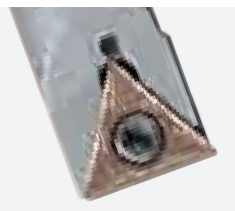


STEEL	A-SCLCR	d	↔ l1	↔ f	↔ W	Dmin								
	A 08 SCLCR 06	8	21	5	3,5	10	CCMT CCGT 0602...	VT25B	BT08	CBH 0816	0,008			108,-
	A 10 SCLCR 06	10	22	6	3,5	12					0,010			108,-
	A 12 SCLCR 06	12	23	7	3,5	16					0,014			108,-
	A 16 SCLCR 09	16	26	9	3,5	20	CCMT CCGT 09T3...	VT40B	BT15		0,030			119,-



STEEL	A-SDUCR	d	l1 f W (mm)	Dmin										
	A 08 SDUCR 07	8	21	9	3,5	13	DCMT DCGT 0702...	VT25B	BT08	CBH 0816	0,008			108,-
	A 10 SDUCR 07	10	22	9	3,5	14					0,010			108,-
	A 12 SDUCR 07	12	23	10	3,5	16					0,014			108,-
	A 16 SDUCR 07	16	26	11,3	3,5	20					0,030			119,-

TESTINA FILETTATA _ KÖPFE MIT GEWINDE _ HEADS WITH THREAD CONNECTION



A-STFCR		d	l1	f	W	Dmin								
STEEL	A 08 STFCR 08	8	21	5	3,5	10	TCMT 0802...	VT20	BT06			0,008		108,-
	A 10 STFCR 11	10	22	6	3,5	12	TCMT TCGT 1102...	VT25B	BT08	CBH 0816		0,010		108,-
	A 12 STFCR 11	12	23	7	3,5	14						0,014		108,-
	A 16 STFCR 11	16	26	9	3,5	18						0,030		119,-



SET BARENO MD + TESTINE
VHM SCHAFT + EINSCHRAUBEN-KÖPFEN SATZ
CARBIDE SHANK + HEADS WITH THREAD CONNECTION SET

PROFI-BOX
SC06.SD07.ST08



STOCK

SET E08K-R SC06.SD07.ST08

n° 1		E08K M4 R
n° 1		A08 SCLCR 06
n° 1		A08 SDUCR 07
n° 1		A08 STFCR 08



STOCK

SPECIAL
NET PRICE
PROMO

SET E10K-R SC06.SD07.ST11

n° 1		E10K M5 R
n° 1		A10 SCLCR 06
n° 1		A10 SDUCR 07
n° 1		A10 STFCR 11



STOCK

SPECIAL
NET PRICE
PROMO

SET E12M-R SC06.SD07.ST11

n° 1		E12M M6 R
n° 1		A12 SCLCR 06
n° 1		A12 SDUCR 07
n° 1		A12 STFCR 11

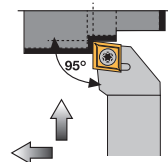
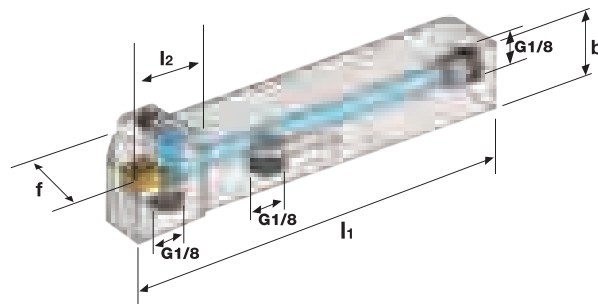


STOCK

SPECIAL
NET PRICE
PROMO

UTENSILI PER TORNITURA ESTERNA KLEMMHALTER FÜR DIE AUSSENBearbeitung _ EXTERNAL TURNING TOOLS

Con lubrificazione _ Mit Innenkühlung _ With coolant

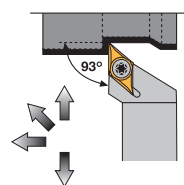
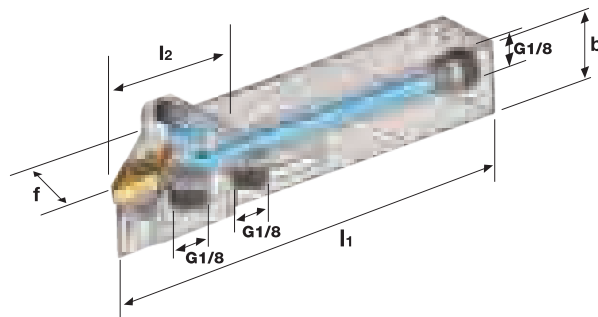
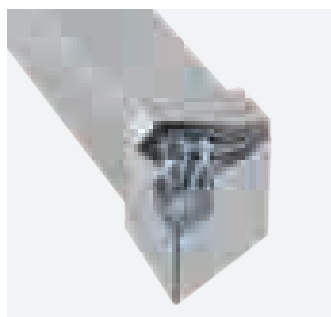


INCLUDING FREE
NO SEPARATE SALE

Stelo in acciaio _ Stahlschaft _ Steelshank

SCLCR/L

	h1	h2	b	l1	l2	f											
SCLCR/L 1616 H09 – IK G1/8	16	16	16	100	17	20											
							CCMT CCGT 09T3...	US1111	GBS1111	SS1111	BT15	0,235				236,-	
SCLCR/L 2020 K09 – IK G1/8	20	20	20	125	17	25						0,420				243,50	
							CCMT CCGT 1204...	US1221	GBS1221	SS1221	BT15	0,770				256,-	



INCLUDING FREE
NO SEPARATE SALE

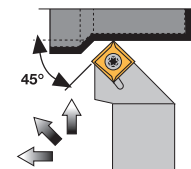
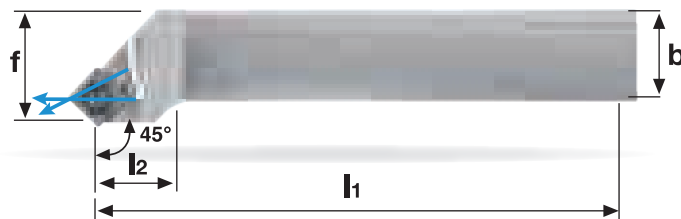
Stelo in acciaio _ Stahlschaft _ Steelshank

SDJCR/L

	h1	h2	b	l1	l2	f											
SDJCR/L 1616 H11 – IK G1/8	16	16	16	100	20	20						0,230				236,-	
							DCMT DCGT 11T3...	US2311	GBS1111	SS1111	BT15	0,408				243,50	
SDJCR/L 2525 M11 – IK G1/8	25	25	25	150	27	32						0,735				256,-	

UTENSILI PER TORNITURA ESTERNA KLEMMHALTER FÜR DIE AUSSENBEARBEITUNG _ EXTERNAL TURNING TOOLS

Con lubrificazione _ Mit Innenkühlung _ With coolant

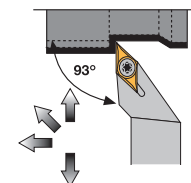
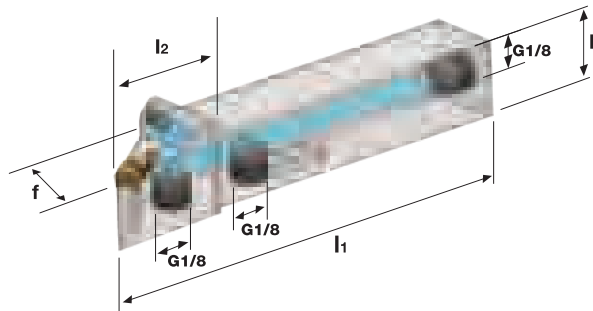


INCLUDING FREE
NO SEPARATE SALE

Stelo in acciaio _ Stahlschaft Steelshank

SSSCR/L

SSSCR/L 1616 H09 - IK G1/8	16	16	16	100	20	20	SCMT SCGT 09T3...	US4111	GBS1111	SS1111	BT15	0,235			236,-
SSSCR/L 2020 K09 - IK G1/8	20	20	20	125	20	25						0,420			243,50
SSSCR/L 2525 M12 - IK G1/8	25	25	25	150	25	32	SCMT SCGT 1204...	US4221	GBS1221	SS1221	BT15	0,770			256,-



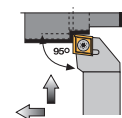
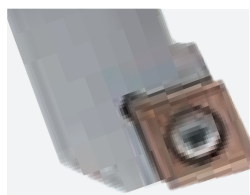
INCLUDING FREE
NO SEPARATE SALE

Stelo in acciaio _ Stahlschaft Steelshank

SVJCR/L

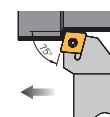
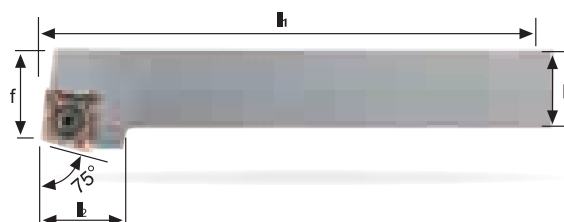
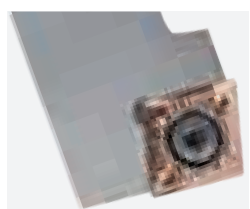
	h1	h2	b	l1	l2	f													
SVJCR/L 1616 H11 - IK G1/8	16	16	16	100	21,5	20											0,203	●	236,-
							VCMT VCGT 1103...	--	--	SS1751	BT08								
SVJCR/L 2020 K11 - IK G1/8	20	20	20	125	23	25											0,373	●	243,50
							VCMT VCGT 1604...	US6522	GBS1111	SS1111	BT15								
SVJCR/L 2020 K16 - IK G1/8	20	20	20	125	29,5	25											0,380	●	243,50
							VCMT VCGT 1604...	US6522	GBS1111	SS1111	BT15								
SVJCR/L 2525 M16 - IK G1/8	25	25	25	150	32,5	32											0,677	●	256,-

UTENSILI PER TORNITURA ESTERNA KLEMMHALTER FÜR DIE AUSSENBearbeitung _ EXTERNAL TURNING TOOLS



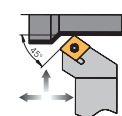
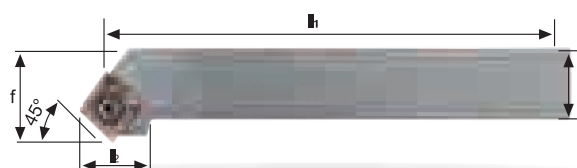
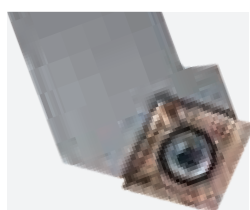
Stelo in acciaio _ Stahlschaft _ Steelshank

SCLCR/L	h1	h2	b	l1	l2	f								
SCLCR/L 0808 D06	8	8	8	60	9	10	CCMT CCGT 0602...	--	--	SS1751	BT08	0,040	--	● 75,-
SCLCR/L 1010 E06	10	10	10	70	10	12						0,060	--	● 75,-
SCLCR/L 1212 F09	12	12	12	80	17	16						0,090	--	● 75,-
SCLCR/L 1616 H09	16	16	16	100	17	20	CCMT CCGT 09T3...	US1111	GBS1111	SS1111	BT15	0,220	--	● 88,-
SCLCR/L 2020 K09	20	20	20	125	18	25						0,420	--	● 90,-
SCLCR/L 2525 M09	25	25	25	150	19	32						0,740	--	● 99,50
SCLCR/L 1616 H12	16	16	16	100	20	20	CCMT CCGT 1204...	US1221	GBS1221	SS1221	BT15	0,220	--	● 88,-
SCLCR/L 2020 K12	20	20	20	125	20	25						0,420	--	● 90,-
SCLCR/L 2525 M12	25	25	25	150	20	32						0,740	--	● 99,50



Stelo in acciaio _ Stahlschaft _ Steelshank

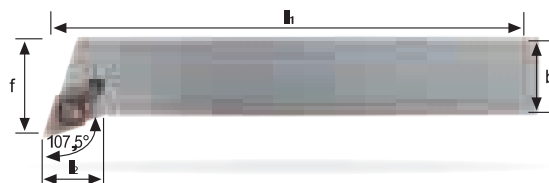
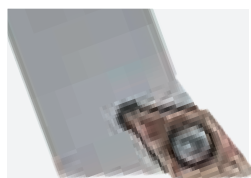
SCRCR/L	h1	h2	b	l1	l2	f								
SCRCR/L 0808 D06	8	8	8	60	14	9	CCMT CCGT 0602...	--	--	SS1751	BT08	0,040	--	● 75,-
SCRCR/L 1010 E06	10	10	10	70	14	11						0,060	--	● 75,-
SCRCR/L 1212 F09	12	12	12	80	20	13						0,090	--	● 75,-
SCRCR/L 1616 H09	16	16	16	100	20	17	CCMT CCGT 09T3...	US1111	GBS1111	SS1111	BT15	0,220	--	● 88,-
SCRCR/L 2020 K09	20	20	20	125	21	22						0,420	--	● 90,-
SCRCR/L 1616 H12	16	16	16	100	24	17	CCMT CCGT 1204...	US1221	GBS1221	SS1221	BT15	0,220	--	● 88,-
SCRCR/L 2020 K12	20	20	20	125	24	22						0,420	--	● 90,-
SCRCR/L 2525 M12	25	25	25	150	24	27						0,740	--	● 99,50



Stelo in acciaio _ Stahlschaft _ Steelshank

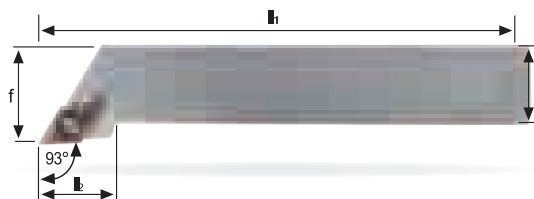
SCSCR/L	h1	h2	b	l1	l2	f								
SCSCR/L 0808 D06	8	8	8	60	12	10	CCMT CCGT 0602...	--	--	SS1751	BT08	0,040	--	● 75,-
SCSCR/L 1010 E06	10	10	10	70	12	12						0,060	--	● 75,-
SCSCR/L 1212 F09	12	12	12	80	19	16						0,090	--	● 75,-
SCSCR/L 1616 H09	16	16	16	100	20	20	CCMT CCGT 09T3...	US1111	GBS1111	SS1111	BT15	0,220	--	● 88,-
SCSCR/L 2020 K09	20	20	20	125	22	25						0,420	--	● 90,-
SCSCR/L 1616 H12	16	16	16	100	22	20	CCMT CCGT 1204...	US1221	GBS1221	SS1221	BT15	0,220	--	● 88,-
SCSCR/L 2020 K12	20	20	20	125	24	25						0,420	--	● 90,-
SCSCR/L 2525 M12	25	25	25	150	27	32						0,740	--	● 99,50

UTENSILI PER TORNITURA ESTERNA KLEMMHALTER FÜR DIE AUSSENBEARBEITUNG _ EXTERNAL TURNING TOOLS



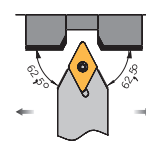
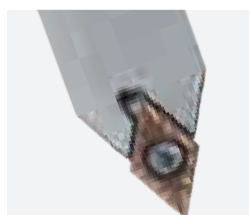
Stelo in acciaio _ Stahlschaft _ Steelshank

SDHCR/L	h1	h2	b	l1	l2	f						KG		STOCK	€
SDHCR/L 1010 E07	10	10	10	70	7,2	12	DCMT DCGT 0702...	--	--	SS1751	BT08	0,060	--	●	75,-
SDHCR/L 1212 F07	12	12	12	80	12	16						0,090	--	●	75,-
SDHCR/L 1616 H11	16	16	16	100	11,6	20						0,220	--	●	88,-
SDHCR/L 2020 K11	20	20	20	125	14,7	25	DCMT DCGT 11T3...	US2311	GBS1111	SS1111	BT15	0,420	--	●	90,-
SDHCR/L 2525 M11	25	25	25	150	21	32						0,740	--	●	99,50



Stelo in acciaio _ Stahlschaft _ Steelshank

SDJCR/L	h1	h2	b	l1	l2	f						KG		STOCK	€
SDJCR/L 0808 D07	8	8	8	60	12,8	10						0,040	--	●	75,-
SDJCR/L 1010 E07	10	10	10	70	12,8	12						0,060	--	●	75,-
SDJCR/L 1212 F07	12	12	12	80	17	16	DCMT DCGT 0702...	--	--	SS1751	BT08	0,090	--	●	75,-
SDJCR/L 1616 H07	16	16	16	100	22	20						0,210	--	●	88,-
SDJCR/L 2020 K07	20	20	20	125	24	25						0,400	--	●	90,-
SDJCR/L 1616 H11	16	16	16	100	20	20						0,220	--	●	88,-
SDJCR/L 2020 K11	20	20	20	125	24	25	DCMT DCGT 11T3...	US2311	GBS1111	SS1111	BT15	0,420	--	●	90,-
SDJCR/L 2525 M11	25	25	25	150	27	32						0,740	--	●	99,50



Stelo in acciaio _ Stahlschaft _ Steelshank

SDNCN	h1	h2	b	l1	f							KG		STOCK	€
SDNCN 0808 D07	8	8	8	60	4							0,040	--	●	75,-
SDNCN 1010 E07	10	10	10	70	5							0,060	--	●	75,-
SDNCN 1212 F07	12	12	12	80	6		DCMT DCGT 0702...	--	--	SS1751	BT08	0,090	--	●	75,-
SDNCN 1616 H11	16	16	16	100	8							0,220	--	●	88,-
SDNCN 2020 K11	20	20	20	125	10		DCMT DCGT 11T3...	US2311	GBS1111	SS1111	BT15	0,420	--	●	90,-
SDNCN 2525 M11	25	25	25	150	12,5							0,740	--	●	99,50

UTENSILI PER TORNITURA ESTERNA KLEMMHALTER FÜR DIE AUSSENBearbeitung _ EXTERNAL TURNING TOOLS

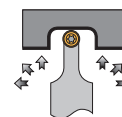
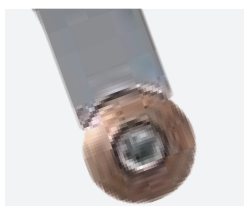
MILLING

MINIMILL

MOULDMILL

MICROTOOLS
AMS

MINITOOLS



Stelo in acciaio _ Stahlschaft _ Steelshank

SRDCN	h1	h2	l1	l2	f									
SRDCN 1212 F06	12	12	80	12,4	6								0,090	-- ● 84,-
SRDCN 1616 H06	16	16	100	12,4	8	RCMT RCGT 0602...	--	--	SS1751	BT08			0,220	-- ● 94,50
SRDCN 2020 K06	20	20	125	12,4	10								0,420	-- ● 108,-
SRDCN 2525 M06	25	25	150	12,4	12,5								0,740	-- ● 121,50
SRDCN 1616 H08	16	16	100	16,4	8								0,220	-- ● 94,50
SRDCN 2020 K08	20	20	125	16,4	10	RCMT RCGT 0803...	--	--	SS8831	BT08			0,420	-- ● 110,50
SRDCN 2525 M08	25	25	150	16,4	12,5								0,740	-- ● 121,50
SRDCN 1616 H10	16	16	100	20,3	8								0,220	-- ● 94,50
SRDCN 2020 K10	20	20	125	20,3	10	RCMT RCGT 1003...	US3431	GBS1111	SS1111	BT15			0,420	-- ● 110,50
SRDCN 2525 M10	25	25	150	20,3	12,5								0,740	-- ● 121,50
SRDCN 2020 K12	20	20	125	20,3	10	RCMT RCGT 1204...	US3450	GBS1111	SS1111	BT15			0,420	-- ● 110,50
SRDCN 2525 M12	25	25	150	20,3	12,5								0,740	-- ● 121,50

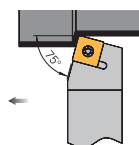
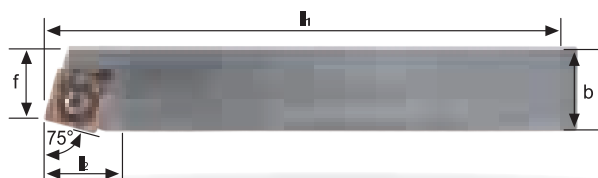
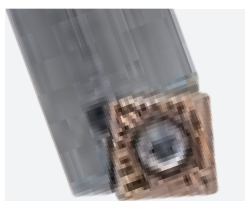


Stelo in acciaio _ Stahlschaft _ Steelshank

SRGCR/L	h1	h2	b	l1	l2	f								
SRGCR/L 1212 F06	12	12	12	80	13,8	16							0,090	-- ● 88,-
SRGCR/L 1616 H06	16	16	16	100	13,8	20	RCMT RCGT 0602...	--	--	SS1751	BT08		0,220	-- ● 99,50
SRGCR/L 2020 K06	20	20	20	125	15,3	25							0,420	-- ● 110,50
SRGCR/L 2525 M06	25	25	25	150	18,8	32							0,740	-- ● 128,50
SRGCR/L 1616 H08	16	16	16	100	14,7	20							0,220	-- ● 99,50
SRGCR/L 2020 K08	20	20	20	125	16,4	25	RCMT RCGT 0803...	--	--	SS8831	BT08		0,420	-- ● 115,50
SRGCR/L 2525 M08	25	25	25	150	19,8	32							0,740	-- ● 128,50
SRGCR/L 1616 H10	16	16	16	100	15,5	20							0,220	-- ● 99,50
SRGCR/L 2020 K10	20	20	20	125	17,2	25	RCMT RCGT 1003...	US3431	GBS1111	SS1111	BT15		0,420	-- ● 115,50
SRGCR/L 2525 M10	25	25	25	150	20,7	32							0,740	-- ● 128,50

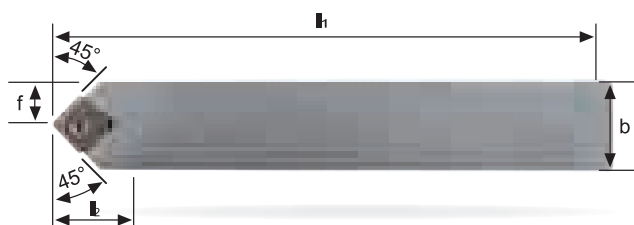
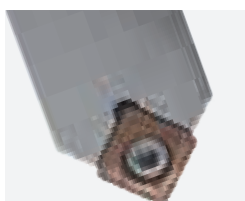
UTENSILI PER TORNITURA ESTERNA

KLEMMHALTER FÜR DIE AUSSENBEARBEITUNG _ EXTERNAL TURNING TOOLS



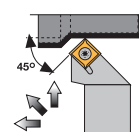
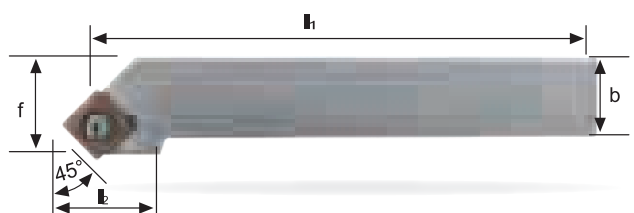
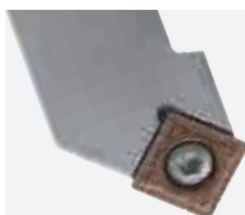
Stelo in acciaio _ Stahlschaft _ Steelshank

SSBCR/L	h1	h2	b	l1	l2	f	SCMT SCGT 09T3..	US4111	GBS1111	SS1111	BT15	KG	STOCK	€
SSBCR/L 1616 H09	16	16	16	100	20	13	SCMT SCGT 1204..	US4221	GBS1221	SS1221	BT15	0,220	--	● 88,-
SSBCR/L 2020 K12	20	20	20	125	20	17						0,420	--	● 90,-
SSBCR/L 2525 M12	25	25	25	150	20	22						0,740	--	● 99,50



Stelo in acciaio _ Stahlschaft _ Steelshank

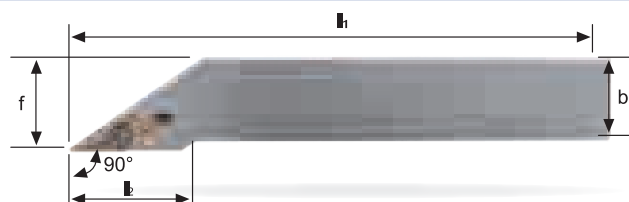
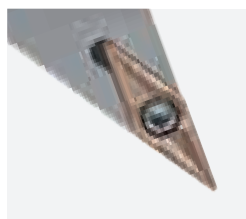
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SSDCN 1212 F09	12	12	12	80	16	6	SCMT SCGT 09T3..	US4111	GBS1111	SS1111	BT15	0,090	--	● 76,00
SSDCN 1616 H09	16	16	16	100	20	8						0,220	--	● 88,-
SSDCN 2020 K09	20	20	20	125	20	10						0,420	--	● 99,50
SSDCN 1616 H12	16	16	16	100	25	8	SCMT SCGT 1204..	US4221	GBS1221	SS1221	BT15	0,220	--	● 93,-
SSDCN 2020 K12	20	20	20	125	25	10						0,420	--	● 99,50
SSDCN 2525 M12	25	25	25	150	25	12,5						0,740	--	● 104,50



Stelo in acciaio _ Stahlschaft _ Steelshank

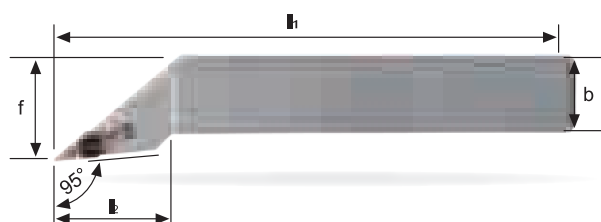
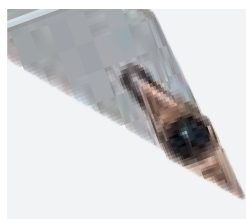
SSSCR/L	h1	h2	b	l1	l2	f	SCMT SCGT 09T3..	US4111	GBS1111	SS1111	BT15	KG	STOCK	€
SSSCR/L 0808 D09	8	8	8	60	21	13	SCMT SCGT 09T3..	US4111	GBS1111	SS1111	BT15	0,040	--	● 75,-
SSSCR/L 1010 E09	10	10	10	70	21	14						0,060	--	● 75,-
SSSCR/L 1212 F09	12	12	12	80	17	16						0,090	--	● 75,-
SSSCR/L 1616 H09	16	16	16	100	20	20	SCMT SCGT 1204..	US4221	GBS1221	SS1221	BT15	0,220	--	● 88,-
SSSCR/L 2020 K09	20	20	20	125	20	25						0,420	--	● 90,-
SSSCR/L 1616 H12	16	16	16	100	18	20						0,220	--	● 88,-
SSSCR/L 2020 K12	20	20	20	125	26,7	25	SCMT SCGT 1204..	US4221	GBS1221	SS1221	BT15	0,420	--	● 90,-
SSSCR/L 2525 M12	25	25	25	150	25	32						0,740	--	● 99,50

UTENSILI PER TORNITURA ESTERNA KLEMMHALTER FÜR DIE AUSSENBearBEITUNG _ EXTERNAL TURNING TOOLS



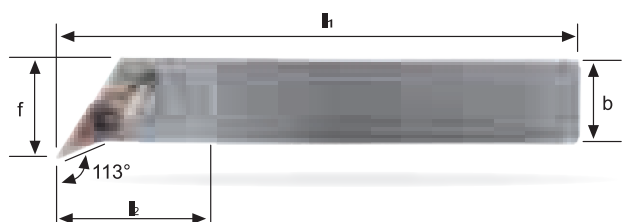
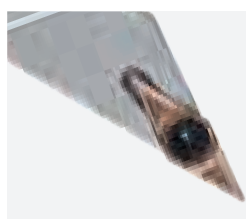
Stelo in acciaio _ Stahlschaft _ Steelshank

SVGCR/L	h1	h2	b	l1	l2	f									
SVGCR/L 0808 K07	8	8	8	125	15	8,5							0,040	--	● 73,50
SVGCR/L 1010 M07	10	10	10	150	15	10,5	VCMT VCGT 0702...	--	--	VT20	BT06		0,060	--	● 79,-
SVGCR/L 1212 M07	12	12	12	150	18	12,5							0,090	--	● 84,-



Stelo in acciaio _ Stahlschaft _ Steelshank

SVLCR/L	h1	h2	b	l1	l2	f									
SVLCR/L 0808 D07	8	8	8	60	15	10							0,040	--	● 73,50
SVLCR/L 1010 E07	10	10	10	70	15	12	VCMT VCGT 0702...	--	--	VT20	BT06		0,060	--	● 79,-
SVLCR/L 1212 F07	12	12	12	80	18	16							0,090	--	● 84,-

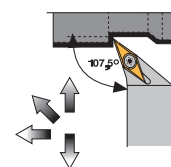
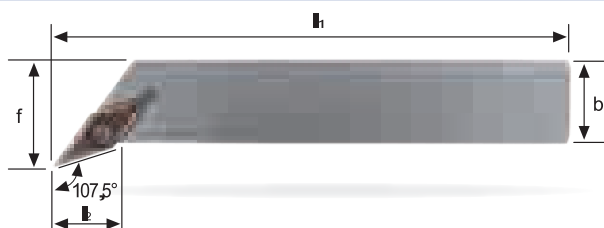
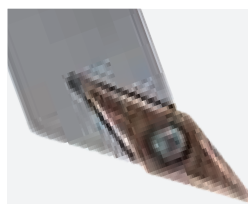


Stelo in acciaio _ Stahlschaft _ Steelshank

SVXCR/L	h1	h2	b	l1	l2	f									
SVXCR/L 0808 D07	8	8	8	60	15	10							0,040	--	● 73,50
SVXCR/L 1010 E07	10	10	10	70	15	12	VCMT VCGT 0702...	--	--	VT20	BT06		0,060	--	● 79,-
SVXCR/L 1212 F07	12	12	12	80	18	16							0,090	--	● 84,-

UTENSILI PER TORNITURA ESTERNA

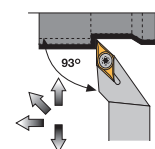
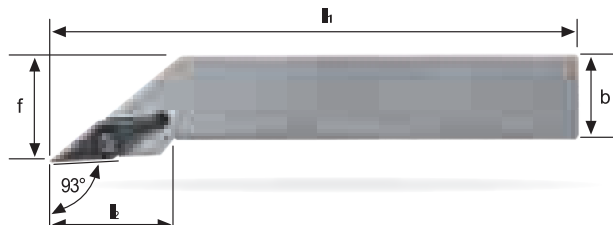
KLEMMHALTER FÜR DIE AUSSENBEARBEITUNG _ EXTERNAL TURNING TOOLS



Stelo in acciaio _ Stahlschaft _ Steelshank

SVHBR/L	h1	h2	b	l1	l2	f						KG		STOCK	€
SVHBR/L 1212 F11	12	12	12	80	13,4	16						0,090	--	●	91,-
SVHBR/L 1616 H11	16	16	16	100	13,4	20	VBMT VBGT 1103...	--	--	SS1751	BT08	0,220	--	●	91,-
SVHBR/L 2020 K11	20	20	20	125	16,6	25						0,420	--	●	98,50
SVHBR/L 2020 K16	20	20	20	125	15,9	25	VBMT VBGT 1604...	US6522	GBS1111	SS1111	BT15	0,420	--	●	108,-
SVHBR/L 2525 M16	25	25	25	150	20,6	32						0,740	--	●	121,50

SVHCR/L	h1	h2	b	l1	l2	f						KG		STOCK	€
SVHCR/L 1212 F11	12	12	12	80	13,4	16						0,090	--	●	91,-
SVHCR/L 1616 H11	16	16	16	100	13,4	20	VCMT VCGT 1103...	--	--	SS1751	BT08	0,220	--	●	91,-
SVHCR/L 2020 K11	20	20	20	125	16,6	25						0,420	--	●	98,50
SVHCR/L 2525 M11	25	25	25	150	22,9	32						0,740	--	●	108,-
SVHCR/L 2020 K16	20	20	20	125	15,2	25	VCMT VCGT 1604...	US6522	GBS1111	SS1111	BT15	0,420	--	●	108,-
SVHCR/L 2525 M16	25	25	25	150	23,5	32						0,740	--	●	121,50



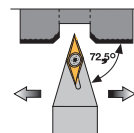
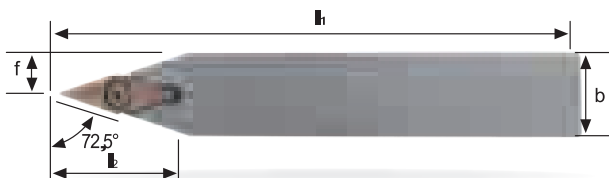
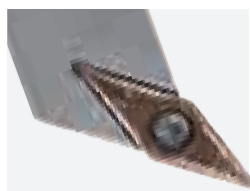
Stelo in acciaio _ Stahlschaft _ Steelshank

SVJBR/L	h1	h2	b	l1	l2	f						KG		STOCK	€
SVJBR/L 1212 F11	12	12	12	80	21,5	16						0,090	--	●	91,-
SVJBR/L 1616 H11	16	16	16	100	21,5	20	VBMT VBGT 1103...	--	--	SS1751	BT08	0,220	--	●	91,-
SVJBR/L 2020 K11	20	20	20	125	23	25						0,420	--	●	98,50
SVJBR/L 2020 K16	20	20	20	125	29,5	25	VBMT VBGT 1604...	US6522	GBS1111	SS1111	BT15	0,420	--	●	108,-
SVJBR/L 2525 M16	25	25	25	150	33	32						0,740	--	●	121,50

Stelo in acciaio _ Stahlschaft _ Steelshank

SVJCR/L	h1	h2	b	l1	l2	f						KG		STOCK	€
SVJCR/L 1212 F11	12	12	12	80	21,5	16						0,090	--	●	91,-
SVJCR/L 1616 H11	16	16	16	100	21,5	20	VCMT VCGT 1103...	--	--	SS1751	BT08	0,220	--	●	91,-
SVJCR/L 2020 K11	20	20	20	125	24	25						0,420	--	●	98,50
SVJCR/L 2525 M11	25	25	25	150	26	32						0,740	--	●	108,-
SVJCR/L 2020 K16	20	20	20	125	29,5	25	VCMT VCGT 1604...	US6522	GBS1111	SS1111	BT15	0,420	--	●	108,-
SVJCR/L 2525 M16	25	25	25	150	32,5	32						0,740	--	●	121,50

UTENSILI PER TORNITURA ESTERNA KLEMMHALTER FÜR DIE AUSSENBEARBEITUNG _ EXTERNAL TURNING TOOLS

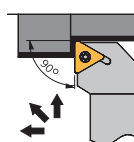
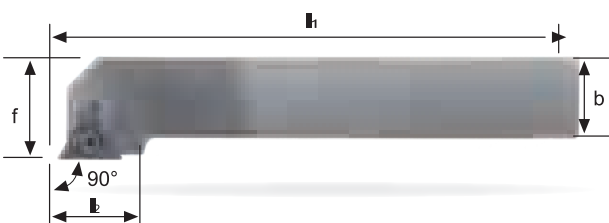
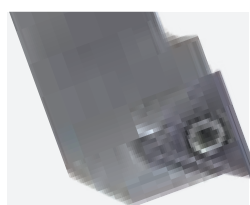


Stelo in acciaio _ Stahlschaft _ Steelshank

SVVBN	h1	h2	b	l1	l2	f									
SVVBN 1212 F11	12	12	12	80	18,5	6							0,090	--	● 82,-
SVVBN 1616 H11	16	16	16	100	24,7	8	VBMT VBGT 1103...	--	--	SS1751	BT08		0,220	--	● 88,-
SVVBN 2020 K11	20	20	20	125	32	10							0,420	--	● 90,-
SVVBN 2525 M11	25	25	25	150	38,9	12,5							0,740	--	● 99,50
SVVBN 2020 K16	20	20	20	125	30,7	10	VBMT VBGT 1604...	US6522	GBS1111	SS1111	BT15		0,420	--	● 98,50
SVVBN 2525 M16	25	25	25	150	38,8	12,5							0,740	--	● 108,-

Stelo in acciaio _ Stahlschaft _ Steelshank

SVVCN	h1	h2	b	l1	l2	f									
SVVCN 0808 K07	8	8	8	125	15	4	VCMT VCGT 0702...	--	--	VT20	BT06		0,040	--	● 73,50
SVVCN 1010 M07	10	10	10	150	15	5							0,060	--	● 79,-
SVVCN 1212 M07	12	12	12	150	18	6							0,090	--	● 84,-
SVVCN 1212 F11	12	12	12	80	18,4	6							0,090	--	● 82,-
SVVCN 1616 H11	16	16	16	100	24,7	8	VCMT VCGT 1103...	--	--	SS1751	BT08		0,220	--	● 88,-
SVVCN 2020 K11	20	20	20	125	31,3	10							0,420	--	● 90,-
SVVCN 2525 M11	25	25	25	150	39	12,5							0,740	--	● 99,50
SVVCN 2020 K16	20	20	20	125	31,1	10	VCMT VCGT 1604...	US6522	GBS1111	SS1111	BT15		0,420	--	● 98,50
SVVCN 2525 M16	25	25	25	150	38,2	12,5							0,740	--	● 108,-

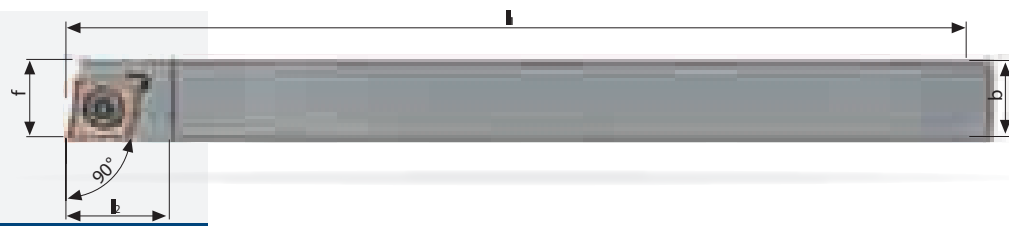


Stelo in acciaio _ Stahlschaft _ Steelshank

STGCR/L	h1	h2	b	l1	l2	f									
STGCR/L 1212 F11	12	12	12	80	19	16	TCMT 1102...	--	--	SS1751	BT08		0,090	--	● 91,-
STGCR/L 1616 H11	16	16	16	100	19	20							0,220	--	● 91,-
STGCR/L 1616 H16	16	16	16	100	22	20							0,220	--	● 91,-
STGCR/L 2020 K16	20	20	20	125	22	25	TCMT TCGT 16T3...	US5511	GBS1111	SS1111	BT15		0,420	--	● 108,-
STGCR/L 2525 M16	25	25	25	150	23	32							0,740	--	● 121,50

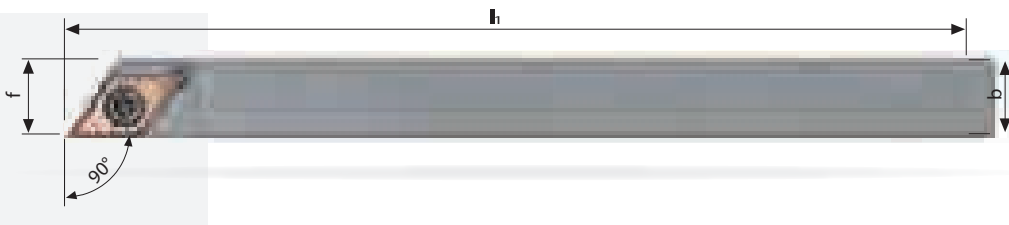
UTENSILI PER FANTINE MOBILI

LANGDREHMASCHINEN WERKZEUGEN _ SWISS TYPE MACHINING TURNING TOOLS



Stelo in acciaio _ Stahlschaft _ Steelshank

SCACR/L	h1	h2	b	l1	f						KG		STOCK	€
SCACR/L 0808 X06-A	8	8	8	115	8,0	CCMT CCGT 0602...	--	--	SS1751	BT08	0,060	--	●	86,50
SCACR/L 1010 X06-A	10	10	10	115	10,0						0,100	--	●	87,50
SCACR/L 1212 X06-A	12	12	12	130	12,0						0,150	--	●	89,50
SCACR/L 1212 X09-A	12	12	12	130	12,0	CCMT CCGT 09T3...	--	--	VT40B	BT15	0,150	--	●	89,50
SCACR/L 1616 X09-A	16	16	16	130	16,0						0,260	--	●	92,50



Stelo in acciaio _ Stahlschaft _ Steelshank

SDACR/L	h1	h2	b	l1	f						KG		STOCK	€
SDACR/L 0808 X07-A	8	8	8	115	8,0	DCMT DCGT 0702...	--	--	SS1751	BT08	0,060	--	●	86,50
SDACR/L 1010 X07-A	10	10	10	115	10,0						0,090	--	●	87,50
SDACR/L 1212 X07-A	12	12	12	130	12,0						0,150	--	●	89,50
SDACR/L 1616 X07-A	16	16	16	130	16,0	DCMT DCGT 11T3...	--	--	VT40B	BT15	0,250	--	●	92,50
SDACR/L 1212 X11-A	12	12	12	130	12,0						0,150	--	●	89,50
SDACR/L 1616-X11-A	16	16	16	130	16,0						0,250	--	●	92,50



Stelo in acciaio _ Stahlschaft _ Steelshank

SDNCN	h1	h2	b	l1	f						KG		STOCK	€
SDNCN 1010 X07-A	10	10	10	115	5,0	DCMT DCGT 0702...	--	--	SS1751	BT08	0,060	--	●	87,50
SDNCN 1212 X11-A	12	12	12	130	6,0						0,150	--	●	89,50
SDNCN 1616 X11-A	16	16	16	130	8,0	DCMT DCGT 11T3...	--	--	VT40B	BT15	0,250	--	●	92,50

UTENSILI PER FANTINE MOBILI LANGDREHMASCHINEN WERKZEUGEN _ SWISS TYPE MACHINING TURNING TOOLS

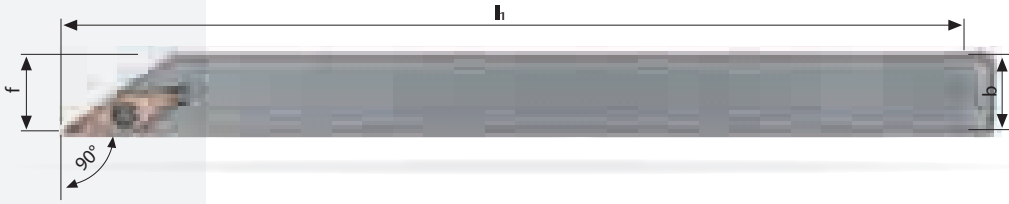
MILLING

MINIMILL

MOULDMILL

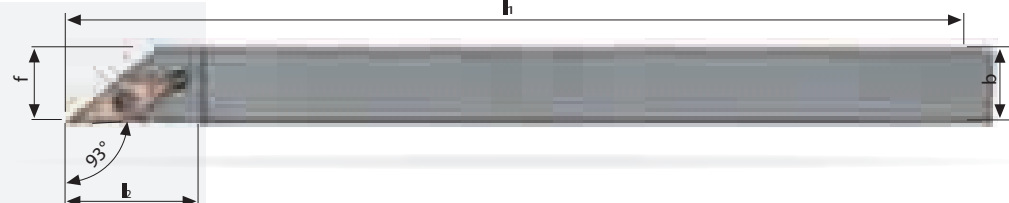
MICROTOOLS
AMS

MINITOOLS



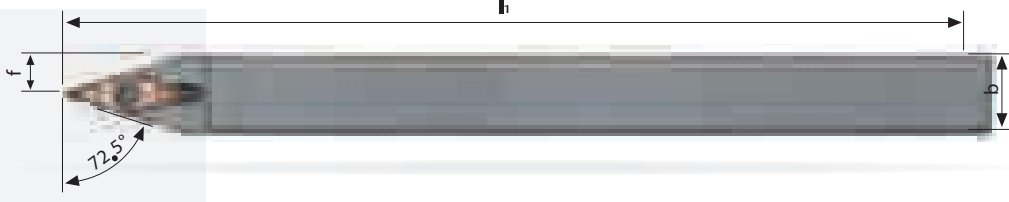
Stelo in acciaio _ Stahlschaft _ Steelshank

SVACR/L	h1	h2	b	l1	f									
SVACR/L 0808 X11-A	8	8	8	115	8,0							0,060	--	● 86,50
SVACR/L 1010 X11-A	10	10	10	115	10,0	VCMT VCGT 1103...	--	--	SS1751	BT08		0,090	--	● 87,50
SVACR/L 1212 X11-A	12	12	12	130	12,0							0,150	--	● 89,50
SVACR/L 1616 X11-A	16	16	16	130	16,0							0,250	--	● 92,50
SVACR/L 1212 X16-A	12	12	12	130	12,0	VCMT VCGT 1604...	--	--	VT40B	BT15		0,140	--	● 89,50
SVACR/L 1616-X16-A	16	16	16	130	16,0							0,240	--	● 92,50



Stelo in acciaio _ Stahlschaft _ Steelshank

SVJCR/L	h1	h2	b	l1	f									
SVJCR/L 0808 X11-A	8	8	8	115	8,0							0,060	--	● 86,50
SVJCR/L 1010 X11-A	10	10	10	115	10,0	VCMT VCGT 1103...	--	--	SS1751	BT08		0,090	--	● 87,50
SVJCR/L 1212 X11-A	12	12	12	130	12,0							0,150	--	● 89,50
SVJCR/L 1616 X11-A	16	16	16	130	16,0							0,250	--	● 92,50
SVJCR/L 1212 X16-A	12	12	12	130	12,0	VCMT VCGT 1604...	--	--	VT40B	BT15		0,140	--	● 89,50
SVJCR/L 1616-X16-A	16	16	16	130	16,0							0,240	--	● 92,50



Stelo in acciaio _ Stahlschaft _ Steelshank

SVVCN	h1	h2	b	l1	f									
SVVCN 1010 X11-A	10	10	10	115	5,0	VCMT VCGT 1103...	--	--	SS1751	BT08		0,100	--	● 87,50
SVVCN 1212 X11-A	12	12	12	130	6,0							0,150	--	● 89,50
SVVCN 1616 X11-A	16	16	16	130	8,0							0,250	--	● 92,50
SVVCN 1212 X16-A	12	12	12	130	6,0	VCMT VCGT 1604...	--	--	VT40B	BT15		0,150	--	● 89,50
SVVCN 1616 X16-A	16	16	16	130	8,0							0,240	--	● 92,50

● Disponibile - Lieferbar - On stock

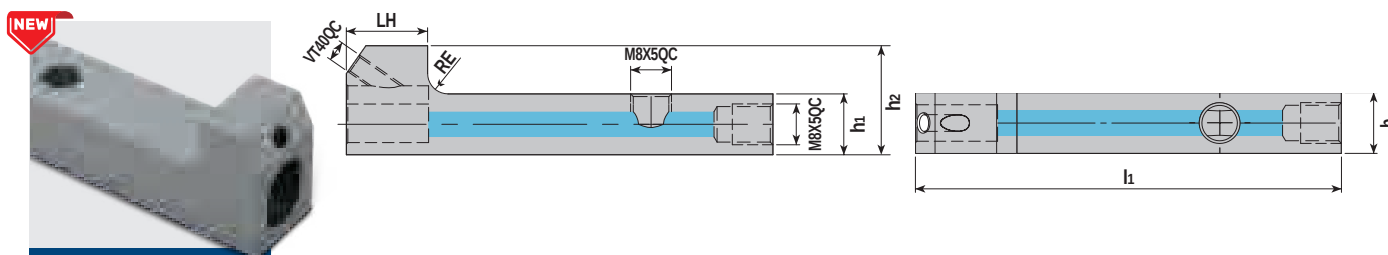
○ A richiesta - Auf Anfrage - On request

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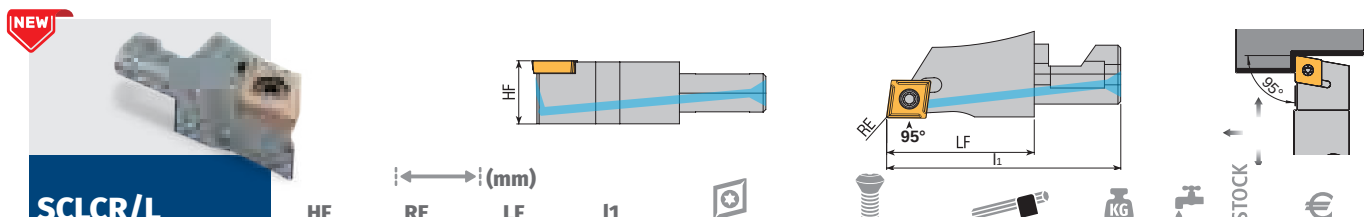
75

UTENSILI PER FANTINE MOBILI LANGDREHMASCHINEN WERKZEUGEN _ SWISS TYPE MACHINING TURNING TOOLS



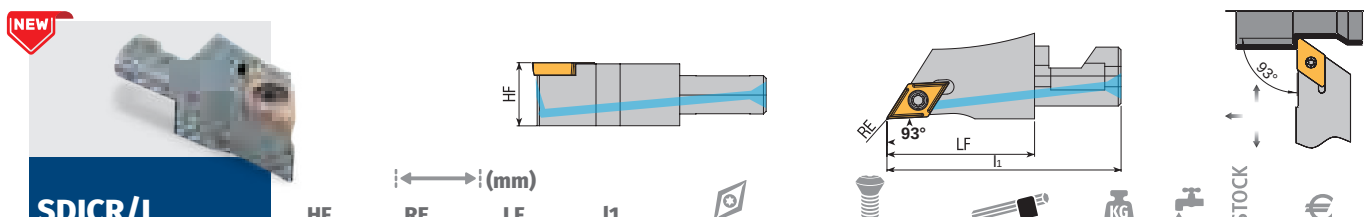
QCTB

	h1	h2	b	RE	LH	l1			KG		STOCK	€
QCTB 1212	12	21,5	12	4	16	84	M8X5QC	VT40QC	0,140		●	234,-
QCTB 1616	16	21,5	16	1	16	90	M8X5QC (M8X1X5)	VT40QC (M4X0,7)	0,220		●	251,50



