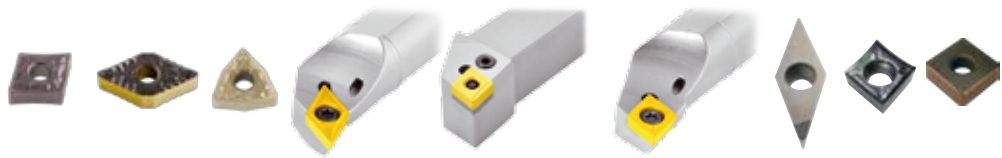


Gesamtübersicht *General View*

1 Drehen Turning



Drehen
Turning

2 Fräswerkzeuge Milling Tools



Fräswerkzeuge
Milling Tools

3 HDS-/VHM- Fräser HDS-/ Solid Carbide Endmills



HDS-/VHM- Fräser
HDS-/ Solid Carbide
Endmills

4 Stech- und Abstechwerkzeuge Grooving and Parting off Tools



Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

5 Mini-/Micro -Werkzeuge Mini-/ Micro Tools



Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

6 Gewindewerkzeuge Threading Tools



Gewinde-
werkzeuge
Threading Tools

7 Wendeplattenbohrer / VHM-Bohrer Indexable Drills Solid / Carbide Drills



Wendeplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

8 Alphanumerischer Index Alphanumeric Index

Allgemeine Liefer- und Verkaufsbedingungen General Delivery and Sales Conditions

Diverses
Diverse

Drehen *Turning*

1

Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

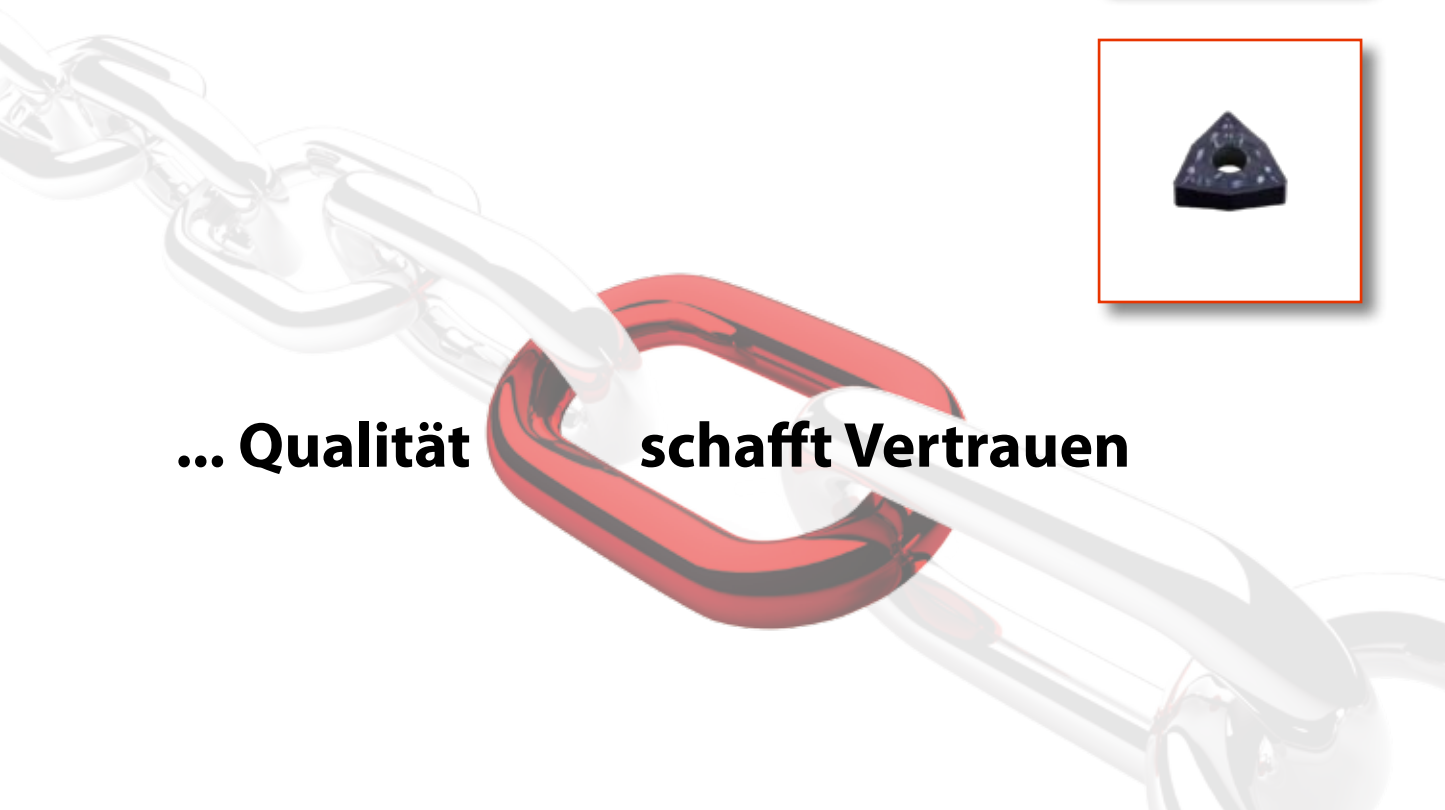
Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills