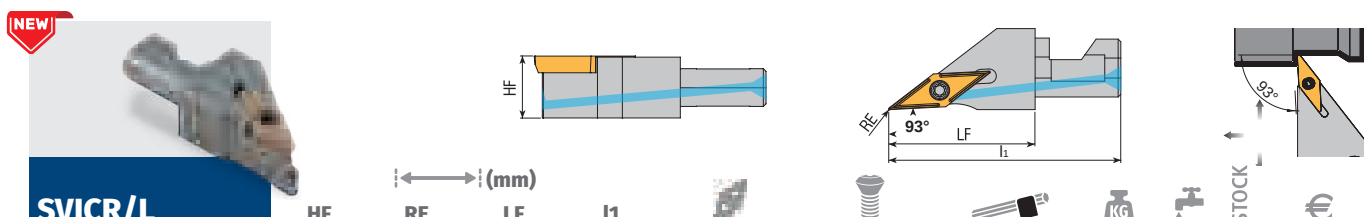
SCLCR/L

SCLCR/L	HF	RE	LF	l1			KG		STOCK	€	
SCLCR/L 12-06	11,8	0,2	27,3	43,3	CCMT CCGT 0602...	SS1751	BT08	0,080	-	○	197,-
SCLCR/L 12-06 W	11,8	0,2	27,3	43,3				0,080	💧	●	251,50
SCLCR/L 16-06	15,8	0,2	27,3	43,3				0,080	-	○	197,-
SCLCR/L 16-06 W	15,8	0,2	27,3	43,3				0,080	💧	●	251,50
SCLCR/L 12-09	11,8	0,2	27,3	43,3	CCMT CCGT 09T3...	VT35	BT15	0,080	-	○	197,-
SCLCR/L 12-09 W	11,8	0,2	27,3	43,3				0,080	💧	●	251,50
SCLCR/L 16-09	15,8	0,2	27,3	43,3				0,090	-	○	197,-
SCLCR/L 16-09 W	15,8	0,2	27,3	43,3				0,090	💧	●	251,50



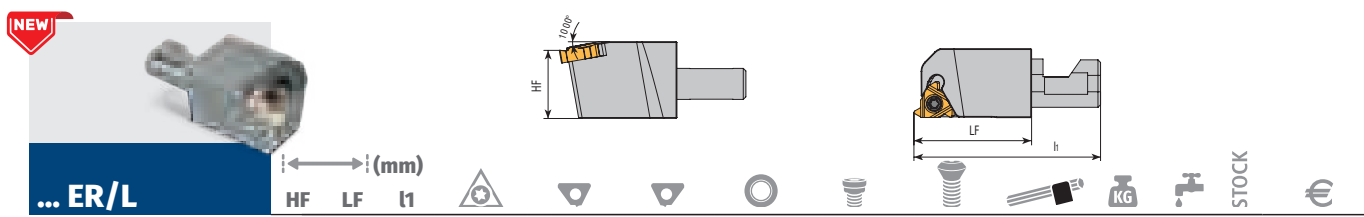
SDJCR/L

SDJCR/L 12-07	11,8	0,2	27,3	43,3	DCMT DCGT 0702...	SS1751	BT08	0,080	-	○	197,-
SDJCR/L 12-07 W	11,8	0,2	27,3	43,3				0,080	💧	●	251,50
SDJCR/L 16-07	15,8	0,2	27,3	43,3				0,080	-	○	197,-
SDJCR/L 16-07 W	15,8	0,2	27,3	43,3				0,080	💧	●	251,50
SDJCR/L 12-11	11,8	0,2	27,3	43,3	DCMT DCGT 11T3...	VT35	BT15	0,080	-	○	197,-
SDJCR/L 12-11 W	11,8	0,2	27,3	43,3				0,080	💧	●	251,50
SDJCR/L 16-11	15,8	0,2	27,3	43,3				0,090	-	○	197,-
SDJCR/L 16-11 W	15,8	0,2	27,3	43,3				0,090	💧	●	251,50



SVJCR/L

SVJCR/L 12-11	11,8	0,2	27,3	43,3	VCMT VCGT 1103...	SS1751	BT08	0,070	-	○	197,-
SVJCR/L 12-11 W	11,8	0,2	27,3	43,3				0,070	💧	●	251,50
SVJCR/L 16-11	15,8	0,2	27,3	43,3				0,080	-	○	197,-
SVJCR/L 16-11 W	15,8	0,2	27,3	43,3				0,080	💧	●	251,50



... ER/L

SER/L 12-11	11,8	27,3	43,3	11 ER/L	-	-	-	-	SS1751	BT08	0,070	-	○	197,-
TER/L 16-16	15,8	27,3	43,3	16 ER/L	US-3R	US-3L	USR-3E	GBS-3E	VT40-3E	BT10	0,100	-	○	268,50

BARENI PER TORNITURA INTERNA BOHRSTANGEN FÜR DIE INNENBEARBEITUNG _ INTERNAL BORING BARS

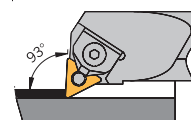
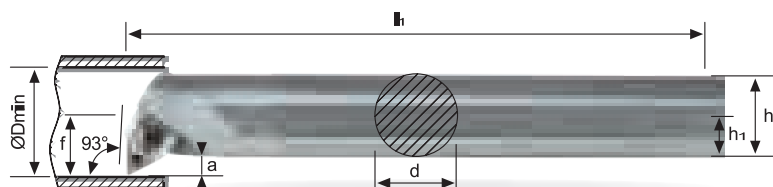
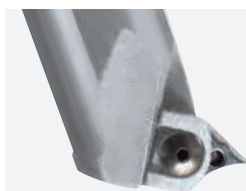
MILLING

MINIMILL

MOULDMILL

MICROTOOLS
AMS

MINITOOLS



Stelo in acciaio _ Stahlschaft _ Steelshank

A-MTFNR/L	d	h1	h2	l1 (mm)	f	a	Dmin		KG		€
A32S MTFNR/L 16	32	15	30	250	22	5,9	44	TN... 1604...	1,400	●	308,50
A40T MTFNR/L 16	40	18	36	300	27	6,9	54		2,700	●	366,-

RICAMBI
Ersatzteile
Spare parts

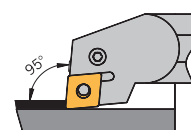
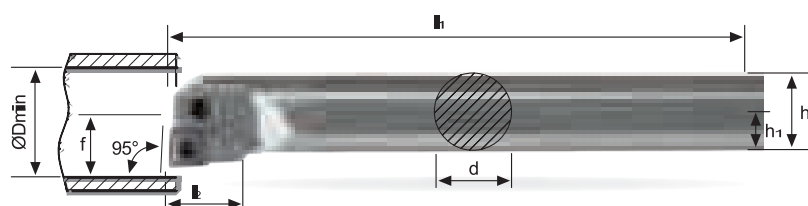
Staffa
Klemme
Clamp

Perno
Keilstück
Wedge

Supporto
Unterlegplatte
Support pad

Grano
Gewindestift
Pin

... MTFNR/L 16	GS1	P1	E1	G1
----------------	-----	----	----	----



Stelo in acciaio _ Stahlschaft _ Steelshank

A-PCLNR/L	d	h1	h2	l1 (mm)	l2	f	Dmin		KG		€
A16M PCLNR/L 09	16	8	15,5	150	21	11	20	CN... 0903...	0,250	○	199,50
A20Q PCLNR/L 09	20	10	19	180	21	13	25		0,500	○	262,50
A25R PCLNR/L 09	25	12,5	24	200	21	17	32		0,700	○	341,50
A25R PCLNR/L 12	25	12,5	24	200	21	17	32	CN... 1204...	0,700	●	341,50
A32S PCLNR/L 12	32	16	31	250	24,1	22	40		1,400	●	350,-
A40T PCLNR/L 12	40	20	38,5	300	24,1	27	49		2,700	●	380,-

RICAMBI
Ersatzteile
Spare parts

Supporto
Unterlage
Support pad

Leva
Hebel
Lever

Vite di fissaggio
Klemmschraube
Clamping screw

Spina supporto
Rohrstift
Shim pin

Punzone
Montagedorn
Shim pin punch

... 16/20... PCLNR/L 09	--	HP 1118	SP 1118	--	--
... 25... PCLNR/L 09	UP 1115	HP 4751	SP 3111	RP 3112	MP 3111
... 25... PCLNR/L 12	UP 1111	HP 1111	SP 1114	RP 1111	MP 1111
... 32-40... PCLNR/L 12	UP 1111	HP 1111	SP 1111	RP 1111	MP 1111

● Disponibile - Lieferbar - On stock

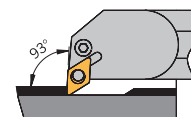
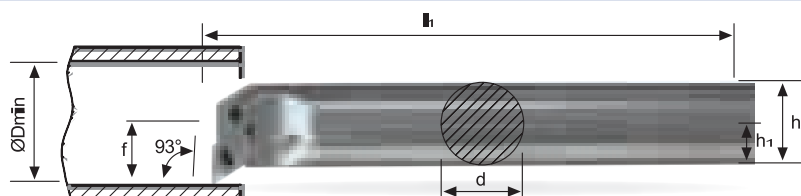
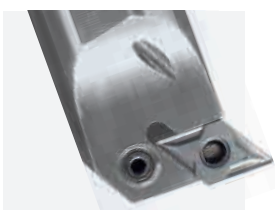
○ A richiesta - Auf Anfrage - On request

2023/24



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BARENI PER TORNITURA INTERNA BOHRSTANGEN FÜR DIE INNENBEARBEITUNG _ INTERNAL BORING BARS



Stelo in acciaio _ Stahlschaft _ Steelshank

A-PDUNR/L	d	h1	h2	l1	f	D _{min}		KG		STOCK	€
A20Q PDUNR/L 11	20	10	19	180	16	27	DN...	0,500		○	262,50
A25R PDUNR/L 11	25	12,5	24	200	18,5	32	1104...	0,700		○	341,50
A32S PDUNR/L 15	32	16	31	250	22	40	DN...	1,400		●	350,-
A40T PDUNR/L 15	40	20	38,5	300	27	49	1506...	2,700		○	380,-

RICAMBI Ersatzteile Spare parts

Supporto Unterlage Support pad

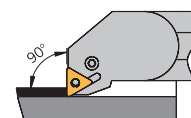
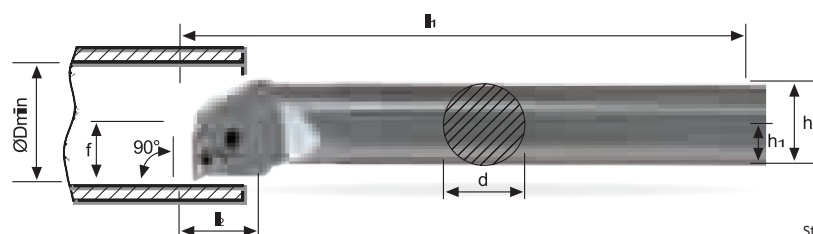
Leva Hebel Lever

Vite di fissaggio Klemmschraube Clamping screw

Spina supporto Rohrstift Shim pin

Punzone Montagedorn Shim pin punch

...20... PDUNR/L 11	--	HP 2012	SP 3112	--	--
...25... PDUNR/L 11	UP 2011	HP 2011	SP 3111	RP 3112	MP 3111
...32-40... PDUNR/L 15	UP 2421	HP 2421	SP 1111	RP 1111	MP 1111



Stelo in acciaio _ Stahlschaft _ Steelshank

A-PTFNR/L	d	h1	h2	l1	l2	f	D _{min}		KG		STOCK	€
A20Q PTFNR/L 11	20	10	19	180	14	13	25	TN... 1103...	0,500		●	262,50
A25R PTFNR/L 16	25	12,5	24	200	17,5	17	32	TN... 1604...	0,700		●	341,50

RICAMBI Ersatzteile Spare parts

Supporto Unterlage Support pad

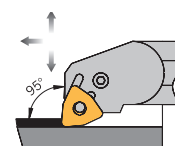
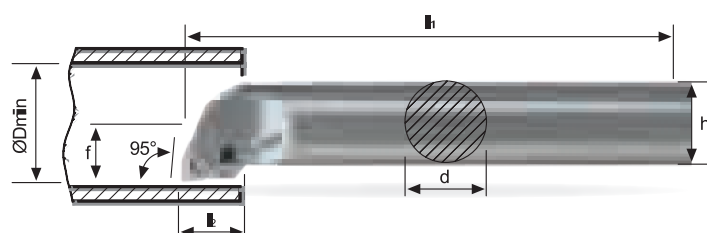
Leva Hebel Lever

Vite di fissaggio Klemmschraube Clamping screw

Spina supporto Rohrstift Shim pin

Punzone Montagedorn Shim pin punch

...20... PTFNR/L 11	--	HP 6051	SP 5751	--	--
...25... PTFNR/L 16	UP 6211	HP 4751	SP 3111	RP 3112	MP 3111



Stelo in acciaio _ Stahlschaft _ Steelshank

A-PWLNR/L	d	h2	l1	l2	f	D _{min}		KG		STOCK	€
A16M PWLNR/L 06	16	15,5	150	17,5	11	21		0,250		○	199,50
A20Q PWLNR/L 06	20	19	180	19,5	13	25	WN... 0604...	0,500		○	262,50
A25R PWLNR/L 06	25	24	200	19,5	17	32		0,700		○	341,50
A32S PWLNR/L 08	32	31	250	26	22	40	WN... 0804...	1,400		●	350,-

RICAMBI Ersatzteile Spare parts

Supporto Unterlage Support pad

Leva Hebel Lever

Vite di fissaggio Klemmschraube Clamping screw

Spina supporto Rohrstift Shim pin

Punzone Montagedorn Shim pin punch

... 16-20... PWLNR/L 06	--	HP 4753	SP 3113	--	--
... 25... PWLNR/L 06	UP 71111	HP 4751	SP 3111	RP 3112	MP 3111
... 32... PWLNR/L 08	UP 71011	HP 1111	SP 1111	RP 1111	MP 1111

UTENSILI PER TORNITURA ESTERNA **WERKZEUGE FÜR DIE AUSSENBEARBEITUNG _ EXTERNAL TURNING TOOLS** Con lubrificazione _ Mit Innenkühlung _ With coolant

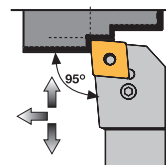
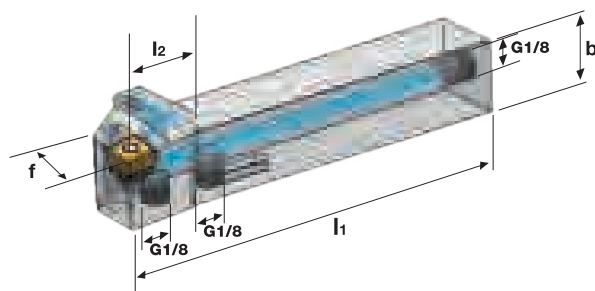
MILLING

MINIMILL

MOULDMILL

MICROTOOLS
AMS

MINITOOLS



INCLUDING FREE
NO SEPARATE SALE

Stelo in acciaio _ Stahlschaft Steelshank

PCLNR/L

h1 h2 b l1 l2 f (mm)



PCLNR/L 1616 H12 – IK G1/8

16 16 16 100 26,1 20

0,254 **240,-**

PCLNR/L 2020 K12 – IK G1/8

20 20 20 125 27,4 25

**CN...
1204...**

**UP
1111**

**HP
1111**

**SP
1111**

**RP
1111**

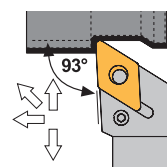
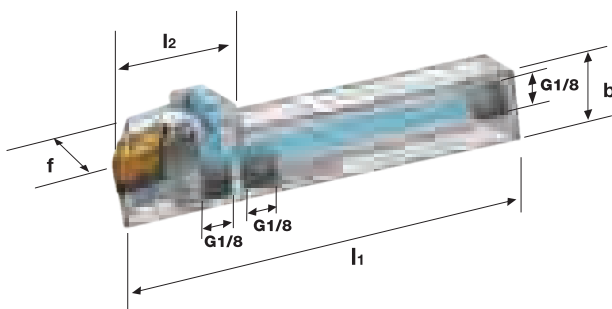
**MP
1111**

0,428 **251,-**

PCLNR/L 2525 M12 – IK G1/8

25 25 25 150 28 32

0,751 **270,-**



INCLUDING FREE
NO SEPARATE SALE

Stelo in acciaio _ Stahlschaft Steelshank

PDJNR/L

h1 h2 b l1 l2 f (mm)



PDJNR/L 1616 H11 – IK G1/8

16 16 16 100 30 20

**DN...
1104...**

**UP
2011**

**HP
2011**

**SP
3111**

**RP
3112**

**MP
3111**

0,220 **240,-**

PDJNR/L 2020 K15 – IK G1/8

20 20 20 125 30 25

**DN...
1506...**

**UP
2421**

**HP
2421**

**SP
1111**

**RP
1111**

**MP
1111**

0,411 **251,-**

PDJNR/L 2525 M15 – IK G1/8

25 25 25 150 30 32

0,737 **270,-**

● Disponibile - Lieferbar - On stock

○ A richiesta - Auf Anfrage - On request

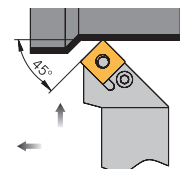
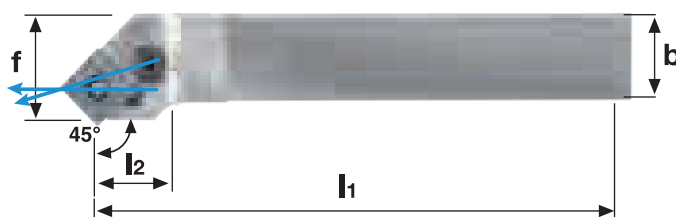
2023/24



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UTENSILI PER TORNITURA ESTERNA WERKZEUGE FÜR DIE AUSSENBEARBEITUNG _ EXTERNAL TURNING TOOLS

Con lubrificazione _ Mit Innenkühlung _ With coolant



INCLUDING FREE
NO SEPARATE SALE

Stelo in acciaio _ Stahlschaft Steelshank

PSSNR/L

(mm)

h1

h2

b

l1

l2

f



PSSNR/L 2020 K12 - IK G1/8

20 20 20 125 29,4 25

0,430



251,-

SN...
1204...

UP
5112

HP
1111

SP
1111

RP
1111

MP
1111

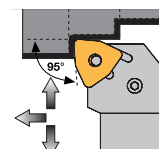
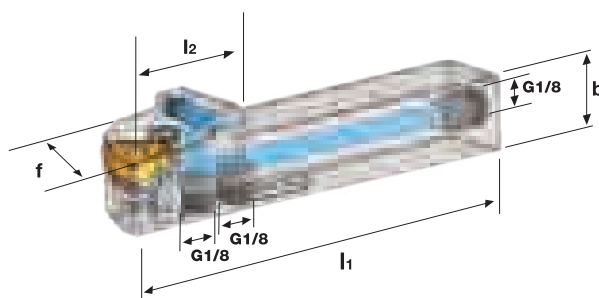
PSSNR/L 2525 M12 - IK G1/8

25 25 25 150 29,3 32

0,760



270,-



INCLUDING FREE
NO SEPARATE SALE

Stelo in acciaio _ Stahlschaft Steelshank

PWNLR/L

(mm)

h1

h2

b

l1

l2

f



PWNLR/L 2020 K08 - IK G1/8

20 20 20 125 25 25

0,420



251,-

WN...
0804...

UP
71011

HP
1111

SP
1111

RP
1111

MP
1111

PWNLR/L 2525 M08 - IK G1/8

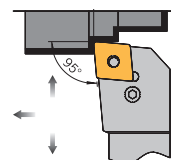
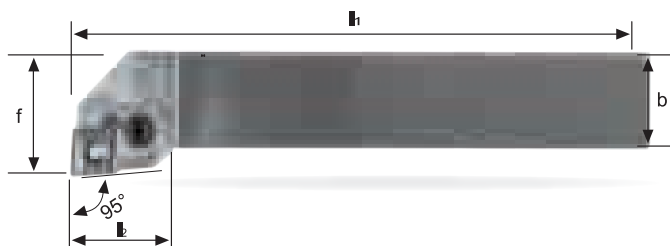
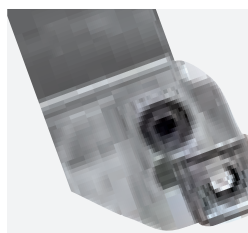
25 25 25 150 25 32

0,767



270,-

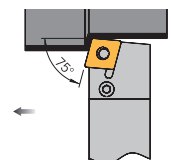
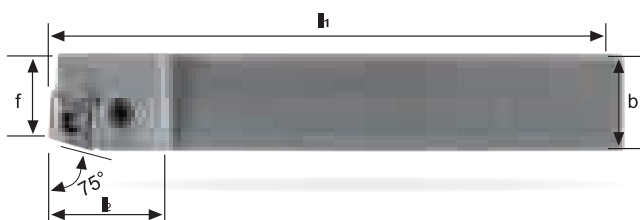
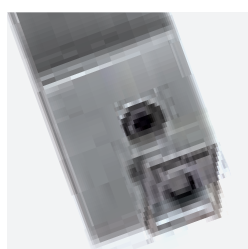
UTENSILI PER TORNITURA ESTERNA WERKZEUGE FÜR DIE AUSSENBEARBEITUNG _ EXTERNAL TURNING TOOLS



Stelo in acciaio _ Stahlschaft _ Steelshank

PCLNR/L	h1	h2	b	l1 (mm)	l2	f		KG		€
PCLNR/L 1616 H09	16	16	16	100	23	20,3	CN... 0903...	0,220	--	○ 131,50
PCLNR/L 1616 H12	16	16	16	100	26,1	20,3	CN... 1204...	0,220	--	● 131,50
PCLNR/L 2020 K09	20	20	20	125	26	25,3	CN... 0903...	0,420	--	○ 136,50
PCLNR/L 2020 K12	20	20	20	125	27,5	25,3	CN... 1204...	0,420	--	● 136,50
PCLNR/L 2525 M09	25	25	25	150	28	32,3	CN... 0903...	0,740	--	○ 136,50
PCLNR/L 2525 M12	25	25	25	150	28,1	32,3	CN... 1204...	0,740	--	● 136,50
PCLNR/L 2525 M16	25	25	25	150	32,7	32,3	CN... 1606...	0,740	--	○ 136,50
PCLNR/L 3225 P12	32	32	25	170	31,2	32,3	CN... 1204...	1,300	--	● 140,-
PCLNR/L 3232 P16	32	32	32	170	40	40,3	CN... 1606...	1,300	--	○ 148,50
PCLNR/L 3232 P19	32	32	32	170	38,2	40,3	CN... 1906...	1,300	--	○ 148,50
PCLNR/L 4040 S19	40	40	40	250	40	50,3		1,700	--	○ 241,50

RICAMBI Ersatzteile Spare parts	Supporto Unterlage Support pad	Leva Hebel Lever	Vite di fissaggio Klemmschraube Clamping screw	Spina supporto Rohrstift Shim pin	Punzone Montagedorn Shim pin punch
PC... R/L... 09	UP 1115	HP 4751	SP 3111	RP 3112	MP 3111
PC... R/L... 12	UP 1111	HP 1111	SP 1111	RP 1111	MP 1111
PC... R/L... 16	UP 1221	HP 1221	SP 1221	RP 1221	MP 1221
PC... R/L... 19	UP 1321	HP 1321	SP 1321	RP 1321	MP 1321

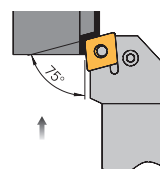
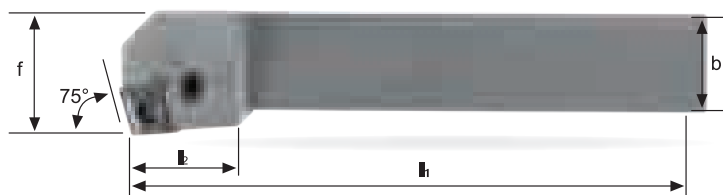
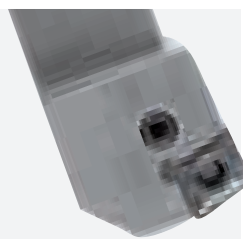


Stelo in acciaio _ Stahlschaft _ Steelshank

PCBNR/L	h1	h2	b	l1 (mm)	l2	f		KG		€
PCBNR/L 2525 M12	25	25	25	150	27,7	22	CN... 1204...	0,740	--	● 136,50

RICAMBI Ersatzteile Spare parts	Supporto Unterlage Support pad	Leva Hebel Lever	Vite di fissaggio Klemmschraube Clamping screw	Spina supporto Rohrstift Shim pin	Punzone Montagedorn Shim pin punch
PC... R/L... 12	UP 1111	HP 1111	SP 1111	RP 1111	MP 1111

UTENSILI PER TORNITURA ESTERNA WERKZEUGE FÜR DIE AUSSENBEARBEITUNG _ EXTERNAL TURNING TOOLS



Stelo in acciaio _ Stahlschaft _ Steelshank

PCKNR/L

	h1	h2	b	l1 (mm)	l2	f		KG		STOCK	€
PCKNR/L 2020 K12	20	20	125	27,4	25	25	CN... 1204...	0,420	--	●	136,50
PCKNR/L 2525 M12	25	25	150	28	25	32		0,740	--	●	136,50

**RICAMBI
Ersatzteile
Spare parts****Supporto
Unterlage
Support pad****Leva
Hebel
Lever****Vite di fissaggio
Klemmschraube
Clamping screw****Spina supporto
Rohrstift
Shim pin****Punzone
Montagedorn
Shim pin punch**

PC... R/L... 12

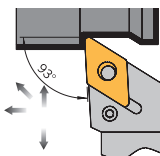
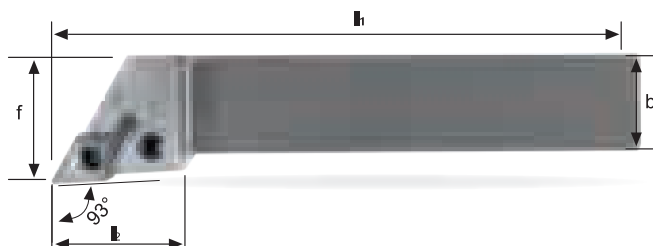
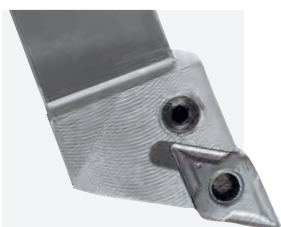
UP 1111

HP 1111

SP 1111

RP 1111

MP 1111



Stelo in acciaio _ Stahlschaft _ Steelshank

PDJNR/L

	h1	h2	b	l1 (mm)	l2	f		KG		STOCK	€
PDJNR/L 1616 H11	16	16	16	100	30	20,2	DN... 1104...	0,220	--	○	131,50
PDJNR/L 2020 K11	20	20	20	125	30	25,2		0,420	--	○	136,50
PDJNR/L 2020 K15	20	20	20	125	35,4	25,2	DN... 1506...	0,420	--	●	136,50
PDJNR/L 2525 M11	25	25	25	150	30	32,2	DN... 1104...	0,740	--	○	136,50
PDJNR/L 2525 M15	25	25	25	150	35,4	32,2	DN... 1506...	0,740	--	●	136,50
PDJNR/L 3225 P11	32	32	25	170	29,8	32,2	DN... 1104...	1,300	--	○	140,-
PDJNR/L 3232 P15	32	32	32	170	35,4	40,2	DN... 1506...	1,300	--	●	148,50

**RICAMBI
Ersatzteile
Spare parts****Supporto
Unterlage
Support pad****Leva
Hebel
Lever****Vite di fissaggio
Klemmschraube
Clamping screw****Spina supporto
Rohrstift
Shim pin****Punzone
Montagedorn
Shim pin punch**

PD... R/L... 11

UP 2011

HP 2011

SP 3111

RP 3112

MP 3111

PD... R/L... 15

UP 2421

HP 2421

SP 1111

RP 1111

MP 1111

UTENSILI PER TORNITURA ESTERNA WERKZEUGE FÜR DIE AUSSENBEARBEITUNG _ EXTERNAL TURNING TOOLS

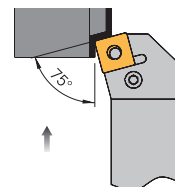
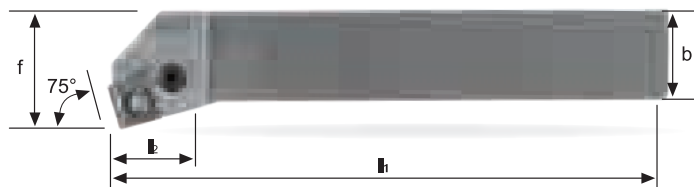
MILLING

MINIMILL

MOULDMILL

MICROTOOLS
AMS

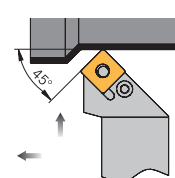
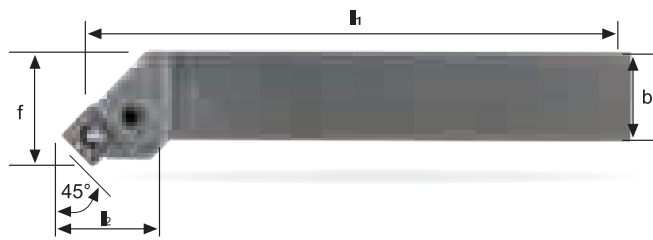
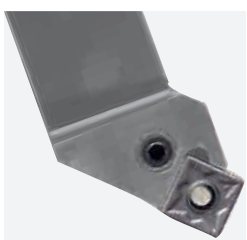
MINITOOLS



Stelo in acciaio _ Stahlschaft _ Steelshank

PSKNR/L	h1	h2	b	l1 (mm)	l2	f		KG		€
PSKNR/L 2020 K12	20	20	20	125	20,7	25,3	SN... 1204...	0,420	--	● 136,50
PSKNR/L 2525 M12	25	25	25	150	24	32,3		0,740	--	● 136,50
PSKNR/L 2525 M15	25	25	25	150	24,8	32,3	SN... 1506...	0,740	--	○ 136,50
PSKNR/L 3232 P15	32	32	32	170	27,6	40,1		1,300	--	○ 148,50
PSKNR/L 3232 P19	32	32	32	170	37,4	40,3	SN... 1906...	1,300	--	○ 148,50

RICAMBI Ersatzteile Spare parts	Supporto Unterlage Support pad	Leva Hebel Lever	Vite di fissaggio Klemmschraube Clamping screw	Spina supporto Rohrstift Shim pin	Punzone Montagedorn Shim pin punch
PS... R/L... 12	UP 5112	HP 1111	SP 1111	RP 1111	MP 1111
PS... R/L... 15	UP 5421	HP 1221	SP 1221	RP 1221	MP 1221
PS... R/L... 19	UP 5321	HP 1321	SP 1321	RP 1321	MP 1321

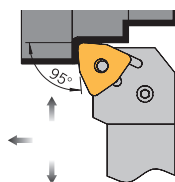
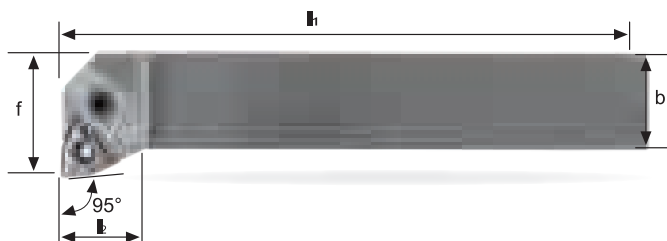
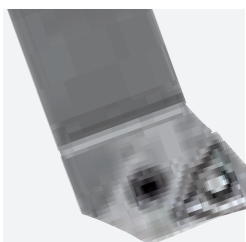


Stelo in acciaio _ Stahlschaft _ Steelshank

PSSNR/L	h1	h2	b	l1 (mm)	l2	f		KG		€
PSSNR/L 2020 K12	20	20	20	125	29,4	25,3	SN... 1204...	0,420	--	● 136,50
PSSNR/L 2525 M12	25	25	25	150	29,3	32,3		0,740	--	● 136,50
PSSNR/L 2525 M15	25	25	25	150	32,5	32,3	SN... 1506...	0,740	--	○ 136,50
PSSNR/L 3232 P15	32	32	32	170	32,5	40,3		1,300	--	○ 148,50

RICAMBI Ersatzteile Spare parts	Supporto Unterlage Support pad	Leva Hebel Lever	Vite di fissaggio Klemmschraube Clamping screw	Spina supporto Rohrstift Shim pin	Punzone Montagedorn Shim pin punch
PS... R/L... 12	UP 5112	HP 1111	SP 1111	RP 1111	MP 1111
PS... R/L... 15	UP 5421	HP 1221	SP 1221	RP 1221	MP 1221

UTENSILI PER TORNITURA ESTERNA WERKZEUGE FÜR DIE AUSSENBEARBEITUNG _ EXTERNAL TURNING TOOLS



Stelo in acciaio _ Stahlschaft _ Steelshank

PWLNR/L	h1	h2	(mm)		l2	f		KG		STOCK	€
	b	l1									
PWLNR/L 1616 H06	16	16	16	100	20	23	WN... 0604...	0,220	--	○	131,50
PWLNR/L 2020 K06	20	20	20	125	22	25		0,420	--	○	136,50
PWLNR/L 2020 K08	20	20	20	125	22	25	WN... 0804...	0,420	--	●	136,50
PWLNR/L 2525 M06	25	25	25	150	22,4	32	WN... 0604...	0,740	--	○	136,50
PWLNR/L 2525 M08	25	25	25	150	22,4	32	WN... 0804...	0,740	--	●	136,50
PWLNR/L 3225 P08	32	32	25	170	22	32		1,300	--	●	140,-

RICAMBI Ersatzteile Spare parts

Supporto Unterlage Support pad

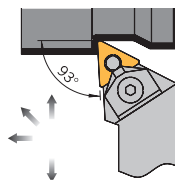
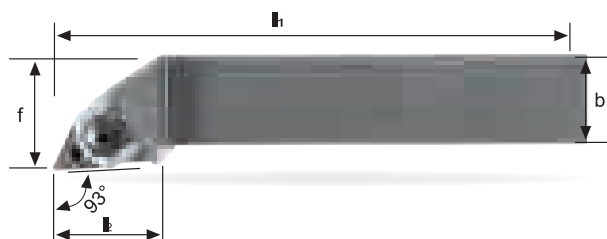
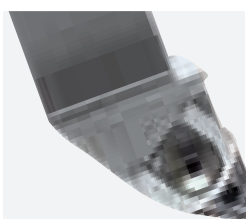
Leva Hebel Lever

Vite di fissaggio Klemmschraube Clamping screw

Spina supporto Rohrstift Shim pin

Punzone Montagedorn Shim pin punch

PW... R/L... 06	UP 71111	HP 4751	SP 3111	RP 3112	MP 3111
PW... R/L... 08	UP 71011	HP 1111	SP 1111	RP 1111	MP 1111



Stelo in acciaio _ Stahlschaft _ Steelshank

MTJNR/L	h1	h2	(mm)		l2	f		KG		STOCK	€
	b	l1									
MTJNR/L 2020 K16	20	20	20	125	35	25	TN...1604...	0,420	--	●	107,-
MTJNR/L 2525 M16	25	25	25	150	32	32		0,740	--	●	117,-

RICAMBI Ersatzteile Spare parts

Staffa Klemme Clamp

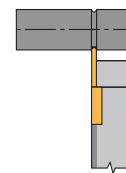
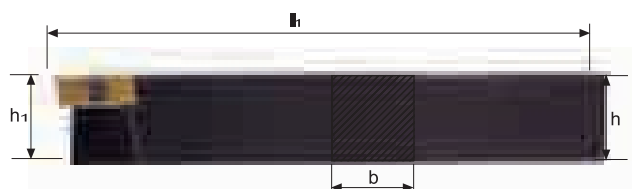
Perno Keilstück Wedge

Supporto Unterlegplatte Support pad

Grano Gewindestift Pin

MT... R/L... 16	GS1	P1	E1	G1
-----------------	-----	----	----	----

UTENSILI PER TAGLIO E SCANALATURA ESTERNA AUSSENBEARBEITUNG RADIAL - STECHDREHEN _ EXTERNAL MACHINING GROOVING



Stelo in acciaio _ Stahlschaft _ Steelshank

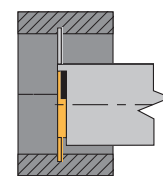
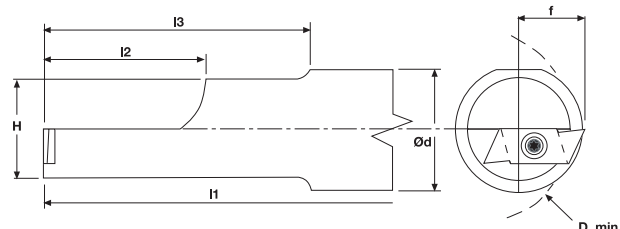
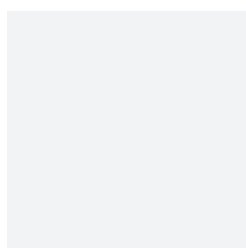
THE / THS

	h1	h	b	l1				KG		€
THE-7-0808 R/L	08	08	08	100	GIE... GP-ST-SG- GR-GW	VT 30-G	BT08	0,040	--	173,50
THE-7-1010 R/L	10	10	10	120				0,060	--	173,50
THE-7-1212 R/L	12	12	12	120				0,090	--	173,50
THE-7-1616 R/L	16	16	16	120				0,220	--	188,-
THE-7-2020 R/L	20	20	20	120				0,420	--	260,50
THE-7-2525 R/L	25	25	25	120				0,740	--	273,-

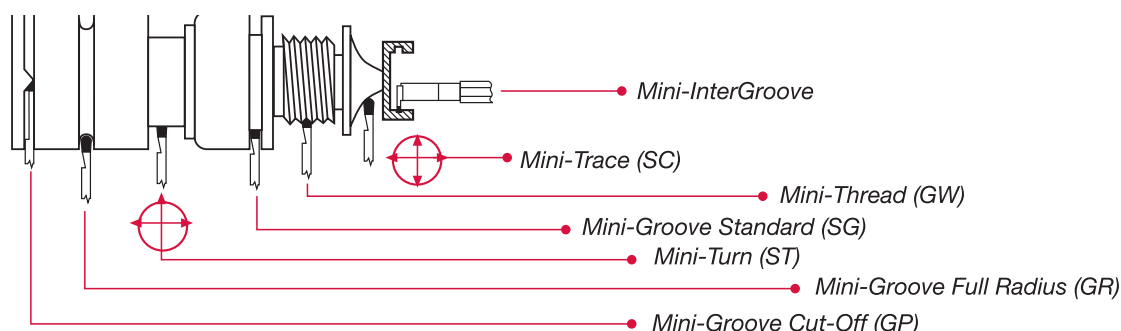
Utensili per macchine svizzere _ Swiss machine tools

THS-7-0808 R/L	08	08	08	140	GIE... GP-ST-SG- GR-GW	VT 30-G	BT08	0,040	--	237,50
THS-7-1010 R/L	10	10	10	150				0,060	--	237,50

UTENSILI PER SCANALATURA INTERNA INNENBEARBEITUNG INNENSTECHDREHEN _ INTERNAL MACHINING INTERNAL GROOVING



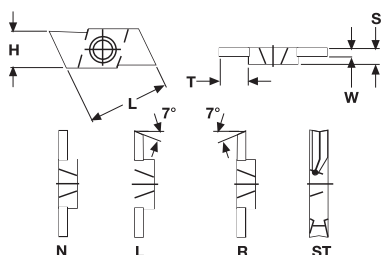
THI	ØD	Ød	f	H	l1	l2	l3				KG		€
THI-7-20 R/L	38,1	20	13,34	195	140	25	50	GIE... GP-ST-SG- GR-GW	VT 30-G	BT08	0,220	--	289,-
THI-7-25 R/L	38,1	25	13,34	195	150	32	63				0,420	--	314,-
THI-7-32 R/L	38,1	32	13,34	195	150	32	63				0,740	--	331,-



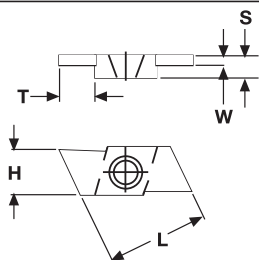
NOTE: - per utensili destri (R) inserto sinistro (L) - per utensili sinistri (L) inserto destro (R)
NOTE: - for rechte Werkzeuge (R) linke W.P. (L) - for linke Werkzeuge (L) rechte W.P. (R)
NOTE: - right hand holders (R) Left hand inserts (L) - Left hand holders (L) right hand inserts (R)

INSERTI _ WENDEPLATTEN _ INSERTS

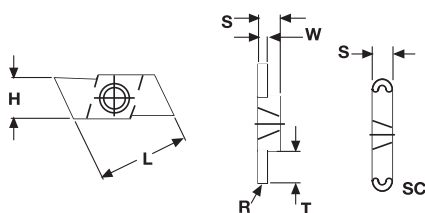
GIE

Inserti per scanalatura e taglio
Drehen und Stechen _ Grooving and Turning

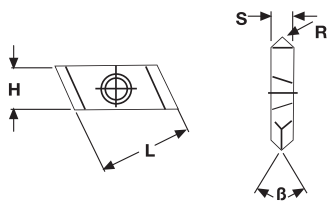
Art.	W ⁺⁰² ₋₀	T	H	S	L	TIN	€
GIE-7-GP-1,0 R/L N	1	6	7	2	17	○	49,10
GIE-7-GP-1,0 R/L R/L	1	6	7	2	17	○	49,10
GIE-7-GP-1,5 R/L N	1,5	6	7	2	17	○	49,10
GIE-7-GP-1,5 R/L R/L	1,5	6	7	2	17	○	49,10
GIE-7-GP-2 R/L N	2	6	7	2	17	○	49,10
GIE-7-GP-2 R/L R/L	2	6	7	2	17	○	49,10
GIE-7-ST-3,0 R/L	3,1	6	7	3,17	17	○	57,80

Inserti per scanalatura per anelli
Stechen _ Grooving

Art.	W ⁺⁰² ₋₀	T	H	S	L	TIN	€
GIE-7-SG-0,5 R/L	0,5	2,54	7	2	17	○	49,10
GIE-7-SG-0,7 R/L	0,7	2,54	7	2	17	○	49,10
GIE-7-SG-0,8 R/L	0,8	2,54	7	2	17	○	49,10
GIE-7-SG-0,9 R/L	0,9	2,54	7	2	17	○	49,10
GIE-7-SG-1,1 R/L	1,1	6	7	2	17	○	49,10
GIE-7-SG-1,3 R/L	1,3	6	7	2	17	○	49,10
GIE-7-SG-1,6 R/L	1,6	6	7	2	17	○	49,10
GIE-7-SG-1,85 R/L	1,85	6	7	2	17	○	49,10

Inserti per scanalatura raggiata e profilatura
Vollradiusaustrohung _ Full radius execution

Art.	W ⁺⁰² ₋₀	B	T	H	S	L	TIN	€
GIE-7-GR-1 R/L	1	0,5	6	7	2	17	○	49,10
GIE-7-GR-1,5 R/L	1,5	0,75	6	7	2	17	○	49,10
GIE-7-GR-2 R/L	2	1	6	7	2	17	○	49,10
GIE-7-SC-3 R/L	3,17	1,585	6	7	3,17	17	○	52,50

Inserti per filettare
Gewindedrehen _ Threading

Art.	B	R	H	S	L	TIN	€
GIE-7-GW-60 R/L	60°	0,1	7	2	17	○	49,10
GIE-7-GW-55 R/L	55°	0,12	7	2	17	○	49,10



SET MINI GROOVE

KG STOCK €

Art. SET 05-GIE

n° 1	THE-7-1212-R						
n° 1	GIE-7-SG-0,9 L TIN						
n° 1	GIE-7-SG-1,1 L TIN						
n° 1	GIE-7-SG-1,3 L TIN	0,170	○				405,50
n° 1	GIE-7-SG-1,6 L TIN						
n° 1	GIE-7-SG-1,85 L TIN						

(*) **SG** = scanalatura standard
standard Stechen
standard grooving

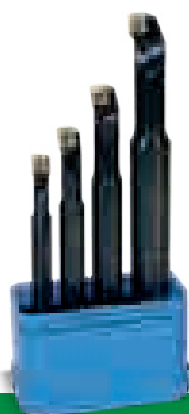
GP = scanalatura e taglio
Drehen und Stechen
grooving and cutoff

GR = scanalatura raggiata
Vollradiusaustrohung
grooving full radius

GW = filettatura
Gewindedrehen
threading

ST = tornitura
Drehen
turning

SC = profilatura
Kopierprofil
tracing

**SET A - SCLCR/L 06**

N° 1 A 0608H SCLCR/L 06
N° 1 A 0810J SCLCR/L 06
N° 1 A 1012K SCLCR/L 06
N° 1 A 1216M SCLCR/L 06

**SET A-SDUCR/L 07**

N° 1 A 0810H SDUCR/L 07
N° 1 A 1012K SDUCR/L 07
N° 1 A 1216M SDUCR/L 07

**SET A-SDQCR/L 07**

N° 1 A 0810H SDQCR/L 07
N° 1 A 1012K SDQCR/L 07
N° 1 A 1216M SDQCR/L 07

**SET A-SWUCR/L 02**

N° 1 A 0508H SWUCR/L 02
N° 1 A 0608H SWUCR/L 02

**SET AH - SCLCR/L 06**

N° 1 AH 0608H SCLCR/L 06
N° 1 AH 0810J SCLCR/L 06
N° 1 AH 1012K SCLCR/L 06
N° 1 AH 1216M SCLCR/L 06

**SET AH-SDUCR/L 07**

N° 1 AH 0810H SDUCR/L 07
N° 1 AH 1012K SDUCR/L 07
N° 1 AH 1216M SDUCR/L 07

**SET E SV.CR/L 05 + 20 WP 05**

N° 1 E08F SVLCR/L 05
N° 1 E08F SVXCR/L 05
N° 1 E08F SVVCR/L 05
N° 1 E08F SV95CR/L 05
N° 10 VCGT 050102 FN-ALU K15
N° 10 VCGT 050102 EN-PM1 K400

**SET E SV.CR/L 07 + 20 WP VC07**

N° 1 E10H SVLCR/L 07
N° 1 E10H SVXCR/L 07
N° 1 E10H SVVCR/L 07
N° 1 E10H SV95CR/L 07
N° 10 VCGT 070202FN-ALU K15
N° 10 VCMT 070202EN-PM1 K400

**SET E SCLCR/L 06**

N° 1 E08K SCLCR/L 06
N° 1 E10K SCLCR/L 06
N° 1 E12M SCLCR/L 06

**SET E SDUCR/L 07**

N° 1 E10K SDUCR/L 07
N° 1 E12M SDUCR/L 07

**SET E SCLCR/L 03**

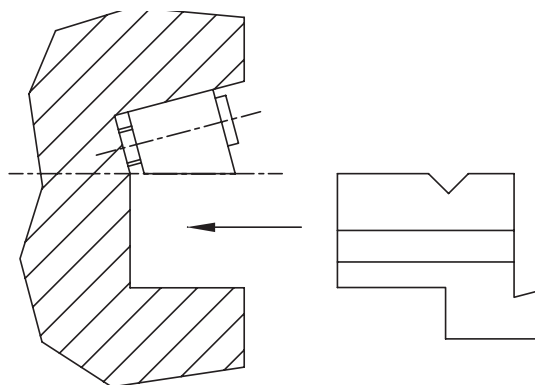
N° 1 E04G SCLCR/L 03
N° 1 E05H SCLCR/L 03
N° 1 E06J SCLCR/L 03

**SET E-SWUCR/L 02**

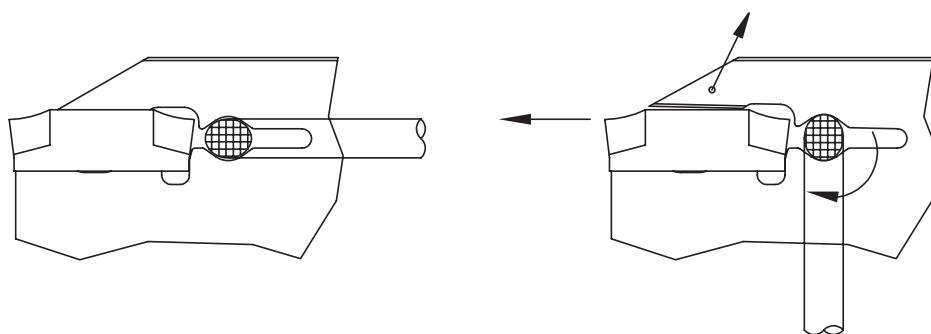
N° 1 E 0508H SWUCR/L 02
N° 1 E 0608H SWUCR/L 02



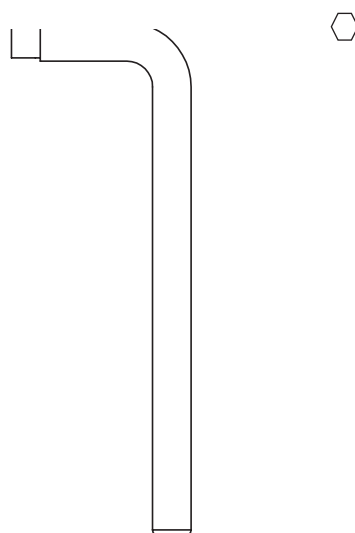
GROOVING



Base holder assembly instruction

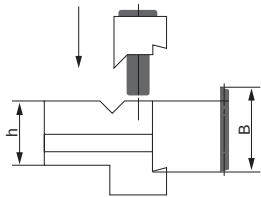
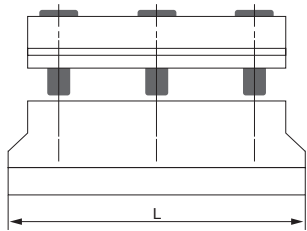