... Qualität schafft Vertrauen



Drehen
Turning

Fräswerkzeuge
Milling Tools

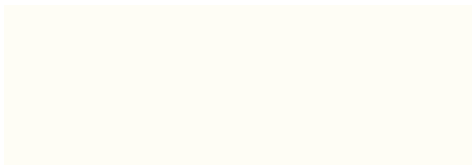
HDS-/VHM-Fräser
HDS-/ Solid Carbide
Endmills




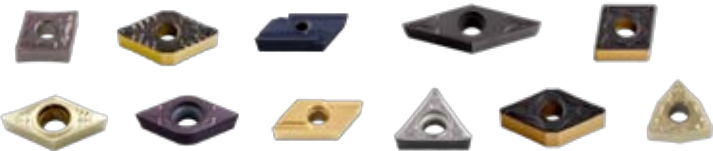
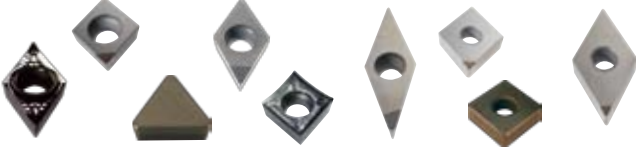
Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

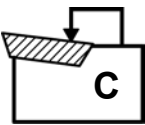
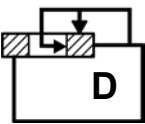
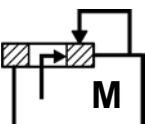
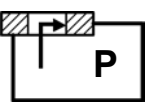

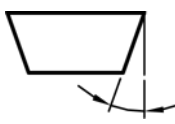
Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills



		Seite Page
ISO - Bezeichnungssystem für Klemmhalter <i>Designation System for Toolholders</i>	S C L C R 25 25 M 12	1.02
Drehwerkzeuge für Außenbearbeitung <i>External Turning Tools</i>		1.04
ISO - Bezeichnungssystem für Bohrstangen <i>Designation System for Boring Bars</i>	A 32 S P C L N L 12	1.22
Drehwerkzeuge für Innenbearbeitung <i>Internal Turning Tools</i>		1.24
Bohrstangen - Sets <i>Boring Bar - Sets</i>		1.34
ISO - Bezeichnungssystem für Wendeschneidplatten zum Drehen <i>Designation System for Indexable Inserts for Turning</i>	T N M G 16 04 04 E R	1.40
Wendeschneidplatten zum Drehen <i>Indexable Inserts for Turning</i>		1.42
Wendeschneidplatten zum Drehen CBN, PKD, Keramik <i>Indexable Inserts for Turning</i>		1.61
Schneidstoffsorten-Übersicht zum Drehen <i>Description of Carbide Grades for Turning</i>		1.70
Schneidstoffsorten-Schlüssel zum Drehen <i>Code Explanation of Carbide Grades for Turning</i>		1.71
Spanleitstufen zum Drehen <i>Chipbreakers for Turning</i>		1.72
Schnittdaten-Empfehlungen zum Drehen <i>Cutting Data Recommendations for Turning</i>		1.74

ISO - Bezeichnungssystem für Klemmhalter / ISO Designation System for Toolholders

- Drehen
Turning
- Fräswerkzeuge
Milling Tools
- HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills
- Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools
- Mini/Micro
Schneidwerkzeuge
Mini/Micro Tools
- Gewinde-
werkzeuge
Threading Tools
- Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

 Von oben geklemmt <i>Top clamping</i>	 Von oben und über Bohrung geklemmt <i>Top and hole clamping</i>	 Von oben und über Bohrung geklemmt <i>Top and hole clamping</i>	 Über Bohrung geklemmt <i>Hole clamping</i>	 Durch Bohrung aufgeschraubt <i>With screw through hole</i>	80° C 55° D 75° E 86° M 35° V 85° A 82° B 55° K H L O P R S T W	90° A 75° B 90° C 45° D 60° E 90° F 90° G 107.5° H 93° J 75° K 95° L 50° M 63° N 75° R 45° S 60° T 93° U 72.5° V 60° W 85° Y	 3° A 5° B 7° C 15° D 20° E 25° F 30° G 0° N 11° P Sonstige Others O	R L N
S	C	L	C	R				
Klemmsystem <i>Clamping Method</i>	Plattenform <i>Shape</i>	Halterform <i>Style</i>	Freiwinkel <i>Clearance Angle</i>	Halteausführung <i>Holder Execution</i>				

ISO - Bezeichnungssystem für Klemmhalter / ISO Designation System for Toolholders

Höhe der Schneidenecke
"h1" in mm

Height of cutting edge
"h1" in mm

Schaftbreite "b" in mm

Width "b" in mm

25

25

Schafthöhe
Height of Shank

Schaftbreite
Width of Shank

L1 (mm)		L1 (mm)
32	A	150 M
40	B	160 N
50	C	170 P
60	D	180 Q
70	E	200 R
80	F	250 S
90	G	300 T
100	H	350 U
110	J	400 V
125	K	450 W
140	L	500 Y
Sonderlänge Special Length		X