Instruction for changing the insert



Assembly-key

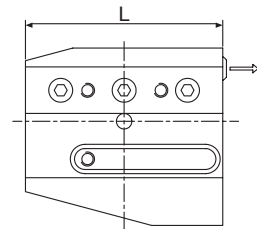
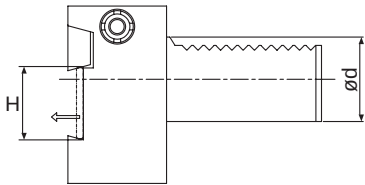
BASE DI SUPPORTO _ GRUNDHALTER _ BASE HOLDER



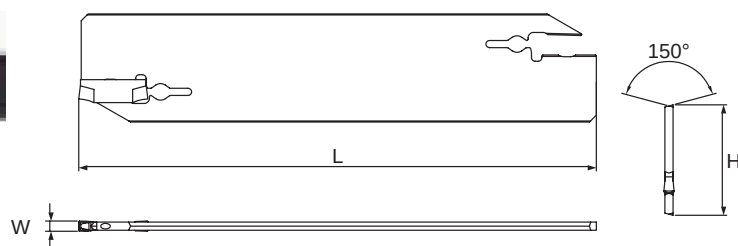
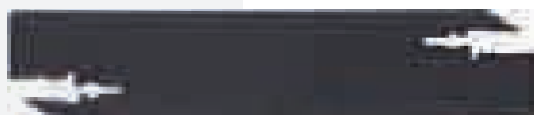
6

MCTB	h	(mm) L	B	KG	STOCK	€
MCTB 1910	10	76	19	0,200	○	281,-
MCTB 1912	12	76	19	0,250	○	281,-
MCTB 1916	16	76	19	0,300	○	281,-
MCTB 2620	20	87	26	0,600	○	289,50
MCTB 2625	25	87	26	0,700	○	310,-
MCTB 3220	20	100	32	0,800	○	293,50
MCTB 3225	25	110	32	1,000	○	316,-
MCTB 3232	32	120	32	1,300	○	321,-

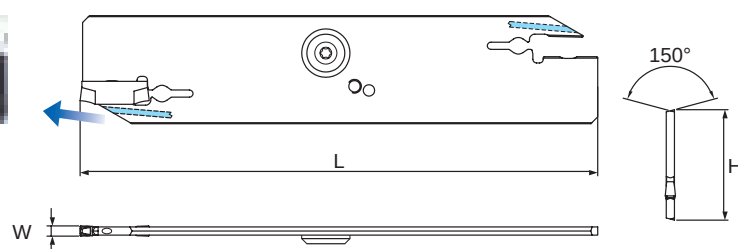
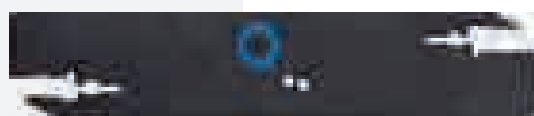
BASE VDI CON LUBRIFICAZIONE _ VDI GRUNDHALTER MIT IK _ VDI TOOL HOLDER WITH IC



MCGB	Ø d	(mm) L	H	KG	STOCK	€
MCGB VDI30/26 COOL	30	70	26	1,300	○	1083,-
MCGB VDI30/32 COOL	30	70	32	1,300	○	1083,-
MCGB VDI40/32 COOL	40	85	32	2,150	○	1083,-

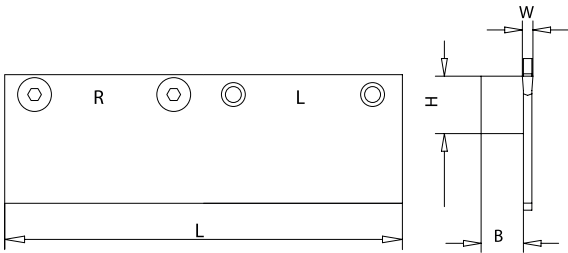


MCCB	W	H (mm)	L		KG	€
MCCB 1920 S	2,0	19	86	GELCG..192002...	0,040	● 130,-
MCCB 2620 S	2,0	26	110		0,050	● 139,50
MCCB 2630 S	3,0	26	110	GELCG..193002...	0,060	● 139,50
MCCB 3230 S	3,0	32	150		0,090	● 157,-
MCCB 2640 S	4,0	26	110	GELCG..234002...	0,100	● 139,50
MCCB 3240 S	4,0	32	150		0,100	● 157,-



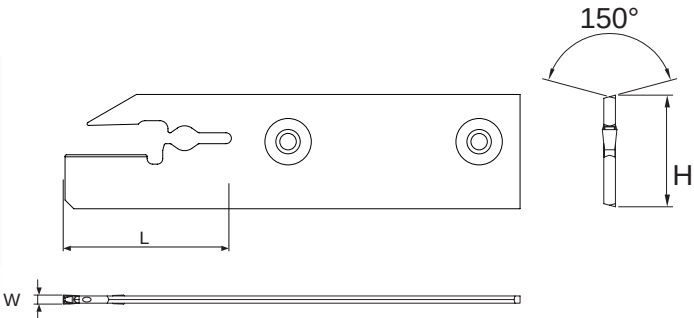
MCCB COOL	W	H (mm)	L	VT40SL	GESL	BT15		KG		€
MCCB 2620 S COOL	2,0	26	110				GELCG..192002...	0,050	●	268,-
MCCB 2630 S COOL	3,0	26	110				GELCG..193002...	0,060	●	268,-
MCCB 3230 S COOL	3,0	32	150					0,090	●	291,50
MCCB 2640 S COOL	4,0	26	110				GELCG..234002...	0,100	●	268,-
MCCB 3240 S COOL	4,0	32	150					0,100	●	291,50

BASE SUPPORTO LAMA _GRUNDHALTER _TOOL HOLDER



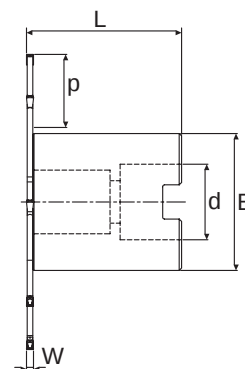
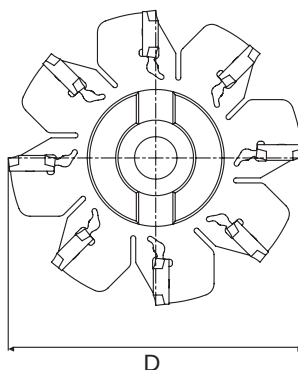
MCBHM	(mm)			Scanalatura consigliata Empfohlene Stechbreite			KG	STOCK	€
	H	B	L						
MCBHM1010N	10	10	100	2	VT50 BHM	3.00mm	0,080	●	142,-
MCBHM1212N	12	12	100	2			0,110	●	147,-
MCBHM1616N	16	16	100	2 / 3			0,200	●	151,50
MCBHM2020N	20	20	100	2 / 3 / 4			0,300	●	162,50
MCBHM2525N	25	25	100	2 / 3 / 4			0,400	●	191,-

LAMA _STECHSCHWERTER _BLADE



MCCBM	(mm)			KG	STOCK	€
	W	L				
MCCBM2N	2,0	20	GELCG..192002...	0,030	●	91,50
MCCBM3N	3,0	25	GELCG..193002...	0,040	●	91,50
MCCBM4N	4,0	30	GELCG..234002...	0,050	●	91,50



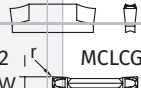


MCDM	Ø D	L	W	p	Ø B	d	Z		KG		€
MCDM 08020 Z4 ST *	80	39,9	2,0	25	29	M16	4		0,250	--	● 1150,50
MCDM 10020 Z6 SA	100	51,9	2,0	28	40	22	6	GELCG..192002	0,700	--	● 1327,50
MCDM 12520 Z8 SA	125	51,9	2,0	36	48	27	8		1,250	--	● 1434,-
MCDM 16020 Z10 SA	160	64,9	2,0	39	80	40	10		2,500	--	● 1702,50
MCDM 08030 Z4 ST *	80	40,7	3,0	25	29	M16	4	GELCG..193002	0,250	--	● 1175,-
MCDM 10030 Z6 SA	100	52,7	3,0	28	40	22	6		0,700	--	● 1350,-
MCDM 12530 Z8 SA	125	52,7	3,0	36	48	27	8		1,300	--	● 1467,50
MCDM 16030 Z10 SA	160	65,7	3,0	39	80	40	10	GELCG..234002	2,550	--	● 1732,50
MCDM 12540 Z6 SA	125	53,5	4,0	37,5	48	27	6		1,350	--	● 1409,-
MCDM 16040 Z8 SA	160	66,5	4,0	39	80	40	8		2,650	--	● 1600,50

* Gambo filettato _ Schaftausführung Gewinde _ Threaded shank

INSERTI _ WECHSELPLATTEN _ INSERTS

Inserto unico per tutto il programma _ Ein Wendplatte fuer gesamtes Programm _ One insert for whole programme

CODICE ORDINE Bestell-Nr. Order No.	FIGURA Form Figure	 (mm)		 DENOMINAZIONE Bezeichnung Designation	 NON RIVESTITI Unbeschichte Uncoated				 RIVESTITI Beschichtet Coated				CERMET			
		W	r		TAGLIENTI Schneide Cutting edge	K15	P25	P40	P200	P300	K300	K400	TIN PVD	TIALN PVD	X99	X55
 MCLCGS		2,0	0,2	1	MCLCGS 192002	● 16,80				● 16,80	● 16,80					
		3,0	0,2	1	MCLCGS 193002	● 17,90				● 17,90	● 17,90					
		4,0	0,2	1	MCLCGS 234002	● 18,90				● 18,90	● 18,90					
 MCLCGD		2,0	0,2	2	MCLCGD 192002	● 20,-				● 20,-	● 20,-					
		3,0	0,2	2	MCLCGD 193002	● 21,-				● 21,-	● 21,-					
		4,0	0,2	2	MCLCGD 234002	● 22,10				● 22,10	● 22,10					

MC KEY

Chiave _ Schlüssel _ Spanner



Chiave non inclusa. Da ordinare separatamente.
Schlüssel nicht eingeschlossen. Separat bestellen.
Key not included. To be ordered separately.

17,40



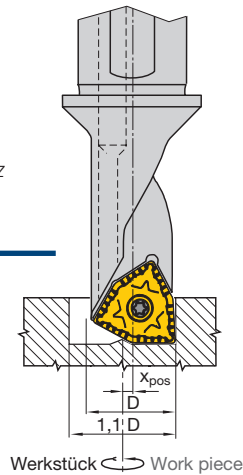
MC DRILLS

Technische Hinweise _ Technical hints

Nebenschneide einsetzbar
 Secondary cutting edge can be used

Weitere Konstruktionsmerkmale und Vorteile
 Additional features and application possibilities

Bohren ins Volle außer
 der Mitte, positiver Versatz
 Drilling off center,
 positive offset



X_{pos} : Versatz aus der Mitte positiv
 Offset, positive

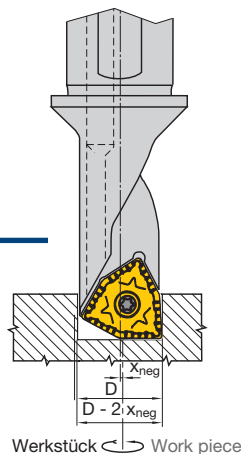
D : Nenndurchmesser Werkzeug
 Nominal tool diameter

**Acciaio
 Stahl
 Steel** $X_{pos} = \frac{(1,1 \times D) - D}{2}$

**Alluminio
 Aluminium
 Aluminium** $X_{pos} = \frac{(1,5 \times D) - D}{2}$

Werkzeug Tool	D	Acciaio Stahl Steel		Alluminio Aluminium Aluminium	
		D_{max}	x_{pos}	D_{max}	x_{pos}
2,25D/1,50D					
PTR/L 08 -x,xxD- 04	08H13	8,8	0,40	12,0	2,00
PTR/L 10 -x,xxD- 05	10H13	11,0	0,50	15,0	2,50
PTR/L 11 -x,xxD- 06	11H13	12,1	0,55	16,5	2,75
PTR/L 15 -x,xxD- 07	15H13	16,5	0,75	22,5	3,75
PTR/L 18 -x,xxD- 09	18H13	19,8	0,90	27,0	4,50
PTR/L 20 -x,xxD- 10	20H13	22,0	1,00	30,0	5,00
PTR/L 26 -x,xxD- 13	26H13	28,6	1,30	39,0	6,50

Bohren ins Volle außer der
 Mitte, negativer Versatz
 Drilling off center,
 negative offset



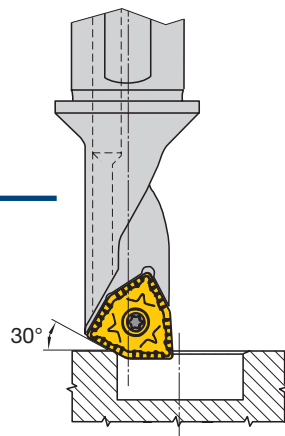
X_{pos} : Versatz aus der Mitte positiv
 Offset, negative

D : Nenndurchmesser Werkzeug
 Nominal tool diameter

$$X_{neg} = \frac{D_{min} - D}{2}$$

Werkzeug Tool	D	D_{min}	x_{neg}
2,25D/1,50D			
PTR/L 08 -x,xxD- 04	08H13	7,8	0,10
PTR/L 10 -x,xxD- 05	10H13	9,8	0,10
PTR/L 11 -x,xxD- 06	11H13	10,8	0,10
PTR/L 15 -x,xxD- 07	15H13	14,7	0,15
PTR/L 18 -x,xxD- 09	18H13	17,7	0,15
PTR/L 20 -x,xxD- 10	20H13	19,7	0,15
PTR/L 26 -x,xxD- 13	26H13	25,7	0,15

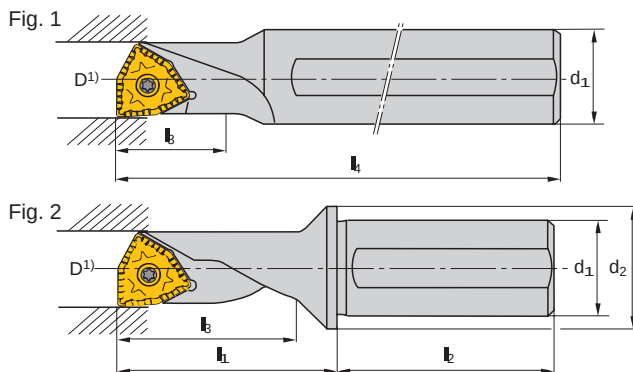
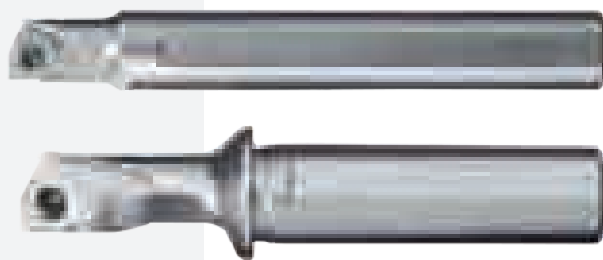
Anfasen innen
 Internal chamfering



Anfasen außen
 External chamfering



PUNTE AD INSERTI MULTIFUNZIONE MULTIFUNKTION WENDEPLATTENVOLLBOHRER _ MULTI-FUNCTION INDEXABLE INSERT DRILLING TOOL



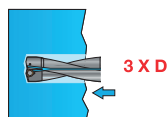
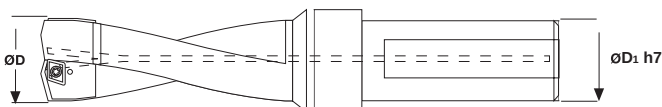
PTR/L	Fig	D ¹⁾	d1	d2	l1	l2	l3	l4		KG		STOCK	€
PTR/L 08 - 1,50D-04	1	8	12	-	-	-	12,0	80	WCHX 04...	0,030		●	239,-
PTR/L 08 - 2,25D-04	2	8	10	12	22,5	38	18,0	-		0,050		●	253,-
PTR/L 10 - 1,50D-05	1	10	12	-	-	-	15,0	90	WCHX 05...	0,040		●	243,50
PTR/L 10 - 2,25D-05	2	10	12	16	28	42	22,5	-		0,060		●	262,50
PTR/L 11 - 1,50D-06	1	11	16	-	-	-	16,5	100	WCHX 06...	0,080		●	243,50
PTR/L 11 - 2,25D-06	2	11	16	20	32	45	24,75	-		0,130		●	262,50
PTR/L 15 - 1,50D-07	1	15	20	-	-	-	22,5	125	WCHX 07...	0,150		●	287,-
PTR/L 15 - 2,25D-07	2	15	20	25	43	50	33,75	-		0,240		●	297,-
PTR/L 18 - 1,50D-09	1	18	25	-	-	-	27,0	135	WCHX 09...	0,280		●	291,-
PTR/L 18 - 2,25D-09	2	18	25	32	53	56	40,5	-		0,400		●	310,50
PTR/L 20 - 1,50D-10	1	20	25	-	-	-	30,0	150	WCHX 10...	0,290		●	297,-
PTR/L 20 - 2,25D-10	2	20	25	32	56	56	45,0	-		0,460		●	310,50
PTR/L 26 - 1,50D-13	1	26	32	-	-	-	39,0	180	WCHX 13...	0,570		●	372,50
PTR/L 26 - 2,25D-13	2	26	32	40	73	60	58,5	-		0,910		●	396,-

RICAMBI _ Ersatzteile _ Spare parts

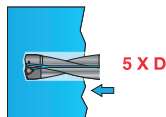
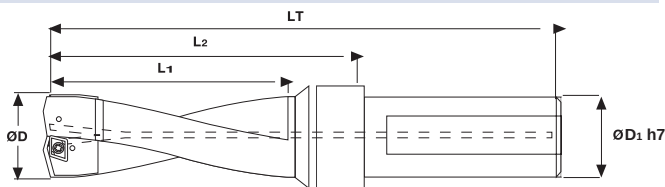
PTR/L			Torx Torx Torx	Momento torsione Anzugsmoment Torque [Ncm]
PTR/L 08	A02-20033	V04-T0600	06	62
PTR/L 10	A13-25042	V04-T0800	08	128
PTR/L 11	A13-25050	V04-T0800	08	128
PTR/L 15	A13-30073	V04-T0800	08	180
PTR/L 18	A02-35082	V04-T1500	15	345
PTR/L 20	A06-50088	V04-T2000	20	1020
PTR/L 26	A02-60120	V04-T2500	25	1750

INSERTI _ Wendeplatten _ Inserts

P300	K400	K15



TDXP - 3 X D	(mm)					XPMT	BFTX		KG		€
	Ød	ØD1	LT	L1	L2						
TDXP 140-30 R	14	20	104	43	60	XPMT 042004...	BFTX 01604N	BT06	0,380	●	385,-
TDXP 150-30 R	15	20	107	46	63				0,380	●	385,-
TDXP 160-30 R	16	20	110	49	66				0,380	●	385,-
TDXP 170-30 R	17	20	113	52	69	XPMT 052804...	BFTX 0204N	BT06	0,380	●	385,-
TDXP 180-30 R	18	20	116	55	72				0,380	●	385,-
TDXP 190-30 R	19	25	134	58	78				0,380	●	385,-
TDXP 200-30 R	20	25	137	61	81	XPMT 063306...	BFTX 02206N	BT07	0,390	●	385,-
TDXP 210-30 R	21	25	140	64	84				0,410	●	385,-
TDXP 220-30 R	22	25	143	67	87				0,410	●	385,-
TDXP 230-30 R	23	25	146	70	90	XPMT 074006...	BFTX 02506N	BT08	0,420	●	400,50
TDXP 240-30 R	24	25	149	73	93				0,420	●	415,50
TDXP 250-30 R	25	25	152	76	96				0,460	●	415,50
TDXP 260-30 R	26	25	155	79	99	XPMT 094508...	BFTX 03584	BT15	0,480	●	415,50
TDXP 270-30 R	27	25	158	82	102				0,500	●	415,50
TDXP 280-30 R	28	25	161	85	105				0,530	●	415,50
TDXP 290-30 R	29	32	170	88	110	XPMT 125812...	BFTX 0511N	BT20	0,550	●	415,50
TDXP 300-30 R	30	32	173	91	113				0,850	●	451,50
TDXP 310-30 R	31	32	176	94	116				0,870	●	451,50
TDXP 320-30 R	32	32	179	97	119	XPMT 156812...	BFTX 0615N	BT25	0,880	●	451,50
TDXP 330-30 R	33	32	182	100	122				0,910	●	451,50
TDXP 340-30 R	34	32	185	103	125				0,950	●	451,50
TDXP 350-30 R	35	32	188	106	128	XPMT 156812...	BFTX 0615N	BT25	0,980	●	471,-
TDXP 360-30 R	36	32	191	109	131				1,020	●	527,-
TDXP 370-30 R	37	32	194	112	134				1,060	●	527,-
TDXP 380-30 R	38	32	197	115	137	XPMT 156812...	BFTX 0615N	BT25	1,090	●	527,-
TDXP 390-30 R	39	32	200	118	140				1,130	●	527,-
TDXP 400-30 R	40	32	203	121	143				1,180	●	527,-
TDXP 410-30 R	41	32	206	124	146	XPMT 156812...	BFTX 0615N	BT25	1,230	●	527,-
TDXP 420-30 R	42	40	220	127	150				1,270	●	527,-
TDXP 430-30 R	43	40	223	130	153				1,310	●	527,-
TDXP 440-30 R	44	40	226	133	156	XPMT 156812...	BFTX 0615N	BT25	1,350	●	568,-
TDXP 450-30 R	45	40	229	136	159				1,910	●	568,-
TDXP 460-30 R	46	40	240	139	170				1,930	●	568,-
TDXP 470-30 R	47	40	243	141	173	XPMT 156812...	BFTX 0615N	BT25	2,020	●	568,-
TDXP 480-30 R	48	40	246	144	176				2,090	●	593,50
TDXP 490-30 R	49	40	249	147	179				2,120	●	593,50
TDXP 500-30 R	50	40	252	150	182	XPMT 156812...	BFTX 0615N	BT25	2,220	●	593,50
TDXP 510-30 R	51	40	255	153	185				2,270	●	593,50
TDXP 520-30 R	52	40	258	156	188				2,320	●	593,50
TDXP 530-30 R	53	40	261	159	191	XPMT 156812...	BFTX 0615N	BT25	2,520	●	593,50
TDXP 540-30 R	54	40	264	162	194				2,570	●	593,50
TDXP 550-30 R	55	40	267	165	197				2,820	●	593,50

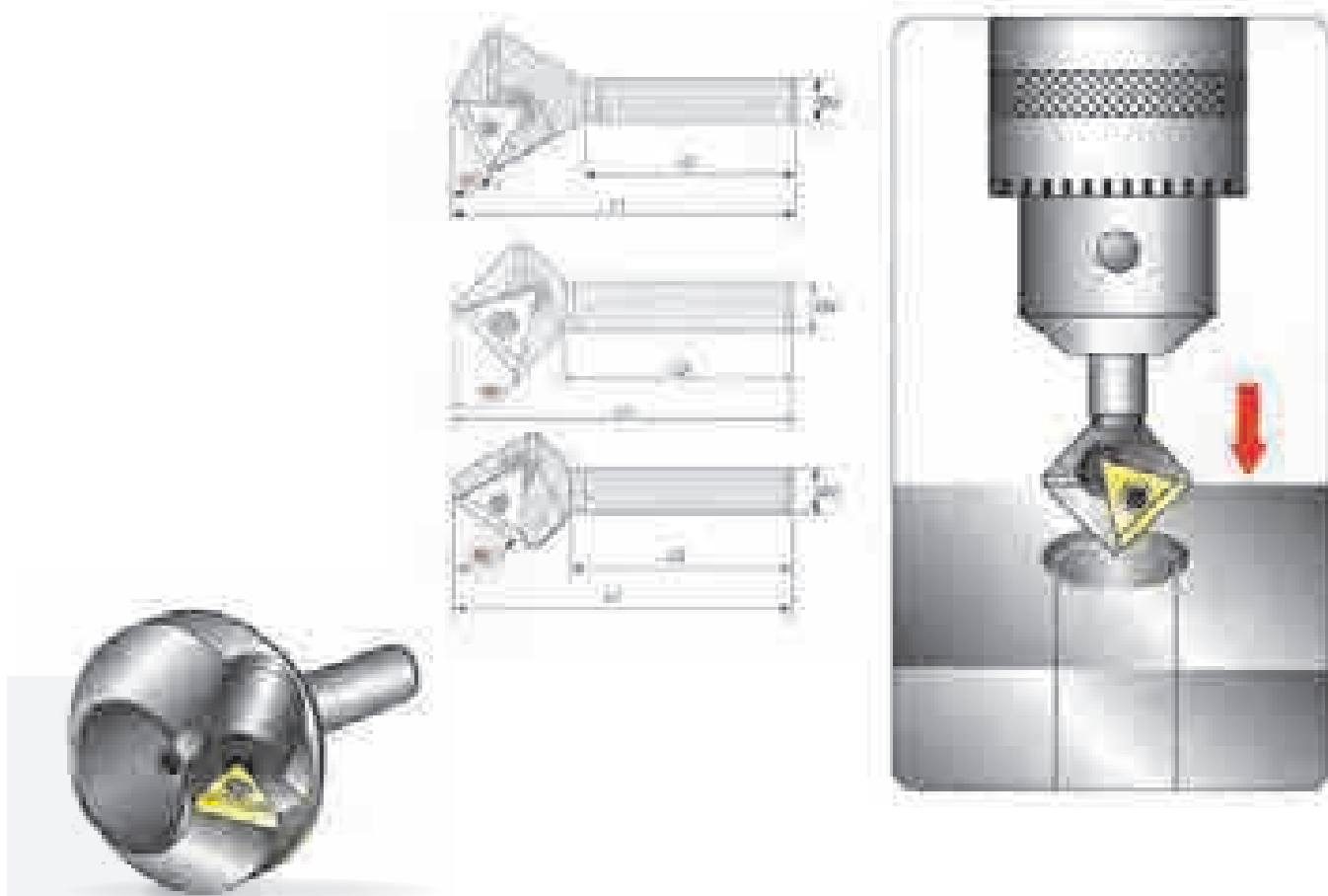


TDXP - 5 X D	(mm)					XPMT	BFTX	BT	KG	STOCK	€
	Ød	ØD1	LT	L1	L2						
TDXP 140-50 R	14	20	132	71	88	XPMT 042004...	BFTX 01604N	BT06	0,420	●	441,-
TDXP 150-50 R	15	20	137	76	93				0,420	●	441,-
TDXP 160-50 R	16	20	142	81	98	XPMT 052804...	BFTX 0204N	BT06	0,420	●	441,-
TDXP 170-50 R	17	20	147	86	103				0,420	●	441,-
TDXP 180-50 R	18	20	152	91	108	XPMT 063306...	BFTX 02206N	BT07	0,420	●	441,-
TDXP 190-50 R	19	25	172	96	116				0,420	●	441,-
TDXP 200-50 R	20	25	177	101	121	XPMT 063306...	BFTX 02206N	BT07	0,500	●	441,-
TDXP 210-50 R	21	25	182	106	126				0,550	●	441,-
TDXP 220-50 R	22	25	187	111	131	XPMT 074006...	BFTX 02506N	BT08	0,550	●	441,-
TDXP 230-50 R	23	25	192	116	136				0,570	●	456,50
TDXP 240-50 R	24	25	197	121	141	XPMT 074006...	BFTX 02506N	BT08	0,570	●	476,-
TDXP 250-50 R	25	25	202	126	146				0,590	●	476,-
TDXP 260-50 R	26	25	207	131	151	XPMT 094508...	BFTX 03584	BT15	0,600	●	476,-
TDXP 270-50 R	27	25	212	136	156				0,620	●	476,-
TDXP 280-50 R	28	25	217	141	161	XPMT 125812...	BFTX 0511N	BT20	0,650	●	476,-
TDXP 290-50 R	29	32	228	146	168				0,670	●	476,-
TDXP 300-50 R	30	32	233	151	173	XPMT 094508...	BFTX 03584	BT15	0,950	●	517,50
TDXP 310-50 R	31	32	238	156	178				0,970	●	517,50
TDXP 320-50 R	32	32	243	161	183	XPMT 125812...	BFTX 0511N	BT20	0,990	●	517,50
TDXP 330-50 R	33	32	248	166	188				1,000	●	517,50
TDXP 340-50 R	34	32	253	171	193	XPMT 125812...	BFTX 0511N	BT20	1,050	●	517,50
TDXP 350-50 R	35	32	258	176	198				1,100	●	537,50
TDXP 360-50 R	36	32	263	181	203	XPMT 125812...	BFTX 0511N	BT20	1,300	●	592,-
TDXP 370-50 R	37	32	268	186	208				1,300	●	592,-
TDXP 380-50 R	38	32	273	191	213	XPMT 125812...	BFTX 0511N	BT20	1,400	●	592,-
TDXP 390-50 R	39	32	278	196	218				1,400	●	592,-
TDXP 400-50 R	40	32	283	201	223	XPMT 125812...	BFTX 0511N	BT20	1,500	●	592,-
TDXP 410-50 R	41	32	288	206	228				1,600	●	592,-
TDXP 420-50 R	42	40	304	211	234	XPMT 125812...	BFTX 0511N	BT20	1,600	●	592,-
TDXP 430-50 R	43	40	309	216	239				1,600	●	592,-
TDXP 440-50 R	44	40	314	221	244	XPMT 125812...	BFTX 0511N	BT20	1,700	●	636,-
TDXP 450-50 R	45	40	319	226	249				1,700	●	636,-
TDXP 460-50 R	46	40	332	231	262	XPMT 125812...	BFTX 0511N	BT20	2,400	●	636,-
TDXP 470-50 R	47	40	337	235	267				2,400	●	636,-
TDXP 480-50 R	48	40	342	240	272	XPMT 125812...	BFTX 0511N	BT20	2,500	●	636,-
TDXP 490-50 R	49	40	347	247	277				2,600	●	666,-
TDXP 500-50 R	50	40	352	250	282	XPMT 125812...	BFTX 0511N	BT20	2,600	●	666,-
TDXP 510-50 R	51	40	357	255	287				2,800	●	666,-
TDXP 520-50 R	52	40	362	260	292	XPMT 125812...	BFTX 0511N	BT20	2,800	●	666,-
TDXP 530-50 R	53	40	367	265	297				2,900	●	666,-
TDXP 540-50 R	54	40	372	270	302	XPMT 125812...	BFTX 0511N	BT20	3,100	●	666,-
TDXP 550-50 R	55	40	377	275	307				3,200	●	666,-
TDXP 550-50 R	55	40	377	275	307	XPMT 125812...	BFTX 0511N	BT20	3,500	●	666,-
TDXP 550-50 R	55	40	377	275	307				3,500	●	666,-



NICECUT

SVASATORI AD INSERTO INTERCAMBIABILE FASFRÄSER FÜR ABSCHRÄGUNG _ MILLING CUTTERS FOR CHAMFERING FLARIN



MENTRUBE	Angolo Winwel Angle	↔ (mm)		L1	L2	Ød					STOCK	€
		MIN Ø	MAX Ø									
BM3029T	30°	6	29	74	45	10	TM32 GUR... TM32 GSR...	M - 1	MA - 1	0,110	○	344,-
BM4524T	45°	5	24	67	45	10				0,070	○	258,-
BM4538T	45°	19	38	75	50	12				0,230	○	310,50
BM4552T	45°	33	52	80	55	13				0,410	○	388,-
BM4566T	45°	47	66	80	55	13				0,660	○	527,50
BM6021T	60°	7	21	69	45	10				0,070	○	332,50



	FIG.	NR. TAGLIENTI SCHNITTKANTEN NO. OF CORNERS
TM32 GUR HSS...	1	2
TM32 GSR HSS...	2	6

VELOCITÀ CONSIGLIATE_SCHNITTDATEN RECOMMENDED SPEED

	MIN Ø	MAX Ø	RPM
BM3029T	6	29	500-350
BM4524T	5	24	500-350
BM4538T	19	38	350-200
BM4552T	33	52	200-150
BM4566T	47	68	150-100
BM6021T	7	21	500-350

FRESE PER SMUSSI, SCANALATURE A V E CENTRARE
ZENTRIER-, SENK-, UND ANFASWERKZEUG _ CENTER DRILLING, CHAMFERING AND V-GROOVING

MILLING

MINIMILL

MOULDMILL

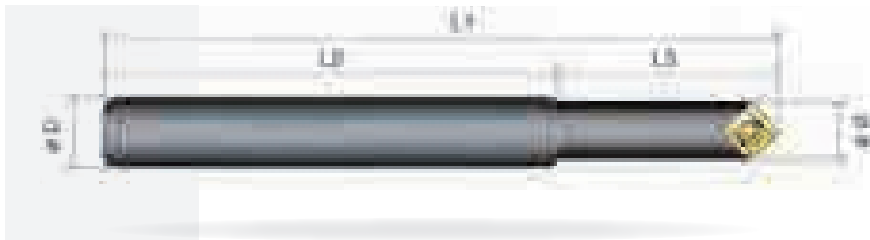
MICROTOOLS
AMS

MINITOLS

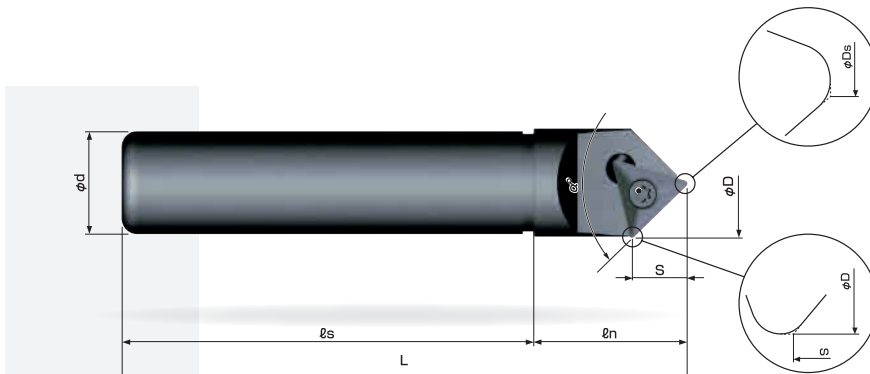
GROOVING

MC DRILLS

NICECUT



MOMIMEN	Angolo Winwel Angle	 (mm)											
		L1	L2	L3	Ø D	Ø d	MIN Ø	MAX Ø					
SCM1045C	90°	105	72	33	10	8	0,6	8	C22 GUX...	L-13	N-5	0,070	○ 298,50
SCM1045CL	90°	165	132	33	10	8	0,6	8				0,120	○ 373,-
SC1245C	90°	110	82	28	12	13	0,6	13	C32 GUX...	L-6	K-3	0,110	○ 339,-
SC1645C	90°	110	82	28	16	13	0,6	13				0,180	○ 339,-
SC1630C	118°	110	82	28	16	16	0,6	16	DCET 11X304...	L-15	N-6	0,130	○ 339,-
SC1660DS	60°	150	95	55	16	12	0,6	12				0,170	○ 465,-



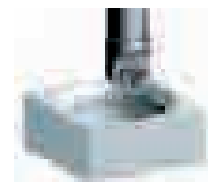
MOMIMEN	 (mm)												
	Ø D	Ø Ds	Ø d	L	ls	ln	S	α°					
EMS1045T	10,3	0,88	10	95	80	15	4,7	90°	TXMT 080206...	L-18	N-4	0,100	○ 229,50
EMM1245T	14,2	0,88	12	100	80	20	6,7	90°	TXMT 110306...	L-13	N-5	0,120	○ 329,-
EML2045T	22	0,88	20	110	80	30	10,5	90°	TXMT 16T306...	L-15	N-7	0,200	○ 421,50
EMD3245T	37,1	1,2	32	150	110	40	18	90°	TXMT 270506...	L-16	BT20	0,250	○ 564,-

CENTRATURA
ZENTRIER-SENK
CENTER DRILLING

SMUSSO SU FORO
BOHRUNG ANFASSEN
BORE CHAMFERING

SCANALATURA "V"
"V" - NUTENFRAESER
"V" - GROOVE CUTTING

SMUSSO LATERALE
ECKE ANFASSEN
CORNER CHAMFERING



FRESE AD INSERTI PER RAGGI CONVESSI

RADIEN ANFRÄSER MIT WENDEPLATTEN _ INDEXABLE ROUND CHAMFERING MILLING-CUTTERS



RICAMBI - ERSATZTEILE - SPARE PARTS



CL1-S



L-12

R-NUBOR	Z	↔ (mm)				L	l	KG	STOCK	€
		∅ D1	∅ D2	∅ d						
NK32-70R	3	70	42	32		130	90	1,000	○	1002,-
NK32-70RL200	3	70	42	32		200	150	1,000	○	1277,-
NK25-10R	1	35	8,9	25		120	80	0,600	○	425,50

	Z		R	X	h
	N54GCR-5R	NK2020	5	22,78	6,79
	N54GCR-8R	NK2020	8	22,8	9,63
	N54GCR-10R	NK2020	10	22,7	11,76
	N54GCR-6R	NK2020	6	22,8	6,8
	N54GCR-7R	NK2020	7	22,8	9,7
	N54GCR-9R	NK2020	9	22,7	11,5

PARAMETRI DI LAVORO - CUTTING DATAS

MATERIAL	RPM	FEED
STEEL	1200 ~ 2000	200 ~ 400 mm/1'
CAST IRON	900 ~ 1200	150 ~ 300 mm/1'
ALU	1500 ~ 3000	300 ~ 500 mm/1'



RICAMBI - ERSATZTEILE - SPARE PARTS



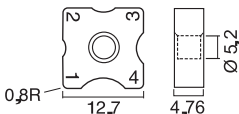
CL1-S (05R)



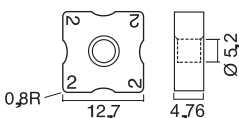
L-14 (05R)

L-12 (04R)

N43GXR8 / NK2020



- N43GXR8 ■ 1R
- N43GXR8 ■ 2R
- N43GXR8 ■ 3R
- N43GXR8 ■ 4R
- N43GXR8 ■ 5R

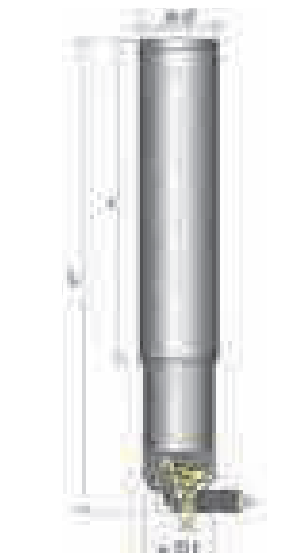


R-NUBOR	Z	↔ (mm)				L	l	KG	STOCK	€
		∅ D1	∅ D2	∅ d						
NK25-05R	1	26	-	25		130	90	0,420	○	427,50
NK20-40R-2	2	56	39,3	20		115	85	0,480	○	907,-
NK32-40R-3	3	56	39,3	32		115	85	1,000	○	907,-

	Z		R	X	h
	N43GXR8-1R	NK2020	1	23,27	4,66
	N43GXR8-2R	NK2020	2	22,77	5,07
	N43GXR8-3R	NK2020	3	22,27	5,58
	N43GXR8-4R	NK2020	4	21,81	6,08
	N43GXR8-5R	NK2020	5	21,2	6,5
	N43GXR8	NK2020	1-2-3-4	21,81	6,08

PARAMETRI DI LAVORO - CUTTING DATAS

MATERIAL	RPM	FEED
STEEL	1500 ~ 2500	300 ~ 500 mm/1'
CAST IRON	1100 ~ 1500	150 ~ 300 mm/1'
ALU	1700 ~ 3500	300 ~ 500 mm/1'



RICAMBI - ERSATZTEILE - SPARE PARTS



L-6

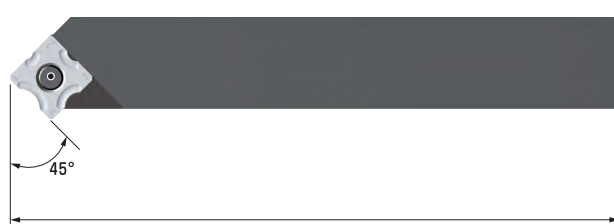
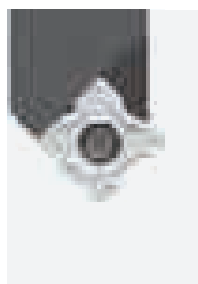
R-NUBOR	Z	↔ (mm)				L	l	KG	STOCK	€
		∅ D1	∅ D2	∅ d						
CR25-05T	1	25	-	25		150	100	0,530	○	328,50

	Z		R	X	h
	T32GSR-1R	NK2020	1	6,52	6,02
	T32GSR-2R	NK2020	2	6,05	6,53
	T32GSR-3R	NK2020	3	5,61	7,01

PARAMETRI DI LAVORO - CUTTING DATAS

MATERIAL	RPM	FEED
STEEL	2500 ~ 400	200 ~ 400 mm/1'
CAST IRON	1800 ~ 3000	150 ~ 300 mm/1'
ALU	3000 ~ 5000	300 ~ 600 mm/1'

UTENSILI AD INSERTI PER RAGGI CONVESSI RADIEN WERKZEUG MIT WENDEPLATTEN _ INDEXABLE ROUND CORNER CHAMFERING TOOL



R-BIT 20XR

R-BIT 20XR

↔ (mm)

D1

D2

L1

Z



19

20

126

1

N43GXR

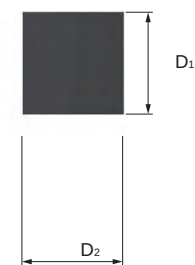
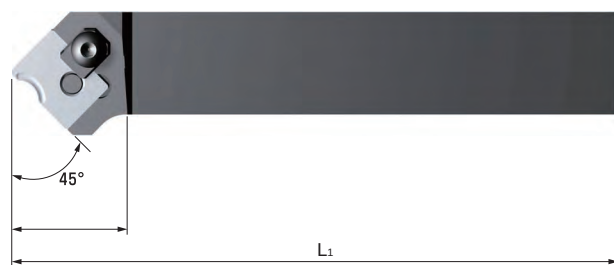
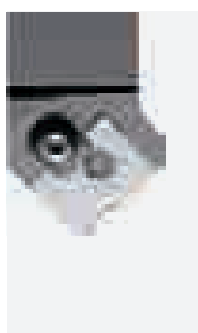
L-12

K-4

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○

684,-



10R-BIT 25CR

10R-BIT 25CR

↔ (mm)

D1

D2

L1

L2

Z



25

25

150

30

1

N54GCR

CL-1S

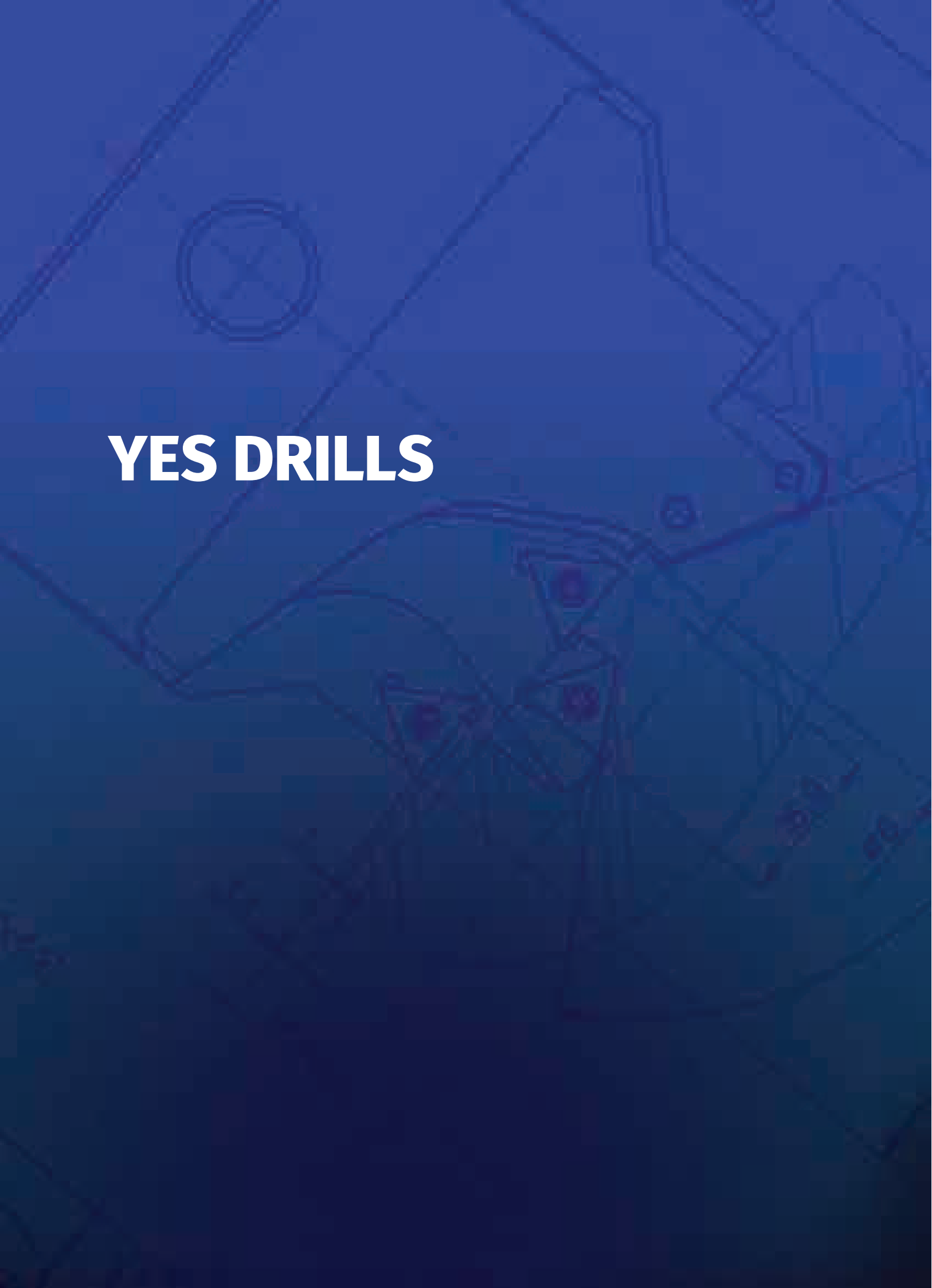
L-12

K-3 K-4

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○

684,-

The background is a dark blue map with white lines representing roads and boundaries. A semi-transparent blue rectangle is overlaid on the left side of the map. The text "YES DRILLS" is written in white, bold, sans-serif capital letters within this rectangle.

YES DRILLS

YES DRILLS	NICECUT	MC DRILLS	GROOVING	MINITOOLS	MICROTOOLS AMS	MOULDMILL	MINIMILL	MILLING
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KRUZ-FSL, YTDI-FSL Flange body & Carbide insert



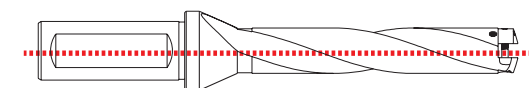
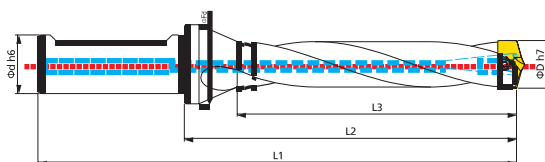
Cross
clamping hole



YTDI-FSL body



KRUZ-FSL body



HB shank



IDP Affilature \ ricoperture specifiche +30% _ IDP Besondere Schliffungen \ Beschichtungen +30%_ IDP Specific grindings \ coatings +30%

KRUZ-FSL/YTDI-FSL Please make required cutting depth in the ☐ like T, P, H, L

Hole size range	Body Code No.	Shank Size (Ød)	Cutting depth (Length x 40)	L1	L2	L3	Flanged dia. (ØFd)	YTDI		KRUZ						
								STOCK	€	STOCK	€					
Ø 8.0 ~Ø 8.4	YTDI 080 ☐ FSL KRUZ 080 ☐ FSL	10,0 (HA)	T (3xD) P (5xD) H (7xD)	87 103 119	42 58 74	32 48 64	18	 ● 255,50  ● 316,-  ● 327,-	 ○ 296,-  ○ 358,-  ○ 372,-	● IDP 080 ● IDP 081 ● IDP 082 ● IDP 083 ● IDP 084	€ 49,-	CS 080-085 SL	T6 Torque 0,6Nm (Max)	-	-	
Ø 8.5 ~Ø 8.9	YTDI 085 ☐ FSL KRUZ 085 ☐ FSL	10,0 (HA)	T (3xD) P (5xD) H (7xD)	89 106 123	44 61 78	34 51 68	18	 ● 255,50  ● 316,-  ● 327,-	 ○ 296,-  ○ 358,-  ○ 372,-	● IDP 085 ● IDP 086 ● IDP 087 ● IDP 088 ● IDP 089	€ 49,-	CS 080-085 SL	T6 Torque 0,6Nm (Max)	-	-	
Ø 9.0 ~Ø 9.4	YTDI 090 ☐ FSL KRUZ 090 ☐ FSL	10,0 (HA)	T (3xD) P (5xD) H (7xD)	92 110 128	47 65 83	36 54 72	18	 ● 255,50  ● 316,-  ● 327,-	 ○ 296,-  ○ 358,-  ○ 372,-	● IDP 090 ● IDP 091 ● IDP 092 ● IDP 093 ● IDP 094	€ 57,-	CS 090-095 SL	T6 Torque 0,6Nm (Max)	-	-	
Ø 9.5 ~Ø 9.9	YTDI 095 ☐ FSL KRUZ 095 ☐ FSL	12,0 (HA)	T (3xD) P (5xD) H (7xD)	97 116 135	49 68 87	38 57 76	18	 ● 255,50  ● 316,-  ● 327,-	 ○ 296,-  ○ 358,-  ○ 372,-	● IDP 095 ● IDP 096 ● IDP 097 ● IDP 098 ● IDP 099	€ 57,-	CS 090-095 SL	T6 Torque 0,6Nm (Max)	-	-	
Ø 10.0 ~Ø 10.4	YTDI 100 ☐ FSL KRUZ 100 ☐ FSL	12,0 (HA)	T (3xD) P (5xD) H (7xD)	99 119 139	51 71 91	40 60 80	18	 ● 255,50  ● 316,-  ● 327,-	 ○ 296,-  ○ 358,-  ○ 372,-	● IDP 100 ● IDP 101 ● IDP 102 ● IDP 103 ● IDP 104	€ 68,-	CS 100-115 SL	T6 Torque 0,6Nm (Max)	-	-	
Ø 10.5 ~Ø 10.9	YTDI 105 ☐ FSL KRUZ 105 ☐ FSL	12,0 (HA)	T (3xD) P (5xD) H (7xD)	102 123 144	54 75 96	42 63 84	18	 ● 255,50  ● 316,-  ● 327,-	 ○ 296,-  ○ 358,-  ○ 372,-	● IDP 105 ● IDP 106 ● IDP 107 ● IDP 108 ● IDP 109	€ 68,-	CS 100-115 SL	T6 Torque 0,6Nm (Max)	-	-	
Ø 11.0 ~Ø 11.4	YTDI 110 ☐ FSL KRUZ 110 ☐ FSL	12,0 (HA)	T (3xD) P (5xD) H (7xD) L (10XD)	104 126 148 181	56 78 100 133	44 66 88 121	18	 ● 255,50  ● 316,-  ● 327,-  ○ 424,-	 ○ 296,-  ○ 358,-  ○ 372,-  ○ 483,-	● IDP 110 ● IDP 111 ● IDP 112 ● IDP 113 ● IDP 114	€ 84,-	CS 100-115 SL	T6 Torque 0,6Nm (Max)	-	-	
Ø 11.5 ~Ø 11.9	YTDI 115 ☐ FSL KRUZ 115 ☐ FSL	12,0 (HA)	T (3xD) P (5xD) H (7xD) L (10XD)	107 130 153 188	59 82 105 140	46 69 92 127	18	 ● 255,50  ● 316,-  ● 327,-  ○ 424,-	 ○ 296,-  ○ 358,-  ○ 372,-  ○ 483,-	● IDP 115 ● IDP 116 ● IDP 117 ● IDP 118 ● IDP 119	€ 84,-	CS 100-115 SL	T6 Torque 0,6Nm (Max)	-	-	
Ø 12.0 ~Ø 12.4	YTDI 120 ☐ FSL KRUZ 120 ☐ FSL	16,0	T (3xD) P (5xD) H (7xD) L (10XD)	109 133 157 193	61 85 109 145	48 72 96 132	21	 ● 258,50  ● 338,-  ● 355,50  ○ 462,-	 ○ 301,50  ○ 396,-  ○ 422,-  ○ 547,50	● IDP 120 ● IDP 121 ● IDP 122 ● IDP 123 ● IDP 124	€ 97,-	CS 120-135 SL	T6 Torque 0,6Nm (Max)	M 2.5x4	1.3 mm	

KRUZ-FSL, YTDI-FSL Flange body & Carbide insert

Hole size range	Body Code No.	Shank Size (ød)	Cutting depth (Length x 40)	L1	L2	L3	Flange dia. (øFd)	YTDI	KRUZ	IDP	Cap Screw	Torx driver	Set Screw	L-wrench
								STOCK €	STOCK €					
ø 12.5 ~ø 12.9	YTDI 125 □ FSL KRUZ 125 □ FSL	16.0	T (3xD) P (5xD) H (7xD) L (10XD)	111 136 161 199	63 88 113 151	50 75 100 138	21	● 258,50 ● 338,- ● 355,50 ○ 462,-	○ 301,50 ○ 396,- ○ 422,- ○ 547,50	● IDP 125 ● IDP 126 ● IDP 127 ● IDP 128 ● IDP 129	CS 120-135 SL	T6 Torque 0,6Nm (Max)	M 2.5x4	1.3 mm
ø 13.0 ~ø 13.4	YTDI 130 □ FSL KRUZ 130 □ FSL	16.0	T (3xD) P (5xD) H (7xD) L (10XD)	114 140 166 205	66 92 118 157	52 78 104 143	21	● 258,50 ● 338,- ● 355,50 ○ 462,-	○ 301,50 ○ 396,- ○ 422,- ○ 547,50	● IDP 130 ● IDP 131 ● IDP 132 ● IDP 133 ● IDP 134	CS 120-135 SL	T6 Torque 0,6Nm (Max)	M 2.5x4	1.3 mm
ø 13.5 ~ø 13.9	YTDI 135 □ FSL KRUZ 135 □ FSL	16.0	T (3xD) P (5xD) H (7xD) L (10XD)	116 143 170 211	68 95 122 163	54 81 108 149	21	● 258,50 ● 338,- ● 355,50 ○ 462,-	○ 301,50 ○ 396,- ○ 422,- ○ 547,50	● IDP 135 ● IDP 136 ● IDP 137 ● IDP 138 ● IDP 139	CS 120-135 SL	T6 Torque 0,6Nm (Max)	M 2.5x4	1.3 mm
ø 14.0 ~ø 14.4	YTDI 140 □ FSL KRUZ 140 □ FSL	16.0	T (3xD) P (5xD) H (7xD) L (10XD)	119 147 175 217	71 99 127 169	56 84 112 154	21	● 277,50 ● 379,- ● 413,- ○ 536,50	○ 316,- ○ 437,- ○ 477,- ○ 617,50	● IDP 140 ● IDP 141 ● IDP 142 ● IDP 143 ● IDP 144	CS 140-155 SL	T7 Torque 0,9Nm (Max)	M 2.5x4	1.3 mm
ø 14.5 ~ø 14.9	YTDI 145 □ FSL KRUZ 145 □ FSL	20.0	T (3xD) P (5xD) H (7xD) L (10XD)	123 152 181 225	73 102 131 175	58 87 116 160	27	● 277,50 ● 379,- ● 413,- ○ 536,50	○ 316,- ○ 437,- ○ 477,- ○ 617,50	● IDP 145 ● IDP 146 ● IDP 147 ● IDP 148 ● IDP 149	CS 140-155 SL	T7 Torque 0,9Nm (Max)	M 2.5x4	1.3 mm
ø 15.0 ~ø 15.4	YTDI 150 □ FSL KRUZ 150 □ FSL	20.0	T (3xD) P (5xD) H (7xD) L (10XD)	127 157 187 232	77 107 137 182	60 90 120 165	27	● 277,50 ● 379,- ● 413,- ○ 536,50	○ 316,- ○ 437,- ○ 477,- ○ 617,50	● IDP 150 ● IDP 151 ● IDP 152 ● IDP 153 ● IDP 154	CS 140-155 SL	T7 Torque 0,9Nm (Max)	M 2.5x4	1.3 mm
ø 15.5 ~ø 15.9	YTDI 155 □ FSL KRUZ 155 □ FSL	20.0	T (3xD) P (5xD) H (7xD) L (10XD)	130 161 192 239	80 111 142 189	62 93 124 171	27	● 277,50 ● 379,- ● 413,- ○ 536,50	○ 316,- ○ 437,- ○ 477,- ○ 617,50	● IDP 155 ● IDP 156 ● IDP 157 ● IDP 158 ● IDP 159	CS 140-155 SL	T7 Torque 0,9Nm (Max)	M 2.5x4	1.3 mm
ø 16.0 ~ø 16.4	YTDI 160 □ FSL KRUZ 160 □ FSL	20.0	T (3xD) P (5xD) H (7xD) L (10XD)	132 164 196 244	82 114 146 194	64 96 128 176	27	● 279,50 ● 412,- ● 446,- ○ 578,50	○ 318,- ○ 477,- ○ 515,50 ○ 669,50	● IDP 160 ● IDP 161 ● IDP 162 ● IDP 163 ● IDP 164	CS 160-175 SL	T7 Torque 0,9Nm (Max)	M 2.5x4	1.3 mm
ø 16.5 ~ø 16.9	YTDI 165 □ FSL KRUZ 165 □ FSL	20.0	T (3xD) P (5xD) H (7xD) L (10XD)	135 168 201 251	85 118 151 201	66 99 132 182	27	● 279,50 ● 412,- ● 446,- ○ 578,50	○ 318,- ○ 477,- ○ 515,50 ○ 669,50	● IDP 165 ● IDP 166 ● IDP 167 ● IDP 168 ● IDP 169	CS 160-175 SL	T7 Torque 0,9Nm (Max)	M 2.5x4	1.3 mm
ø 17.0 ~ø 17.4	YTDI 170 □ FSL KRUZ 170 □ FSL	20.0	T (3xD) P (5xD) H (7xD) L (10XD)	137 171 205 256	87 121 155 206	68 102 136 187	27	● 279,50 ● 412,- ● 446,- ○ 578,50	○ 318,- ○ 477,- ○ 515,50 ○ 669,50	● IDP 170 ● IDP 171 ● IDP 172 ● IDP 173 ● IDP 174	CS 160-175 SL	T7 Torque 0,9Nm (Max)	M 2.5x4	1.3 mm
ø 17.5 ~ø 17.9	YTDI 175 □ FSL KRUZ 175 □ FSL	20.0	T (3xD) P (5xD) H (7xD) L (10XD)	139 174 209 262	89 124 159 212	70 105 140 193	27	● 279,50 ● 412,- ● 446,- ○ 578,50	○ 318,- ○ 477,- ○ 515,50 ○ 669,50	● IDP 175 ● IDP 176 ● IDP 177 ● IDP 178 ● IDP 179	CS 160-175 SL	T7 Torque 0,9Nm (Max)	M 2.5x4	1.3 mm
ø 18.0 ~ø 18.4	YTDI 180 □ FSL KRUZ 180 □ FSL	20.0	T (3xD) P (5xD) H (7xD) L (10XD)	142 178 214 268	92 128 164 218	72 108 144 198	27	● 279,50 ● 447,- ● 473,50 ○ 616,50	○ 318,- ○ 515,50 ○ 550,50 ○ 715,-	● IDP 180 ● IDP 181 ● IDP 182 ● IDP 183 ● IDP 184	CS 180-195 SL	T8 Torque 1,5Nm (Max)	M 2.5x4	1.3 mm
ø 18.5 ~ø 18.9	YTDI 185 □ FSL KRUZ 185 □ FSL	20.0	T (3xD) P (5xD) H (7xD) L (10XD)	144 181 218 274	94 131 168 224	74 111 148 204	27	● 279,50 ● 447,- ● 473,50 ○ 616,50	○ 318,- ○ 515,50 ○ 550,50 ○ 715,-	● IDP 185 ● IDP 186 ● IDP 187 ● IDP 188 ● IDP 189	CS 180-195 SL	T8 Torque 1,5Nm (Max)	M 2.5x4	1.3 mm
ø 19.0 ~ø 19.4	YTDI 190 □ FSL KRUZ 190 □ FSL	20.0	T (3xD) P (5xD) H (7xD) L (10XD)	147 185 223 280	97 135 173 230	76 114 152 209	27	● 279,50 ● 447,- ● 473,50 ○ 616,50	○ 318,- ○ 515,50 ○ 550,50 ○ 715,-	● IDP 190 ● IDP 191 ● IDP 192 ● IDP 193 ● IDP 194	CS 180-195 SL	T8 Torque 1,5Nm (Max)	M 2.5x4	1.3 mm
ø 19.5 ~ø 19.9	YTDI 195 □ FSL KRUZ 195 □ FSL	20.0	T (3xD) P (5xD) H (7xD) L (10XD)	149 188 227 286	99 138 177 236	78 117 156 215	27	● 279,50 ● 447,- ● 473,50 ○ 616,50	○ 318,- ○ 515,50 ○ 550,50 ○ 715,-	● IDP 195 ● IDP 196 ● IDP 197 ● IDP 198 ● IDP 199	CS 180-195 SL	T8 Torque 1,5Nm (Max)	M 2.5x4	1.3 mm
ø 20.0 ~ø 20.4	YTDI 200 □ FSL KRUZ 200 □ FSL	25.0	T (3xD) P (5xD) H (7xD) L (10XD)	157 197 237 297	101 141 181 241	80 120 160 220	32	● 337,- ● 447,- ● 503,- ○ 653,50	○ 385,- ○ 515,50 ○ 580,50 ○ 754,50	● IDP 200 ○ IDP 201 ○ IDP 202 ○ IDP 203 ○ IDP 204	CS 200-215 SL	T8 Torque 1,5Nm (Max)	M 3x6	1.5 mm

● Disponibile - Lieferbar - On stock

○ A richiesta - Auf Anfrage - On request

2023/24



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MILLING

MINIMILL

MOULDMILL

MICROTOOLS AMS

MINITOOLS

GROOVING

MC DRILLS

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YES DRILLS

KRUZ-FSL, YTDI-FSL Flange body & Carbide insert

Hole size range	Body Code No.	Shank Size (Ød)	Cutting depth (Length x 40)	L1	L2	L3	Flanged dia. (ØFd)	YTDI		KRUZ						
								STOCK	€	STOCK	€					
Ø 20.5 ~Ø 20.9	YTDI 205 □ FSL KRUZ 205 □ FSL	25.0	T (3xD) P (5xD) H (7xD) L (10XD)	160 201 242 304	104 145 186 248	82 123 164 226	32	● 337,- ● 447,- ○ 503,- ○ 653,50	○ 385,- ○ 515,50 ○ 580,50 ○ 754,50	● IDP 205 ○ IDP 206 ○ IDP 207 ○ IDP 208 ○ IDP 209	€ 118,-	CS 200-215 SL	T8 Torque 1.5Nm (Max)	M 3x6	1.5 mm	
Ø 21.0 ~Ø 21.4	YTDI 210 □ FSL KRUZ 210 □ FSL	25.0	T (3xD) P (5xD) H (7xD) L (10XD)	162 204 246 309	106 148 190 253	84 126 168 231	32	● 337,- ● 447,- ○ 503,- ○ 653,50	○ 385,- ○ 515,50 ○ 580,50 ○ 754,50	● IDP 210 ○ IDP 211 ○ IDP 212 ○ IDP 213 ○ IDP 214	€ 118,-	CS 200-215 SL	T8 Torque 1.5Nm (Max)	M 3x6	1.5 mm	
Ø 21.5 ~Ø 21.9	YTDI 215 □ FSL KRUZ 215 □ FSL	25.0	T (3xD) P (5xD) H (7xD) L (10XD)	165 208 251 316	109 152 195 260	86 129 172 237	32	● 337,- ● 447,- ○ 503,- ○ 653,50	○ 385,- ○ 515,50 ○ 580,50 ○ 754,50	● IDP 215 ○ IDP 216 ○ IDP 217 ○ IDP 218 ○ IDP 219	€ 118,-	CS 200-215 SL	T8 Torque 1.5Nm (Max)	M 3x6	1.5 mm	
Ø 22.0 ~Ø 22.4	YTDI 220 □ FSL KRUZ 220 □ FSL	25.0	T (3xD) P (5xD) H (7xD) L (10XD)	167 211 255 321	111 155 199 265	88 132 176 242	32	● 337,- ● 477,- ○ 567,- ○ 737,-	○ 385,- ○ 550,50 ○ 657,50 ○ 856,-	● IDP 220 ○ IDP 221 ○ IDP 222 ○ IDP 223 ○ IDP 224	€ 130,50	CS 220-235 SL	T8 Torque 1.5Nm (Max)	M 3x6	1.5 mm	
Ø 22.5 ~Ø 22.9	YTDI 225 □ FSL KRUZ 225 □ FSL	25.0	T (3xD) P (5xD) H (7xD) L (10XD)	169 214 259 327	113 158 203 271	90 135 180 248	32	● 337,- ● 477,- ○ 567,- ○ 737,-	○ 385,- ○ 550,50 ○ 657,50 ○ 856,-	● IDP 225 ○ IDP 226 ○ IDP 227 ○ IDP 228 ○ IDP 229	€ 130,50	CS 220-235 SL	T8 Torque 1.5Nm (Max)	M 3x6	1.5 mm	
Ø 23.0 ~Ø 23.4	YTDI 230 □ FSL KRUZ 230 □ FSL	25.0	T (3xD) P (5xD) H (7xD) L (10XD)	172 218 264 333	116 162 208 277	92 138 184 253	32	● 337,- ● 477,- ○ 567,- ○ 737,-	○ 385,- ○ 550,50 ○ 657,50 ○ 856,-	● IDP 230 ○ IDP 231 ○ IDP 232 ○ IDP 233 ○ IDP 234	€ 130,50	CS 220-235 SL	T8 Torque 1.5Nm (Max)	M 3x6	1.5 mm	
Ø 23.5 ~Ø 23.9	YTDI 235 □ FSL KRUZ 235 □ FSL	25.0	T (3xD) P (5xD) H (7xD) L (10XD)	174 221 268 339	118 165 212 283	94 141 188 259	32	● 337,- ● 477,- ○ 567,- ○ 737,-	○ 385,- ○ 550,50 ○ 657,50 ○ 856,-	● IDP 235 ○ IDP 236 ○ IDP 237 ○ IDP 238 ○ IDP 239	€ 130,50	CS 220-235 SL	T8 Torque 1.5Nm (Max)	M 3x6	1.5 mm	
Ø 24.0 ~Ø 24.4	YTDI 240 □ FSL KRUZ 240 □ FSL	32.0	T (3xD) P (5xD) H (7xD) L (10XD)	181 229 277 349	121 169 217 289	96 144 192 264	39	● 415,- ● 504,- ○ 576,- ○ 748,-	○ 476,- ○ 580,50 ○ 665,50 ○ 864,-	● IDP 240 ○ IDP 241 ○ IDP 242 ○ IDP 243 ○ IDP 244	€ 159,50	CS 240-255 SL	T15 Torque 3,5Nm (Max)	M 3x6	1.5 mm	
Ø 24.5 ~Ø 24.9	YTDI 245 □ FSL KRUZ 245 □ FSL	32.0	T (3xD) P (5xD) H (7xD) L (10XD)	183 232 281 355	123 172 221 295	98 147 196 270	39	● 415,- ● 504,- ○ 576,- ○ 748,-	○ 476,- ○ 580,50 ○ 665,50 ○ 864,-	● IDP 245 ○ IDP 246 ○ IDP 247 ○ IDP 248 ○ IDP 249	€ 159,50	CS 240-255 SL	T15 Torque 3,5Nm (Max)	M 3x6	1.5 mm	
Ø 25.0 ~Ø 25.4	YTDI 250 □ FSL KRUZ 250 □ FSL	32.0	T (3xD) P (5xD) H (7xD) L (10XD)	185 235 285 360	125 175 225 300	100 150 200 275	39	● 415,- ● 504,- ○ 576,- ○ 748,-	○ 476,- ○ 580,50 ○ 665,50 ○ 864,-	● IDP 250 ○ IDP 251 ○ IDP 252 ○ IDP 253 ○ IDP 254	€ 159,50	CS 240-255 SL	T15 Torque 3,5Nm (Max)	M 3x6	1.5 mm	
Ø 25.5 ~Ø 25.9	YTDI 255 □ FSL KRUZ 255 □ FSL	32.0	T (3xD) P (5xD) H (7xD) L (10XD)	188 239 290 367	128 179 230 307	102 153 204 281	39	● 415,- ● 504,- ○ 576,- ○ 748,-	○ 476,- ○ 580,50 ○ 665,50 ○ 864,-	● IDP 255 ○ IDP 256 ○ IDP 257 ○ IDP 258 ○ IDP 259	€ 159,50	CS 240-255 SL	T15 Torque 3,5Nm (Max)	M 3x6	1.5 mm	
Ø 26.0 ~Ø 26.4	YTDI 260 □ FSL KRUZ 260 □ FSL	32.0	T (3xD) P (5xD) H (7xD) L (10XD)	190 242 294 372	130 182 234 312	104 156 208 286	39	● 415,- ● 568,50 ○ 673,- ○ 873,-	○ 476,- ○ 657,50 ○ 778,- ○ 1009,50	● IDP 260 ○ IDP 261 ○ IDP 262 ○ IDP 263 ○ IDP 264	€ 182,50	CS 260-275 SL	T15 Torque 3,5Nm (Max)	M 3x6	1.5 mm	
Ø 26.5 ~Ø 26.9	YTDI 265 □ FSL KRUZ 265 □ FSL	32.0	T (3xD) P (5xD) H (7xD) L (10XD)	193 246 299 379	133 186 239 319	106 159 212 292	39	● 415,- ● 568,50 ○ 673,- ○ 873,-	○ 476,- ○ 657,50 ○ 778,- ○ 1009,50	● IDP 265 ○ IDP 266 ○ IDP 267 ○ IDP 268 ○ IDP 269	€ 182,50	CS 260-275 SL	T15 Torque 3,5Nm (Max)	M 3x6	1.5 mm	
Ø 27.0 ~Ø 27.4	YTDI 270 □ FSL KRUZ 270 □ FSL	32.0	T (3xD) P (5xD) H (7xD) L (10XD)	195 249 303 384	135 189 243 324	108 162 216 297	39	● 415,- ● 568,50 ○ 673,- ○ 873,-	○ 476,- ○ 657,50 ○ 778,- ○ 1009,50	● IDP 270 ○ IDP 271 ○ IDP 272 ○ IDP 273 ○ IDP 274	€ 182,50	CS 260-275 SL	T15 Torque 3,5Nm (Max)	M 4x8	2.0 mm	
Ø 27.5 ~Ø 27.9	YTDI 275 □ FSL KRUZ 275 □ FSL	32.0	T (3xD) P (5xD) H (7xD) L (10XD)	197 252 307 390	137 192 247 330	110 165 220 303	39	● 415,- ● 568,50 ○ 673,- ○ 873,-	○ 476,- ○ 657,50 ○ 778,- ○ 1009,50	● IDP 275 ○ IDP 276 ○ IDP 277 ○ IDP 278 ○ IDP 279	€ 182,50	CS 260-275 SL	T15 Torque 3,5Nm (Max)	M 4x8	2.0 mm	
Ø 28.0 ~Ø 28.4	YTDI 280 □ FSL KRUZ 280 □ FSL	32.0	T (3xD) P (5xD) H (7xD) L (10XD)	200 256 312 396	140 196 252 336	112 168 224 308	39	● 539,50 ● 568,50 ○ 673,- ○ 873,-	○ 626,50 ○ 657,50 ○ 780,- ○ 1013,50	● IDP 280 ○ IDP 281 ○ IDP 282 ○ IDP 283 ○ IDP 284	€ 234,-	CS 280-295 SL	T15 Torque 3,5Nm (Max)	M 4x8	2.0 mm	

KRUZ-FSL, YTDI-FSL Flange body & Carbide insert

Hole size range	Body Code No.	Shank Size (Ød)	Cutting depth (Length x 40)	L1	L2	L3	Flange dia. (ØFd)	YTDI	KRUZ	IDP	Cap Screw	Torx driver	Set Screw	L-wrench
								STOCK	STOCK					
Ø 28.5 ~Ø 28.9	YTDI 285 □ FSL KRUZ 285 □ FSL	32.0	T (3xD) P (5xD) H (7xD) L (10XD)	202 259 316 402	142 199 256 342	114 171 228 314	39	● 539,50 ● 568,50 ○ 673,- ○ 873,-	○ 626,50 ○ 657,50 ○ 780,- ○ 1013,50	● IDP 285 ○ IDP 286 ○ IDP 287 ○ IDP 288 ○ IDP 289	CS 280-295 SL	T15 Torque 3.5Nm (Max)	M 4x8	2.0 mm
Ø 29.0 ~Ø 29.4	YTDI 290 □ FSL KRUZ 290 □ FSL	32.0	T (3xD) P (5xD) H (7xD) L (10XD)	205 263 321 408	145 203 261 348	116 174 232 319	39	● 539,50 ● 568,50 ○ 673,- ○ 873,-	○ 626,50 ○ 657,50 ○ 780,- ○ 1013,50	● IDP 290 ○ IDP 291 ○ IDP 292 ○ IDP 293 ○ IDP 294	CS 280-295 SL	T15 Torque 3.5Nm (Max)	M 4x8	2.0 mm
Ø 29.5 ~Ø 29.9	YTDI 295 □ FSL KRUZ 295 □ FSL	32.0	T (3xD) P (5xD) H (7xD) L (10XD)	207 266 325 414	147 206 265 354	118 177 236 325	39	● 539,50 ● 568,50 ○ 673,- ○ 873,-	○ 626,50 ○ 657,50 ○ 780,- ○ 1013,50	● IDP 295 ○ IDP 296 ○ IDP 297 ○ IDP 298 ○ IDP 299	CS 280-295 SL	T15 Torque 3.5Nm (Max)	M 4x8	2.0 mm
Ø 30.0 ~Ø 30.4	YTDI 300 □ FSL KRUZ 300 □ FSL	32.0	T (3xD) P (5xD) H (7xD) L (10XD)	209 269 329 419	149 209 269 359	120 180 240 330	39	● 539,50 ● 568,50 ○ 685,50 ○ 889,-	○ 626,50 ○ 657,50 ○ 789,- ○ 1023,50	● IDP 300 ○ IDP 301 ○ IDP 302 ○ IDP 303 ○ IDP 304	CS 300-315 SL	T20 Torque 4.0 Nm (Max)	M 4x8	2.0 mm
Ø 30.5 ~Ø 30.9	YTDI 305 □ FSL KRUZ 305 □ FSL	32.0	T (3xD) P (5xD) H (7xD) L (10XD)	212 273 334 426	152 213 274 366	122 183 244 336	39	● 539,50 ● 568,50 ○ 685,50 ○ 889,-	○ 626,50 ○ 657,50 ○ 789,- ○ 1023,50	○ IDP 305 ○ IDP 306 ○ IDP 307 ○ IDP 308 ○ IDP 309	CS 300-315 SL	T20 Torque 4.0 Nm (Max)	M 4x8	2.0 mm
Ø 31.0 ~Ø 31.4	YTDI 310 □ FSL KRUZ 310 □ FSL	32.0	T (3xD) P (5xD) H (7xD) L (10XD)	214 276 338 431	154 216 278 371	124 186 248 341	39	● 539,50 ● 568,50 ○ 685,50 ○ 889,-	○ 626,50 ○ 657,50 ○ 789,- ○ 1023,50	○ IDP 310 ○ IDP 311 ○ IDP 312 ○ IDP 313 ○ IDP 314	CS 300-315 SL	T20 Torque 4.0 Nm (Max)	M 5x10	2.5 mm
Ø 31.5 ~Ø 31.9	YTDI 315 □ FSL KRUZ 315 □ FSL	32.0	T (3xD) P (5xD) H (7xD) L (10XD)	217 280 343 438	157 220 283 378	126 189 252 347	39	● 539,50 ● 568,50 ○ 685,50 ○ 889,-	○ 626,50 ○ 657,50 ○ 789,- ○ 1023,50	○ IDP 315 ○ IDP 316 ○ IDP 317 ○ IDP 318 ○ IDP 319	CS 300-315 SL	T20 Torque 4.0 Nm (Max)	M 5x10	2.5 mm
Ø 32.0 ~Ø 32.4	YTDI 320 □ FSL KRUZ 320 □ FSL	32.0	T (3xD) P (5xD) H (7xD) L (10XD)	219 283 347 443	159 223 287 383	128 192 256 352	39	● 539,50 ● 568,50 ○ 685,50 ○ 889,-	○ 626,50 ○ 657,50 ○ 795,50 ○ 1033,50	○ IDP 320 ○ IDP 321 ○ IDP 322 ○ IDP 323 ○ IDP 324	CS 320-355 SL	T20 Torque 4.0 Nm (Max)	M 5x10	2.5 mm
Ø 32.5 ~Ø 32.9	YTDI 325 □ FSL KRUZ 325 □ FSL	32.0	T (3xD) P (5xD) H (7xD) L (10XD)	221 286 351 449	161 226 291 389	130 195 260 358	39	● 539,50 ● 568,50 ○ 685,50 ○ 889,-	○ 626,50 ○ 657,50 ○ 795,50 ○ 1033,50	○ IDP 325 ○ IDP 326 ○ IDP 327 ○ IDP 328 ○ IDP 329	CS 320-355 SL	T20 Torque 4.0 Nm (Max)	M 5x10	2.5 mm
Ø 33.0 ~Ø 33.4	YTDI 330 □ FSL KRUZ 330 □ FSL	32.0	T (3xD) P (5xD) H (7xD) L (10XD)	224 290 356 455	164 230 296 395	132 198 264 363	39	● 539,50 ● 568,50 ○ 685,50 ○ 889,-	○ 626,50 ○ 657,50 ○ 795,50 ○ 1033,50	○ IDP 330 ○ IDP 331 ○ IDP 332 ○ IDP 333 ○ IDP 334	CS 320-355 SL	T20 Torque 4.0 Nm (Max)	M 5x10	2.5 mm
Ø 33.5 ~Ø 33.9	YTDI 335 □ FSL KRUZ 335 □ FSL	32.0	T (3xD) P (5xD) H (7xD) L (10XD)	226 293 360 461	166 233 300 401	134 201 268 369	39	● 539,50 ● 568,50 ○ 685,50 ○ 889,-	○ 626,50 ○ 657,50 ○ 795,50 ○ 1033,50	○ IDP 335 ○ IDP 336 ○ IDP 337 ○ IDP 338 ○ IDP 339	CS 320-355 SL	T20 Torque 4.0 Nm (Max)	M 5x10	2.5 mm
Ø 34.0 ~Ø 34.4	YTDI 340 □ FSL KRUZ 340 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10XD)	239 307 375 477	169 237 305 407	136 204 272 374	55	● 700,50 ● 893,50 ○ 1019,50 ○ 1323,-	○ 818,50 ○ 1117,50 ○ 1278,- ○ 1660,-	○ IDP 340 ○ IDP 341 ○ IDP 342 ○ IDP 343 ○ IDP 344	CS 320-355 SL	T20 Torque 4.0 Nm (Max)	M 5x10	2.5 mm
Ø 34.5 ~Ø 34.9	YTDI 345 □ FSL KRUZ 345 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10XD)	241 310 379 483	171 240 309 413	138 207 276 380	55	● 700,50 ● 893,50 ○ 1019,50 ○ 1323,-	○ 818,50 ○ 1117,50 ○ 1278,- ○ 1660,-	○ IDP 345 ○ IDP 346 ○ IDP 347 ○ IDP 348 ○ IDP 349	CS 320-355 SL	T20 Torque 4.0 Nm (Max)	M 5x10	2.5 mm
Ø 35.0 ~Ø 35.4	YTDI 350 □ FSL KRUZ 350 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10XD)	243 313 383 488	173 243 313 418	140 210 280 385	55	○ 700,50 ● 893,50 ○ 1019,50 ○ 1323,-	○ 818,50 ○ 1117,50 ○ 1278,- ○ 1660,-	○ IDP 350 ○ IDP 351 ○ IDP 352 ○ IDP 353 ○ IDP 354	CS 320-355 SL	T20 Torque 4.0 Nm (Max)	M 5x10	2.5 mm
Ø 35.5 ~Ø 35.9	YTDI 355 □ FSL KRUZ 355 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10XD)	246 317 388 495	176 247 318 425	142 213 284 391	55	○ 700,50 ● 893,50 ○ 1019,50 ○ 1323,-	○ 818,50 ○ 1117,50 ○ 1278,- ○ 1660,-	○ IDP 355 ○ IDP 356 ○ IDP 357 ○ IDP 358 ○ IDP 359	CS 320-355 SL	T20 Torque 4.0 Nm (Max)	M 5x10	2.5 mm
Ø 36.0 ~Ø 36.4	YTDI 360 □ FSL KRUZ 360 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10XD)	248 320 392 500	178 250 322 430	144 216 288 396	55	○ 727,- ● 913,- ○ 1099,50 ○ 1429,50	○ 847,- ○ 1144,50 ○ 1373,- ○ 1784,-	○ IDP 360 ○ IDP 361 ○ IDP 362 ○ IDP 363 ○ IDP 364	CS 360-395 SL	T20 Torque 4.0 Nm (Max)	M 5x10	2.5 mm

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MC DRILLS

NICECUT

YES DRILLS

		KRUZ-FSL, YTDI-FSL Flange body & Carbide insert																		
												YTDI		KRUZ						
Hole size range	Body Code No.	Shank Size (Ød)	Cutting depth (Length x 40)	L1	L2	L3	Flanged dia. (ØFd)	STOCK	€	STOCK	€	IDP	Cap Screw	Torx driver	Set Screw					
Ø 36.5 ~Ø 36.9	YTDI 365 □ FSL KRUZ 365 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10XD)	251 324 397 507	181 254 327 347	146 219 292 402	55	○ 727,- ● 913,- ○ 1099,50 ○ 1429,50	○ 847,- ○ 1144,50 ○ 1373,- ○ 1784,-	○ IDP 365 ○ IDP 366 ○ IDP 367 ○ IDP 368 ○ IDP 369	€ 341,-	CS 360-395 SL	T20 Torque 4.0Nm (Max)	M 5x10	2.5 mm					
	Ø 37.0 ~Ø 37.4	YTDI 370 □ FSL KRUZ 370 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10XD)	253 327 401 512	183 257 331 442	148 222 296 407	55	○ 727,- ● 913,- ○ 1099,50 ○ 1429,50	○ 847,- ○ 1144,50 ○ 1373,- ○ 1784,-	○ IDP 370 ○ IDP 371 ○ IDP 372 ○ IDP 373 ○ IDP 374	€ 341,-	CS 360-395 SL	T20 Torque 4.0Nm (Max)	M 5x10	2.5 mm				
Ø 37.5 ~Ø 37.9	YTDI 375 □ FSL KRUZ 375 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10XD)	255 330 405 518	185 260 335 448	150 225 300 413	55	○ 727,- ● 913,- ○ 1099,50 ○ 1429,50	○ 847,- ○ 1144,50 ○ 1373,- ○ 1784,-	○ IDP 375 ○ IDP 376 ○ IDP 377 ○ IDP 378 ○ IDP 379	€ 341,-	CS 360-395 SL	T20 Torque 4.0Nm (Max)	M 5x10	2.5 mm					
	Ø 38.0 ~Ø 38.4	YTDI 380 □ FSL KRUZ 380 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10XD)	258 334 410 524	188 264 340 454	152 228 304 418	55	○ 727,- ● 913,- ○ 1099,50 ○ 1429,50	○ 862,- ○ 1157,- ○ 1394,- ○ 1811,-	○ IDP 380 ○ IDP 381 ○ IDP 382 ○ IDP 383 ○ IDP 384	€ 388,-	CS 360-395 SL	T20 Torque 4.0Nm (Max)	M 5x10	2.5 mm				
Ø 38.5 ~Ø 38.9	YTDI 385 □ FSL KRUZ 385 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10XD)	260 337 414 530	196 267 344 460	154 231 308 424	55	○ 727,- ● 913,- ○ 1099,50 ○ 1429,50	○ 862,- ○ 1157,- ○ 1394,- ○ 1811,-	○ IDP 385 ○ IDP 386 ○ IDP 387 ○ IDP 388 ○ IDP 389	€ 388,-	CS 360-395 SL	T20 Torque 4.0Nm (Max)	M 5x10	2.5 mm					
	Ø 39.0 ~Ø 39.4	YTDI 390 □ FSL KRUZ 390 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10XD)	263 341 419 536	193 271 349 466	156 234 312 429	55	○ 727,- ● 913,- ○ 1099,50 ○ 1429,50	○ 862,- ○ 1157,- ○ 1394,- ○ 1811,-	○ IDP 390 ○ IDP 391 ○ IDP 392 ○ IDP 393 ○ IDP 394	€ 388,-	CS 360-395 SL	T20 Torque 4.0Nm (Max)	M 5x10	2.5 mm				
Ø 39.5 ~Ø 39.9	YTDI 395 □ FSL KRUZ 395 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10XD)	265 344 423 542	195 274 353 472	158 237 316 435	55	○ 727,- ● 913,- ○ 1099,50 ○ 1429,50	○ 862,- ○ 1157,- ○ 1394,- ○ 1811,-	○ IDP 395 ○ IDP 396 ○ IDP 397 ○ IDP 398 ○ IDP 399	€ 388,-	CS 360-395 SL	T20 Torque 4.0Nm (Max)	M 5x10	2.5 mm					
	Ø 40.0 ~Ø 40.4	YTDI 400 □ FSL KRUZ 400 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10XD)	267 347 427 547	197 277 357 477	160 240 320 440	55	○ 780,- ● 961,- ○ 1125,- ○ 1462,50	○ 930,- ○ 1206,50 ○ 1414,- ○ 1838,50	○ IDP 400 ○ IDP 401 ○ IDP 402 ○ IDP 403 ○ IDP 404	€ 427,50	CS 400-445 SL	T20 Torque 4.0Nm (Max)	M 6x12	3.0 mm				
Ø 40.5 ~Ø 40.9	YTDI 405 □ FSL KRUZ 405 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10XD)	270 351 432 554	200 281 362 484	162 243 324 446	55	○ 780,- ● 961,- ○ 1125,- ○ 1462,50	○ 930,- ○ 1206,50 ○ 1414,- ○ 1838,50	○ IDP 405 ○ IDP 406 ○ IDP 407 ○ IDP 408 ○ IDP 409	€ 427,50	CS 400-445 SL	T20 Torque 4.0Nm (Max)	M 6x12	3.0 mm					
	Ø 41.0 ~Ø 41.4	YTDI 410 □ FSL KRUZ 410 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10XD)	272 354 436 559	202 284 366 489	164 246 328 451	55	○ 780,- ● 961,- ○ 1125,- ○ 1462,50	○ 930,- ○ 1206,50 ○ 1414,- ○ 1838,50	○ IDP 410 ○ IDP 411 ○ IDP 412 ○ IDP 413 ○ IDP 414	€ 427,50	CS 400-445 SL	T20 Torque 4.0 Nm (Max)	M 6x12	3.0 mm				
Ø 41.5 ~Ø 41.9	YTDI 415 □ FSL KRUZ 415 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10XD)	275 358 441 566	205 288 371 496	166 249 332 457	55	○ 780,- ● 961,- ○ 1125,- ○ 1462,50	○ 930,- ○ 1206,50 ○ 1414,- ○ 1838,50	○ IDP 415 ○ IDP 416 ○ IDP 417 ○ IDP 418 ○ IDP 419	€ 427,50	CS 400-445 SL	T20 Torque 4.0 Nm (Max)	M 6x12	3.0 mm					
	Ø 42.0 ~Ø 42.4	YTDI 420 □ FSL KRUZ 420 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10XD)	277 361 445 571	207 291 375 501	168 252 336 462	55	○ 780,- ● 1251,- ○ 1465,50 ○ 1904,50	○ 930,- ○ 1526,50 ○ 1789,- ○ 2324,50	○ IDP 420 ○ IDP 421 ○ IDP 422 ○ IDP 423 ○ IDP 424	€ 473,50	CS 400-445 SL	T20 Torque 4.0 Nm (Max)	M 6x12	3.0 mm				
Ø 42.5 ~Ø 42.9	YTDI 425 □ FSL KRUZ 425 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10XD)	279 364 449 577	209 294 379 507	170 255 340 468	55	○ 780,- ○ 1251,- ○ 1465,50 ○ 1904,50	○ 930,- ○ 1526,50 ○ 1789,- ○ 2324,50	○ IDP 425 ○ IDP 426 ○ IDP 427 ○ IDP 428 ○ IDP 429	€ 473,50	CS 400-445 SL	T20 Torque 4.0 Nm (Max)	M 6x12	3.0 mm					
	Ø 43.0 ~Ø 43.4	YTDI 430 □ FSL KRUZ 430 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10XD)	282 368 454 583	212 298 384 513	172 258 344 473	55	○ 780,- ○ 1251,- ○ 1465,50 ○ 1904,50	○ 930,- ○ 1526,50 ○ 1789,- ○ 2324,50	○ IDP 430 ○ IDP 431 ○ IDP 432 ○ IDP 433 ○ IDP 434	€ 473,50	CS 400-445 SL	T20 Torque 4.0 Nm (Max)	M 6x12	3.0 mm				
Ø 43.5 ~Ø 43.9	YTDI 435 □ FSL KRUZ 435 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10XD)	284 371 458 589	214 301 388 519	174 261 348 479	55	○ 780,- ○ 1251,- ○ 1465,50 ○ 1904,50	○ 930,- ○ 1526,50 ○ 1789,- ○ 2324,50	○ IDP 435 ○ IDP 436 ○ IDP 437 ○ IDP 438 ○ IDP 439	€ 473,50	CS 400-445 SL	T20 Torque 4.0 Nm (Max)	M 6x12	3.0 mm					
	Ø 44.0 ~Ø 44.4	YTDI 440 □ FSL KRUZ 440 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10XD)	287 375 463 595	217 305 393 525	176 264 352 484	55	○ 922,- ○ 1275,- ○ 1550,50 ○ 2017,-	○ 1120,50 ○ 1566,- ○ 1899,- ○ 2466,50	○ IDP 440 ○ IDP 441 ○ IDP 442 ○ IDP 443 ○ IDP 444	€ 524,50	CS 400-445 SL	T20 Torque 4.0 Nm (Max)	M 6x12	3.0 mm				

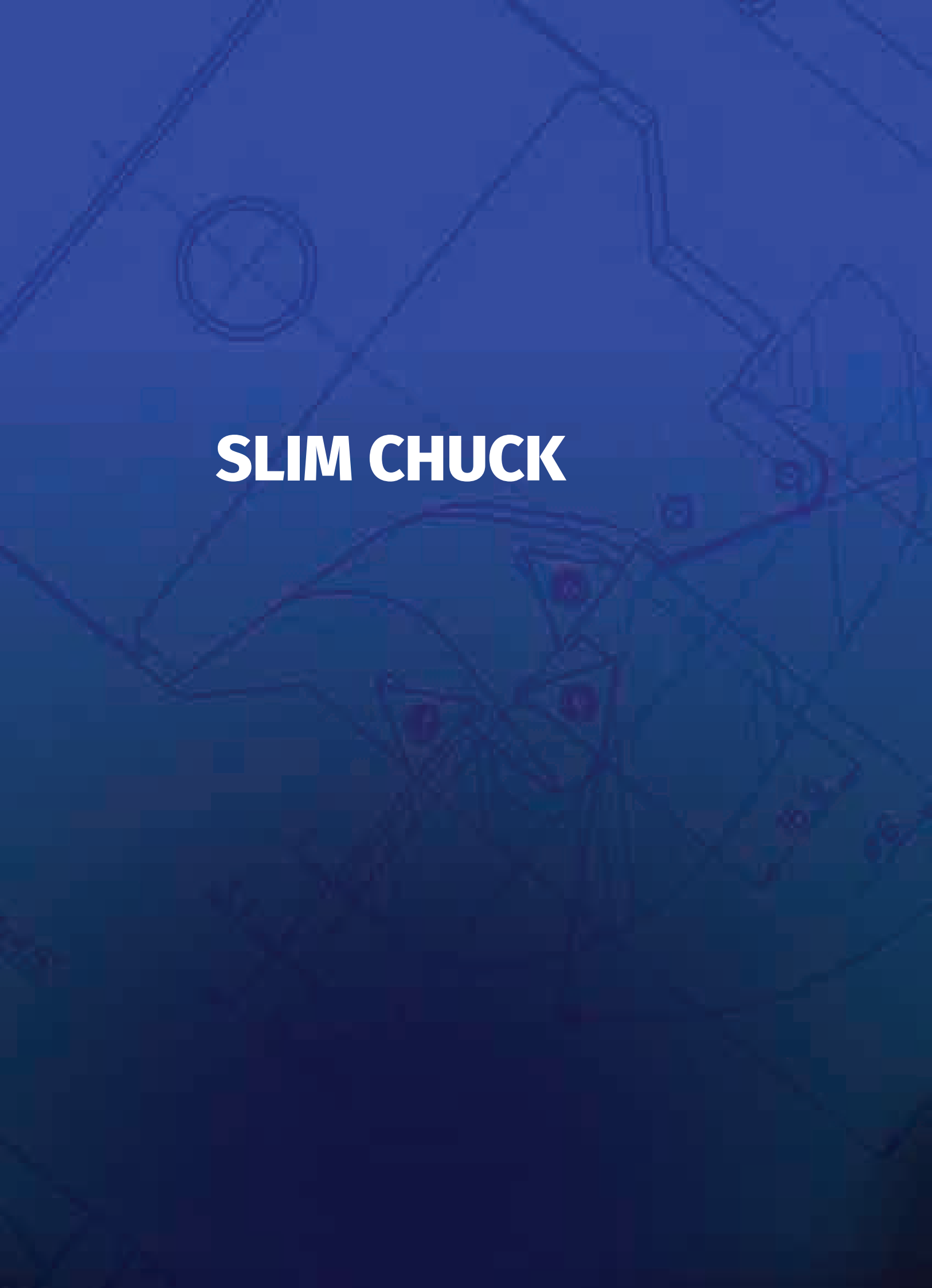
KRUZ-FSL, YTDI-FSL Flange body & Carbide insert

Hole size range	Body Code No.	Shank Size (Ød)	Cutting depth (Length x 40)	L1	L2	L3	Flange dia. (ØFd)	YTDI	KRUZ	IDP	Cap Screw	Torx driver	Set Screw	L-wrench
								STOCK	€					
Ø 44.5 ~Ø 44.9	YTDI 445 □ FSL KRUZ 445 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10xD)	289 378 467 601	219 308 397 531	178 267 356 490	55	○ 922,- ○ 1275,- ○ 1550,50 ○ 2017,-	○ 1120,50 ○ 1566,- ○ 1899,- ○ 2466,50	○ IDP 445 ○ IDP 446 ○ IDP 447 ○ IDP 448 ○ IDP 449	€ 524,50	CS 400-445 SL	T20 Torque 4.0Nm (Max)	M 6x12 3.0 mm
Ø 45.0 ~Ø 45.4	YTDI 450 □ FSL KRUZ 450 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10xD)	291 381 471 606	221 311 401 536	180 270 360 495	55	○ 922,- ○ 1275,- ○ 1550,50 ○ 2017,-	○ 1120,50 ○ 1566,- ○ 1899,- ○ 2466,50	○ IDP 450 ○ IDP 451 ○ IDP 452 ○ IDP 453 ○ IDP 454	€ 524,50	CS 450-500 SL	T20 Torque 4.0Nm (Max)	M 6x12 3.0 mm
Ø 45.5 ~Ø 45.9	YTDI 455 □ FSL KRUZ 455 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10xD)	294 385 476 613	224 315 406 543	182 273 364 501	55	○ 922,- ○ 1275,- ○ 1550,50 ○ 2017,-	○ 1120,50 ○ 1566,- ○ 1899,- ○ 2466,50	○ IDP 455 ○ IDP 456 ○ IDP 457 ○ IDP 458 ○ IDP 459	€ 524,50	CS 450-500 SL	T20 Torque 4.0Nm (Max)	M 6x12 3.0 mm
Ø 46.0 ~Ø 46.4	YTDI 460 □ FSL KRUZ 460 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10xD)	296 388 480 618	226 318 410 548	184 276 368 506	55	○ 922,- ○ 1275,- ○ 1550,50 ○ 2017,-	○ 1120,50 ○ 1566,- ○ 1899,- ○ 2466,50	○ IDP 460 ○ IDP 461 ○ IDP 462 ○ IDP 463 ○ IDP 464	€ 576,50	CS 450-500 SL	T20 Torque 4.0Nm (Max)	M 6x12 3.0 mm
Ø 46.5 ~Ø 46.9	YTDI 465 □ FSL KRUZ 465 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10xD)	299 392 485 625	229 322 415 555	186 279 372 512	55	○ 922,- ○ 1275,- ○ 1550,50 ○ 2017,-	○ 1120,50 ○ 1566,- ○ 1899,- ○ 2466,50	○ IDP 465 ○ IDP 466 ○ IDP 467 ○ IDP 468 ○ IDP 469	€ 576,50	CS 450-500 SL	T20 Torque 4.0Nm (Max)	M 6x12 3.0 mm
Ø 47.0 ~Ø 47.4	YTDI 470 □ FSL KRUZ 470 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10xD)	301 395 489 630	231 325 419 560	188 282 376 517	55	○ 922,- ○ 1275,- ○ 1550,50 ○ 2017,-	○ 1120,50 ○ 1566,- ○ 1899,- ○ 2466,50	○ IDP 470 ○ IDP 471 ○ IDP 472 ○ IDP 473 ○ IDP 474	€ 576,50	CS 450-500 SL	T20 Torque 4.0Nm (Max)	M 6x12 3.0 mm
Ø 47.5 ~Ø 47.9	YTDI 475 □ FSL KRUZ 475 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10xD)	303 398 493 636	233 328 423 566	190 285 380 523	55	○ 922,- ○ 1275,- ○ 1550,50 ○ 2017,-	○ 1120,50 ○ 1566,- ○ 1899,- ○ 2466,50	○ IDP 475 ○ IDP 476 ○ IDP 477 ○ IDP 478 ○ IDP 479	€ 576,50	CS 450-500 SL	T20 Torque 4.0Nm (Max)	M 6x12 3.0 mm
Ø 48.0 ~Ø 48.4	YTDI 480 □ FSL KRUZ 480 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10xD)	306 402 498 642	236 332 428 572	192 288 384 528	55	○ 962,- ○ 1323,- ○ 1612,50 ○ 2095,-	○ 1198,- ○ 1626,50 ○ 1979,50 ○ 2572,50	○ IDP 480 ○ IDP 481 ○ IDP 482 ○ IDP 483 ○ IDP 484	€ 614,-	CS 450-500 SL	T20 Torque 4.0Nm (Max)	M 6x12 3.0 mmv
Ø 48.5 ~Ø 48.9	YTDI 485 □ FSL KRUZ 485 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10xD)	308 405 502 648	238 335 432 578	194 291 388 534	55	○ 962,- ○ 1323,- ○ 1612,50 ○ 2095,-	○ 1198,- ○ 1626,50 ○ 1979,50 ○ 2572,50	○ IDP 485 ○ IDP 486 ○ IDP 487 ○ IDP 488 ○ IDP 489	€ 614,-	CS 450-500 SL	T20 Torque 4.0Nm (Max)	M 6x12 3.0 mm
Ø 49.0 ~Ø 49.4	YTDI 490 □ FSL KRUZ 490 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10xD)	311 409 507 654	241 339 437 584	196 294 392 539	55	○ 962,- ○ 1323,- ○ 1612,50 ○ 2095,-	○ 1198,- ○ 1626,50 ○ 1979,50 ○ 2572,50	○ IDP 490 ○ IDP 491 ○ IDP 492 ○ IDP 493 ○ IDP 494	€ 614,-	CS 450-500 SL	T20 Torque 4.0Nm (Max)	M 6x12 3.0 mm
Ø 49.5 ~Ø 49.9	YTDI 495 □ FSL KRUZ 495 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10xD)	313 412 511 660	243 342 441 590	198 297 396 545	55	○ 962,- ○ 1323,- ○ 1612,50 ○ 2095,-	○ 1198,- ○ 1626,50 ○ 1979,50 ○ 2572,50	○ IDP 495 ○ IDP 496 ○ IDP 497 ○ IDP 498 ○ IDP 499	€ 614,-	CS 450-500 SL	T20 Torque 4.0Nm (Max)	M 6x12 3.0 mm
Ø 50.0 ~Ø 50.4	YTDI 500 □ FSL KRUZ 500 □ FSL	40.0	T (3xD) P (5xD) H (7xD) L (10xD)	315 415 515 665	245 345 445 595	200 300 400 550	55	○ 962,- ○ 1323,- ○ 1612,50 ○ 2095,-	○ 1198,- ○ 1626,50 ○ 1979,50 ○ 2572,50	○ IDP 500 ○ IDP 501 ○ IDP 502 ○ IDP 503 ○ IDP 504	€ 686,-	CS 450-500 SL	T20 Torque 4.0Nm (Max)	M 6x12 3.0 mm

KRUZ-FSL Drills, Cutting Speed Recommendation

Material group	DRILL. DIAM									
	Ø 8-16 mm		Ø 16-25 mm		Ø 25-32 mm		Ø 32-40 mm		Ø 40-50 mm	
	Speed (m/min)	Feed (mm/rev)	Speed (m/min)	Feed (mm/rev)	Speed (m/min)	Feed (mm/rev)	Speed (m/min)	Feed (mm/rev)	Speed (m/min)	Feed (mm/rev)
Grey cast iron (FC)	80~150	0.20~0.30	80~150	0.25~0.45	80~160	0.35~0.55	90~200	0.34~0.58	90~200	0.38~0.60
Nodular cast iron (FCD)	80~140	0.15~0.25	80~140	0.22~0.45	80~150	0.32~0.52	90~180	0.35~0.62	90~200	0.38~0.60
Carbon steel (S45C)	80~140	0.15~0.30	80~140	0.16~0.40	80~150	0.20~0.40	80~150	0.22~0.48	80~160	0.25~0.54
Alloy steel (SCM440)	70~140	0.15~0.30	70~140	0.15~0.40	70~140	0.18~0.40	80~140	0.25~0.47	80~140	0.27~0.52
Hardened steel (SKD11)	40~50	0.10~0.20	40~50	0.12~0.28	40~50	0.16~0.35	40~60	0.20~0.38	40~60	0.22~0.42
Stainless steel (SUS)	30~40	0.10~0.20	35~50	0.10~0.22	35~50	0.15~0.28	40~55	0.18~0.30	40~55	0.22~0.32
Aluminium 13HB (AL)	120~200	0.20~0.30	120~200	0.25~0.40	120~200	0.30~0.45	120~200	0.30~0.45	120~200	0.30~0.50

- This data is recommended for 3xDia, and should be reduced about 15-20% for 5xD, 7xD, 10xD drills.
- The data is normally suggested for oil-mist(MQL) coolant condition and also possible to run in other normal condition if machining environment like clamping etc. are secured in good.



SLIM CHUCK

MANDRINO A PINZA SLIM CHUCK SLIM CHUCK SPANNZANGENAUFNAHME _ SLIM CHUCK EXTENSION ADAPTOR



Fig. 1



Fig. 2

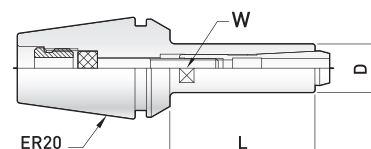
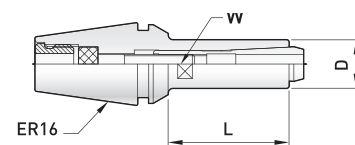


Mandrino a pinza progettato senza ghiera, parte da un diametro di 8,6mm. In questo modo si raggiunge l'effetto migliore nel processo di estensione.

Spannzangenaufnahme ohne Oberwurfmutter, mindest Durchmesser 8,6mm. In dieser Weise, erreicht man den besten Effekt mit der Verlängerung.

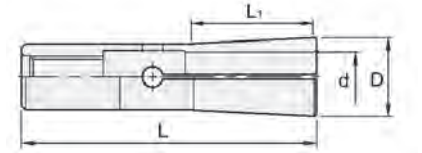
Slim collet chuck designed without nut can get the smallest outside diameter of 8.6 mm. This can achieve the best effect on extended processing depth.

ST	Fig.	↔ (mm)							Pinza Spannzange Collet	Chiave Schlüssel Spanner	Vite Schraube Screw	Bussola Schraube Stop Screw	Estrattore Auszieher Stop Nut	STOCK	€
ST10-DC4-90	1	2-4	90	14	10	9	-		DC4	30194-632(M3)	M4L70	-	TP-M8	○	459,50
ST12-DC4-120	2	2-4	120	38	12	9	3°		DC4	30194-632(M3)	M4L85	OP-M8	-	○	513,50
ST12-DC6-120	1	1-6	120	40	12	14	-		DC6	30194-643(M4)	M5L95	-	TP-M12	●	459,50
ST16-DC6-150	2	1-6	150	35	16	14	3°		DC6	30194-643(M4)	M5L100	OP-M10	-	●	513,50
ST20-DC6-200	2	1-6	200	70	20	14	3°		DC6	30194-643(M4)	M5L100	OP-M10	-	○	641,-
ST25-DC6-250	2	1-6	250	115	25	14	3°		DC6	30194-644(M4)	M5L100	OP-M10	-	○	907,50
ST20-DC8-200	2	3-8	200	50	20	19	2°		DC8	30194-652(M5)	-	OP-M12	-	○	532,-



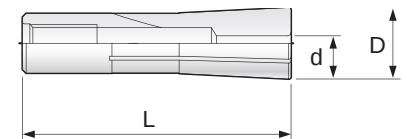
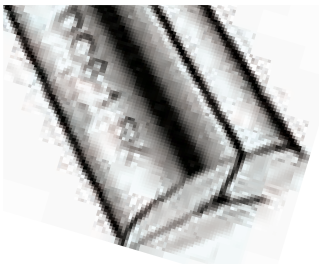
ER	d	↔ (mm)			Pinza Spannzange Collet	Chiave Schlüssel Spanner	STOCK	€
ER16-DC4-25	2-4	25	9	8	DC4	30194-632(M3)	○	339,-
ER20-DC6-35	1-6	35	14	13	DC6	30194-643(M4)	○	339,-

PINZE DC TIPO E DC SPANNZANGEN TYPE E _ DC COLLETS TYPE E



DC...E	d	L	(mm)	D	W	€
DC4-2E	2	31		10	7	● 162,-
DC4-3E	3	31		14	7	● 143,50
DC4-4E	4	31		14	7	● 143,50
DC6-3E	3	36		14	9,6	● 143,50
DC6-4E	4	36		14	9,6	● 143,50
DC6-6E	6	36		16	9,6	● 143,50
DC8-3E	3	45		15	15	○ 147,50
DC8-4E	4	45		16	15	○ 147,50
DC8-6E	6	45		24	15	○ 147,50
DC8-8E	8	45		26	15	○ 147,50

PINZE DC TIPO K DDC SPANNZANGEN TYPE K _ DC COLLETS TYPE K



DC...K	d	(d)	(mm)	L	D	€
DC6-1.0K	1.0	0.9 ~ 1.0		36	9,6	○ 186,50
DC6-1.1K	1.1	1.0 ~ 1.1		36	9,6	○ 186,50
DC6-1.2K	1.2	1.1 ~ 1.2		36	9,6	○ 186,50
DC6-1.3K	1.3	1.2 ~ 1.3		36	9,6	○ 186,50
DC6-1.4K	1.4	1.3 ~ 1.4		36	9,6	○ 186,50
DC6-1.5K	1.5	1.4 ~ 1.5		36	9,6	○ 186,50
DC6-1.6K	1.6	1.5 ~ 1.6		36	9,6	○ 186,50
DC6-1.7K	1.7	1.6 ~ 1.7		36	9,6	○ 186,50
DC6-1.8K	1.8	1.7 ~ 1.8		36	9,6	○ 186,50
DC6-1.9K	1.9	1.8 ~ 1.9		36	9,6	○ 186,50

SET DC SLIM CHUCK- MANDRINO + PINZE _ SET DC SLIM CHUCK - AUFNAHME + SPANNZANGEN

SET OF DC SLIM CHUCK EXTENSION ADAPTOR + COLLETS



Contenuto set - Inhalt des Sets - Set contents						
DC4	Mandrino Aufnahme Collet Chuck	Pinza Spannzange Collet	Chiave (A) Schlüssel (A) Spanner (A)	Chiave (B) Schlüssel (B) Spanner (B)	STOCK	€
SST10-DC4-90	ST10-DC4-90	DC4-2E x 1 pc DC4-3E x 1 pc	30194-002	30194-632	○	823,50
SST12-DC4-120	ST12-DC4-120	DC4-4E x 1 pc			○	898,-

Contenuto set - Inhalt des Sets - Set contents						
DC6	Mandrino Aufnahme Collet Chuck	Pinza Spannzange Collet	Chiave (A) Schlüssel (A) Spanner (A)	Chiave (B) Schlüssel (B) Spanner (B)	STOCK	€
SST12-DC6-120	ST12-DC6-120	DC6-3E x 1 pc DC6-4E x 1 pc	30194-002	30194-643	○	823,50
SST16-DC6-150	ST16-DC6-150	DC6-6E x 1 pc			○	898,-

Chiave (A) Schlüssel (A) Spanner (A)	Chiave (B) Schlüssel (B) Spanner (B)	Vite Schraube Screw	Bussola Schraube Stop Screw	Estrattore Auszieher Stop Nut
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CODICE ORDINE Bestell-Nr. Order No.	CODICE ORDINE Bestell-Nr. Order No.	mm	L	CODICE ORDINE Bestell-Nr. Order No.	Filetto Gewinde Thread	L	CODICE ORDINE Bestell-Nr. Order No.	Filetto Gewinde Thread	CODICE ORDINE Bestell-Nr. Order No.	Filetto Gewinde Thread
30194-002	30194-632	3	100	M4L70	M4	70	OP-M8	M8(L)	TP-M8	M8(L)
	30194-643	4	150	M4L85	M4	85	OP-M10	M10(L)	TP-M12	M12(L)
	30194-644	4	200	M5L95	M5	95	OP-M12	M12(L)	Il filetto della bussola è sinistro Die Gewinde der Schraube ist links Thread of stop screw is leftward	
				M5L100	M5	100	OP-M16	M16(L)		

Il filetto della bussola è sinistro
Die Gewinde der Schraube ist links
Thread of stop screw is leftward

SLIM CHUCK	YES DRILLS	NICECUT	MC DRILLS	GROOVING	MINITOOOLS	MICROTOOLS AMS	MOULDMILL	MINIMILL	MILLING
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INSERTS

MILLING

MINIMILL

MOULDMILL

MICROTOOLS
AMS

MINITOOLS

GROOVING

MC DRILLS

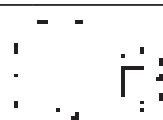
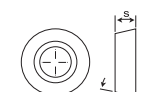
NICECUT

YES DRILLS

SLIM CHUCK

INSERTS

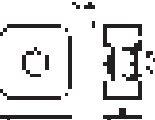
INSERTI PER FRESATURA _ WENDEPLATTEN ZUM FRÄSEN _ MILLING INSERTS

CODICE ORDINE Bestell-Nr. Order No.	FIGURA Form Figure	 (mm)					DENOMINAZIONE Bezeichnung Designation	NON RIVESTITI Unbeschichte Uncoated			RIVESTITI Beschichtet Coated					
		l	d	s	d1	r		k15	P25	P40	200	P: P300	K300	K400	TIN PVD	TIALN PVD
 APMX		6,3	3,65	2,15	2,05	1	APMX 060210 MPH							● 14,70		
 APKT... PDTR-K		6,4	3,65	2,15	2	0,4	APKT 060204 PDTR-K							● 11,50		
 APKT... PDER-S		6,4	3,7	2,17	2	0,4	APKT 060204 PDER-S				○ 11,50	○ 11,50	○ 11,50			
		6	3,64	2,15	2,05	2,0	APKT 060220 PDER-S				○ 14,70	○ 14,70	○ 14,70			
		10,5	6,7	3,5	2,8	0,4	APKT 1003 PDER-S				● 14,70	● 14,70	● 14,70			
		17	9,5	5,30	4,5	0,8	APKT 1604 PDER-S				● 17,-	● 17,-	● 17,-			
 APKT... PDR-M		10	6,7	3,5	3,2	0,5	APKT 1003 PDR-M							● 9,10		
		16,3	9,5	5,26	4,4	0,9	APKT 1604 PDR-M							● 11,10		
 APKT... PDFR... ALU		10,5	6,7	3,5	2,8	0,4	APKT 1003 PDFR-R04 ALU	● 16,70								
		17	9,45	5,26	4,4	0,4	APKT 1604 PDFR-R04 ALU	● 17,90								
		17	9,45	5,26	4,4	0,8	APKT 1604 PDFR-R08 ALU	● 17,90								
 APPT... MM		10	6,7	3,50	2,8	0,8	APPT 100308 PDSR-MM							● 9,10		
		17	9,5	5,26	4,5	0,8	APPT 160408 PDSR-MM							● 11,10		
 APHX... ALU		10,3	6,35	3,18	2,8	0,4	APHX 1003 FR-ALU	● 19,70								
		17	9,52	4,76	4,4	0,2	APHX 1604 FR-ALU	● 20,10								
		16	9,52	4,76	4,4	0,8	APHX 1604 PDR-ALU	● 25,70								
 APHT...		10,3	6,35	3,18	2,8	0,4	APHT 100304	● 14,70	● 14,70	● 14,70				● 18,40	● 18,40	
		16	9,52	4,76	4,4	0,8	APHT 1604 PDR	● 17,-	● 17,-	● 17,-				● 20,10	● 21,20	
 RDHT... ALU		-	5	1,59	-	-	RDHT 0501MOF ALU	● 12,20								
		-	7	2,38	-	-	RDHT 0702MOF ALU	● 12,20								
		-	10	3,18	-	-	RDHT 1003MOF ALU	● 12,20								
		-	12	3,97	-	-	RDHT 12T3MOF ALU	● 12,90								
		-	16	4,76	-	-	RDHT 1604MOF ALU	● 16,40								

INSERTI PER FRESATURA _ WENDEPLATTEN ZUM FRÄSEN _ MILLING INSERTS

 CODICE ORDINE Bestell-Nr. Order No.	 FIGURA Form Figure	 (mm)					 DENOMINAZIONE Bezeichnung Designation	 NON RIVESTITI Unbeschichte Uncoated			 RIVESTITI Beschichtet Coated					
		l	d	s	d1	r		k15	P25	P40	P200	P300	K300	K400	TIN PVD	TIALN PVD
 RDKW		-	5	1,5	2,2	-	RDKW 0501MOS-MP							● 10,30		
		-	7	2,38	2,7	-	RDKW 0702MOS-MP							● 10,70		
		-	10	3,18	3,9	-	RDKW 1003MOS-MP							● 11,50		
		-	12	3,97	3,9	-	RDKW 12T3MOS-MP							● 13,60		
		-	16	4,76	5,2	-	RDKW 1604MOS-MP							● 17,-		
 SDMT... 69		12,7	12,7	5	4,4	0,8	SDMT 1205 PDR.69	● 21,20	● 21,20	● 21,20					● 23,50	● 23,50
 SDKT		12,7	12,7	4,76	5,5	-	SDKT 1204 AFTN							● 19,-		
 SEKT		12,7	12,7	4,76	5,5	-	SEKT 1204 AFTN							● 15,10		
 SEHX 1204 ALU		12,7	12,7	4,76	5,5	-	SEHX 1204 ALU	● 25,10								
 SEKR		12,7	12,7	3,18	-	-	SEKR 1203 AFTN							● 15,10		
 SEHX 13T3 ALU		13,4	13,4	3,97	4,1	1,5	SEHX 13T3 ALU	● 31,70								
 SEHT 13T3		13,4	13,4	3,97	4,1	1,5	SEHT 13T3				● 21,20	● 21,20	● 21,20			
 SNHX		11	11	2,3	4,4	-	SNHX 1102T	● 14,-	● 14,-						● 16,20	● 17,30
		11	11	2,7	4,4	-	SNHX 1103T	● 14,-	● 14,-						● 16,20	● 17,30
		12,7	12,7	3,2	5	-	SNHX 1203T	● 15,10	● 15,10						● 18,40	● 19,30
		12,7	12,7	5,4	5	-	SNHX 1205T	● 16,40	● 16,40						● 19,20	● 19,60
 SNHX... ALU		11	11	2,3	4,4	-	SNHX 1102 ALU	● 20,10								
		11	11	2,7	4,4	-	SNHX 1103 ALU	● 21,20								
		12,7	12,7	3,2	5	-	SNHX 1203 ALU	● 22,30								
		12,7	12,7	5,4	5	-	SNHX 1205 ALU	● 22,90								

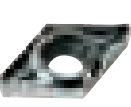
INSERTI PER FRESATURA _ WENDEPLATTEN ZUM FRÄSEN _ MILLING INSERTS

	CODICE ORDINE Bestell-Nr. Order No.	FIGURA Form Figure	(mm)					DENOMINAZIONE Bezeichnung Designation	NON RIVESTITI Unbeschichte Uncoated			RIVESTITI Beschichtet Coated					
			l	d	s	d1	r		k15	P25	P40	P200	P300	K300	K400	TIN PVD	TIALN PVD
MILLING			12,7	2,5	6,4	5,2	2,36	SNEX 1206 ANN-MA ALU	● 21,80								
MINIMILL			12,7	2,5	6,4	5,2	2,36	SNKX 1206 ANN-MM1							● 14,-		
MOULDMILL			12,7	2,5	6,4	5,2	2,36	SNMX 1206 ANN-MB1				● 17,30	● 17,30	● 17,30			
MICROTOOLS AMS			12,7	2,5	6,9	5,4	2,36	SNMU 1206 ANER				● 17,30	● 17,30	● 17,30			
MINITOOLS			12,7	5,2	6	6	0,8	ONMU 1205 ANN MB				● 17,30	● 17,30	● 17,30			
GROOVING			10	6,5	6,5	3,5	0,5	LNEX 100605 PNR-MA ALU	● 23,10								
			15	10	10	4,5	0,8	LNEX 151008 PNR-MA ALU	● 28,90								
MC DRILLS			10	6,5	6,5	3,5	0,5	LNKX 100605 PNR-MM							● 15,70		
			15	10	10	4,5	0,8	LNKX 151008 PNR-MM							● 16,70		
NICECUT			10	6,5	6,5	3,5	0,5	LNMX 100605 PNR-MB				● 17,90	● 17,90	● 17,90			
			15	10	10	4,5	0,8	LNMX 151008 PNR-MB				● 21,20	● 21,20	● 21,20			
YES DRILLS			6,35	6,35	3,18	2,8	0,4	SPMT 060304							● 13,50		
			9,52	9,52	3,97	4,5	0,8	SPMT 09T308							● 14,50		
			12,7	12,7	4,76	5,5	0,8	SPMT 120408							● 15,70		
SLIM CHUCK																	
INSERTS																	

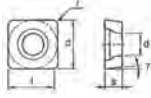
INSERTI PER FRESATURA _ WENDEPLATTEN ZUM FRÄSEN _ MILLING INSERTS

 CODICE ORDINE Bestell-Nr. Order No.	 FIGURA Form Figure	 (mm)					 DENOMINAZIONE Bezeichnung Designation	 NON RIVESTITI Unbeschichte Uncoated			 RIVESTITI Beschichtet Coated						
		l	d	s	d1	r		k15	P25	P40	200	P P300	K300	K400	TIN PVD	TIALN PVD	
 SPGT... ALU		6,35	6,35	3,18	2,8	0,4	SPGT 060304 ALU	● 15,70									
		9,52	9,52	3,97	4,5	0,8	SPGT 09T308 ALU	● 16,70									
		12,7	12,7	4,76	5,5	0,8	SPGT 120408 ALU	● 17,90									
 SEEX		12,25	12,25	5,25	4,8	0,8	SEEX 12T408							● 26,70			
 TCMX		16,5	9,52	3,97	4,4	0,4	TCMX 16T3 ZR							● 23,50			
 TCMX		16,5	9,52	3,97	4,4	0,8	TCMX 16T308 ZR								● 23,50		
 TCGX		16,5	9,52	3,97	4,4	0,4	TCGX 163504						● 24,50				
 XNEX...		7,5	12,5	6,56	4,6	1,0	XNEX 080610-HF							● 21,20			
 WNEU 04...		4	6,7	3,3	3,2	0,4	WNEU 040304-MB				● 17,50	● 17,50	● 17,50				
		4	6,7	3,3	3,2	0,8	WNEU 040308-MB				● 17,50	● 17,50	● 17,50				
 WNEU 08... MB		7,5	12,5	6,56	4,6	0,8	WNEU 080608-MB				● 21,20	● 21,20	● 21,20	● 21,20			
 WNEU 08... MB		8	12,7	6,55	4,6	1,2	WNEU 080612-MB				○ 21,20	○ 21,20	○ 21,20				
 WNMU 08... MB		7,5	12,5	6,56	4,6	0,8	WNMU 080608-MB							● 19,70			
 WNEX		7,5	12,5	6,56	4,5	0,8	WNEX 080608-ALU	● 24,50									

INSERTI PER TORNITURA _ WENDEPLATTEN ZUM DREHEN _ TURNING INSERTS

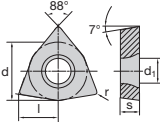
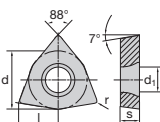
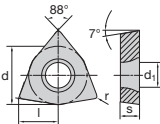
CODICE ORDINE Bestell-Nr. Order No.	FIGURA Form Figure	 (mm)					DENOMINAZIONE Bezeichnung Designation	NON RIVESTITI Unbeschichte Uncoated			RIVESTITI Beschichtet Coated					CERMET	
		l	d	s	d1	r		k15	P25	P40	P200	P300	K300	K400	TIN PVD	TIALN PVD	X99
 CPMT MINI		5,6	5,56	1,98	2,5	0,4	CPMT 05T104					● 18,40					
		5,6	5,56	1,98	2,5	0,2	CPMT 05T102 EN-PM1						● 15,80				
		5,6	5,56	1,98	2,5	0,2	CPMT 05T102 EN-PS2				○ 15,80						
		5,6	5,56	1,98	2,5	0,4	CPMT 05T104 EN-PM1						● 15,80				
		5,6	5,56	1,98	2,5	0,4	CPMT 05T104 EN-PS2				○ 15,80						
 CPGT... ALU MINI		5,6	5,56	1,98	2,5	0,2	CPGT 05T102 FN-ALU	● 20,10									
		5,6	5,56	1,98	2,5	0,4	CPGT 05T104 FN-ALU	● 20,10									
 CCMT		6,4	6,35	2,38	2,8	0,2	CCMT 060202						● 12,30				
		6,4	6,35	2,38	2,8	0,4	CCMT 060204						● 11,70				
		9,7	9,52	3,97	4,4	0,4	CCMT 09T304						● 12,90				
		9,7	9,52	3,97	4,4	0,8	CCMT 09T308						● 12,90				
		12,9	12,7	4,76	5,5	0,4	CCMT 120404						● 16,20				
		12,9	12,7	4,76	5,5	0,8	CCMT 120408						● 16,20				
 CCGT		3,3	3,35	1,4	2,3	0,2	CCGT 030102 FN						● 23,60				
 CCGT... ALU		6,4	6,35	2,38	2,8	0,2	CCGT 060202-ALU	● 15,90									
		6,4	6,35	2,38	2,8	0,4	CCGT 060204-ALU	● 15,90									
		9,7	9,52	3,97	4,4	0,2	CCGT 09T302-ALU	● 20,-									
		9,7	9,52	3,97	4,4	0,4	CCGT 09T304-ALU	● 20,-									
		9,7	9,52	3,97	4,4	0,8	CCGT 09T308-ALU	● 20,-									
		12,9	12,7	4,76	5,5	0,2	CCGT 120402 ALU	● 21,20									
		12,9	12,7	4,76	5,5	0,4	CCGT 120404 ALU	● 21,20									
		12,9	12,7	4,76	5,5	0,8	CCGT 120408 ALU	● 21,20									
 CDGT MINI		4,03	3,97	1	2,1	0,1	CDGT 040101 FN-ALU	● 20,-									
		4,03	3,97	1	2,1	0,2	CDGT 040102 FN-ALU	● 20,-									
		4,03	3,97	1	2,1	0,4	CDGT 040104 FN-ALU	● 20,-									
		4,03	3,97	1	2,1	0,2	CDGT 040102 FN							● 21,-			
		4,03	3,97	1	2,1	0,4	CDGT 040104 FN							● 21,-			
 DCGT...ALU MINI		3,78	3,1	1,2	1,7	0,2	DCGT 04T002 FN-ALU	● 24,-									
 DCGT...PM1 MINI		3,78	3,1	1,2	1,7	0,2	DCGT 04T002 EN-PM1						● 25,10				
 DCMT		7,75	6,35	2,38	2,8	0,2	DCMT 070202						● 12,30				
		7,75	6,35	2,38	2,8	0,4	DCMT 070204						● 11,70				
		11,6	9,52	3,97	4,4	0,2	DCMT 11T302						● 14,-				
		11,6	9,52	3,97	4,4	0,4	DCMT 11T304						● 14,-				
		11,6	9,52	3,97	4,4	0,8	DCMT 11T308						● 14,-				
 DCGT... ALU		7,75	6,35	2,38	2,8	0,2	DCGT 070202-ALU	● 15,90									
		7,75	6,35	2,38	2,8	0,4	DCGT 070204 -ALU	● 15,90									
		11,6	9,52	3,97	4,4	0,2	DCGT 11T302-ALU	● 18,10									
		11,6	9,52	3,97	4,4	0,4	DCGT 11T304-ALU	● 18,10									
		11,6	9,52	3,97	4,4	0,8	DCGT 11T308-ALU	● 18,10									

INSERTI PER TORNITURA WENDEPLATTEN ZUM DREHEN _ TURNING INSERTS

CODICE ORDINE Bestell-Nr. Order No.	FIGURA Form Figure	 (mm)					DENOMINAZIONE Bezeichnung Designation	NON RIVESTITI Unbeschichte Uncoated			RIVESTITI Beschichtet Coated						CERMET	
		l	d	s	d1	r		k15	P25	P40	P200	P300	K300	K400	TIN PVD	TIALN PVD	X99	X55
SCMT		6,35	6,35	2,38	2,8	0,4	SCMT 060204						● 14,20					
		9,52	9,52	3,97	4,4	0,8	SCMT 09T308						● 14,20					
		12,7	12,7	4,76	5,5	0,8	SCMT120408						● 15,70					
SCGT... ALU		9,525	9,525	3,97	4,4	0,4	SCGT 09T304-ALU	● 19,10										
		9,525	9,525	3,97	4,4	0,8	SCGT 09T308-ALU	● 19,10										
		12,7	12,7	4,76	5,5	0,8	SCGT 120408-ALU	● 21,70										
TCMT		8,2	4,76	2,38	2,3	0,4	TCMT 080204						● 18,40					
		11	6,35	2,38	2,8	0,2	TCMT 110202						● 11,20					
		11	6,35	2,38	2,6	0,4	TCMT 110204						● 10,70					
		16	9,52	3,97	4,4	0,4	TCMT 16T304						● 14,-					
		18	9,52	3,97	4,4	0,8	TCMT 16T308						● 14,-					
TCGT... ALU		11	6,35	2,38	2,8	0,2	TCGT 110202-ALU	● 15,70										
		11	6,35	2,38	2,8	0,4	TCGT 110204-ALU	● 15,10										
		16,5	9,52	3,97	4,4	0,4	TCGT 16T304-ALU	● 20,10										
		16,5	9,52	3,97	4,4	0,8	TCGT 16T308 -ALU	● 20,10										
VBMT		11,1	6,35	3,18	2,9	0,4	VBMT 110304						● 23,50					
		16,6	9,52	4,76	4,4	0,4	VBMT 160404						● 23,50					
		16,6	9,52	4,76	4,4	0,8	VBMT 160408						● 23,50					
VCGT...EN-PM1 MINI		5,40	3,10	1,59	1,7	0,1	VCGT 050101 EN-PM1						○ 25,10					
		5,40	3,10	1,59	1,7	0,2	VCGT 050102 EN-PM1						● 25,10					
VCMT...EN-PM1 MINI		6,92	3,97	2,38	2,2	0,2	VCMT 070202 EN-PM1						● 16,80					
		6,92	3,97	2,38	2,2	0,4	VCMT 070204 EN-PM1						● 16,80					
VCMT		11,1	6,35	3,18	2,9	0,4	VCMT 110304						● 23,50					
		16,6	9,52	4,76	4,4	0,4	VCMT 160404						● 23,50					
		16,6	9,52	4,76	4,4	0,8	VCMT 160408						● 23,50					
VCGT...FN-ALU MINI		5,40	3,10	1,59	1,7	0,2	VCGT 050102 FN-ALU	● 24,-										
		6,92	3,97	2,38	2,2	0,1	VCGT 070201 FN-ALU	● 24,-										
		6,92	3,97	2,38	2,2	0,2	VCGT 070202 FN-ALU	● 24,-										
		6,92	3,97	2,38	2,2	0,4	VCGT 070204 FN-ALU	● 24,-										
VCGT... ALU		11,1	6,35	3,18	2,9	0,2	VCGT 110302-ALU	● 15,90										
		11,1	6,35	3,18	2,9	0,4	VCGT 110304-ALU	● 15,90										
		11,1	6,35	3,18	2,9	0,8	VCGT 110308-ALU	● 15,90										
		16,6	9,52	4,76	4,4	0,4	VCGT 160404-ALU	● 20,60										
		16,6	9,52	4,76	4,4	0,8	VCGT 160408-ALU	● 20,60										
WCGT...ALU MINI		2,7	3,97	1,59	2,2	0,1	WCGT 020101 FN-ALU	● 24,-										
		2,7	3,97	1,59	2,2	0,2	WCGT 020102 FN-ALU	● 24,-										
WCMT MINI		2,7	3,97	1,59	2,2	0,2	WCMT 020102										● 20,10	
		2,7	3,97	1,59	2,2	0,4	WCMT 020104										● 20,10	

INSERTI PER FORATURA

WENDEPLATTEN ZUM BOHREN _DRILLING INSERTS

CODICE ORDINE Bestell-Nr. Order No.	FIGURA Form Figure	 (mm)					DENOMINAZIONE Bezeichnung Designation	NON RIVESTITI Unbeschichte Uncoated			RIVESTITI Beschichtet Coated					
		l	d	s	d1	r		k15	P25	P40	200	P. P300	K300	K400	TIN PVD	TIALN PVD
 	4,0	6,35	1,59	2,25	0,2	WCHX 040102FN-BAL LW610	●	25,40								
	4,0	6,35	1,59	2,25	0,4	WCHX 040104FN-BAL LW610	●	25,40								
	5,0	7,93	1,98	2,80	0,2	WCHX 05T102FN-BAL LW610	●	25,90								
	5,0	7,93	1,98	2,80	0,4	WCHX 05T104FN-BAL LW610	●	25,90								
	5,5	8,93	2,38	2,80	0,2	WCHX 060202FN-BAL LW610	●	25,90								
	5,5	8,93	2,38	2,80	0,4	WCHX 060204FN-BAL LW610	●	25,90								
	7,5	12,00	3,18	3,40	0,4	WCHX 070304FN-BAL LW610	●	26,50								
	7,5	12,00	3,18	3,40	0,8	WCHX 070308FN-BAL LW610	●	26,50								
	9,0	14,29	3,18	4,40	0,4	WCHX 090304FN-BAL LW610	●	27,-								
	9,0	14,29	3,18	4,40	0,8	WCHX 090308FN-BAL LW610	●	27,-								
	10,0	15,87	3,97	5,90	0,4	WCHX 10T304FN-BAL LW610	●	27,-								
	10,0	15,87	3,97	5,90	0,8	WCHX 10T308FN-BAL LW610	●	27,-								
	13,0	21,00	5,56	7,00	0,8	WCHX 130508FN-BAL LW610	●	34,60								
 	4,0	6,35	1,59	2,25	0,2	WCHX 040102EN-BFM LCP25T							●	22,40		
	4,0	6,35	1,59	2,25	0,4	WCHX 040104EN-BFM LCP25T							●	22,40		
	5,0	7,93	1,98	2,80	0,2	WCHX 05T102EN-BFM LCP25T							●	23,70		
	5,0	7,93	1,98	2,80	0,4	WCHX 05T104EN-BFM LCP25T							●	23,70		
	5,5	8,37	2,38	2,80	0,2	WCHX 060202EN-BFM LCP25T							●	23,70		
	5,5	8,37	2,38	2,80	0,4	WCHX 060204EN-BFM LCP25T							●	23,70		
	7,5	12,00	3,18	3,40	0,4	WCHX 070304EN-BFM LCP25T							●	23,70		
	7,5	12,00	3,18	3,40	0,8	WCHX 070308EN-BFM LCP25T							●	23,70		
	9,0	14,29	3,18	4,40	0,4	WCHX 090304EN-BFM LCP25T							●	24,70		
	9,0	14,29	3,18	4,40	0,8	WCHX 090308EN-BFM LCP25T							●	24,70		
	10,0	15,87	3,97	5,90	0,4	WCHX 10T304EN-BFM LCP25T							●	25,40		
	10,0	15,87	3,97	5,90	0,8	WCHX 10T308EN-BFM LCP25T							●	25,40		
	13,0	21,00	5,56	7,00	0,8	WCHX 130508EN-BFM LCP25T							●	31,-		
 	4,0	6,35	1,59	2,25	0,2	WCHX 040102EN-BFM LCM45T						●	22,40			
	4,0	6,35	1,59	2,25	0,4	WCHX 040104EN-BFM LCM45T						●	22,40			
	5,0	7,93	1,98	2,80	0,2	WCHX 05T102EN-BFM LCM45T						●	23,70			
	5,0	7,93	1,98	2,80	0,4	WCHX 05T104EN-BFM LCM45T						●	23,70			
	5,5	8,93	2,38	2,80	0,2	WCHX 060202EN-BFM LCM45T						●	23,70			
	5,5	8,93	2,38	2,80	0,4	WCHX 060204EN-BFM LCM45T						●	23,70			
	7,5	12,00	3,18	3,40	0,4	WCHX 070304EN-BFM LCM45T						●	23,70			
	7,5	12,00	3,18	3,40	0,8	WCHX 070308EN-BFM LCM45T						●	23,70			
	9,0	14,29	3,18	4,40	0,4	WCHX 090304EN-BFM LCM45T						●	24,70			
	9,0	14,29	3,18	4,40	0,8	WCHX 090308EN-BFM LCM45T						●	24,70			
	10,0	15,87	3,97	5,90	0,4	WCHX 10T304EN-BFM LCM45T						●	25,40			
	10,0	15,87	3,97	5,90	0,8	WCHX 10T308EN-BFM LCM45T						●	25,40			
	13,0	21,00	5,56	7,00	0,8	WCHX 130508EN-BFM LCM45T						●	31,-			
 	4,6	4,2	2,1	2,6	0,4	XPMT 042004						●	17,30	○	17,30	
	5,5	5,0	2,9	2,9	0,4	XPMT 052804						●	18,40	○	18,40	
	6,6	6,0	3,5	3,4	0,6	XPMT 063306						●	18,40	○	18,40	
	8,3	7,5	4,2	3,9	0,6	XPMT 074006						●	19,70	○	19,70	
	10,6	9,6	4,7	5,7	0,8	XPMT 094508						●	21,80	○	21,80	
	13,6	12,4	6,0	7,5	1,2	XPMT 125812						●	21,80	○	21,80	
	16,7	15,2	7,0	9,5	1,2	XPMT 156812						●	24,20	○	24,20	
 	4,6	4,2	2,1	2,6	0,4	XPMT 042004 ALU	○	24,30								
	5,5	5,0	2,9	2,9	0,4	XPMT 052804 ALU	○	26,40								
	6,6	6,0	3,5	3,4	0,6	XPMT 063306 ALU	○	27,-								
	8,3	7,5	4,2	3,9	0,6	XPMT 074006 ALU	○	28,-								
	10,6	9,6	4,7	5,7	0,8	XPMT 094508 ALU	○	31,70								
	13,6	12,4	6,0	7,5	1,2	XPMT 125812 ALU	○	33,-								
	16,7	15,2	7,0	9,5	1,2	XPMT 156812 ALU	○	35,40								

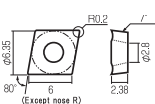
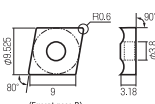
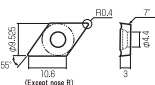
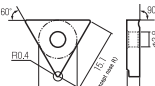
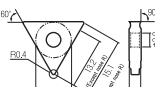
INSERTI NEGATIVI _ NEGATIVE WENDEPLATTEN _ NEGATIVE INSERTS

 CODICE ORDINE Bestell-Nr. Order No.	 (mm)					 DENOMINAZIONE Bezeichnung Designation	 NON RIVESTITI Unbeschichte Uncoated			 RIVESTITI Beschichtet Coated						CERMET	
	l	d	s	d1	r		K15	P25	P40	P200	P300	K300	K400	TIN PVD	TIALN PVD	CBN	PKD
 CNGG	--	12,7	4,76	5,16	0,4	120404-LHC ALU	 19,90										
	--	12,7	4,76	5,16	0,8	120408-LHC ALU	 19,90										
 DNGG	--	12,7	6,35	5,16	0,4	150604-LHC ALU	 19,90										
	--	12,7	6,35	5,16	0,8	150608-LHC ALU	 19,90										
 SNGG	--	12,7	4,76	5,16	0,4	120404-LHC ALU	 19,90										
	--	12,7	4,76	5,16	0,8	120408-LHC ALU	 19,90										
 TNGG	--	9,525	4,76	9,525	0,4	160404-LHC ALU	 19,90										
	--	9,525	4,76	9,525	0,8	160408-LHC ALU	 19,90										
 VNGG	--	9,525	4,76	3,81	0,2	160402-LHC ALU	 19,90										
	--	9,525	4,76	3,81	0,4	160404-LHC ALU	 19,90										
 WNGG	--	12,7	4,76	5,16	0,4	080404-LHC ALU	 19,90										
	--	12,7	4,76	5,16	0,8	080408-LHC ALU	 19,90										

INSERTI CBN/PKD _ CBN/PKD WENDEPLATTEN _ CBN/PKD INSERTS

 CODICE ORDINE Bestell-Nr. Order No.	 (mm)					 DENOMINAZIONE Bezeichnung Designation	 NON RIVESTITI Unbeschichte Uncoated			 RIVESTITI Beschichtet Coated						CERMET	
	l	d	s	d1	r		K15	P25	P40	200	P 300	K300	K400	TIN PVD	TIALN PVD	CBN	PKD
 CDGW MINI	--	--	--	--	--	CDGW 040101 FN CVD 2P										 173,10	
	--	--	--	--	--	CDGW 040101 H65-2C										 120,90	
 DCGW MINI	--	--	--	--	--	DCGW 04T001 FN CVD 2P										 173,10	
	--	--	--	--	--	DCGW 04T001 H65-2C										 120,90	
 VCGW MINI	--	--	--	--	--	VCGW 050101 FN CVD 2P										 173,10	
	--	--	--	--	--	VCGW 050101 H65-2C										 120,90	
 WCGW MINI	--	--	--	--	--	WCGW 020101 FN CVD 3P										 207,80	
	--	--	--	--	--	WCGW 020101 H65-3C										 173,10	

INSERTI NICECUT _ NICECUT WENDEPLATTEN _ CNICECUT INSERTS

CODICE ORDINE Bestell-Nr. Order No.	FIGURA Form Figure	 (mm)					DENOMINAZIONE Bezeichnung Designation	NON RIVESTITI Unbeschichte Uncoated			RIVESTITI Beschichtet Coated						CERMET	
		l	d	s	d1	r		k15	P25	P40	P200	P300	K300	K400	TIN PVD	TIALN PVD	X99	X55
 C22... GUX		6,0	6,35	2,38	2,8	0,2	C22 GUX NK2020	○	40,-									
		6,0	6,35	2,38	2,8	0,2	C22 GUX NK5050							○	51,20			
 C32... GUX		9,0	9,525	3,18	3,8	0,6	C32 GUX NK2020	○	40,-									
		9,0	9,525	3,18	3,8	0,6	C32 GUX NK5050							○	55,70			
 DCET 11X304		10,6	9,525	3,0	4,4	0,4	DCET 11X304							○	102,40			
 T32GSR		16,5	9,525	3,18	3,8	0,4	T32GSR-1R NK2020	○	75,70						○	88,-		
		16,5	9,525	3,18	3,8	0,4	T32GSR-2R NK2020	○	75,70						○	88,-		
		16,5	9,525	3,18	3,8	0,4	T32GSR-3R NK2020	○	75,70						○	88,-		
 N43GXR8		12,7	12,7	4,76	5,2	0,8	N43GXR8-1R NK2020	●	59,60						○	65,80		
		12,7	12,7	4,76	5,2	0,8	N43GXR8-2R NK2020	●	59,60						○	69,10		
		12,7	12,7	4,76	5,2	0,8	N43GXR8-3R NK2020	●	59,60						○	69,10		
		12,7	12,7	4,76	5,2	0,8	N43GXR8-4R NK2020	●	59,60						○	69,10		
		12,7	12,7	4,76	5,2	0,8	N43GXR8-5R NK2020	●	116,40						○	118,70		
		12,7	12,7	4,76	5,2	0,8	N43GXR8-1-2-3-4 NK2020	●	59,60						○	69,10		
 N54GCR		15/20	15/20	4,76	5,2	0,8	N54GCR-5R NK2020	○	86,30						○	100,20		
		15/20	15/20	4,5	5,2	0,8	N54GCR-6R NK2020	○	136,50						○	147,-		
		15/20	15/20	4,5	5,2	0,8	N54GCR-7R NK2020	○	136,50						○	147,-		
		15/20	15/20	4,76	5,2	0,8	N54GCR-8R NK2020	○	86,30						○	100,20		
		15/20	15/20	4,5	5,2	0,8	N54GCR-9R NK2020	○	136,50						○	147,-		
		15/20	15/20	4,76	5,2	0,8	N54GCR-10R NK2020	○	86,30						○	100,20		
 TM32 GUR		15,1	9,525	3,18	3,8	0,4	TM32 GUR HSS	○	67,-									
 TM32 GSR		13,2	9,525	3,18	3,8	0,4	TM32 GSR HSS	○	68,-						○	74,70		
 TXMT		6,543	4,762	2,381	2,3	0,6	TXMT 080206	○	47,40						○	49,70		
		8,925	6,35	3,175	2,8	0,6	TXMT 110306	○	51,90						○	54,10		
		14,4	9,525	3,969	4,4	0,6	TXMT 16T306	○	56,30						○	59,10		
		25,0	15,875	5,556	5,5	0,6	TXMT 270506	○	78,60						○	80,80		



INSERTS	SLIM CHUCK	YES DRILLS	NICECUT	MC DRILLS	GROOVING	MINITOOLS	MICROTOOLS AMS	MOULDMILL	MINIMILL	MILLING
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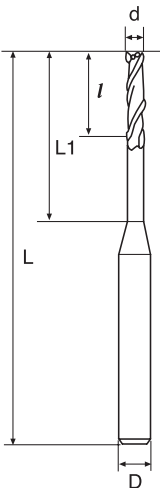


WGK

WGK	INSERTS	SLIM CHUCK	YES DRILLS	NICECUT	MC DRILLS	GROOVING	MINITOLS	MICROTOOLS AMS	MOULDMILL	MINIMILL	MILLING
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SQUARE SERIES-LONG NECK-2 FLUTES

- Micro Grain Carbide
- WC=90 Co=10 HV30=1571 Rupture=3750N/mm² Grain Size=0.6 µm



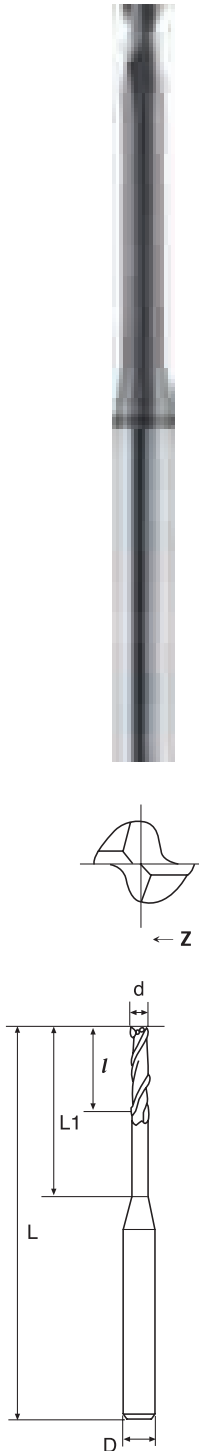
LNT	Diameter	Flute Length	Efficient Length	Full Length	Shank Diameter	Flutes	KG	STOCK	€
d	l	L1	L	D	Z				
LNT05022 AlTiN	0.5	0.75	2	50	4	2	0,010	●	51,50
LNT05042 AlTiN	0.5	0.75	4	50	4	2	0,010	●	51,50
LNT05062 AlTiN	0.5	0.75	6	50	4	2	0,010	●	51,50
LNT06022 AlTiN	0.6	0.9	2	50	4	2	0,010	●	48,-
LNT06042 AlTiN	0.6	0.9	4	50	4	2	0,010	●	48,-
LNT06062 AlTiN	0.6	0.9	6	50	4	2	0,010	●	48,-
LNT07042 AlTiN	0.7	1.1	4	50	4	2	0,010	●	48,-
LNT07062 AlTiN	0.7	1.1	6	50	4	2	0,010	●	48,-
LNT08042 AlTiN	0.8	1.2	4	50	4	2	0,010	●	48,-
LNT08062 AlTiN	0.8	1.2	6	50	4	2	0,010	●	48,-
LNT08082 AlTiN	0.8	1.2	8	50	4	2	0,010	●	48,-
LNT09062 AlTiN	0.9	1.4	6	50	4	2	0,010	●	48,-
LNT09082 AlTiN	0.9	1.4	8	50	4	2	0,010	●	48,-
LNT09102 AlTiN	0.9	1.4	10	50	4	2	0,010	●	48,-
LNT10062 AlTiN	1	1.5	6	50	4	2	0,010	●	38,50
LNT10082 AlTiN	1	1.5	8	50	4	2	0,010	●	38,50
LNT10102 AlTiN	1	1.5	10	50	4	2	0,010	●	38,50
LNT10122 AlTiN	1	1.5	12	50	4	2	0,010	●	38,50
LNT10162 AlTiN	1	1.5	16	50	4	2	0,010	●	38,50
LNT12062 AlTiN	1.2	1.8	6	50	4	2	0,010	●	48,-
LNT12082 AlTiN	1.2	1.8	8	50	4	2	0,010	●	48,-
LNT12102 AlTiN	1.2	1.8	10	50	4	2	0,010	●	48,-
LNT12122 AlTiN	1.2	1.8	12	50	4	2	0,010	●	48,-
LNT14062 AlTiN	1.4	2.1	6	50	4	2	0,010	●	48,-
LNT14102 AlTiN	1.4	2.1	10	50	4	2	0,010	●	48,-
LNT14162 AlTiN	1.4	2.1	16	50	4	2	0,010	●	48,-
LNT15062 AlTiN	1.5	2.3	6	50	4	2	0,010	●	38,50
LNT15082 AlTiN	1.5	2.3	8	50	4	2	0,010	●	38,50
LNT15102 AlTiN	1.5	2.3	10	50	4	2	0,010	●	38,50
LNT15122 AlTiN	1.5	2.3	12	50	4	2	0,010	●	38,50
LNT15142 AlTiN	1.5	2.3	14	50	4	2	0,010	●	38,50
LNT15162 AlTiN	1.5	2.3	16	50	4	2	0,010	●	38,50
LNT15182 AlTiN	1.5	2.3	18	50	4	2	0,010	●	38,50
LNT15202 AlTiN	1.5	2.3	20	50	4	2	0,010	●	38,50
LNT16062 AlTiN	1.6	2.4	6	50	4	2	0,010	●	48,-
LNT16082 AlTiN	1.6	2.4	8	50	4	2	0,010	●	48,-
LNT16102 AlTiN	1.6	2.4	10	50	4	2	0,010	●	48,-
LNT16122 AlTiN	1.6	2.4	12	50	4	2	0,010	●	48,-

Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

Carbon steel, Alloy steel	Pre-hardened steel		High-hardened			Stainless steel	Copper alloy	Aluminum alloy
	~45HRC	~50HRC	~55HRC	~60HRC	~65HRC			
☐	☒	☒	☐	-	-	☐	-	-

SQUARE SERIES-LONG NECK-2 FLUTES

- Micro Grain Carbide
- WC=90 Co=10 HV30=1571 Rupture=3750N/mm² Grain Size=0.6 µm



LNT	Diameter d	Flute Length l	Efficient Length L1	Full Length L	Shank Diameter D	Flutes Z	KG	€
LNT16142 AlTiN	1.6	2.4	14	50	4	2	0,010	● 48,-
LNT16162 AlTiN	1.6	2.4	16	50	4	2	0,010	● 48,-
LNT16182 AlTiN	1.6	2.4	18	50	4	2	0,010	● 48,-
LNT18082 AlTiN	1.8	2.7	8	50	4	2	0,010	● 48,-
LNT18142 AlTiN	1.8	2.7	14	50	4	2	0,010	● 48,-
LNT18202 AlTiN	1.8	2.7	20	50	4	2	0,010	● 48,-
LNT20062 AlTiN	2	3	6	50	4	2	0,010	● 38,50
LNT20082 AlTiN	2	3	8	50	4	2	0,010	● 38,50
LNT20102 AlTiN	2	3	10	50	4	2	0,010	● 38,50
LNT20122 AlTiN	2	3	12	50	4	2	0,010	● 38,50
LNT20142 AlTiN	2	3	14	50	4	2	0,010	● 38,50
LNT20162 AlTiN	2	3	16	50	4	2	0,010	● 38,50
LNT20182 AlTiN	2	3	18	50	4	2	0,010	● 38,50
LNT20202 AlTiN	2	3	20	50	4	2	0,010	● 38,50
LNT25082 AlTiN	2.5	4	8	50	4	2	0,010	● 38,50
LNT25102 AlTiN	2.5	4	10	50	4	2	0,010	● 38,50
LNT25122 AlTiN	2.5	4	12	50	4	2	0,010	● 38,50
LNT25142 AlTiN	2.5	4	14	50	4	2	0,010	● 38,50
LNT25162 AlTiN	2.5	4	16	50	4	2	0,010	● 38,50
LNT25202 AlTiN	2.5	4	20	50	4	2	0,010	● 38,50
LNT30082 AlTiN	3	4.5	8	50	6	2	0,020	● 42,-
LNT30102 AlTiN	3	4.5	10	50	6	2	0,020	● 42,-
LNT30122 AlTiN	3	4.5	12	50	6	2	0,020	● 42,-
LNT30162 AlTiN	3	4.5	16	60	6	2	0,020	● 48,50
LNT30202 AlTiN	3	4.5	20	60	6	2	0,020	● 48,50
LNT30252 AlTiN	3	4.5	25	75	6	2	0,020	● 48,50
LNT35122 AlTiN	3.5	6	12	50	6	2	0,020	● 42,-
LNT35162 AlTiN	3.5	6	16	60	6	2	0,020	● 51,-
LNT35202 AlTiN	3.5	6	20	75	6	2	0,020	● 51,-
LNT35252 AlTiN	3.5	6	25	75	6	2	0,020	● 51,-
LNT35302 AlTiN	3.5	6	30	75	6	2	0,020	● 51,-
LNT40122 AlTiN	4	6	12	50	6	2	0,020	● 42,-
LNT40162 AlTiN	4	6	16	60	6	2	0,020	● 51,-
LNT40202 AlTiN	4	6	20	75	6	2	0,020	● 51,-
LNT40252 AlTiN	4	6	25	75	6	2	0,020	● 51,-
LNT40302 AlTiN	4	6	30	75	6	2	0,020	● 51,-
LNT40352 AlTiN	4	6	35	75	6	2	0,020	● 51,-

Application: ■ Recommend □ Suitable x Not Recommend

Carbon steel, Alloy steel	Pre-harden steel ~45HRC	~50HRC	High-hardened ~55HRC	~60HRC	~65HRC	Stainless steel	Copper alloy	Aluminum alloy
□	■	■	□	-	-	□	-	-

● Disponibile - Lieferbar - On stock ○ A richiesta - Auf Anfrage - On request

2023/24



135

MILLING

MINIMILL

MOULDMILL

MICROTOOLS
AMS

MINITOOLS

GROOVING

MC DRILLS

NICECUT

YES DRILLS

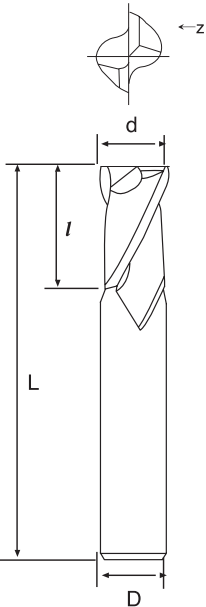
SLIM CHUCK

INSERTS

WGM

SQUARE SERIES- 2 FLUTES

- Micro Grain Carbide
- WC=90 Co=10 HV30=1571 Rupture=3750N/mm² Grain Size=0.6 μm



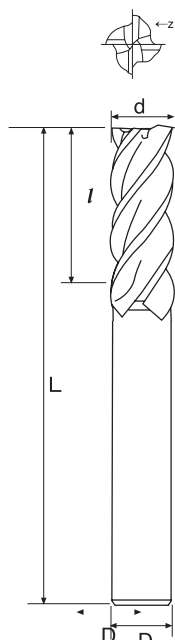
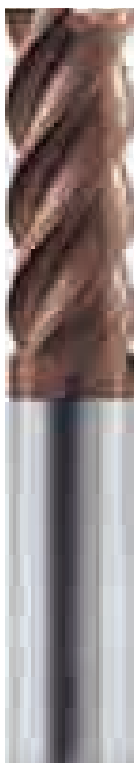
SSE MSE SE	Diameter	Flute Length	Full Length	Shank Diameter	Flutes	KG	STOCK	€
	d	l	L	D	Z			
SSE0102 TiSiN	1	3	50	3	2	0,020	○	20,-
MSE0102 TiSiN	1	3	50	4	2	0,020	●	20,-
SSE0152 TiSiN	1.5	4	50	3	2	0,020	○	20,-
MSE0152 TiSiN	1.5	4	50	4	2	0,020	●	20,-
SSE0202 TiSiN	2	6	50	3	2	0,020	○	20,-
MSE0202 TiSiN	2	6	50	4	2	0,020	●	20,-
SSE0252 TiSiN	2.5	8	50	3	2	0,020	○	20,-
MSE0252 TiSiN	2.5	8	50	4	2	0,020	●	20,-
SSE0302 TiSiN	3	8	50	3	2	0,020	○	20,-
MSE0302 TiSiN	3	8	50	4	2	0,020	●	20,-
MSE0352 TiSiN	3.5	10	50	4	2	0,020	●	20,-
MSE0402 TiSiN	4	11	50	4	2	0,020	●	20,-
SE0102 TiSiN	1	3	50	6	2	0,020	●	27,50
SE0152 TiSiN	1.5	4	50	6	2	0,020	●	27,50
SE0202 TiSiN	2	6	50	6	2	0,020	●	27,50
SE0252 TiSiN	2.5	8	50	6	2	0,020	●	27,50
SE0302 TiSiN	3	8	50	6	2	0,020	●	27,50
SE0352 TiSiN	3.5	10	50	6	2	0,020	●	27,50
SE0402 TiSiN	4	11	50	6	2	0,020	●	27,50
SE0452 TiSiN	4.5	13	50	6	2	0,020	●	27,50
SE0502 TiSiN	5	13	50	6	2	0,020	●	27,50
SE0552 TiSiN	5.5	13	50	6	2	0,020	●	27,50
SE0602 TiSiN	6	16	50	6	2	0,020	●	27,50
SE0652 TiSiN	6.5	16	60	8	2	0,040	●	50,50
SE0702 TiSiN	7	16	60	8	2	0,040	●	50,50
SE0752 TiSiN	7.5	19	60	8	2	0,040	●	50,50
SE0802 TiSiN	8	20	60	8	2	0,040	●	50,50
SE0852 TiSiN	8.5	20	75	10	2	0,080	●	72,50
SE0902 TiSiN	9	20	75	10	2	0,080	●	72,50
SE0952 TiSiN	9.5	25	75	10	2	0,080	●	72,50
SE1002 TiSiN	10	25	75	10	2	0,080	●	72,50
SE1052 TiSiN	10.5	25	75	12	2	0,100	●	99,50
SE1102 TiSiN	11	30	75	12	2	0,110	●	99,50
SE1152 TiSiN	11.5	30	75	12	2	0,110	●	99,50
SE1202 TiSiN	12	32	75	12	2	0,110	●	99,50
SE1402 TiSiN	14	40	100	16	2	0,240	●	225,50
SE1602 TiSiN	16	40	100	16	2	0,290	●	225,50
SE1802 TiSiN	18	45	100	20	2	0,360	●	289,50
SE2002 TiSiN	20	45	100	20	2	0,390	●	289,50

Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

Carbon steel, Alloy steel	Pre-hardened steel		High-hardened			Stainless steel	Copper alloy	Aluminum alloy
	~45HRC	~50HRC	~55HRC	~60HRC	~65HRC			
☐	☒	☒	☐	-	-	☐	-	-

SQUARE SERIES-4 FLUTES

- Micro Grain Carbide
- WC=90 Co=10 HV30=1571 Rupture=3750N/mm² Grain Size=0.6



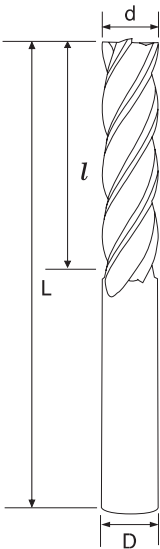
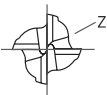
SSE MSE SE	Diameter d	Flute Length l	Full Length L	Shank Diameter D	Flutes Z	KG	€
SSE0104 TiSiN	1	3	50	3	4	0,020	20,-
MSE0104 TiSiN	1	3	50	4	4	0,020	20,-
SSE0154 TiSiN	1.5	4	50	3	4	0,020	20,-
MSE0154 TiSiN	1.5	4	50	4	4	0,020	20,-
SSE0204 TiSiN	2	6	50	3	4	0,020	20,-
MSE0204 TiSiN	2	6	50	4	4	0,020	20,-
SSE0254 TiSiN	2.5	8	50	3	4	0,020	20,-
MSE0254 TiSiN	2.5	8	50	4	4	0,020	20,-
SSE0304 TiSiN	3	8	50	3	4	0,020	20,-
MSE0304 TiSiN	3	8	50	4	4	0,020	20,-
MSE0354 TiSiN	3.5	10	50	4	4	0,020	20,-
MSE0404 TiSiN	4	11	50	4	4	0,020	20,-
SE0104 TiSiN	1	3	50	6	4	0,020	27,50
SE0154 TiSiN	1.5	4	50	6	4	0,020	27,50
SE0204 TiSiN	2	6	50	6	4	0,020	27,50
SE0254 TiSiN	2.5	8	50	6	4	0,020	27,50
SE0304 TiSiN	3	8	50	6	4	0,020	27,50
SE0354 TiSiN	3.5	10	50	6	4	0,020	27,50
SE0404 TiSiN	4	11	50	6	4	0,020	27,50
SE0454 TiSiN	4.5	13	50	6	4	0,020	27,50
SE0504 TiSiN	5	13	50	6	4	0,020	27,50
SE0554 TiSiN	5.5	13	50	6	4	0,020	27,50
SE0604 TiSiN	6	16	50	6	4	0,040	27,50
SE0654 TiSiN	6.5	16	60	8	4	0,040	50,50
SE0704 TiSiN	7	16	60	8	4	0,040	50,50
SE0754 TiSiN	7.5	19	60	8	4	0,040	50,50
SE0804 TiSiN	8	20	60	8	4	0,040	50,50
SE0854 TiSiN	8.5	20	75	10	4	0,080	72,50
SE0904 TiSiN	9	20	75	10	4	0,080	72,50
SE0954 TiSiN	9.5	25	75	10	4	0,080	72,50
SE1004 TiSiN	10	30	75	10	4	0,080	72,50
SE1054 TiSiN	10.5	30	75	12	4	0,100	99,50
SE1104 TiSiN	11	30	75	12	4	0,110	99,50
SE1154 TiSiN	11.5	30	75	12	4	0,110	99,50
SE1204 TiSiN	12	32	75	12	4	0,110	99,50
SE1404 TiSiN	14	40	100	16	4	0,240	225,50
SE1604 TiSiN	16	40	100	16	4	0,290	225,50
SE1804 TiSiN	18	45	100	20	4	0,360	289,50
SE2004 TiSiN	20	45	100	20	4	0,390	289,50

Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

Carbon steel, Alloy steel	Pre-harden steel ~45HRC	~50HRC	High-hardened ~55HRC	~60HRC	~65HRC	Stainless steel	Copper alloy	Aluminum alloy
☐	☒	☒	☐	-	-	☐	-	-

SQUARE SERIES-LONG FLUTE-4 FLUTES

- Micro Grain Carbide
- WC=90 Co=10 HV30=1571 Rupture=3750N/mm² Grain Size=0.6 m

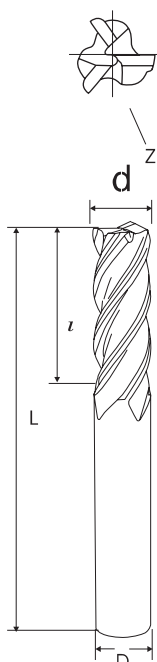


LET	Diameter	Flute Length	Full Length	Shank Diameter	Flutes			
	d	l	L	D	Z	KG	STOCK	€
LET0104 TiSiN	1	6	50	4	4	0,020	●	33,50
LET0154 TiSiN	1.5	9	50	4	4	0,020	●	33,50
LET0204 TiSiN	2	12	50	4	4	0,020	●	33,50
LET0254 TiSiN	2.5	12	50	4	4	0,020	●	33,50
LET0304 TiSiN	3	15	60	6	4	0,020	●	37,-
LET0354 TiSiN	3,5	15	60	6	4	0,020	●	37,-
LET0404 TiSiN	4	20	75	6	4	0,020	●	47,-
LET0454 TiSiN	4.5	20	75	6	4	0,030	●	47,-
LET0504 TiSiN	5	25	75	6	4	0,030	●	47,-
LET0554 TiSiN	5.5	25	75	6	4	0,030	●	47,-
LET0604 TiSiN	6	30	75	6	4	0,030	●	47,-
LET0704 TiSiN	7	30	100	8	4	0,060	●	75,-
LET0804 TiSiN	8	40	100	8	4	0,070	●	75,-
LET0904 TiSiN	9	40	100	10	4	0,090	●	95,50
LET1004 TiSiN	10	40	100	10	4	0,110	●	95,50
LET1104 TiSiN	11	40	100	12	4	0,140	●	122,-
LET1204 TiSiN	12	50	100	12	4	0,140	●	122,-
LET1404 TiSiN	14	50	150	16	4	0,350	●	322,-
LET1604 TiSiN	16	60	150	16	4	0,370	●	322,-
LET2004 TiSiN	20	90	200	20	4	0,720	●	652,50

Application: ☒ Recommend ☐ Suitable x Not Recommend								
Carbon steel, Alloy steel	Pre-harden steel ~45HRC	~50HRC	~55HRC	~60HRC	~65HRC	Stainless steel	Copper alloy	Aluminum alloy
☐	☒	☒	☐	-	-	☐	-	-

SQUARE SERIES-FLUTE ANGLE 45°-3 FLUTES

- Micro Grain Carbide
- WC=88 Co=12 HRA=92.4 Rupture=3950N/mm² Grain Size=0.5 m



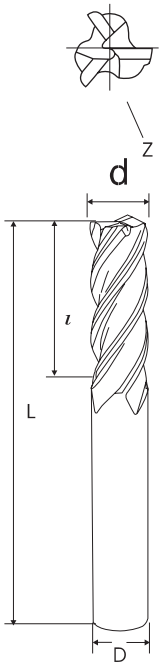
MPE PE	Diameter	Flute Length	Full Length	Shank Diameter	Flutes		
	d	l	L	D	Z	KG	€
MPE0103 TiSiN	1	3	50	4	3	0,010	● 20,-
MPE0153 TiSiN	1.5	4	50	4	3	0,020	● 20,-
MPE0203 TiSiN	2	6	50	4	3	0,020	● 20,-
MPE0253 TiSiN	2.5	8	50	4	3	0,020	● 20,-
MPE3303 TiSiN	3	8	50	3	3	0,020	● 20,-
MPE0303 TiSiN	3	8	50	4	3	0,020	● 20,-
MPE0353 TiSiN	3.5	10	50	4	3	0,020	● 20,-
MPE0403 TiSiN	4	11	50	4	3	0,020	● 20,-
PE0103 TiSiN	1	3	50	6	3	0,020	● 27,50
PE0153 TiSiN	1.5	4	50	6	3	0,020	● 27,50
PE0203 TiSiN	2	6	50	6	3	0,020	● 27,50
PE0253 TiSiN	2.5	8	50	6	3	0,020	● 27,50
PE0303 TiSiN	3	8	50	6	3	0,020	● 27,50
PE0353 TiSiN	3.5	10	50	6	3	0,020	● 27,50
PE0403 TiSiN	4	11	50	6	3	0,020	● 27,50
PE0453 TiSiN	4.5	13	50	6	3	0,020	● 27,50
PE0503 TiSiN	5	13	50	6	3	0,020	● 27,50
PE0553 TiSiN	5.5	13	50	6	3	0,020	● 27,50
PE0603 TiSiN	6	16	50	6	3	0,020	● 27,50
PE0653 TiSiN	6.5	16	60	8	3	0,040	● 50,50
PE0703 TiSiN	7	16	60	8	3	0,040	● 50,50
PE0753 TiSiN	7.5	19	60	8	3	0,040	● 50,50
PE0803 TiSiN	8	20	60	8	3	0,040	● 50,50
PE0853 TiSiN	8.5	20	75	10	3	0,080	● 72,50
PE0903 TiSiN	9	20	75	10	3	0,080	● 72,50
PE0953 TiSiN	9.5	25	75	10	3	0,080	● 72,50
PE1003 TiSiN	10	30	75	10	3	0,080	● 72,50
PE1053 TiSiN	10.5	30	75	12	3	0,100	● 99,50
PE1103 TiSiN	11	30	75	12	3	0,110	● 99,50
PE1153 TiSiN	11.5	30	75	12	3	0,110	● 99,50
PE1203 TiSiN	12	32	75	12	3	0,110	● 99,50
PE1403 TiSiN	14	40	100	16	3	0,240	● 225,50
PE1603 TiSiN	16	40	100	16	3	0,290	● 225,50
PE1803 TiSiN	18	45	100	20	3	0,360	● 289,50
PE2003 TiSiN	20	45	100	20	3	0,390	● 289,50

Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

Carbon steel, Alloy steel	Pre-harden steel ~45HRC	~50HRC	High-hardened ~55HRC	~60HRC	~65HRC	Stainless steel	Copper alloy	Aluminum alloy
☐	☒	☒	☐	-	-	☐	-	-

SQUARE SERIES-FLUTE ANGLE 45°-4 FLUTES

- Micro Grain Carbide
- WC=90 Co=10 HV30=1571 Rupture=3750N/mm² Grain Size=0.6 m



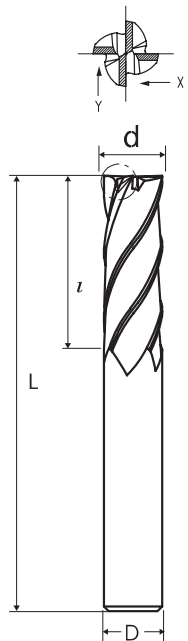
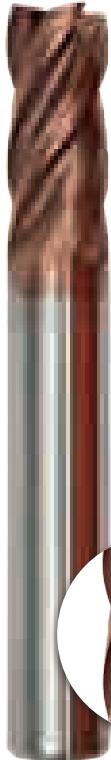
MPE PE	Diameter	Flute Length	Full Length	Shank Diameter	Flutes	KG	STOCK	€
	d	l	L	D	Z			
MPE0104 TiSiN	1	3	50	4	4	0,010	●	20,-
MPE0154 TiSiN	1.5	4	50	4	4	0,020	●	20,-
MPE0204 TiSiN	2	6	50	4	4	0,020	●	20,-
MPE0254 TiSiN	2.5	8	50	4	4	0,020	●	20,-
MPE3304 TiSiN	3	8	50	3	4	0,020	●	20,-
MPE0304 TiSiN	3	8	50	4	4	0,020	●	20,-
MPE0354 TiSiN	3.5	10	50	4	4	0,020	●	20,-
MPE0404 TiSiN	4	11	50	4	4	0,020	●	20,-
PE0104 TiSiN	1	3	50	6	4	0,020	●	27,50
PE0154 TiSiN	1.5	4	50	6	4	0,020	●	27,50
PE0204 TiSiN	2	6	50	6	4	0,020	●	27,50
PE0254 TiSiN	2.5	8	50	6	4	0,020	●	27,50
PE0304 TiSiN	3	8	50	6	4	0,020	●	27,50
PE0354 TiSiN	3.5	10	50	6	4	0,020	●	27,50
PE0404 TiSiN	4	11	50	6	4	0,020	●	27,50
PE0454 TiSiN	4.5	13	50	6	4	0,020	●	27,50
PE0504 TiSiN	5	13	50	6	4	0,020	●	27,50
PE0554 TiSiN	5.5	13	50	6	4	0,020	●	27,50
PE0604 TiSiN	6	16	50	6	4	0,020	●	27,50
PE0654 TiSiN	6.5	16	60	8	4	0,040	●	50,50
PE0704 TiSiN	7	16	60	8	4	0,040	●	50,50
PE0754 TiSiN	7.5	19	60	8	4	0,040	●	50,50
PE0804 TiSiN	8	20	60	8	4	0,040	●	50,50
PE0854 TiSiN	8.5	20	75	10	4	0,080	●	72,50
PE0904 TiSiN	9	20	75	10	4	0,080	●	72,50
PE0954 TiSiN	9.5	25	75	10	4	0,080	●	72,50
PE1004 TiSiN	10	30	75	10	4	0,080	●	72,50
PE1054 TiSiN	10.5	30	75	12	4	0,100	●	99,50
PE1104 TiSiN	11	30	75	12	4	0,110	●	99,50
PE1154 TiSiN	11.5	30	75	12	4	0,110	●	99,50
PE1204 TiSiN	12	32	75	12	4	0,110	●	99,50
PE1404 TiSiN	14	40	100	16	4	0,240	●	225,50
PE1604 TiSiN	16	40	100	16	4	0,290	●	225,50
PE1804 TiSiN	18	45	100	20	4	0,360	●	289,50
PE2004 TiSiN	20	45	100	20	4	0,390	●	289,50

Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

Carbon steel, Alloy steel	Pre-hardened steel		High-hardened			Stainless steel	Copper alloy	Aluminum alloy
	~45HRC	~50HRC	~55HRC	~60HRC	~65HRC			
☐	☒	☒	☒	☐	-	☐	-	-

SQUARE SERIES - FLUTE ANGLE 35° / 38° - 4 FLUTES

- Micro Grain Carbide
- WC=90 Co=10 HV30=1571 Rupture=3750N/mm² Grain Size=0.6 m



DH	Diameter d	Flute Length l	Full Length L	Shank Diameter D	Flutes Z	KG	€
DH0104 TiSiN	1	3	50	6	4	0,020	27,50
DH0154 TiSiN	1,5	4	50	6	4	0,020	27,50
DH0204 TiSiN	2	6	50	6	4	0,020	27,50
DH0304 TiSiN	3	8	50	6	4	0,020	27,50
DH0404 TiSiN	4	11	50	6	4	0,020	27,50
DH0604 TiSiN	6	16	50	6	4	0,020	27,50
DH0804 TiSiN	8	20	60	8	4	0,040	50,50
DH1004 TiSiN	10	30	75	10	4	0,080	72,50
DH1204 TiSiN	12	32	75	12	4	0,110	99,50
DH1604 TiSiN	16	40	100	16	4	0,290	225,50
DH2004 TiSiN	20	45	100	20	4	0,390	289,50

Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

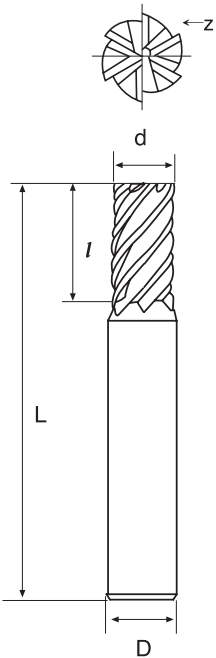
Carbon steel, Alloy steel	Pre-harden steel ~45HRC	~50HRC	High-hardened ~55HRC	~60HRC	~65HRC	Stainless steel	Copper alloy	Aluminun alloy
☐	☒	☒	☐	-	-	☐	-	-

SQUARE SERIES - FOR HARD MATERIAL - MULTIPLE FLUTE

- Ultra Fine Micro Grain Carbide
- WC=87 Co=12 HRA=92.1 Rupture=3800N/mm’ Grain Size=0.4 m



UVT	Diameter	Flute Length	Full Length	Shank Diameter	Flutes	KG	STOCK	€
	d	l	L	D	Z			
UVT0204 ALTiN	2	4	50	4	4	0,010	○	50,-
UVT0304 ALTiN	3	6	50	6	4	0,020	○	49,-
UVT0404 ALTiN	4	8	50	6	4	0,020	○	49,-
UVT0506 ALTiN	5	13	50	6	6	0,020	○	49,-
UVT0606 ALTiN	6	16	50	6	6	0,020	○	49,-
UVT0806 ALTiN	8	20	60	8	6	0,050	○	68,50
UVT1006 ALTiN	10	30	75	10	6	0,090	○	99,50
UVT1206 ALTiN	12	32	75	12	6	0,120	○	128,-
UVT1606 ALTiN	16	40	100	16	6	0,400	○	277,50
UVT2008 ALTiN	20	45	100	20	8	0,600	○	465,50
UVT2508 ALTiN	25	45	100	25	8	0,940	○	779,50
ULVT0606 ALTiN	6	25	75	6	6	0,020	○	59,-
ULVT0806 ALTiN	8	30	75	8	6	0,050	○	72,50
ULVT1006 ALTiN	10	40	100	10	6	0,090	○	122,-
ULVT1206 ALTiN	12	45	100	12	6	0,120	○	153,-
ULVT1606 ALTiN	16	65	150	16	6	0,400	○	359,-
ULVT2008 ALTiN	20	75	150	20	8	0,600	○	665,-
ULVT2508 ALTiN	25	80	150	25	8	0,940	○	916,-



Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

Carbon steel, Alloy steel	Pre-harden steel	High-hardened					Stainless steel	Copper alloy	Aluminun alloy
	~45HRC	~50HRC	~55HRC	~60HRC	~65HRC				
☐	☒	☐	☐	☐	-		☐	-	-

SQUARE SERIES - FOR HARD MATERIAL - MULTIPLE FLUTE

- Super Ultra Fine Micro Grain Carbide
- WC=91 Co=9 HRA=93.2 Rupture=4000N/mm² Grain Size=0.2µm

200
Nano

HRC
65

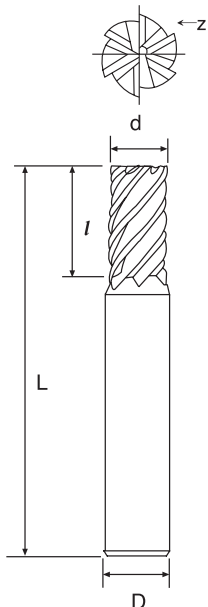
45°

51



SFULVT

	Diameter d	Flute Length l	Full Length L	Shank Diameter D	Flutes Z	KG	€
SFUVT0606 nACo	6	15	60	6	6	0,020	86,50
SFUVT0806 nACo	8	20	60	8	6	0,050	117,50
SFUVT1006 nACo	10	25	75	10	6	0,090	188,50
SFUVT1206 nACo	12	30	75	12	6	0,120	215,50
SFUVT1606 nACo	16	45	100	16	6	0,400	455,-
SFUVT2008 nACo	20	45	100	20	8	0,600	721,50
SFUVT2508 nACo	25	45	100	25	8	0,940	944,-
SFULVT0606 nACo	6	25	75	6	6	0,020	98,-
SFULVT0806 nACo	8	35	100	8	6	0,050	136,-
SFULVT1006 nACo	10	45	100	10	6	0,090	215,50
SFULVT1206 nACo	12	50	100	12	6	0,120	245,50
SFULVT1606 nACo	16	65	150	16	6	0,400	518,-
SFULVT2008 nACo	20	75	150	20	8	0,600	978,50
SFULVT2508 nACo	25	80	150	25	8	0,940	1266,-



Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

Carbon steel, Alloy steel	Pre-harden steel ~45HRC	~50HRC	High-hardened ~55HRC	~60HRC	~65HRC	Stainless steel	Copper alloy	Aluminum alloy
☐	☐	☐	☒	☒	☒	☐	-	-

● Disponibile - Lieferbar - On stock ○ A richiesta - Auf Anfrage - On request

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YES DRILLS

SLIM CHUCK

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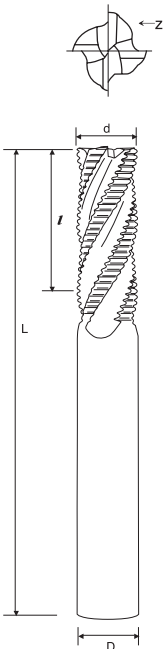
WGK

FINE PITCH ROUGHING SERIES

- Micro Grain Carbide
- WC=88 Co=12 HRA=92.4 Rupture=3950N/mm² Grain Size=0.51Jm



NTA	Diameter	Flute Length	Full Length	Shank Diameter	Flutes			
	d	l	L	D	Z	KG	STOCK	€
NTA0504 ALTiN	5	13	50	6	4	0,020	○	64,50
NTA0604 ALTiN	6	16	50	6	4	0,020	○	64,50
NTA0704 ALTiN	7	16	60	8	4	0,040	○	79,50
NTA0804 ALTiN	8	19	60	8	4	0,040	○	79,50
NTA0904 ALTiN	9	25	75	10	4	0,080	○	108,-
NTA1004 ALTiN	10	25	75	10	4	0,080	○	108,-
NTA1104 ALTiN	11	30	75	12	4	0,110	○	132,50
NTA1204 ALTiN	12	30	75	12	4	0,110	○	132,50
NTA1404 ALTiN	14	35	100	16	4	0,260	○	326,-
NTA1504 ALTiN	15	35	100	16	4	0,270	○	326,-
NTA1604 ALTiN	16	35	100	16	4	0,280	○	326,-
NTA2004 ALTiN	20	45	100	20	4	0,400	○	434,-



Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

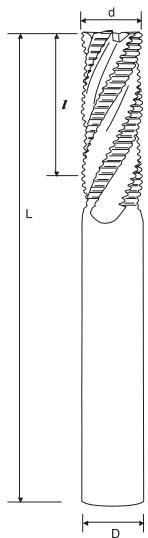
Carbon steel, Alloy steel	Pre-harden steel		High-hardened			Stainless steel	Copper alloy	Aluminun alloy
	~45HRC	~50HRC	~55HRC	~60HRC	~65HRC			
☒	☒	☐	☐	☐	-	☒	☐	☐

ROUGHING SERIES

- Micro Grain Carbide
- WC=88 Co=12 HRA=92.4 Rupture=3950N/mm² Grain Size=0.51Jm



XTA	Diameter d	Flute Length l	Full Length L	Shank Diameter D	Flutes Z	KG	€
XTA0504 AlTiN	5	13	50	6	4	0,020	64,50
XTA0604 AlTiN	6	16	50	6	4	0,020	64,50
XTA0704 AlTiN	7	16	60	8	4	0,040	82,50
XTA0804 AlTiN	8	19	60	8	4	0,040	82,50
XTA0904 AlTiN	9	25	75	10	4	0,080	110,-
XTA1004 AlTiN	10	25	75	10	4	0,080	110,-
XTA1104 AlTiN	11	30	75	12	4	0,110	132,50
XTA1204 AlTiN	12	30	75	12	4	0,110	132,50
XTA1604 AlTiN	16	35	100	16	4	0,280	327,50
XTA2004 AlTiN	20	45	100	20	4	0,400	434,-



Application: ☒ Recommend ☐ Suitable ☐ Not Recommend

Carbon steel, Alloy steel	Pre-harden steel ~45HRC	~50HRC	High-hardened ~55HRC	~60HRC	~65HRC	Stainless steel	Copper alloy	Aluminum alloy
☒	☒	☐	☐	☐	-	☒	☐	☐

● Disponibile - Lieferbar - On stock ○ A richiesta - Auf Anfrage - On request

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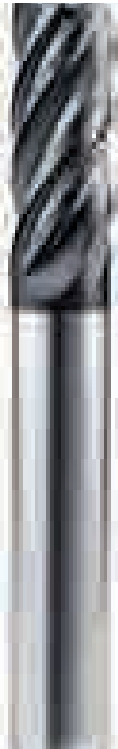
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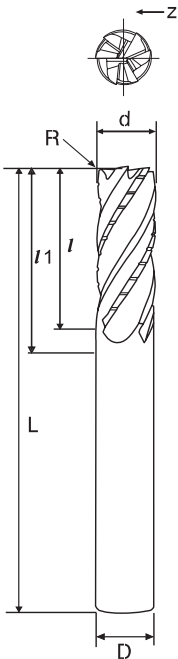
KKF MULTI FLUTES HIGH EFFICIENCY

- Ultra Micro Grain Carbide
- WC=87 Co=12 HRA=92.1 Rupture=3800N/mm² Grain Size=0.41Jm



KKF	Diameter	Flute Length	Full Length	Shank Diameter	Flutes			
	d	l	L	D	Z	KG	STOCK	€
KKF0602	6	16	50	6	2	0,020	○	79,50
KKF0802	8	19	60	8	2	0,040	○	112,50
KKF1002	10	25	75	10	2	0,080	○	149,50
KKF1202	12	30	75	12	2	0,080	○	183,-
KKF1602	16	35	110	16	2	0,280	○	434,50
KKF2002	20	45	110	20	2	0,400	○	653,-

KKF	Diameter	Flute Length	Full Length	Shank Diameter	Flutes			
	d	l	L	D	Z	KG	STOCK	€
KKF0603	6	16	50	6	3	0,020	○	79,50
KKF0803	8	19	60	8	3	0,040	○	112,50
KKF1003	10	25	75	10	3	0,080	○	149,50
KKF1203	12	30	75	12	3	0,110	○	183,-
KKF1603	16	35	110	16	3	0,280	○	434,50
KKF2003	20	45	110	20	3	0,400	○	653,-

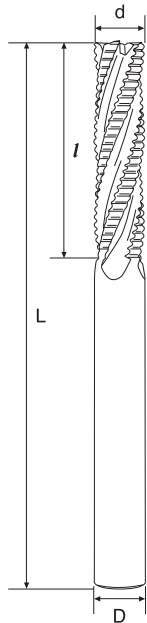
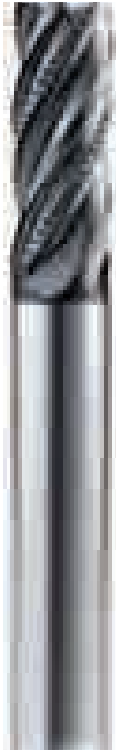


Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

Carbon steel, Alloy steel	Pre-hardened steel		High-hardened			Stainless steel	Copper alloy	Aluminun alloy
	~45HRC	~50HRC	~55HRC	~60HRC	~65HRC			
☒	☒	☒	☐	☐	-	-	-	-

KKR MULTI FLUTES HIGH EFFICIENCY

- Ultra Micro Grain Carbide
- WC=87 Co=12 HRA=92.1 Rupture=3800N/mm² Grain Size=0.41µm



KKR	Diameter d	Flute Length l	Full Length L	Shank Diameter D	Flutes Z	KG	€
KKR0602	6	16	50	6	2	0,020	79,50
KKR0802	8	19	60	8	2	0,040	112,50
KKR1002	10	25	75	10	2	0,080	149,50
KKR1202	12	30	75	12	2	0,110	183,-
KKR1602	16	35	110	16	2	0,280	434,50
KKR2002	20	45	110	20	2	0,400	653,-
KKR2502	25	50	110	25	2	0,670	851,-

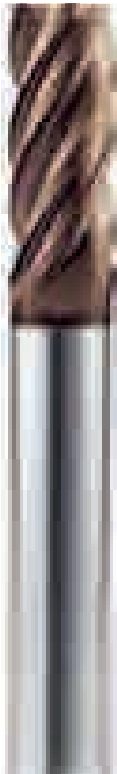
KKR	Diameter d	Flute Length l	Full Length L	Shank Diameter D	Flutes Z	KG	€
KKR0603	6	16	50	6	3	0,020	79,50
KKR0803	8	19	60	8	3	0,040	112,50
KKR1003	10	25	75	10	3	0,080	149,50
KKR1203	12	30	75	12	3	0,110	183,-
KKR1603	16	35	110	16	3	0,280	434,50
KKR2003	20	45	110	20	3	0,400	653,-
KKR2503	25	50	110	25	3	0,670	851,-

Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

Carbon steel, Alloy steel	Pre-harden steel ~45HRC	~50HRC	High-hardened ~55HRC	~60HRC	~65HRC	Stainless steel	Copper alloy	Aluminum alloy
☒	☒	☒	☐	☐	-	-	-	-

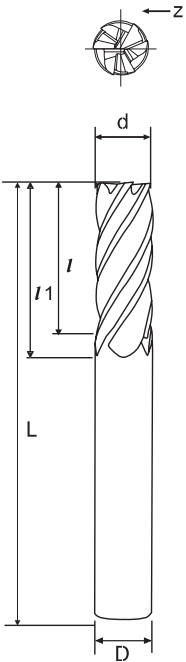
KKM MULTI FLUTES HIGH EFFICIENCY

- Ultra Micro Grain Carbide
- WC=87 Co=12 HRA=92.1 Rupture=3800N/mm² Grain Size=0.41Jm



KKM	Diameter	Flute Length	Full Length	Shank Diameter	Flutes		STOCK	€
	d	l	L	D	Z	KG		
KKM0602	6	16	50	6	2	0,020	○	79,50
KKM0802	8	19	60	8	2	0,040	○	112,50
KKM1002	10	22	75	10	2	0,080	○	149,50
KKM1202	12	26	75	12	2	0,110	○	158,50
KKM1602	16	35	110	16	2	0,280	○	357,-
KKM2002	20	40	110	20	2	0,400	○	576,50
KKM2502	25	45	110	25	2	0,670	○	780,-

KKM	Diameter	Flute Length	Full Length	Shank Diameter	Flutes		STOCK	€
	d	l	L	D	Z	KG		
KKM0603	6	16	50	6	3	0,020	○	79,50
KKM0803	8	19	60	8	3	0,040	○	112,50
KKM1003	10	25	75	10	3	0,080	○	156,50
KKM1203	12	30	75	12	3	0,110	○	166,-
KKM1603	16	40	110	16	3	0,280	○	385,-
KKM2003	20	45	110	20	3	0,400	○	612,-
KKM2503	25	50	110	25	3	0,670	○	809,50



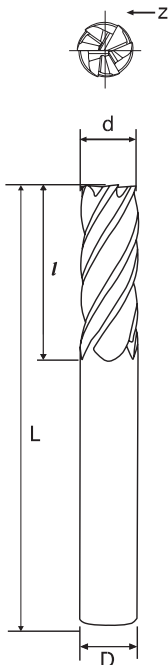
KKM	Diameter	Flute Length	Full Length	Shank Diameter	Flutes		STOCK	€
	d	l	L	D	Z	KG		
KKM1004	10	25	75	10	4	0,080	○	156,50
KKM1204	12	30	75	12	4	0,110	○	166,-
KKM1604	16	40	110	16	4	0,280	○	385,-
KKM2004	20	45	110	20	4	0,400	○	612,-
KKM2504	25	50	110	25	4	0,670	○	809,50

Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

Carbon steel, Alloy steel	Pre-harden steel		High-hardened			Stainless steel	Copper alloy	Aluminun alloy
	~45HRC	~50HRC	~55HRC	~60HRC	~65HRC			
☒	☒	☒	☒	☐	-	-	-	-

KKH MULTI FLUTES HIGH EFFICIENCY

- Ultra Micro Grain Carbide
- WC=87 Co=12 HRA=92.1 Rupture=3800N/mm² Grain Size=0.41µm



KKH	Diameter d	Flute Length l	Full Length L	Shank Diameter D	Flutes Z	KG	€
KKH0602	6	16	50	6	2	0,020	58,-
KKH0802	8	19	60	8	2	0,040	79,50
KKH1002	10	22	75	10	2	0,080	88,-
KKH1202	12	26	75	12	2	0,110	154,-
KKH1602	16	35	110	16	2	0,280	357,-
KKH2002	20	40	110	20	2	0,400	576,50
KKH2502	25	45	110	25	2	0,670	780,-

KKH	Diameter d	Flute Length l	Full Length L	Shank Diameter D	Flutes Z	KG	€
KKH0603	6	16	50	6	3	0,020	60,-
KKH0803	8	19	60	8	3	0,040	88,-
KKH1003	10	25	75	10	3	0,080	133,50
KKH1203	12	30	75	12	3	0,110	166,-
KKH1603	16	40	110	16	3	0,280	385,-
KKH2003	20	45	110	20	3	0,400	612,-
KKH2503	25	50	110	25	3	0,670	809,50

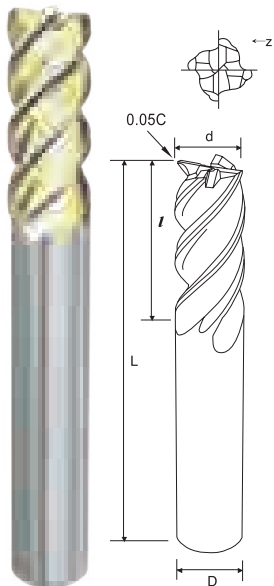
KKH	Diameter d	Flute Length l	Full Length L	Shank Diameter D	Flutes Z	KG	€
KKH1004	10	25	75	10	4	0,080	133,50
KKH1204	12	30	75	12	4	0,110	166,-
KKH1604	16	40	110	16	4	0,280	385,-
KKH2004	20	45	110	20	4	0,400	612,-
KKH2504	25	50	110	25	4	0,670	809,50

Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

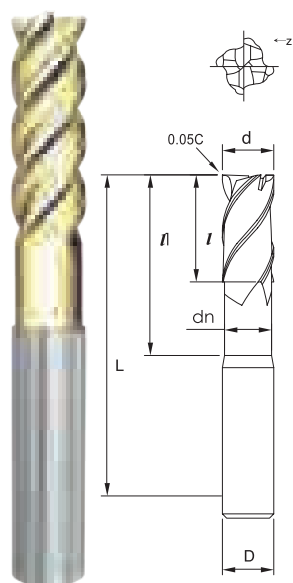
Carbon steel, Alloy steel	Pre-harden steel ~45HRC	~50HRC	High-hardened ~55HRC	~60HRC	~65HRC	Stainless steel	Copper alloy	Aluminun alloy
☒	☒	☒	☒	☐	-	-	-	-

KKM MULTI FLUTES HIGH EFFICIENCY

- Ultra Micro Grain Carbide
- WC=87 Co=12 HRA=92.1 Rupture=3800N/mm² Grain Size=0.41Jm

400
PLUSHRC
▶ 45

PVE	Diameter	Flute Length	Full Length	Shank Diameter	Flutes	Corner Chamfer Width	KG	STOCK	€
PVE1T0404	4	8	50	6	4	0.2	0,021	○	38,-
PVE1T0504	5	10	50	6	4	0.25	0,021	○	38,-
PVE1T0604	6	12	50	6	4	0.3	0,021	○	38,-
PVE1T0804	8	19	60	8	4	0.4	0,047	○	52,-
PVE1T1004	10	23	75	10	4	0.5	0,090	○	82,50
PVE1T1204	12	27	75	12	4	0.6	0,118	○	109,-
PVE1T1604	16	32	100	16	4	0.8	0,270	○	258,50
PVE1T2004	20	39	100	20	4	1	0,390	○	394,-



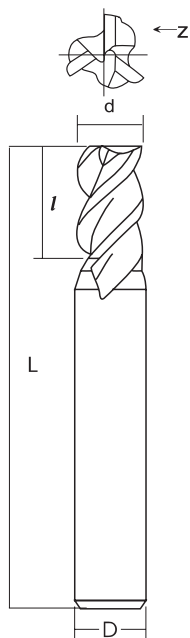
PNVE	Diameter	Flute Length	Efficient Leng	Full Length	Shank Diameter	Flutes	Corner Chamfer Width	Neck Diameter	KG	STOCK	€
PNVE1T0404	4	6	22	75	6	4	0.2	3.7	0,026	○	57,-
PNVE1T0504	5	8	24	75	6	4	0.25	4.6	0,026	○	57,-
PNVE1T0604	6	9	26	75	6	4	0.3	5.5	0,026	○	57,-
PNVE1T0804	8	12	35	100	8	4	0.4	7.4	0,073	○	75,50
PNVE1T1004	10	15	43	120	10	4	0.5	9.2	0,140	○	116,-
PNVE1T1204	12	18	51	120	12	4	0.6	11	0,240	○	150,-
PNVE1T1604	16	24	59	120	16	4	0.8	15	0,360	○	273,50

Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

Pre-hardened steel	High-hardened	carbon steel, Alloy steel	Stainless steel	Titanium alloy	Nickel/Inconel alloy	Copper alloy	Aluminum alloy
<30HRC	30-40HRC	40-50HRC	50-65HRC				
-	■	□	-	-	■	■	-

HPSS SUPER PLUGGING+SLOTING

- Ultra Micro Grain Carbide
- WC=87 Co=12 HRA=92.1 Rupture=3800N/mm² Grain Size=0.41µm



HPSS	Diameter d	Flute Length l	Full Length L	Shank Diameter D	Flutes Z	KG	€
HPSS0200	2	4	50	6	3	0,020	66,-
HPSS0250	2.5	5	50	6	3	0,020	66,-
HPSS0300	3	6	50	6	3	0,020	68,50
HPSS0350	3.5	8	50	6	3	0,020	68,50
HPSS0400	4	8	50	6	3	0,020	71,50
HPSS0450	4.5	10	50	6	3	0,020	72,50
HPSS0500	5	10	50	6	3	0,020	77,-
HPSS0550	5.5	13	50	6	3	0,020	72,50
HPSS0600	6	13	60	6	3	0,020	77,-
HPSS0650	6.5	16	60	8	3	0,020	119,-
HPSS0700	7	16	60	8	3	0,040	101,50
HPSS0750	7.5	16	60	8	3	0,040	115,50
HPSS0800	8	19	60	8	3	0,040	101,50
HPSS0850	8.5	19	75	10	3	0,080	130,-
HPSS0900	9	19	75	10	3	0,080	130,-
HPSS0950	9.5	19	75	10	3	0,080	148,50
HPSS1000	10	22	75	10	3	0,090	143,50
HPSS1100	11	22	75	12	3	0,110	177,50
HPSS1200	12	26	100	12	3	0,150	180,-
HPSS1300	13	26	100	14	3	0,180	239,50
HPSS1400	14	26	100	14	3	0,200	213,50
HPSS1500	15	26	100	16	3	0,230	413,50
HPSS1600	16	30	100	16	3	0,260	392,-
HPSS2000	20	32	100	20	3	0,380	543,-

Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

Carbon steel, Alloy steel	Pre-harden steel ~45HRC	~50HRC	High-hardened ~55HRC	~60HRC	~65HRC	Stainless steel	Copper alloy	Aluminum alloy
☒	☒	☐	-	-	-	-	-	-

● Disponibile - Lieferbar - On stock

○ A richiesta - Auf Anfrage - On request

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MC DRILLS

NICECUT

YES DRILLS

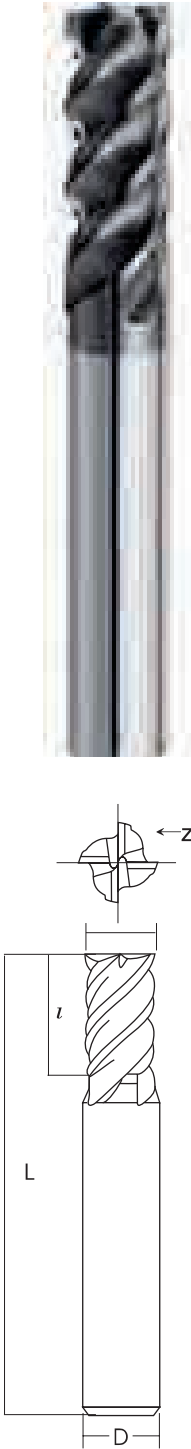
SLIM CHUCK

INSERTS

WGK

FHPS 4 FLUTES • SHORT – (HEAVY- DUTY OPERATION TYPE)

- Ultra Micro Grain Carbide
- WC=87 Co=12 HRA=92.1 Rupture=3800N/mm² Grain Size=0.41µm



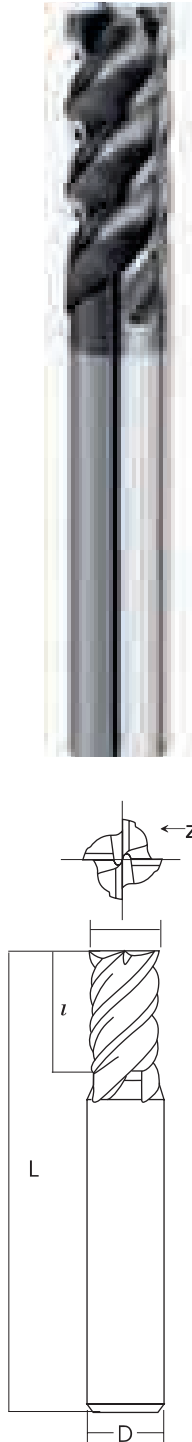
FHPS	Diameter d	Flute Length l	Full Length L	Shank Diameter D	Flutes Z	KG	STOCK	€
FHPS020	2	3	50	6	4	0,020	●	66,-
FHPS021	2.1	3.2	50	6	4	0,020	●	66,-
FHPS022	2.2	3.3	50	6	4	0,020	●	66,-
FHPS023	2.3	3.5	50	6	4	0,020	●	66,-
FHPS024	2.4	3.6	50	6	4	0,020	●	66,-
FHPS025	2.5	3.8	50	6	4	0,020	●	66,-
FHPS026	2.6	3.9	50	6	4	0,020	●	66,-
FHPS027	2.7	4.1	50	6	4	0,020	●	66,-
FHPS028	2.8	4.2	50	6	4	0,020	●	66,-
FHPS029	2.9	4.4	50	6	4	0,020	●	66,-
FHPS030	3	4.5	50	6	4	0,020	●	66,-
FHPS031	3.1	4.7	50	6	4	0,020	●	68,50
FHPS032	3.2	4.8	50	6	4	0,020	●	68,50
FHPS033	3.3	5	50	6	4	0,020	●	68,50
FHPS034	3.4	5.1	50	6	4	0,020	●	68,50
FHPS035	3.5	5.3	50	6	4	0,020	●	68,50
FHPS036	3.6	5.4	50	6	4	0,020	●	68,50
FHPS037	3.7	5.6	50	6	4	0,020	●	68,50
FHPS038	3.8	5.7	50	6	4	0,020	●	68,50
FHPS039	3.9	5.9	50	6	4	0,020	●	68,50
FHPS040	4	6	50	6	4	0,020	●	68,50
FHPS041	4.1	6.2	50	6	4	0,020	●	72,50
FHPS042	4.2	6.3	50	6	4	0,020	●	72,50
FHPS043	4.3	6.5	50	6	4	0,020	●	72,50
FHPS044	4.4	6.6	50	6	4	0,020	●	72,50
FHPS045	4.5	6.8	50	6	4	0,020	●	72,50
FHPS046	4.6	6.9	50	6	4	0,020	●	72,50
FHPS047	4.7	7.1	50	6	4	0,020	●	72,50
FHPS048	4.8	7.2	50	6	4	0,020	●	72,50
FHPS049	4.9	7.4	50	6	4	0,020	●	72,50
FHPS050	5	7.5	50	6	4	0,020	●	72,50
FHPS051	5.1	7.7	50	6	4	0,020	●	77,-
FHPS052	5.2	7.8	50	6	4	0,020	●	77,-
FHPS053	5.3	8	50	6	4	0,020	●	77,-
FHPS054	5.4	8.1	50	6	4	0,020	●	77,-
FHPS055	5.5	8.3	50	6	4	0,020	●	77,-

Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

Carbon steel, Alloy steel	Pre-harden steel		High-hardened			Stainless steel	Copper alloy	Aluminum alloy
	~45HRC	~50HRC	~55HRC	~60HRC	~65HRC			
☒	☒	☒	☐	☐	-	-	-	-

HPSS SUPER PLUGGING+SLOTING

- Ultra Micro Grain Carbide
- WC=87 Co=12 HRA=92.1 Rupture=3800N/mm² Grain Size=0.4 m



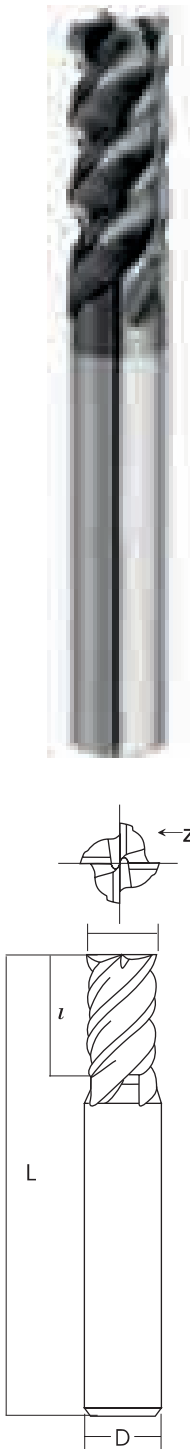
FHPS	Diameter d	Flute Length l	Full Length L	Shank Diameter D	Flutes Z	KG	€
FHPS056	5.6	8.4	50	6	4	0,020	77,-
FHPS057	5.7	8.6	50	6	4	0,020	77,-
FHPS058	5.8	8.7	50	6	4	0,020	77,-
FHPS059	5.9	8.9	50	6	4	0,020	77,-
FHPS060	6	9	50	6	4	0,020	77,-
FHPS061	6.1	9.2	60	8	4	0,040	112,50
FHPS062	6.2	9.3	60	8	4	0,040	112,50
FHPS063	6.3	9.5	60	8	4	0,040	112,50
FHPS064	6.4	9.6	60	8	4	0,040	112,50
FHPS065	6.5	9.8	60	8	4	0,040	112,50
FHPS066	6.6	9.9	60	8	4	0,040	112,50
FHPS067	6.7	10.1	60	8	4	0,040	112,50
FHPS068	6.8	10.2	60	8	4	0,040	112,50
FHPS069	6.9	10.4	60	8	4	0,040	112,50
FHPS070	7	10.5	60	8	4	0,040	112,50
FHPS071	7.1	10.7	60	8	4	0,040	122,-
FHPS072	7.2	10.8	60	8	4	0,040	122,-
FHPS073	7.3	11	60	8	4	0,040	122,-
FHPS074	7.4	11.1	60	8	4	0,040	122,-
FHPS075	7.5	11.3	60	8	4	0,040	122,-
FHPS076	7.6	11.4	60	8	4	0,040	122,-
FHPS077	7.7	11.6	60	8	4	0,040	122,-
FHPS078	7.8	11.7	60	8	4	0,040	122,-
FHPS079	7.9	11.9	60	8	4	0,040	122,-
FHPS080	8	12	60	8	4	0,040	122,-
FHPS081	8.1	12.2	75	10	4	0,080	140,50
FHPS082	8.2	12.3	75	10	4	0,080	140,50
FHPS083	8.3	12.5	75	10	4	0,080	140,50
FHPS084	8.4	12.6	75	10	4	0,080	140,50
FHPS085	8.5	12.8	75	10	4	0,080	140,50
FHPS086	8.6	12.9	75	10	4	0,080	140,50
FHPS087	8.7	13.1	75	10	4	0,080	140,50
FHPS088	8.8	13.2	75	10	4	0,080	140,50
FHPS089	8.9	13.4	75	10	4	0,080	140,50
FHPS090	9	13.5	75	10	4	0,080	140,50
FHPS091	9.1	13.7	75	10	4	0,080	166,-

Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

Carbon steel, Alloy steel	Pre-hardened steel ~45HRC	~50HRC	High-hardened ~55HRC	~60HRC	~65HRC	Stainless steel	Copper alloy	Aluminum alloy
☒	☒	☒	☐	☐	-	-	-	-

FHPS 4 FLUTES • SHORT – (HEAVY- DUTY OPERATION TYPE)

• Ultra Micro Grain Carbide
• WC=87 Co=12 HRA=92.1 Rupture=3800N/mm² Grain Size=0.41Jm



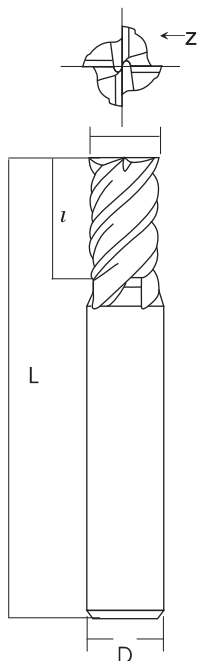
FHPS	Diameter	Flute Length	Full Length	Shank Diameter	Flutes			
	d	l	L	D	Z	KG	STOCK	€
FHPS092	9.2	13.8	75	10	4	0,080	●	166,-
FHPS093	9.3	14	75	10	4	0,080	●	166,-
FHPS094	9.4	14.1	75	10	4	0,080	●	166,-
FHPS095	9.5	14.3	75	10	4	0,080	●	166,-
FHPS096	9.6	14.4	75	10	4	0,080	●	166,-
FHPS097	9.7	14.6	75	10	4	0,080	●	166,-
FHPS098	9.8	14.7	75	10	4	0,090	●	166,-
FHPS099	9.9	14.9	75	10	4	0,090	●	166,-
FHPS100	10	15	75	10	4	0,100	●	166,-
FHPS105	10.5	15.8	100	12	4	0,120	●	190,-
FHPS110	11	16.5	100	12	4	0,150	●	190,-
FHPS115	11.5	17.3	100	12	4	0,160	●	190,-
FHPS120	12	18	100	12	4	0,160	●	190,-
FHPS125	12.5	18.8	100	14	4	0,180	●	220,50
FHPS130	13	19.5	100	14	4	0,200	●	220,50
FHPS135	13.5	20.3	100	14	4	0,250	●	220,50
FHPS140	14	21	100	14	4	0,260	●	220,50
FHPS145	14.5	21.8	100	16	4	0,280	●	409,-
FHPS150	15	22.5	100	16	4	0,280	●	409,-
FHPS155	15.5	23.3	100	16	4	0,290	●	409,-
FHPS160	16	24	100	16	4	0,290	●	409,-
FHPS170	17	25.5	100	20	4	0,310	●	509,50
FHPS180	18	27	100	20	4	0,330	●	509,50
FHPS190	19	28.5	100	20	4	0,350	●	509,50
FHPS200	20	30	100	20	4	0,370	●	509,50

Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

Carbon steel, Alloy steel	Pre-harden steel		High-hardened			Stainless steel	Copper alloy	Aluminun alloy
	~45HRC	~50HRC	~55HRC	~60HRC	~65HRC			
☒	☒	☒	☐	☐	-	-	-	-

UMG - CR- FHP 4 FLUTES • SHORT WITH CORNER – RADIUS (HEAVY- DUTY OPERATION TYPE)

- Ultra Micro Grain Carbide
- WC=87 Co=12 HRA=92.1 Rupture=3800N/mm² Grain Size=0.41µm



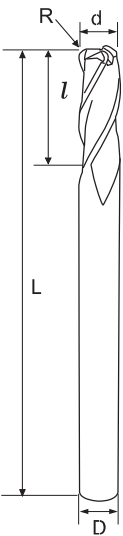
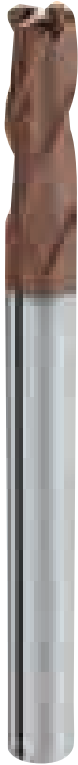
CRFHP	Diameter	Corner Radius	Flute Length	Full Length	Shank Diameter	Flutes	KG	€
	d	R	l	L	D	Z		
CRFHP0302	3	0.2	8	60	6	4	0,020	● 89,50
CRFHP0305	3	0.5	8	60	6	4	0,020	● 89,50
CRFHP0402	4	0.2	11	60	6	4	0,020	● 92,-
CRFHP0405	4	0.5	11	60	6	4	0,020	● 92,-
CRFHP0410	4	1	11	60	6	4	0,020	● 92,-
CRFHP0502	5	0.2	13	60	6	4	0,020	● 96,50
CRFHP0505	5	0.5	13	60	6	4	0,020	● 96,50
CRFHP0510	5	1	13	60	6	4	0,020	● 96,50
CRFHP0603	6	0.3	13	60	6	4	0,020	● 99,50
CRFHP0605	6	0.5	13	60	6	4	0,020	● 99,50
CRFHP0610	6	1	13	60	6	4	0,020	● 99,50
CRFHP0803	8	0.3	19	60	8	4	0,040	● 120,-
CRFHP0805	8	0.5	19	60	8	4	0,050	● 120,-
CRFHP0810	8	1	19	60	8	4	0,040	● 120,-
CRFHP0815	8	1.5	19	60	8	4	0,040	● 120,-
CRFHP0820	8	2	19	60	8	4	0,040	● 120,-
CRFHP1003	10	0.3	22	75	10	4	0,090	● 158,50
CRFHP1005	10	0.5	22	75	10	4	0,080	● 158,50
CRFHP1010	10	1	22	75	10	4	0,090	● 158,50
CRFHP1015	10	1.5	22	75	10	4	0,080	● 158,50
CRFHP1020	10	2	22	75	10	4	0,080	● 158,50
CRFHP1030	10	3	22	75	10	4	0,080	● 158,50
CRFHP1205	12	0.5	26	100	12	4	0,160	● 193,50
CRFHP1210	12	1	26	100	12	4	0,150	● 193,50
CRFHP1215	12	1.5	26	100	12	4	0,150	● 193,50
CRFHP1220	12	2	26	100	12	4	0,160	● 193,50
CRFHP1230	12	3	26	100	12	4	0,160	● 193,50
CRFHP1610	16	1	35	100	16	4	0,170	● 396,-
CRFHP1615	16	1.5	35	100	16	4	0,200	● 396,-
CRFHP1620	16	2	35	100	16	4	0,290	● 396,-
CRFHP1630	16	3	35	100	16	4	0,290	● 396,-
CRFHP2010	20	1	40	100	20	4	0,330	● 559,50
CRFHP2015	20	1.5	40	100	20	4	0,360	● 559,50
CRFHP2020	20	2	40	100	20	4	0,390	● 559,50
CRFHP2030	20	3	40	100	20	4	0,410	● 559,50

Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

Carbon steel, Alloy steel	Pre-harden steel ~45HRC	~50HRC	High-hardened ~55HRC	~60HRC	~65HRC	Stainless steel	Copper alloy	Aluminum alloy
■	■	■	□	□	-	-	-	-

CORNER RADIUS SERIES - 3 FLUTES

- Micro Grain Carbide
- WC=88 Co=12 HRA=92.4 Rupture=3950N/mm² Grain Size=0.5 μm



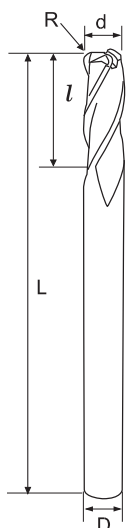
SURTA	Diameter	Radius of Ball Nose	Flute Length	Full Length	Shank Diameter	Flutes	KG	STOCK	€
	d	R	l	L	D	Z			
SURTA0200203 TiSiN	2	0.2	6	50	4	3	0,010	○	51,50
SURTA0200253 TiSiN	2	0.25	6	50	4	3	0,010	○	51,50
SURTA0200303 TiSiN	2	0.3	6	50	4	3	0,010	○	51,50
SURTA0200503 TiSiN	2	0.5	6	50	4	3	0,010	○	51,50
SURTA0300203 TiSiN	3	0.2	10	50	3	3	0,010	○	51,50
SURTA0300303 TiSiN	3	0.3	10	50	3	3	0,010	○	51,50
SURTA0300503 TiSiN	3	0.5	10	50	3	3	0,010	○	51,50
SURTA0301003 TiSiN	3	1	10	50	3	3	0,010	○	51,50
SURTA4300203 TiSiN	3	0.2	10	50	4	3	0,110	○	51,50
SURTA4300253 TiSiN	3	0.25	10	50	4	3	0,110	○	51,50
SURTA4300303 TiSiN	3	0.3	10	50	4	3	0,110	○	51,50
SURTA4300503 TiSiN	3	0.5	10	50	4	3	0,110	○	51,50
SURTA4300753 TiSiN	3	0.75	10	50	4	3	0,110	○	51,50
SURTA4301003 TiSiN	3	1	10	50	4	3	0,110	○	51,50
SURTA0400203 TiSiN	4	0.2	13	60	4	3	0,010	○	51,50
SURTA0400253 TiSiN	4	0.25	13	60	4	3	0,010	○	51,50
SURTA0400303 TiSiN	4	0.3	13	60	4	3	0,010	○	51,50
SURTA0400503 TiSiN	4	0.5	13	60	4	3	0,020	○	51,50
SURTA0400753 TiSiN	4	0.75	13	60	4	3	0,020	○	51,50
SURTA0401003 TiSiN	4	1	13	60	4	3	0,020	○	64,50
SURTA0500203 TiSiN	5	0.2	15	60	5	3	0,020	○	64,50
SURTA0500253 TiSiN	5	0.25	15	60	5	3	0,020	○	64,50
SURTA0500303 TiSiN	5	0.3	15	60	5	3	0,020	○	64,50
SURTA0500503 TiSiN	5	0.5	15	60	5	3	0,020	○	64,50
SURTA0500753 TiSiN	5	0.75	15	60	5	3	0,020	○	64,50
SURTA0501003 TiSiN	5	1	15	60	5	3	0,030	○	64,50
SURTA0600203 TiSiN	6	0.2	16	70	6	3	0,030	○	68,50
SURTA0600253 TiSiN	6	0.25	16	70	6	3	0,030	○	68,50
SURTA0600303 TiSiN	6	0.3	16	70	6	3	0,030	○	68,50

Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

Carbon steel, Alloy steel	Pre-hardened steel		High-hardened			Stainless steel	Copper alloy	Aluminum alloy
	~45HRC	~50HRC	~55HRC	~60HRC	~65HRC			
☒	☒	☐	☐	☐	-	☒	☐	☐

CORNER RADIUS SERIES - 3 FLUTES

- Micro Grain Carbide
- WC=88 Co=12 HRA=92. 4 Rupture= 3950N/mm² Grain Size=0 .5 m



SURTA	Diameter	Radius of Ball Nose	Flute Length	Full Length	Shank Diameter	Flutes	KG	€
	d	R	l	L	D	Z		
SURTA0600503 TiSiN	6	0.5	16	70	6	3	0,030	68,50
SURTA0600753 TiSiN	6	0.75	16	70	6	3	0,030	68,50
SURTA0601003 TiSiN	6	1	16	70	6	3	0,030	68,50
SURTA0601253 TiSiN	6	1.25	16	70	6	3	0,030	68,50
SURTA0601503 TiSiN	6	1.5	16	70	6	3	0,050	68,50
SURTA0800253 TiSiN	8	0.25	23	70	8	3	0,050	91,-
SURTA0800303 TiSiN	8	0.3	23	70	8	3	0,050	91,-
SURTA0800503 TiSiN	8	0.5	23	70	8	3	0,050	91,-
SURTA0800753 TiSiN	8	0.75	23	70	8	3	0,050	91,-
SURTA0801003 TiSiN	8	1	23	70	8	3	0,050	91,-
SURTA0801253 TiSiN	8	1.25	23	70	8	3	0,050	91,-
SURTA0801503 TiSiN	8	1.5	23	70	8	3	0,090	91,-
SURTA0802003 TiSiN	8	2	23	70	8	3	0,090	91,-
SURTA1000253 TiSiN	10	0.25	25	80	10	3	0,090	113,50
SURTA1000303 TiSiN	10	0.3	25	80	10	3	0,090	113,50
SURTA1000503 TiSiN	10	0.5	25	80	10	3	0,090	113,50
SURTA1000753 TiSiN	10	0.75	25	80	10	3	0,090	113,50
SURTA1001003 TiSiN	10	1	25	80	10	3	0,090	113,50
SURTA1001253 TiSiN	10	1.25	25	80	10	3	0,090	113,50
SURTA1001503 TiSiN	10	1.5	25	80	10	3	0,110	113,50
SURTA1002003 TiSiN	10	2	25	80	10	3	0,110	113,50
SURTA1002503 TiSiN	10	2.5	25	80	10	3	0,110	113,50
SURTA1200303 TiSiN	12	0.3	30	80	12	3	0,110	155,50
SURTA1200503 TiSiN	12	0.5	30	80	12	3	0,110	155,50
SURTA1201003 TiSiN	12	1	30	80	12	3	0,110	155,50
SURTA1201253 TiSiN	12	1.25	30	80	12	3	0,110	155,50
SURTA1201503 TiSiN	12	1.5	30	80	12	3	0,110	155,50
SURTA1202003 TiSiN	12	2	30	80	12	3	0,110	155,50
SURTA1202503 TiSiN	12	2.5	30	80	12	3	0,110	155,50
SURTA1203003 TiSiN	12	3	30	80	12	3	0,110	155,50

Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

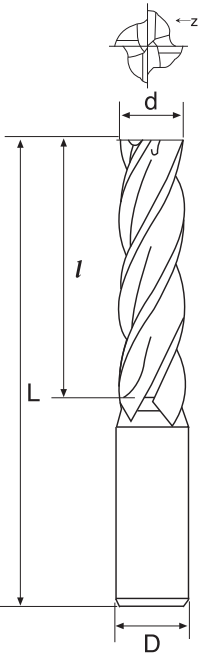
Carbon steel, Alloy steel	Pre-hardened steel		High-hardened			Stainless steel	Copper alloy	Aluminum alloy
	~45HRC	~50HRC	~55HRC	~60HRC	~65HRC			
☒	☒	☐	☐	☐	-	☒	☐	☐

SUS STAINLESS STEEL EXPERT

- Micro Grain Carbide
- WC=88 Co=12 HRA=92.4 Rupture=3950N/mm² Grain Size=0.5 m



SUS	Diameter	Flute Length	Full Length	Shank Diameter	Flutes			
	d	l	L	D	Z	KG	STOCK	€
SUS0104	1	3	50	4	4	0,020	○	28,50
SUS0154	1.5	4	50	4	4	0,020	○	28,50
SUS0204	2	6	50	4	4	0,040	○	28,50
SUS0254	2.5	8	50	4	4	0,040	○	28,50
SUS0304	3	9	50	4	4	0,080	○	28,50
SUS6304	3	9	50	6	4	0,600	○	60,-
SUS0404	4	11	50	4	4	0,080	○	28,50
SUS6404	4	11	50	6	4	0,600	○	95,50
SUS0504	5	13	50	6	4	0,110	○	36,-
SUS0604	6	16	50	6	4	0,110	○	36,-
SUS0804	8	20	60	8	4	0,280	○	61,-
SUS1004	10	30	75	10	4	0,400	○	82,50
SUS1204	12	32	75	12	4	0,400	○	120,-

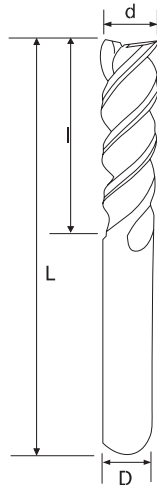


Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

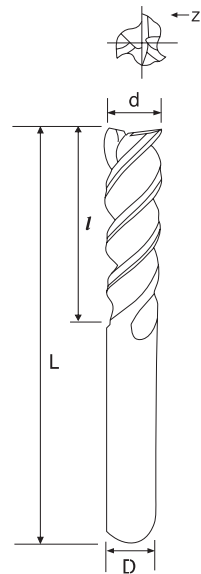
Carbon steel, Alloy steel	Pre-hardened steel ~45HRC	High-hardened				Stainless steel	Copper alloy	Aluminun alloy
		~50HRC	~55HRC	~60HRC	~65HRC			
☐	☐	-	-	-	-	☒	-	-

U-TYPE ALUMINUM

- Micro Grain Carbide
- WC=90 Co=10 HV30=1571 Rupture=3750N/mm² Grain Size=0.6µm



AUE	Diameter	Flute Length	Full Length	Shank Diameter	Flutes	KG		€
	d	l	L	D	Z			
AUE0253	2.5	8	50	6	3	0,020	○	28,50
AUE0303	3	9	50	6	3	0,020	○	28,50
AUE0403	4	12	50	6	3	0,020	○	28,50
AUE0503	5	15	50	6	3	0,020	○	28,50
AUE0603	6	18	50	6	3	0,020	○	28,50
AUE0803	8	20	60	8	3	0,050	○	59,-
AUE1003	10	30	75	10	3	0,090	○	86,50
AUE1203	12	32	75	12	3	0,130	○	116,50
AUE1603	16	45	100	16	3	0,300	○	270,-
AUE2003	20	45	100	20	3	0,400	○	417,50
AUEL0603	6	30	75	6	3	0,020	○	42,-
AUEL0803	8	40	100	8	3	0,050	○	88,-
AUEL1003	10	42	100	10	3	0,090	○	129,-
AUEL1203	12	52	100	12	3	0,180	○	173,-



S-AUE	Diameter	Flute Length	Full Length	Shank Diameter	Flutes	KG		€
	d	l	L	D	Z			
S-AUE0603 TB	6	10	50	6	3	0,021	○	54,-
S-AUE0803 TB	8	13	60	8	3	0,047	○	91,50
S-AUE1003 TB	10	16	75	10	3	0,090	○	128,-
S-AUE1203 TB	12	19	75	12	3	0,118	○	165,50

Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

Carbon steel, Alloy steel	Pre-harden steel ~45HRC	~50HRC	High-hardened ~55HRC	~60HRC	~65HRC	Stainless steel	Copper alloy	Aluminum alloy
-	-	-	-	-	-	-	□	■

● Disponibile - Lieferbar - On stock

○ A richiesta - Auf Anfrage - On request

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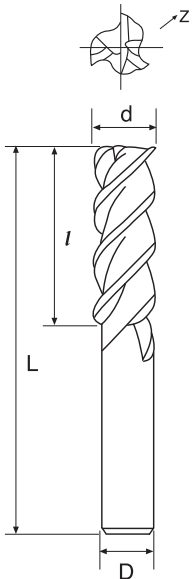
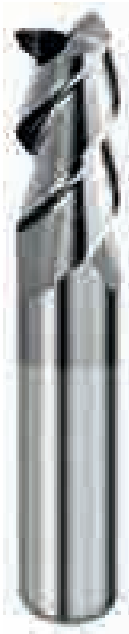
SLIM CHUCK

INSERTS

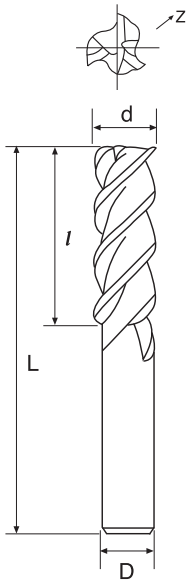
WGK

SQUARE SERIES - FOR ALUMINUM - 3 FLUTES

- Micro Grain Carbide
- WC=90 Co=10 HV30=1571 Rupture=3750N/mm² Grain Size=0.6 m



AET	Diameter	Flute Length	Full Length	Shank Diameter	Flutes		STOCK	€
	d	l	L	D	Z	KG		
AET0103 TB	1	3	50	4	3	0,020	●	67,50
AET0123 TB	1.2	4	50	4	3	0,020	●	77,-
AET0153 TB	1.5	4	50	4	3	0,020	●	77,-
AET0183 TB	1.8	5	50	4	3	0,020	●	77,-
AET0203 TB	2	6	50	4	3	0,020	●	67,50
AET0303 TB	3	8	50	6	3	0,020	●	67,50
AET0403 TB	4	10	50	6	3	0,020	●	67,50
AET0503 TB	5	13	50	6	3	0,020	●	67,50
AET0603 TB	6	15	50	6	3	0,020	●	67,50
AET0803 TB	8	20	60	8	3	0,060	●	113,50
AET1003 TB	10	25	75	10	3	0,080	●	161,50
AET1203 TB	12	30	75	12	3	0,080	●	195,50
AET1603 TB	16	42	100	16	3	0,100	●	348,-
AET2003 TB	20	52	100	20	3	0,120	●	585,50
AET2503 TB	25	62	125	25	3	0,150	●	1064,-



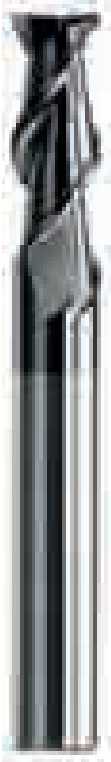
AEL	Diameter	Flute Length	Full Length	Shank Diameter	Flutes		STOCK	€
	d	l	L	D	Z	KG		
AEL50303 TB	3	12	60	6	3	0,020	○	75,-
AEL50403 TB	4	16	60	6	3	0,020	○	75,-
AEL50503 TB	5	20	60	6	3	0,020	○	75,-
AEL50603 TB	6	25	75	6	3	0,040	○	86,50
AEL50803 TB	8	32	75	8	3	0,080	○	133,50
AEL51003 TB	10	45	100	10	3	0,110	○	190,-
AEL51203 TB	12	45	100	12	3	0,260	○	234,-
AEL51603 TB	16	65	150	16	3	0,360	○	617,50
AEL52003 TB	20	75	150	20	3	0,670	○	798,-

Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

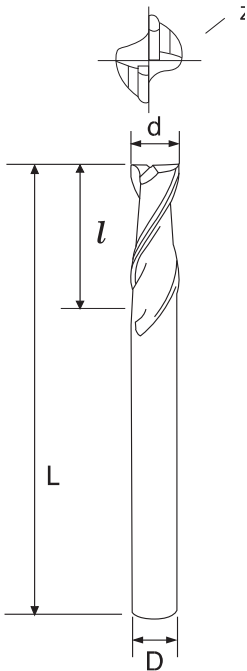
Carbon steel, Alloy steel	Pre-hardened steel		High-hardened			Stainless steel	Copper alloy	Aluminum alloy
	~45HRC	~50HRC	~55HRC	~60HRC	~65HRC			
-	-	-	-	-	-	-	☐	☒

SQUARE SERIES - FOR ALUMINUM - 2 FLUTES

- Micro Grain Carbide
- WC=90 Co=10 HV30=1571 Rupture=3750N/mm² Grain Size=0.611m



AET	Diameter d	Flute Length l	Full Length L	Shank Diameter D	Flutes Z	KG	€
AET0052 TB	0.5	1.5	50	4	2	0,020	77,-
AET0062 TB	0.6	1.5	50	4	2	0,020	77,-
AET0082 TB	0.8	2	50	4	2	0,020	77,-
AET0102 TB	1	3	50	6	2	0,020	67,50
AET0122 TB	1.2	4	50	6	2	0,020	77,-
AET0152 TB	1.5	4	50	6	2	0,020	77,-
AET0182 TB	1.8	5	50	6	2	0,020	77,-
AET0202 TB	2	6	50	6	2	0,020	67,50
AET0302 TB	3	8	50	6	2	0,020	67,50
AET0402 TB	4	10	50	6	2	0,020	67,50
AET0502 TB	5	13	50	6	2	0,020	67,50
AET0602 TB	6	15	50	6	2	0,020	67,50
AET0802 TB	8	20	60	8	2	0,040	113,50
AET1002 TB	10	25	75	10	2	0,080	161,50
AET1202 TB	12	30	75	12	2	0,110	195,50
AET1602 TB	16	42	100	16	2	0,260	348,-
AET2002 TB	20	52	100	20	2	0,360	585,50
AET2502 TB	25	62	125	25	2	0,670	1064,-



Application: ☒ Recommend ☐ Suitable ☐ Not Recommend

Carbon steel, Alloy steel	Pre-harden steel ~45HRC	~50HRC	High-hardened ~55HRC	~60HRC	~65HRC	Stainless steel	Copper alloy	Aluminum alloy
-	-	-	-	-	-	-	☐	☒

● Disponibile - Lieferbar - On stock

○ A richiesta - Auf Anfrage - On request

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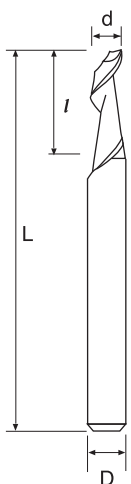
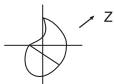
SLIM CHUCK

INSERTS

WGK

SQUARE SERIES - FOR WOOD & PLASTIC & ALUMINUM -1 FLUTE

- Micro Grain Carbide
- WC=90 Co=10 HV30=1571 Rupture=3750N/mm² Grain Size=0.6 m



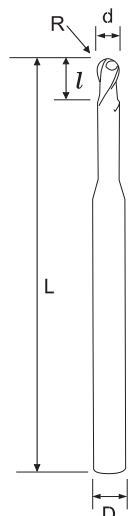
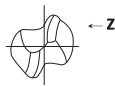
AP	Diameter d	Flute Length l	Full Length L	Shank Diameter D	Flutes Z	KG	STOCK	€
AP0100	1	4	50	3	1	0,010	○	71,50
AP0150	1.5	6	50	3	1	0,010	○	71,50
AP0200	2	8	50	2	1	0,010	○	71,50
AP0201	2	8	60	2	1	0,010	○	71,50
AP0202	2	8	50	3	1	0,010	○	71,50
AP0250	2.5	8	50	3	1	0,010	○	71,50
AP0251	2.5	8	60	3	1	0,010	○	78,50
AP0300	3	10	50	3	1	0,010	○	71,50
AP0301	3	10	60	3	1	0,010	○	78,50
AP0302	3	10	80	6	1	0,030	○	88,-
AP0310	3.17	12.7	60	6.35	1	0,030	○	133,50
AP0400	4	12	60	4	1	0,020	○	71,50
AP0401	4	20	70	4	1	0,020	○	78,50
AP0402	4	30	80	4	1	0,020	○	86,50
AP0403	4	12	60	6	1	0,030	○	88,-
AP0470	4.765	15.9	70	6.35	1	0,040	○	133,50
AP0500	5	16	70	5	1	0,040	○	88,-
AP0501	5	30	80	5	1	0,040	○	95,50
AP0600	6	16	60	6	1	0,030	○	95,50
AP0601	6	25	75	6	1	0,030	○	95,50
AP0602	6	30	75	6	1	0,030	○	107,50
AP0604	6	38	100	6	1	0,050	○	100,50
AP0630	6.35	15.8	70	6.35	1	0,040	○	133,50
AP0800	8	22	75	8	1	0,060	○	133,50
AP0801	8	38	100	8	1	0,080	○	140,50
AP1000	10	30	80	10	1	0,100	○	174,50
AP1200	12	30	100	12	1	0,170	○	204,50

Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

Carbon steel, Alloy steel	Pre-hardened steel ~45HRC	~50HRC	High-hardened ~55HRC	~60HRC	~65HRC	Stainless steel	Copper alloy	Aluminum alloy
-	-	-	-	-	-	-	☐	☐

BALL NOSE - LONG NECK - 2 FLUTES

- Micro Grain Carbide
- WC=90 Co=10 HV30=1571 Rupture=3750N/mm² Grain Size=0.6 μm



LNBT	Diameter	Radius of Ball Nose	Flute Length	Efficient Length	Full Length	Shank Diameter	Flutes	KG	€
	d	R	l	L1	L	D	Z		
LNBT05022 ALTiN	0.5	0.25	0.75	2	50	4	2	0,010	● 58,-
LNBT05042 ALTiN	0.5	0.25	0.75	4	50	4	2	0,010	● 58,-
LNBT05062 ALTiN	0.5	0.25	0.75	6	50	4	2	0,010	● 58,-
LNBT06022 ALTiN	0.6	0.3	0.9	2	50	4	2	0,010	● 54,50
LNBT06042 ALTiN	0.6	0.3	0.9	4	50	4	2	0,010	● 54,50
LNBT06062 ALTiN	0.6	0.3	0.9	6	50	4	2	0,010	● 54,50
LNBT08042 ALTiN	0.8	0.4	1.2	4	50	4	2	0,010	● 54,50
LNBT08062 ALTiN	0.8	0.4	1.2	6	50	4	2	0,010	● 54,50
LNBT08082 ALTiN	0.8	0.4	1.2	8	50	4	2	0,010	● 54,50
LNBT10062 ALTiN	1	0.5	1.5	6	50	4	2	0,010	● 40,50
LNBT10082 ALTiN	1	0.5	1	8	50	4	2	0,010	● 40,50
LNBT10102 ALTiN	1	0.5	1.5	10	50	4	2	0,010	● 40,50
LNBT10122 ALTiN	1	0.5	1.5	12	50	4	2	0,010	● 40,50
LNBT12062 ALTiN	1.2	0.6	1.8	6	50	4	2	0,010	● 52,50
LNBT12082 ALTiN	1.2	0.6	1.8	8	50	4	2	0,010	● 52,50
LNBT12102 ALTiN	1.2	0.6	1.8	10	50	4	2	0,010	● 52,50
LNBT12122 ALTiN	1.2	0.6	1.8	12	50	4	2	0,010	● 52,50
LNBT14062 ALTiN	1.4	0.7	2.1	6	50	4	2	0,010	● 52,50
LNBT14102 ALTiN	1.4	0.7	2.1	10	50	4	2	0,010	● 52,50
LNBT14162 ALTiN	1.4	0.7	2.1	16	50	4	2	0,010	● 52,50
LNBT15062 ALTiN	1.5	0.75	2.3	6	50	4	2	0,010	● 40,50
LNBT15082 ALTiN	1.5	0.75	2.3	8	50	4	2	0,010	● 40,50
LNBT15102 ALTiN	1.5	0.75	2.3	10	50	4	2	0,010	● 40,50
LNBT15122 ALTiN	1.5	0.75	2.3	12	50	4	2	0,010	● 40,50
LNBT15142 ALTiN	1.5	0.75	2.3	14	50	4	2	0,010	● 40,50
LNBT15162 ALTiN	1.5	0.75	2.3	16	50	4	2	0,010	● 40,50
LNBT15182 ALTiN	1.5	0.75	2.3	18	50	4	2	0,010	● 40,50
LNBT15202 ALTiN	1.5	0.75	2.3	20	50	4	2	0,010	● 40,50
LNBT16062 ALTiN	1.6	0.8	2.4	6	50	4	2	0,010	● 52,50
LNBT16082 ALTiN	1.6	0.8	2.4	8	50	4	2	0,010	● 52,50

Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

Carbon steel, Alloy steel	Pre-harden steel	High-hardened			Stainless steel	Copper alloy	Aluminum alloy
	~45HRC	~50HRC	~55HRC	~60HRC	~65HRC		
☐	☒	☒	☐	-	-	☐	-

BALL NOSE - LONG NECK - 2 FLUTES

- Micro Grain Carbide
- WC=90 Co=10 HV30=1571 Rupture=3750N/mm² Grain Size=0.6 m



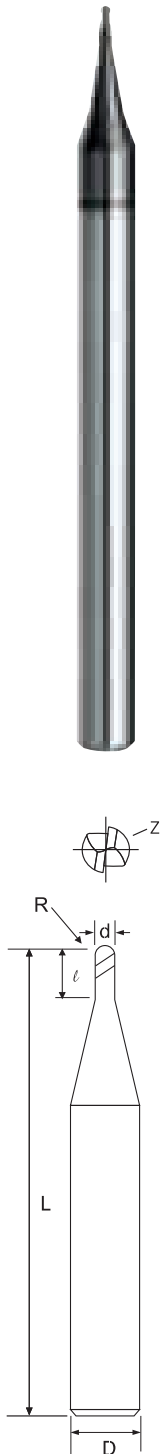
LNBT	Diameter	Radius of Ball Nose	Flute Length	Efficient Length	Full Length	Shank Diameter	Flutes		STOCK	€
	d	R	l	L1	L	D	Z	KG		
LNBT16102 AlTiN	1.6	0.8	2.4	10	50	4	2	0,010	●	52,50
LNBT16122 AlTiN	1.6	0.8	2.4	12	50	4	2	0,010	●	52,50
LNBT16142 AlTiN	1.6	0.8	2.4	14	50	4	2	0,010	●	52,50
LNBT16162 AlTiN	1.6	0.8	2.4	16	50	4	2	0,010	●	52,50
LNBT16182 AlTiN	1.6	0.8	2.4	18	50	4	2	0,010	●	52,50
LNBT16202 AlTiN	1.6	0.8	2.4	20	50	4	2	0,010	●	52,50
LNBT18082 AlTiN	1.8	0.9	2.7	8	50	4	2	0,010	●	52,50
LNBT18142 AlTiN	1.8	0.9	2.7	14	50	4	2	0,010	●	52,50
LNBT18202 AlTiN	1.8	0.9	2.7	20	50	4	2	0,010	●	52,50
LNBT20082 AlTiN	2	1	3	8	50	4	2	0,010	●	40,50
LNBT20102 AlTiN	2	1	3	10	50	4	2	0,010	●	40,50
LNBT20122 AlTiN	2	1	3	12	50	4	2	0,010	●	40,50
LNBT20142 AlTiN	2	1	3	14	50	4	2	0,010	●	40,50
LNBT20162 AlTiN	2	1	3	16	50	4	2	0,010	●	40,50
LNBT20182 AlTiN	2	1	3	18	50	4	2	0,010	●	40,50
LNBT20202 AlTiN	2	1	3	20	50	4	2	0,010	●	40,50
LNBT25082 AlTiN	2.5	1.25	4	8	50	4	2	0,010	●	40,50
LNBT25122 AlTiN	2.5	1.25	4	12	50	4	2	0,010	●	40,50
LNBT25162 AlTiN	2.5	1.25	4	16	50	4	2	0,010	●	40,50
LNBT25202 AlTiN	2.5	1.25	4	20	50	4	2	0,010	●	40,50
LNBT30102 AlTiN	3	1.5	4.5	10	50	6	2	0,010	●	48,-
LNBT30122 AlTiN	3	1.5	4.5	12	50	6	2	0,010	●	48,-
LNBT30162 AlTiN	3	1.5	4.5	16	60	6	2	0,020	●	51,50
LNBT30202 AlTiN	3	1.5	4.5	20	60	6	2	0,020	●	51,50
LNBT30252 AlTiN	3	1.5	4.5	25	75	6	2	0,020	●	58,-
LNBT40122 AlTiN	4	2	6	12	50	6	2	0,020	●	48,-
LNBT40162 AlTiN	4	2	6	16	60	6	2	0,020	●	51,50
LNBT40202 AlTiN	4	2	6	20	75	6	2	0,020	●	58,-
LNBT40252 AlTiN	4	2	6	25	75	6	2	0,020	●	58,-
LNBT40302 AlTiN	4	2	6	30	75	6	2	0,020	●	58,-

Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

Carbon steel, Alloy steel	Pre-hardened steel		High-hardened			Stainless steel	Copper alloy	Aluminum alloy
	~45HRC	~50HRC	~55HRC	~60HRC	~65HRC			
☐	☒	☒	☐	-	-	☐	-	-

MINIATURE BALL NOSE - 2 FLUTES

- Micro Grain Carbide
- WC=90 Co=10 HV30=1571 Rupture=3750N/mm² Grain Size=0.6 μm



MIB	Diameter d	Radius of Ball Nose R	Flute Length l	Full Length L	Shank Diameter D	Flutes Z	KG	€
MIB0032 ALTiN	0.3	0.15	0.6	50	4	2	0,010	66,-
MIB0042 ALTiN	0.4	0.2	0.8	50	4	2	0,010	60,-
MIB0052 ALTiN	0.5	0.25	1	50	4	2	0,020	43,50
MIB0062 ALTiN	0.6	0.3	1.2	50	4	2	0,020	43,50
MIB0072 ALTiN	0.7	0.35	1.4	50	4	2	0,020	43,50
MIB0082 ALTiN	0.8	0.4	1.6	50	4	2	0,020	39,50
MIB0092 ALTiN	0.9	0.45	1.8	50	4	2	0,020	39,50
MIB0102 ALTiN	1	0.5	2	50	4	2	0,020	24,50
MIB0112 ALTiN	1.1	0.55	2.2	50	4	2	0,020	39,50
MIB0122 ALTiN	1.2	0.6	2.4	50	4	2	0,020	39,50
MIB0132 ALTiN	1.3	0.65	2.6	50	4	2	0,020	39,50
MIB0142 ALTiN	1.4	0.7	2.8	50	4	2	0,020	39,50
MIB0152 ALTiN	1.5	0.75	3	50	4	2	0,020	24,50
MIB0162 ALTiN	1.6	0.8	3.2	50	4	2	0,020	39,50
MIB0172 ALTiN	1.7	0.85	3.4	50	4	2	0,020	39,50
MIB0182 ALTiN	1.8	0.9	3.6	50	4	2	0,020	39,50
MIB0192 ALTiN	1.9	0.95	3.8	50	4	2	0,020	39,50
MIB0202 ALTiN	2	1	4	50	4	2	0,020	24,50
MIB0212 ALTiN	2.1	1.05	4.2	50	4	2	0,020	39,50
MIB0222 ALTiN	2.2	1.1	4.4	50	4	2	0,020	39,50
MIB0232 ALTiN	2.3	1.15	4.6	50	4	2	0,020	39,50
MIB0242 ALTiN	2.4	1.2	4.8	50	4	2	0,020	39,50
MIB0252 ALTiN	2.5	1.25	5	50	4	2	0,020	24,50
MIB0262 ALTiN	2.6	1.3	5.2	50	4	2	0,020	39,50
MIB0272 ALTiN	2.7	1.35	5.4	50	4	2	0,020	39,50
MIB0282 ALTiN	2.8	1.4	5.6	50	4	2	0,020	39,50
MIB0292 ALTiN	2.9	1.45	5.8	50	4	2	0,020	39,50
MIB0302 ALTiN	3	1.5	6	50	4	2	0,020	24,50

Application: ☒ Recommend ☐ Suitable ☐ x Not Recommend

Carbon steel, Alloy steel	Pre-hardened steel ~45HRC	~50HRC	High-hardened ~55HRC	~60HRC	~65HRC	Stainless steel	Copper alloy	Aluminum alloy
☐	☒	☒	☐	-	-	☐	-	-

BALL NOSE - 2 FLUTES

- Micro Grain Carbide
- WC=90 Co=10 HV30=1571 Rupture=3750N/mm² Grain Size=0.61µm



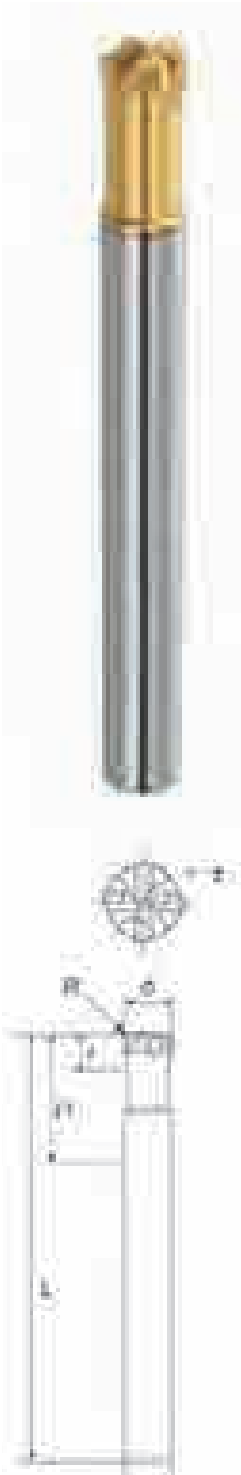
SSB MSB SB	Diameter	Radius of Ball Nose	Flute Length	Full Length	Shank Diameter	Flutes			
	d	R	l	L	D	Z	KG	STOCK	€
SSB0102 TiSiN	1	0.5	2	50	3	2	0,020	○	33,50
MSB0102 TiSiN	1	0.5	2	50	4	2	0,020	○	33,50
SSB0152 TiSiN	1.5	0.75	3	50	3	2	0,020	○	33,50
MSB0152 TiSiN	1.5	0.75	3	50	4	2	0,020	○	33,50
SSB0202 TiSiN	2	1	4	50	3	2	0,020	○	33,50
MSB0202 TiSiN	2	1	4	50	4	2	0,020	○	33,50
SSB0252 TiSiN	2.5	1.25	5	50	3	2	0,020	○	33,50
MSB0252 TiSiN	2.5	1.25	5	50	4	2	0,020	○	33,50
SSB0302 TiSiN	3	1.5	6	50	3	2	0,020	○	33,50
MSB0302 TiSiN	3	1.5	6	50	4	2	0,020	○	33,50
MSB0352 TiSiN	3.5	1.75	7	50	4	2	0,020	○	33,50
MSB0402 TiSiN	4	2	8	50	4	2	0,020	○	33,50
SB0102 TiSiN	1	0.5	2	50	6	2	0,020	●	40,50
SB0152 TiSiN	1.5	0.75	3	50	6	2	0,020	●	40,50
SB0202 TiSiN	2	1	4	50	6	2	0,020	●	40,50
SB0252 TiSiN	2.5	1.25	5	50	6	2	0,020	●	40,50
SB0302 TiSiN	3	1.5	6	50	6	2	0,020	●	40,50
SB0352 TiSiN	3.5	1.75	7	50	6	2	0,020	●	40,50
SB0402 TiSiN	4	2	8	50	6	2	0,020	●	40,50
SB0452 TiSiN	4.5	2.25	9	50	6	2	0,020	●	40,50
SB0502 TiSiN	5	2.5	10	50	6	2	0,020	●	40,50
SB0552 TiSiN	5.5	2.75	11	50	6	2	0,020	●	40,50
SB0602 TiSiN	6	3	12	50	6	2	0,040	●	40,50
SB0702 TiSiN	7	3.5	14	60	8	2	0,040	●	67,50
SB0802 TiSiN	8	4	16	60	8	2	0,080	●	67,50
SB0902 TiSiN	9	4.5	18	75	10	2	0,080	●	96,50
SB1002 TiSiN	10	5	20	75	10	2	0,080	●	96,50
SB1102 TiSiN	11	5.5	22	75	12	2	0,080	●	137,-
SB1202 TiSiN	12	6	24	75	12	2	0,100	●	137,-
SB1402 TiSiN	14	7	28	100	16	2	0,240	●	272,-
SB1602 TiSiN	16	8	32	100	16	2	0,240	●	272,-
SB1802 TiSiN	18	9	36	100	20	2	0,360	●	460,50
SB2002 TiSiN	20	10	40	100	20	2	0,390	●	460,50

Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

Carbon steel, Alloy steel	Pre-hardened steel		High-hardened			Stainless steel	Copper alloy	Aluminum alloy
	~45HRC	~50HRC	~55HRC	~60HRC	~65HRC			
☐	☒	☒	☒	☐	-	☐	-	-

SH SUPER HIGH SPEED HIGH HARDNESS

- Ultra Micro Grain Carbide
- WC=91 Co=9 HRA=93.2 Rupture=4000N/mm² Grain Size=0.2 µm



KCR	Diameter d	Corner Radius R	Flute Length l	Neck Length l1	Neck Diameter dn	Full Length L	Shank Diameter D	Flutes Z	KG	€
KCR0203	2	0.3	0.8	5	1.8	60	6	4	0,020	115,50
KCR0205	2	0.5	0.8	5	1.8	60	6	4	0,020	115,50
KCR0307	3	0.75	1.2	7.5	2.7	60	6	4	0,020	115,50
KCR0310	3	1	1.2	7.5	2.7	60	6	4	0,020	115,50
KCR0405	4	0.5	1.6	10	3.6	75	6	4	0,030	123,50
KCR0410	4	1	1.6	10	3.6	75	6	4	0,030	123,50
KCR0510	5	1	2	12	4.5	75	6	4	0,030	123,50
KCR0512	5	1.2	2	12	4.5	75	6	4	0,030	123,50
KCR0610	6	1	2.5	13	5.4	100	6	4	0,040	137,-
KCR0615	6	1.5	2.5	13	5.4	100	6	4	0,040	137,-
KCR0810	8	1	3.5	16	7.2	100	8	4	0,080	166,-
KCR0820	8	2	3.5	16	7.2	100	8	4	0,080	166,-
KCR0920	9	2	4	18	8.2	100	10	4	0,120	262,50
KCR1010	10	1	4	20	9	100	10	4	0,120	253,50
KCR1020	10	2	4	20	9	100	10	4	0,120	253,50
KCR1210	12	1	5	24	11	100	12	4	0,170	288,-
KCR1220	12	2	5	24	11	100	12	4	0,170	288,-
KCR1230	12	3	5	24	11	100	12	4	0,170	288,-

Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

Carbon steel, Alloy steel	Pre-harden steel ~45HRC	~50HRC	High-hardened ~55HRC	~60HRC	~65HRC	Stainless steel	Copper alloy	Aluminun alloy
☐	☐	☒	☒	☒	☒	-	-	-

● Disponibile - Lieferbar - On stock ○ A richiesta - Auf Anfrage - On request

2023/24



167

MILLING

MINIMILL

MOULDMILL

MICROTOOLS
AMS

MINITOOLS

GROOVING

MC DRILLS

NICECUT

YES DRILLS

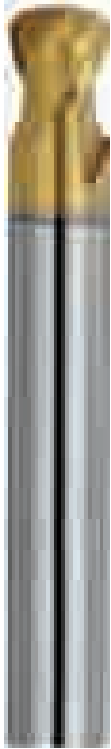
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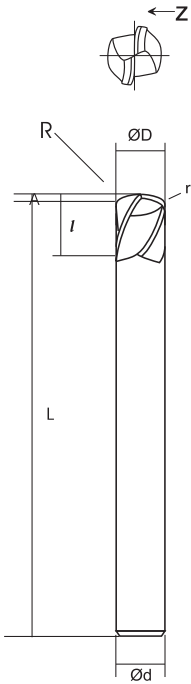
WGK

BIG FOOT SUPER REMOVER

- Ultra Micro Grain Carbide
- WC=87 Co=12 HRA=92.1 Rupture=3800N/mm² Grain Size=0.4 µm



BFR	Diameter	Corner Radius		Corner		Flute Length	Full Length	Shank Diameter	KG	STOCK	€
	d	R	A	B	r	l	L	D			
BFR06050	6	5	0.66	3	2	7	60	6	0,020	○	49,-
BFR06051	6	5	0.66	3	2	7	100	6	0,050	○	70,-
BFR06060	6	6	0.66	3	1.5	7	60	6	0,020	○	49,-
BFR06061	6	6	0.66	3	1.5	7	100	6	0,040	○	70,-
BFR08080	8	8	0.88	4	2	9	60	8	0,040	○	67,50
BFR08081	8	8	0.88	4	2	9	100	10	0,080	○	98,-
BFR10100	10	10	0.9	5	3	11	75	10	0,110	○	112,50
BFR10101	10	10	0.9	5	3	11	100	12	0,120	○	123,50
BFR12120	12	12	1.6	6	3	13	75	12	0,120	○	123,50
BFR12121	12	12	1.6	6	3	13	100	12	0,180	○	143,50
BFR12150	12	15	0.91	6	3	15	75	12	0,120	○	123,50
BFR12151	12	15	0.91	6	3	15	100	12	0,150	○	143,50
BFR16160	16	16	1.77	8	4	18	150	16	0,350	○	376,-
BFR16200	16	20	1.5	8	3	22	150	16	0,400	○	376,-



Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

Carbon steel, Alloy steel	Pre-hardened steel		High-hardened			Stainless steel	Copper alloy	Aluminum alloy
	~45HRC	~50HRC	~55HRC	~60HRC	~65HRC			
☐	☐	☒	☒	☒	☒	-	-	-

SUPER HIGH HARDNESS & SUPER HIGH SPEED CUTTING BALL NOSE

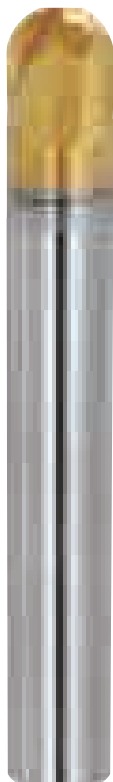
- Ultra Micro Grain Carbide
- WC=91 Co=9 HRA=93.2 Rupture=4000N/mm² Grain Size=0.2µm

200
Nano

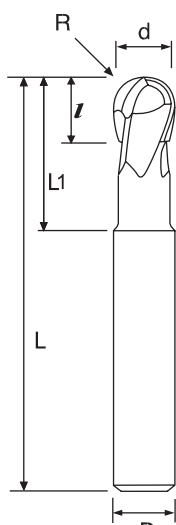
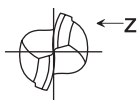
HRC
65

5°

SH



KTG	Diameter d	Radius R	Flute Length l	Efficient Length L1	Neck Diameter dn	Full Length L	Shank Diameter D	KG	€
KTG0102 SH	1	0.5	1	2.5	0.96	50	6	0,030	67,50
KTG0152 SH	1.5	0.75	1.5	4	1.46	50	6	0,030	67,50
KTG0202 SH	2	1	2	6	1.96	50	6	0,030	67,50
KTG0252 SH	2.5	1.25	2.5	7	2.46	50	6	0,030	67,50
KTG0302 SH	3	1.5	3	8	2.96	50	6	0,030	67,50
KTG4402 SH	4	2	4	8	3.96	50	4	0,020	52,50
KTG0402 SH	4	2	4	8	3.96	50	6	0,030	67,50
KTG0502 SH	5	2.5	5	12	4.96	50	6	0,030	67,50
KTG0602 SH	6	3	6	13	5.96	50	6	0,030	67,50
KTG0802 SH	8	4	8	16	7.9	60	8	0,050	94,50
KTG1002 SH	10	5	10	20	9.9	75	10	0,090	128,-
KTG1202 SH	12	6	12	24	11.9	75	12	0,120	197,-



Application: ☒ Recommend ☐ Suitable ☒ Not Recommend

Carbon steel, Alloy steel	Pre-harden steel ~45HRC	~50HRC	High-hardened ~55HRC	~60HRC	~65HRC	Stainless steel	Copper alloy	Aluminum alloy
☐	☐	☒	☒	☒	☒	-	-	-

● Disponibile - Lieferbar - On stock ○ A richiesta - Auf Anfrage - On request

2023/24



169

MILLING

MINIMILL

MOULDMILL

MICROTOOLS
AMS

MINITOOLS

GROOVING

MC DRILLS

NICECUT

YES DRILLS

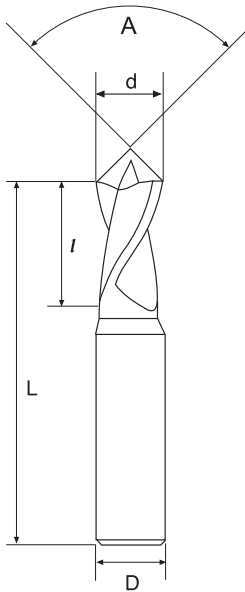
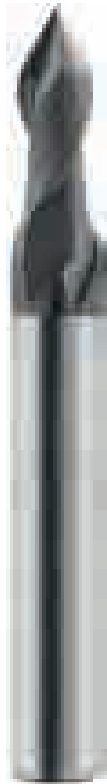
SLIM CHUCK

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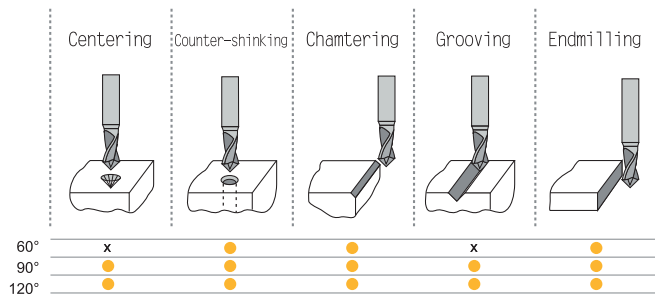
WGK

MULTI - FUNCTION END MILL SERIES - 2 FLUTES

Multi - function end mill series - 2 flutes



CDM	Diameter	Flute Length	Full Length	Shank Diameter	Tip Angle	Flutes	KG	STOCK	€
	d	l	L	D	A	Z			
CDM060030 ALTiN	3	6	50	4	60°	2	0,020	○	48,-
CDM090030 ALTiN	3	6	50	4	90°	2	0,020	○	48,-
CDM120030 ALTiN	3	6	50	4	120°	2	0,080	○	48,-
CDM060040 ALTiN	4	8	50	6	60°	2	0,020	○	61,-
CDM090040 ALTiN	4	8	50	6	90°	2	0,040	○	61,-
CDM120040 ALTiN	4	8	50	6	120°	2	0,080	○	61,-
CDM060050 ALTiN	5	10	50	6	60°	2	0,020	○	61,-
CDM090050 ALTiN	5	10	50	6	90°	2	0,050	○	61,-
CDM120050 ALTiN	5	10	50	6	120°	2	0,160	○	61,-
CDM060060 ALTiN	6	12	60	8	60°	2	0,020	○	102,50
CDM090060 ALTiN	6	12	60	8	90°	2	0,040	○	102,50
CDM120060 ALTiN	6	12	60	8	120°	2	0,150	○	102,50
CDM060080 ALTiN	8	16	75	10	60°	2	0,020	○	134,-
CDM090080 ALTiN	8	16	75	10	90°	2	0,040	○	134,-
CDM120080 ALTiN	8	16	75	10	120°	2	0,140	○	134,-
CDM060100 ALTiN	10	20	75	12	60°	2	0,020	○	146,-
CDM090100 ALTiN	10	20	75	12	90°	2	0,040	○	146,-
CDM120100 ALTiN	10	20	75	12	120°	2	0,150	○	146,-
CDM060120 ALTiN	12	25	75	12	60°	2	0,020	○	146,-
CDM090120 ALTiN	12	25	75	12	90°	2	0,090	○	146,-
CDM120120 ALTiN	12	25	75	12	120°	2	0,140	○	146,-
CDM060140 ALTiN	14	28	80	14	60°	2	0,020	○	213,50
CDM090140 ALTiN	14	28	80	14	90°	2	0,080	○	213,50
CDM120140 ALTiN	14	28	80	14	120°	2	0,150	○	213,50
CDM060160 ALTiN	16	32	100	16	60°	2	0,020	○	313,-
CDM090160 ALTiN	16	32	100	16	90°	2	0,090	○	313,-
CDM120160 ALTiN	16	32	100	16	120°	2	0,140	○	313,-
CDM060200 ALTiN	20	35	100	20	60°	2	0,020	○	376,-
CDM090200 ALTiN	20	35	100	20	90°	2	0,080	○	376,-
CDM120200 ALTiN	20	35	100	20	120°	2	0,140	○	376,-



Application: ☒ Recommend ☐ Suitable x Not Recommend

Carbon steel, Alloy steel	Pre-hardened steel		High-hardened			Stainless steel	Copper alloy	Aluminum alloy
	~45HRC	~50HRC	~55HRC	~60HRC	~65HRC			
☐	☒	☒	☒	☐	-	☐	-	-

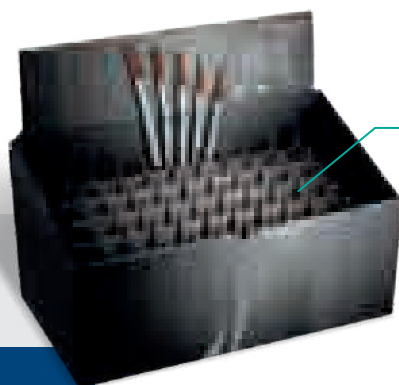
ESEMPIO SET _ SATZ BEISPIEL _ SET EXAMPLE



PROFI-BOX SET PE TiSiN

Art. SET PE 3T
TiSiN 45°

			d	l	L	D	z	STOCK	
n° 1		PE0603 TiSiN	6	16	50	6	3	●	SPECIAL NET PRICE PROMO
n° 1		PE0803 TiSiN	8	20	60	8	3		
n° 1		PE1003 TiSiN	10	30	75	10	3		
n° 1		PE1203 TiSiN	12	32	75	12	3		
n° 1		PE0604 TiSiN	6	16	50	6	4	●	SPECIAL NET PRICE PROMO
n° 1		PE0804 TiSiN	8	20	60	8	4		
n° 1		PE1004 TiSiN	10	30	75	10	4		
n° 1		PE1204 TiSiN	12	32	75	12	4		



PROFI-BOX SET MPE TiSiN

Art. SET MPE 3T
TiSiN 45°

			d	l	L	D	z	STOCK	
n° 10		MPE0103 TiSiN	1	3	50	4	3	●	SPECIAL NET PRICE PROMO
n° 10		MPE0153 TiSiN	1,5	4	50	4	3		
n° 10		MPE0203 TiSiN	2	6	50	4	3		
n° 10		MPE0303 TiSiN	3	8	50	4	3		
n° 10		MPE0403 TiSiN	4	11	50	4	3		



PROFI-BOX SET MSB TiSiN

Art. SET MSB 2T/50
TiSiN 35°

			d	R	l	L	D	Z	STOCK	
n° 10		MSB0102 TiSiN	1	0,5	2	50	4	2	●	SPECIAL NET PRICE PROMO
n° 10		MSB0152 TiSiN	1,5	0,75	3	50	4	2		
n° 10		MSB0202 TiSiN	2	1	4	50	4	2		
n° 10		MSB0302 TiSiN	3	1,5	6	50	4	2		
n° 10		MSB0402 TiSiN	4	2	8	50	4	2		





A technical drawing of a mechanical part, possibly a bracket or a support, is shown in the background. The drawing is a line drawing with various dimensions and labels. The word "RICAMBI" is prominently displayed in the center. The drawing includes several circular features, some of which are labeled with letters like "G", "H", "I", "J", "K", "L", "M", "N", "O", "P", "Q", "R", "S", "T", "U", "V", "W", "X", "Y", "Z". There are also numerical dimensions such as "100", "150", "200", "250", "300", "350", "400", "450", "500", "550", "600", "650", "700", "750", "800", "850", "900", "950", "1000". The drawing is a technical drawing of a mechanical part, possibly a bracket or a support, with various dimensions and labels. The word "RICAMBI" is prominently displayed in the center.

RICAMBI

RICAMBI	WGK	INSERTS	SLIM CHUCK	YES DRILLS	NICECUT	MC DRILLS	GROOVING	MINITOOLS	MICROTOOLS AMS	MOULDMILL	MINIMILL	MILLING
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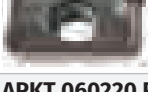
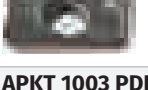
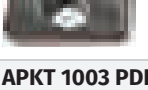
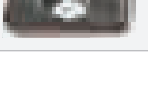
RICAMBI _ ERSATZTEILE _ SPAREPARTS

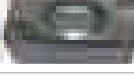
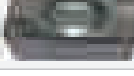
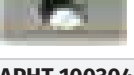
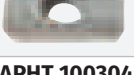
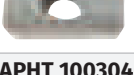
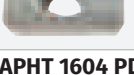
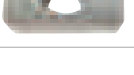
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A02	8,00	K25	11,00	L	17,70
A02	3,50	KF	8,60	US3450	21,60
A02	5,80	KP 3111 (ESAGONO 3)	8,60	L	17,70
A06-50088 (M5X8,8 T20)	5,80	KV	18,80	US4221	17,70
A13	8,00	M6-16 (M6X16,2 5)	6,30	L	13,10
A13-25050 (M2,5X5 T08)	8,00	MI	5,40	US6522	17,70
A13	5,80	MP1111	2,30	L	16,50
AKE 12,4	16,60	MI	2,30	US-3L	16,50
AS (	11,40	MP1321	2,30	L	0,60
AS 0044 (M6X10 3)	11,40	MI	2,30	V04-T0600	10,80
BFT	13,70	P1	13,10	V	10,80
BFTX0204N (M2X4,8 T06)	13,70	RE	5,20	V04-T1500	10,80
BFT	13,70	RE1 (M3X6 1,5)	5,20	V	10,80
BFTX02506N (M2,5X6,5 T08)	13,70	RE	5,20	V04-T2500	10,80
BFT	13,70	RE3 (M5X8 2,5)	5,20	V	6,30
BFTX0511N (M5X11,5 T20)	19,40	RE	5,20	V1006 (M6X16,2 T20)	8,60
BFT	19,40	RE5 (M8X12 4)	5,20	V	6,30
BL0 (M4X8,2 T15)	8,60	RE	5,20	V26 (M2,5X5,5 T07)	6,30
BL1	8,60	RE7 (M8X20 4)	5,20	V	6,30
BL2 (M6X12,5 T25)	8,60	RE	5,20	V36 (M3,5X10 T15)	6,30
BL3	8,60	RE9 (M3X4 1,5)	5,20	V	6,30
BL4 (M8X20 5)	8,60	RE	5,20	VF4 (M4X8 T08)	5,20
BL5	10,80	RE11 (M2X4 0,89)	5,20	V	6,30
BL6 (M10X30 6)	10,80	RF	4,00	VT16 (M1,6X3,2 T06)	7,50
BL7	12,00	RP1221	4,00	V	8,60
BL8 (M12X40 8)	12,00	RF	4,00	VT18 (M1,8X3,7 T06)	7,50
BL9	6,30	RP3112	4,00	V	8,50
BL10 (M3X8,2 T09)	6,30	S1	103,30	VT20 (M2X4,8 T06)	8,60
BL1	6,30	S24 (M6X5 T15)	5,80	V	7,50
BT05 (TORX 05)	7,50	S2	5,80	VT22 (M2,2X4,8 T07)	6,30
BT0	7,50	S35 (M6X48,7 3)	7,10	V	6,30
BT07 (TORX 07)	7,50	S3	7,10	VT24 (M2X3,8 T06)	6,30
BT0	7,50	S35S (M6X33,5 T15)	7,10	V	5,80
BT09 (TORX 09)	8,60	SF	6,30	VT25 B (M2,5X5 T08)	5,20
BT1	8,60	SP1114 (M8X16,8 3)	7,50	V	5,20
BT20 (TORX 20)	9,80	SF	5,80	VT2530 (M2,5X4,5 T07)	6,30
BT2	11,40	SP1221 (M8X20,5 3)	6,30	V	6,90
BT25 IP (TORX PLUS 25)	9,80	SF	6,30	VT25 830 (M2,5X5,5 T08)	5,80
C06	7,50	SP3111 (M6X16,7 2,5)	5,80	V	4,60
CBH 08-10-12-16	33,00	SF	5,80	VT30 G (M3X7 T08)	6,90
CVE	7,50	SP3113 (M5X12,2 2)	5,80	V	5,20
CVB45	14,30	SF	5,80	VT35 S (M3,5X8,6 T15)	5,20
CVE	13,10	SS1111 (M3,5X11 T15)	6,30	V	5,20
CVB55 L (M8X21 4)	13,10	SS	6,30	VT40 (M4X9 T15)	5,80
E1	21,60	SS1221 (M4,5X12 T15)	6,30	V	7,50
G1 (M5X6 2,5)	3,30	SS	6,30	VT40 710 (M4X10,5 T15)	5,20
GBS	8,60	SS8831 (M3X7,3 T08)	6,30	V	4,60
GBS1221 (M6X9 4,5)	8,60	T1	103,30	VT40 835 (M4X11,7 T15)	6,70
GBS	4,60	JP1111	14,30	V	5,20
GESL	11,40	UF	11,40	VT40QC (M4X0,7 3)	5,40
VT4	8,00	JP1221	23,40	V	7,40
VT50 BHM (M5X12 3)	27,30	UF	34,10	VT40 R (M4X10 T15)	5,20
GS1	31,80	JP2011	14,30	V	5,20
HP1111	23,40	UF	14,80	VT45 (M4,5X10,5 T20)	5,20
HP1	22,70	JP5112	11,40	V	5,80
HP1221	22,70	UF	33,50	VT.FB.030 (M8X30,5)	33,00
HP1	34,10	JP5421	23,40	V	38,60
HP2011	22,70	UF	12,60	VT.FB.STANDARD (M12X30 8)	5,20
HP2	30,70	JP71011	15,40	V	9,80
HP2421	24,50	UF	17,10	VTX 3504 (M3,5X4,2 T09)	9,80
HP4	22,70	JS1111	17,70	V	9,80
HP4753	22,70	US	21,60	VTX 408 (M4X7,8 T15)	9,80
HP6	22,70	JS2311	13,10		



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MILLING		P	M	K	N	S	H
	APMX 060210 MPH	K400	P25-P40	M20-M40	K20-K40		
	fz	0,2-0,7	0,2-0,7	0,2-0,7			
	ap	0,2-0,6	0,2-0,6	0,2-0,6			
	VC	110-200	90-160	120-230			
	APKT 060204 PDTR-K	K400	P25-P40	M20-M40	K20-K40		
	fz	0,05-0,25	0,05-0,25	0,05-0,25			
	ap	0,5-2,5	0,5-2,5	0,5-2,5			
	VC	110-200	90-160	120-230			
	APKT 060204 PDER-S	K300	P25-P40	M20-M40	K20-K40		
	fz	0,05-0,25	0,05-0,25	0,05-0,25			
	ap	0,5-2,5	0,5-2,5	0,5-2,5			
	VC	110-200	90-160	120-230			
	APKT 060204 PDER-S	P200	P10-P20	K10-K20			
	fz	0,05-0,25		0,05-0,25			
	ap	0,5-2,5		0,5-2,5			
	VC	180-280		160-270			
	APKT 060204 PDER-S	P300	P30-P40	M30-M40			
	fz	0,05-0,25	0,05-0,25				
	ap	0,05-2,5	0,05-2,5				
	VC	110-180	90-160				
	APKT 060220 PDER-S	P200	P25-P40	M20-M40	K20-K40		
	fz	0,05-0,25	0,05-0,25	0,05-0,25			
	ap	0,5-2,5	0,5-2,5	0,5-2,5			
	VC	110-200	90-160	120-230			
	APKT 060220 PDER-S	P300	P10-P20	K10-K20			
	fz	0,05-0,25		0,05-0,25			
	ap	0,5-2,5		0,5-2,5			
	VC	180-280		160-270			
	APKT 060220 PDER-S	K300	P30-P40	M30-M40			
	fz	0,05-0,25	0,05-0,25				
	ap	0,05-2,5	0,05-2,5				
	VC	110-180	90-160				
	APKT 1003 PDR-M	K400	P25-P40	M20-M40	K20-K40		
	fz	0,10-0,30	0,10-0,30	0,10-0,30			
	ap	0,1-4	0,1-4	0,1-4			
	VC	100-170	70-130	120-230			
	APKT 1003 PDER-S	K300	P25-P40	M20-M40	K20-K40		
	fz	0,10-0,30	0,10-0,30	0,10-0,30			
	ap	0,1-4	0,1-4	0,1-4			
	VC	100-170	70-130	120-230			
	APKT 1003 PDER-S	P200	P10-P20	K10-K20			
	fz	0,05-0,30		0,05-0,30			
	ap	0,1-4		0,1-4			
	VC	180-280		160-270			
	APKT 1003 PDER-S	P300	P30-P40	M30-M40			
	fz	0,05-0,25	0,05-0,25				
	ap	0,1-4	0,1-4				
	VC	110-120	90-160				
	APKT 1003 PDFR-R 04 ALU	K15			K10-K15		
	fz				0,10-0,40		
	ap				max. 0,7		
	VC				200-700		
	APKT 1604 PDR-M	K400	P25-P40	M20-M40	K20-K40		
	fz	0,10-0,30	0,10-0,30	0,10-0,30			
	ap	0,1-7	0,1-7	0,1-7			
	VC	100-170	70-130	120-230			

MILLING		P	M	K	N	S	H
	APKT 1604 PDER-S	K300	P25-P40	M20-M40	K20-K40		
	fz	0,10-0,30	0,10-0,30	0,10-0,30			
	ap	0,1-7	0,1-7	0,1-7			
	VC	100-170	70-130	120-230			
	APKT 1604 PDER-S	P200	P10-P20		K10-K20		
	fz	0,05-0,20		0,05-0,20			
	ap	0,1-7		0,1-7			
	VC	180-280		160-270			
	APKT 1604 PDER-S	P300	P30-P40	M30-M40			
	fz	0,05-0,25	0,05-0,25				
	ap	0,1-7	0,1-7				
	VC	110-120	90-160				
	APKT 1604 PDR-R04 ALU	K15			K10-K15		
	fz				0,10-0,40		
	ap				max. 0,7		
	VC				200-700		
	APKT 1604 PDR-R08 ALU	K15			K10-K15		
	fz				0,10-0,40		
	ap				max. 0,7		
	VC				200-700		
	APPT 100308 PDSR-MM	K400	P25-P40	M20-M40	K20-K40		
	fz	0,10-0,30	0,10-0,30	0,10-0,30			
	ap	0,1-4	0,1-4	0,1-4			
	VC	100-170	70-130	120-230			
	APPT 160408 PDSR-MM	K400	P25-P40	M20-M40	K20-K40		
	fz	0,10-0,30	0,10-0,30	0,10-0,30			
	ap	0,1-7	0,1-7	0,1-7			
	VC	100-170	70-130	120-230			
	APHX 1003 FR-ALU	K15			K10-K15		
	fz				0,10-0,20		
	ap				0,1-4		
	VC				200-700		
	APHX 1604 FR-ALU	K15			K10-K15		
	fz				0,10-0,20		
	ap				0,1-8		
	VC				200-700		
	APHX 1604 PDR-ALU	K15			K10-K15		
	fz				0,10-0,20		
	ap				0,1-8		
	VC				200-700		
	APHT 100304	P25	P25				
	fz	0,07-0,15					
	ap	0,1-4					
	VC	70-200					
	APHT 100304	TIN	P20-P40	M20-M40			
	fz	0,07-0,18	0,07-0,18				
	ap	0,1-4	0,1-4				
	VC	120-250	80-200				
	APHT 100304	TIALN	P20-P25	M20-M35	K20-K30		
	fz	0,07-0,20	0,07-0,20	0,07-0,20			
	ap	0,5-4	0,5-4	0,5-4			
	VC	110-220	70-130	120-230			
	APHT 1604 PDR	P25	P25				
	fz	0,10-0,18					
	ap	0,1-7					
	VC	70-200					

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MILLING		P	M	K	N	S	H
	APHT 1604 PDR	TIN	P20-P40	M20-M40			
	fz	0,10-0,20	0,08-0,18				
	ap	0,1-7	0,1-7				
	VC	110-220	70-130				
	APHT 1604 PDR	TIALN	P20-P25	M20-M35	K20-K30		
	fz	0,05-0,20	0,05-0,20	0,05-0,20			
	ap	0,5-7	0,5-7	0,5-7			
	VC	120-280	80-200	120-230			
	CCMT 0602 02/04	K400	P10-P30	M10-M25	K10-K20		
	fz	0,07-0,17	0,06-0,14	0,06-0,15			
	ap	0,3-1,8	0,3-1,4	0,3-1,8			
	VC	120-250	80-220	120-230			
	CCMT 09T3 04/08	K400	P10-P30	M10-M25	K10-K20		
	fz	0,09-0,20	0,08-0,26	0,08-0,20			
	ap	0,3-2,5	0,3-2	0,3-2,5			
	VC	120-250	80-220	120-230			
	CCMT 1204 04/08	K400	P10-P30	M10-M25	K10-K20		
	fz	0,18-0,45	0,18-0,35	0,15-0,50			
	ap	0,5-4	0,5-4	0,5-5			
	VC	120-250	80-220	120-230			
	CPMT 05T104	K300	P15-P30	M20-M35	K15-K30		
	fz	0,15-0,4	0,15-0,4	0,15-0,4			
	ap	0,1-3,5	0,1-3,5	0,1-3,5			
	VC	130-220	100-160	120-180			
	CPMT 05T1 02/04 EN-PS	P200	P10-P20		K10-K20		
	fz	0,15-0,4		0,15-0,4			
	ap	0,1-3,5		0,1-3,5			
	VC	150-250		150-230			
	CPMT 05T1 02/04 EN-PM1	K400	P20-P35	M15-M30	K15-K25		
	fz	0,15-0,4	0,15-0,4	0,15-0,4			
	ap	0,1-3,5	0,1-3,5	0,1-3,5			
	VC	130-220	100-160	120-180			
	LNEX 1006	K15			K10-K20		
	fz				0,05-0,20		
	ap				0,1-4		
	VC				250-400		
	LNEX 1510	K15			K10-K20		
	fz				0,05-0,20		
	ap				0,1-6		
	VC				250-400		
	LNKX 1006	K400	P25-P40	M20-M40	K20-K40		
	fz	0,10-0,30	0,10-0,30	0,10-0,30			
	ap	0,1-4	0,1-4	0,1-4			
	VC	110-200	90-160	120-230			
	LNKX 1510	K400	P25-P40	M20-M40	K20-K40		
	fz	0,10-0,30	0,10-0,30	0,10-0,30			
	ap	0,1-6	0,1-6	0,1-6			
	VC	110-220	90-160	120-200			
	LNMX 1006	K300	P25-P40	M20-M40	K20-K40		
	fz	0,10-0,30	0,10-0,30	0,10-0,30			
	ap	0,1-4	0,1-4	0,1-4			
	VC	110-200	90-160	120-230			
	LNMX 1006	P200	P10-P20		K10-K20		
	fz	0,05-0,20		0,10-0,25			
	ap	0,1-4		0,1-4			
	VC	100-220		120-220			

MILLING		P	M	K	N	S	H
LNMX 1006 	P300	P30-P40	M30-M40				
	fz	0,05-0,25	0,05-0,20				
	ap	0,1-4	0,1-4				
	VC	100-170	60-130				
LNMX 1510 	K300	P25-P40	M20-M40	K20-K40			
	fz	0,10-0,30	0,10-0,30	0,10-0,30			
	ap	0,1-6	0,1-6	0,1-6			
	VC	110-220	90-160	120-200			
LNMX 1510 	P200	P10-P20		K10-K20			
	fz	0,05-0,20		0,05-0,25			
	ap	0,1-6		0,1-6			
	VC	110-220		110-220			
LNMX 1510 	P300	P30-P40	M30-M40				
	fz	0,08-0,25	0,08-0,25				
	ap	0,1-6	0,1-6				
	VC	100-170	60-130				
ONMU 1205 ANN 	K300	P25-P40	M20-M40	K20-K40			
	fz	0,05-0,25	0,05-0,25	0,05-0,25			
	ap	0,5-2,5	0,5-2,5	0,5-2,5			
	VC	110-220	90-160	120-200			
ONMU 1205 ANN 	P200	P10-P20		K10-K20			
	fz	0,05-0,25		0,05-0,25			
	ap	0,5-2,5		0,5-2,5			
	VC	180-280		160-270			
ONMU 1205 ANN 	P300	P30-P40	M30-M40				
	fz	0,05-0,25	0,05-0,25				
	ap	0,5-2,5	0,5-2,5				
	VC	110-190	90-170				
RDHT 0501 MOF ALU 	K15				K05-K10		
	fz				0,2-1		
	ap				0,5-2		
	VC				100-350		
RDKW 0501 MOS-MP RDKW 0702 MOS-MP 	K400	P15-P35	M30-M40	K10-K30			
	fz	0,11-0,22	0,08-0,18	0,11-0,22			
	ap	0,3-3	0,3-3	0,3-3			
	VC	180-300	100-150	220-300			
RDHT 0702 MOF ALU 	K15				K05-K10		
	fz				0,2-1		
	ap				0,5-3		
	VC				100-350		
RDHT 1003 MOF ALU 	K15				K05-K10		
	fz				0,2-1		
	ap				1-3,5		
	VC				100-350		
RDKW 1003 MOS-MP RDKW 12T3 MOS-MP 	K400	P15-P35	M30-M40	K10-K30			
	fz	0,11-0,22	0,08-0,18	0,11-0,22			
	ap	1-6	1-6	1-6			
	VC	180-300	100-150	220-300			
RDHT 12T3 MOF ALU 	K15				K05-K10		
	fz				0,2-1		
	ap				1-4		
	VC				100-350		

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MILLING		P	M	K	N	S	H
	RDHT 1604 MOF ALU	K15			K05-K10		
	fz				0,2-1		
	ap				1-5		
	VC				100-350		
	RDKW 1604MOS-MP	K400	P15-P35	M30-M40	K10-K30		
	fz	0,11-0,22	0,08-0,18	0,11-0,22			
	ap	1-8	1-8	1-8			
	VC	180-300	100-150	220-300			
	SCMT 060204	K400	P15-P30	M20-M35	K15-K30		
	fz	0,05-2	0,05-2	0,05-2			
	ap	0,1-2	0,1-2	0,1-2			
	VC	100-240	130-220	120-200			
	SCMT 09T308	K400	P10-P30	M10-M25	K10-K20		
	fz	0,18-0,45	0,20-0,40	0,15-0,50			
	ap	0,5-3,2	0,5-3,2	0,5-4			
	VC	120-250	80-220	120-230			
	SCMT 120408	K400	P10-P30	M10-M25	K10-K20		
	fz	0,13-0,30	0,20-0,40	0,15-0,50			
	ap	1-5	1-5	1-5			
	VC	120-250	110-170	120-230			
	SDMT 1205 PDR.69	P25	P25				
	fz	0,07-0,20					
	ap	0,1-8,8					
	VC	70-200					
	SDMT 1205 PDR.69	TIN	P20-P40	M20-M40			
	fz	0,10-0,25	0,07-0,20				
	ap	0,1-8,8	0,1-5,3				
	VC	120-280	80-200				
	SDMT 1205 PDR.69	TIALN	P20-P35	M20-M35	K20-K30		
	fz	0,10-0,30	0,10-0,30	0,10-0,30			
	ap	1-5	1-5	1-5			
	VC	110-220	70-130	120-230			
	SEEX 12T408 TiN	TiN	P25-P40	M20-M40	K20-K40		
	fz	0,08-0,15	0,08-0,15	0,08-0,15			
	ap	0,5-2,5	0,5-2,5	0,5-2,5			
	VC	80-150	80-150	80-150			
	SEHT 13T3	K300	P25-P40	M20-M40	K20-K40		
	fz	0,10-0,30	0,05-0,25	0,10-0,30			
	ap	0,5-5	0,5-5	0,5-5			
	VC	110-220	90-160	120-200			
	SEHT 13T3	P200	P25-P40		K10-K20		
	fz	0,08-0,30		0,05-0,30			
	ap	0,1-5		0,1-5			
	VC	170-250		160-260			
	SEHT 13T3	P300	P30-P40	M30-M40			
	fz	0,05-0,30	0,01-0,30				
	ap	0,5-5	0,1-5				
	VC	110-190	80-150				
	SEHX 13T03 ALU	K15			K10-K20		
	fz				0,10-0,30		
	ap				0,1-3		
	VC				200-350		
	SEHX 1204 ALU	K15			K10-K20		
	fz				0,10-0,30		
	ap				0,1-3		
	VC				200-350		

MILLING		P	M	K	N	S	H
	SEKR 1203 AFTN	K400	P15-P40	M15-M35	K10-K50		
	fz	0,15-0,36	0,12-0,26	0,15-0,41			
	ap	0,5-5	0,5-5	0,5-7			
	VC	130-240	70-170	100-200			
	SDKT 1204 SEKT 1204 AFTN	K400	P25-P40	M20-M40	K20-K40		
	fz	0,10-0,16	0,10-0,13	0,10-0,15			
	ap	0,5-5	0,5-5	0,5-5			
	VC	130-240	70-170	100-200			
	SNEX 1206 ANN MA ALU	K15			K10-K20		
	fz				0,10-0,30		
	ap				0,1-3		
	VC				200-350		
	SNHX 1102/03 T	P25	P25				
	fz	0,05-0,11					
	ap	0,1-11					
	VC	70-90					
	SNHX 1102/03 T	TIN	P20-P40	M20-M40			
	fz	0,06-0,15	0,05-0,1				
	ap	0,1-11	0,1-11				
	VC	140-160	90-120				
	SNHX 1203/05 T	P25	P25				
	fz	0,05-0,11					
	ap	0,1-12					
	VC	70-90					
	SNHX 1203/05 T	TIN	P20-P40	M20-M40			
	fz	0,06-0,15	0,05-0,1				
	ap	0,1-12	0,1-12				
	VC	140-160	90-120				
	SNHX 1102/03 T SNHX 1203/05 T	TIALN	P25-P40	M20-M40	K20-K40		
	fz	0,08-0,15	0,08-0,15	0,08-0,15			
	ap	--	--	--			
	VC	120-200	70-130	130-210			
	SNHX 1102/03 ALU SNHX 1203/05 ALU	K15			K10-K15		
	fz				0,08-0,15		
	ap				--		
	VC				200-500		
	SNMU 1206 ANER	K300	P25-P40	M20-M40	K20-K40		
	fz	0,05-0,25	0,05-0,25	0,05-0,25			
	ap	0,5-5	0,5-5	0,5-5			
	VC	110-220	90-160	120-200			
	SNMU 1206 ANER	P200	P10-P20		K10-K20		
	fz	0,05-0,25			0,05-0,25		
	ap	0,5-5			0,5-5		
	VC	190-290			200-300		
	SNMU 1206 ANER	P300	P30-P40	M30-M40			
	fz	0,05-0,25	0,05-0,25				
	ap	0,5-5	0,5-5				
	VC	110-190	90-170				
	SNMX 1206 ANN1	K300	P25-P40	M20-M40	K20-K40		
	fz	0,10-0,30	0,05-0,25	0,10-0,30			
	ap	0,5-5	0,5-5	0,5-5			
	VC	110-220	90-160	120-200			

PARAMETRI INSERTI _ SCHNITTDATEN _ CUTTING CONDITION

MILLING		P	M	K	N	S	H
	SNMX 1206 ANN1	P200	P25-P40		K20-K40		
	fz	0,05-0,25		0,05-0,20			
	ap	0,5-5		0,5-5			
	VC	180-280		160-270			
	SNMX 1206 ANN1	P300	P30-P40	M20-M40			
	fz	0,05-0,25	0,05-0,25				
	ap	0,5-5	0,5-5				
	VC	110-190	70-170				
	SNKX 1206 ANN1	K400	P25-P40	M20-M40	K20-K40		
	fz	0,08-0,12	0,06-0,2	0,12-0,35			
	ap	0,12-6	0,12-6	0,12-6			
	VC	110-200	70-150	120-200			
	SPGT 060304 ALU	K15			K10-K15		
	fz				0,10-0,20		
	ap				0,5-2,0		
	VC				200-700		
	SPGT 09T308 ALU	K15			K10-K15		
	fz				0,10-0,20		
	ap				0,5-2,0		
	VC				200-700		
	SPGT 120408 ALU	K15			K10-K15		
	fz				0,10-0,20		
	ap				0,5-5,0		
	VC				200-700		
	SPMT 060304	K400	P15-P40	M15-M35	K10-K50		
	fz	0,05-0,10	0,05-0,08	0,05-0,12			
	ap	0,3-3	0,3-3	0,3-3			
	VC	130-240	70-170	110-220			
	SPMT 09T308	K400	P15-P40	M15-M35	K10-K50		
	fz	0,08-0,20	0,08-0,20	0,05-0,20			
	ap	0,5-4	0,5-4	0,5-4			
	VC	130-240	70-170	110-220			
	SPMT 120408	K400	P15-P40	M15-M35	K10-K50		
	fz	0,08-0,20	0,08-0,20	0,11-0,25			
	ap	0,5-6	0,5-6	0,5-6			
	VC	130-240	70-170	110-220			
	TCGX 163504	K400	P10-P30	M10-M25	K10-K20		
	fz	0,08-0,15	0,08-0,15	0,08-0,15			
	ap	1-7,5	1-7,5	1-7,5			
	VC	30-70	30-50	70-90			
	TCMT 080204	K400	P10-P30	M10-M25	K10-K20		
	fz	0,03-0,15	0,03-0,15	0,03-0,15			
	ap	0,1-1,0	0,1-1,0	0,1-1,0			
	VC	80-150	60-130	100-160			
	TCMT 1102 02/04	K400	P10-P30	M10-M25	K10-K20		
	fz	0,08-0,17	0,06-0,16	0,06-0,15			
	ap	0,3-1,8	0,3-1,4	0,3-1,8			
	VC	100-200	80-170	120-230			
	TCMT 16T3 04/08	K400	P10-P30	M10-M25	K10-K20		
	fz	0,10-0,20	0,08-0,16	0,08-0,18			
	ap	0,3-2,5	0,3-2	0,3-2,5			
	VC	120-250	80-170	120-230			
	TCMX 16T3/08 ZR	TiN/TiAlN	P25-P40	M20-M40	K20-K40		
	fz	0,02-0,04	0,02-0,04	0,02-0,04			
	ap	0,5-1,5	0,5-1,5	0,5-1,5			
	VC	30-70	30-50	50-90			

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PARAMETRI INSERTI _ SCHNITTDATEN _ CUTTING CONDITION

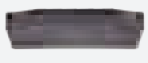
TURNING		P	M	K	N	S	H
CCGT 030102 - FN K400 	f	P20-P35 0,03-0,15	M10-M25 0,03-0,15	K10-K20 0,03-0,15			
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	VC	100-190	70-90	120-200			
CCGT 0602 02/04 ALU CCGT 09T3 02/04/08 ALU CCGT 1204 02/04/08 ALU K15 	f				K10-K20 0,05-0,20		
	--				--		
	VC				160-250		
CCMT 0602 02/04 K400 	f	P10-P30 0,07-0,17	M10-M25 0,06-0,14	K10-K20 0,06-0,15			
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	VC	120-250	80-220	120-230			
CCMT 09T3 04/08 K400 	f	P10-P30 0,09-0,20	M10-M25 0,08-0,26	K10-K20 0,08-0,20			
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	VC	120-250	80-220	120-230			
CCMT 1204 04/08 K400 	f	P10-P30 0,18-0,45	M10-M25 0,18-0,35	K10-K20 0,15-0,50			
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	VC	120-250	80-220	120-230			
CPGT 05T1 02-04 CDGT 0401 01/02/04 N-ALU K15 	f				K10-K15 0,03-0,12		
	--				--		
	VC				160-250		
CDGT 0401 02/04 FN K400 	f	P20-P35 0,03-0,15	M15-M30 0,03-0,15	K15-K25 0,03-0,15			
	--	--	--	--			
	VC	110-190	70-90	120-200			
DCGT 04T002 FN-ALU K15 	f				K10-K15 0,02-0,15		
	--				--		
	VC				160-250		
DCGT 04T002 EN-PM1 K400 	f	P20-P35 0,05-0,20	M15-M30 0,05-0,20	K15-K25 0,05-0,20			
	--	--	--	--			
	VC	100-190	70-90	120-200			
DCGT 0702 02/04 K15 	f				K10-K20 0,08-0,20		
	--				--		
	VC				160-250		
DCGT 11T302 04/08 K15 	f				K10-K20 0,10-0,25		
	--				--		
	VC				160-250		
DCMT 0702 02/04 K400 	f	P10-P30 0,07-0,17	M10-M25 0,06-0,14	K10-K20 0,06-0,15			
	--	--	--	--			
	VC	120-250	80-220	120-230			
DCMT 11T3 02/04/08 K400 	f	P10-P30 0,18-0,45	M10-M25 0,18-0,35	K10-K20 0,15-0,55			
	--	--	--	--			
	VC	120-250	80-220	120-230			
SCGT 09T3 04/08 ALU SCGT 120408 ALU K15 	f				K10-K20 0,10-0,25		
	--				--		
	VC				160-250		

TURNING		P	M	K	N	S	H
	SCMT 060204	K400	P15-P30	M20-M35	K15-K30		
	f	0,05-2	0,05-2	0,05-2			
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	VC	100-240	130-220	120-200			
	SCMT 09T308	K400	P10-P30	M10-M25	K10-K20		
	f	0,18-0,45	0,20-0,40	0,15-0,50			
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	VC	120-250	80-220	120-230			
	SCMT 120408	RK400	P10-P30	M10-M25	K10-K20		
	f	0,13-0,30	0,20-0,40	0,15-0,50			
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	VC	120-250	110-170	120-230			
	TCGT 1102 02/04 TCGT 16T3 04/08	K15			K10-K20		
	f				0,10-0,25		
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	VC				160-250		
	TCMT 1102 02/04	K400	P10-P30	M10-M25	K10-K20		
	f	0,08-0,17	0,06-0,16	0,06-0,15			
	--	--	--	--			
	VC	120-250	80-220	120-230			
	TCMT 16T3 04/08	K400	P10-P30	M10-M25	K10-K20		
	f	0,10-0,20	0,08-0,16	0,08-0,18			
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	VC	120-250	80-220	120-210			
	VBMT 110304	K400	P10-P30	M10-M25	K10-K20		
	f	0,07-0,17	0,06-0,14	0,06-0,15			
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	VC	120-250	80-220	120-230			
	VBMT 1604 04/08	K400	P10-P30	M10-M25	K10-K20		
	f	0,16-0,30	0,16-0,30	0,14-0,40			
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	VC	120-250	80-220	120-230			
	VCGT 0501 02 FN-ALU VCGT 0702 01/02/04 FN-ALU	K15			K10-K15		
	f				0,02-0,15		
	--				--		
	VC				160-250		
	VCGT 0501 01/02 VCMT 0702 02/04	K400	P20-P35	M15-M30	K15-K25		
	f	0,05-0,20	0,05-0,20	0,05-0,20			
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	VC	100-190	70-90	120-200			
	VCGT 1103 02/04/08 VCGT 1604 04/08	K15			K10-K20		
	f				0,10-0,25		
	--				--		
	VC				160-250		
	VCMT 110304	K400	P20-P35	M15-M30	K15-K25		
	f	0,05-0,20	0,05-0,20	0,05-0,20			
	--	--	--	--			
	VC	100-190	70-90	120-200			
	VCMT 1604 04/08	K400	P10-P30	M10-M25	K10-K20		
	f	0,09-0,25	0,08-0,20	0,08-0,25			
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	VC	120-200	80-100	120-200			
	WCGT 0201 01/02 FN-ALU	K15			K10-K30		
	f				0,03-0,15		
	--				--		
	VC				160-250		
	WCMT 0201 02/04	X55	P10-P30	M20-M40	K10-K20		
	f	0,05-0,20	0,05-0,20	0,05-0,20			
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	VC	100-190	70-90	120-200			

DRILLING		P	M	K	N	S	H
SEEX 12T408 TiN TIN 	TIN	P25-P40	M20-M40	K20-K40			
	f	0,02-0,05	0,02-0,05	0,02-0,05			
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	VC	40-80	40-50	40-80			
XPMT 042004 ALU XPMT 052804 ALU XPMT 063306 ALU XPMT 074006 ALU XPMT 094508 ALU XPMT 125812 ALU XPMT 156812 ALU 	K15				K10-K20		
	fz				0,01-0,15		
	ap				--		
	VC				120-340		
XPMT 042004 XPMT 052804 XPMT 063306 XPMT 074006 XPMT 094508 XPMT 125812 XPMT 156812 	K300	P10-P25		K10-K30			
	fz	0,06-0,15		0,06-0,2			
	ap	--		--			
	VC	170-220		200-250			
XPMT 042004 XPMT 052804 XPMT 063306 XPMT 074006 XPMT 094508 XPMT 125812 XPMT 156812 	P300	P10-P30	M20-M35	K10-K30			
	fz	0,06-0,15	0,06-0,15	0,06-0,2			
	ap	--	--	--			
	VC	150-200	140-190	180-230			
WCHX 040102FN-BAL LW610 WCHX 040104FN-BAL LW610 WCHX 05T102FN-BAL LW610 WCHX 05T104FN-BAL LW610 WCHX 060202FN-BAL LW610 WCHX 060204FN-BAL LW610 WCHX 070304FN-BAL LW610 WCHX 070308FN-BAL LW610 WCHX 090304FN-BAL LW610 WCHX 090308FN-BAL LW610 WCHX 10T304FN-BAL LW610 WCHX 10T308FN-BAL LW610 WCHX 130508FN-BAL LW610 	K15				K10-K20		
	fz				0,01-0,13		
	ap				--		
	VC				120-230		

DRILLING		P	M	K	N	S	H
WCHX 040102EN-BFM LCP25T	K400	P25-P40	M20-M40	K20-K40			
WCHX 040104EN-BFM LCP25T							
WCHX 05T102EN-BFM LCP25T							
WCHX 05T104EN-BFM LCP25T							
WCHX 060202EN-BFM LCP25T							
WCHX 060204EN-BFM LCP25T							
WCHX 070304EN-BFM LCP25T							
WCHX 070308EN-BFM LCP25T							
WCHX 090304EN-BFM LCP25T							
WCHX 090308EN-BFM LCP25T							
WCHX 10T304EN-BFM LCP25T							
WCHX 10T308EN-BFM LCP25T							
WCHX 130508EN-BFM LCP25T							
	fz	0,01-0,13	0,01-0,13	0,01-0,13			
	ap						
	VC	130-240	90-160	120-180			
WCHX 040102EN-BFM	P300	P30-P40	M30-M40				
WCHX 040104EN-BFM LCM45T							
WCHX 05T102EN-BFM LCM45T							
WCHX 05T104EN-BFM LCM45T							
WCHX 060202EN-BFM LCM45T							
WCHX 060204EN-BFM LCM45T							
WCHX 070304EN-BFM LCM45T							
WCHX 070308EN-BFM LCM45T							
WCHX 090304EN-BFM LCM45T							
WCHX 090308EN-BFM LCM45T							
WCHX 10T304EN-BFM LCM45T							
WCHX 10T308EN-BFM LCM45T							
WCHX 130508EN-BFM LCM45T							
	fz	0,01-0,13	0,01-0,13				
	ap						
	VC	70-150	50-150				

PARAMETRI INSERTI _ SCHNITTDATEN _ CUTTING CONDITION

GROOVING		P	M	K	N	S	H
MCLCGS... 		P25-P40	M20-M40	K20-K40	K10-K15		
	K300 VC	120-220		180-200			
MCLCGD... 	P300 VC		130-150				
	K15X VC				200-300		
	fz	0,04-0,18	0,04-0,16	0,04-0,18	0,04-0,26		
CDGW 040101 FN CVD 2P 	PKD				x		
	fz				0,005 – 0,15		
	ap				2		
	VC				20 - 600		
DCGW 04T001 FN CVD 2P 	PKD				x		
	fz				0,005 – 0,15		
	ap				2		
	VC				20 - 600		
VCGW 050101 FN CVD 2P 	PKD				x		
	fz				0,005 – 0,15		
	ap				2		
	VC				20 - 600		
WCGW 020101 FN CVD 3P 	PKD				x		
	fz				0,005 – 0,15		
	ap				2		
	VC				20 - 600		
CDGW 040101 H65-2C 	CBN						x
	fz						0,01 – 0,15
	ap						2
	VC						80 - 250
DCGW 04T001 H65-2C 	CBN						x
	fz						0,01 – 0,15
	ap						2
	VC						80 - 250
VCGW 050101 H65-2C 	CBN						x
	fz						0,01 – 0,15
	ap						2
	VC						80 - 250
WCGW 020101 H65-3C 	CBN						x
	fz						0,01 – 0,15
	ap						2
	VC						80 - 250



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