M

Halterlänge
Length of Holder

d (mm)	
06	
08	
10	
12	
16	
20	
25	
32	

(mm)	d		(mm)
	(inch)	(mm)	
06	5/32	3.96	03
09	7/32	5.55	05
11	1/4	6.35	06
16	3/8	9.52	09
22	1/2	12.7	12
27	5/8	15.8	15
33	3/4	19.0	19
44	1	25.4	25

12

Schneidenlänge
Length of Cutting Edge

Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Übersicht - Außendrehen Overview - External Turning

Drehen
Turning

Fräswerkzeuge
Milling Tools

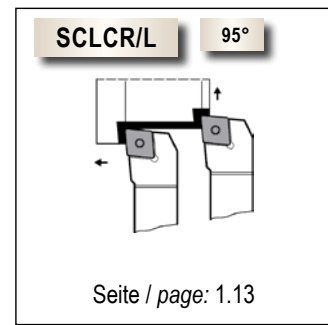
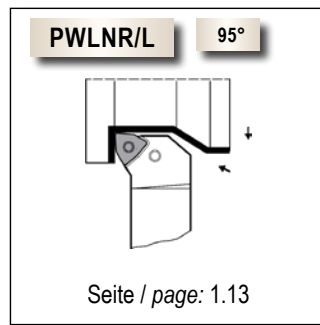
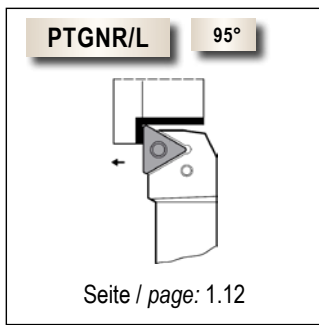
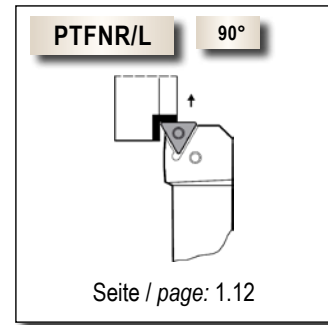
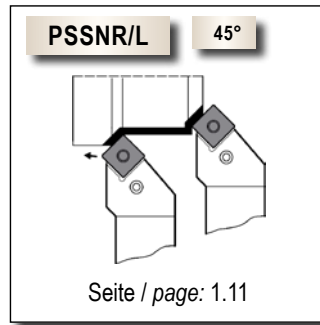
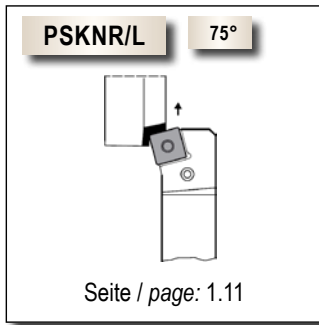
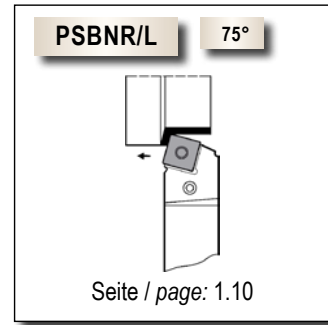
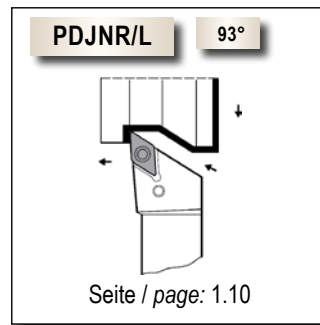
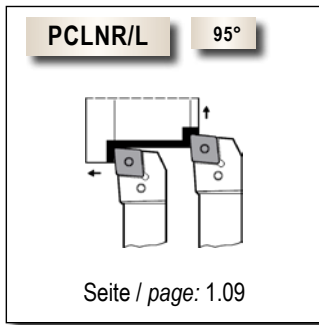
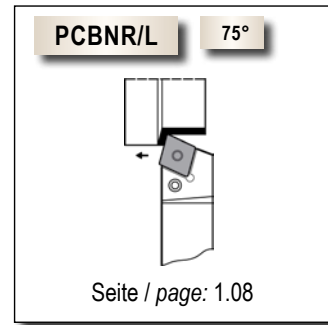
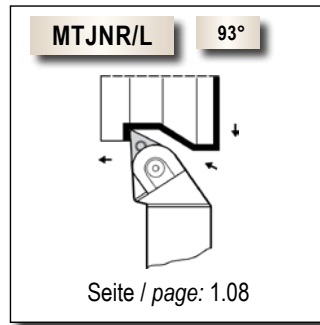
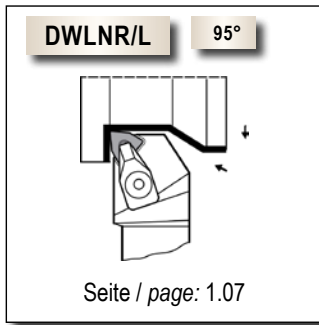
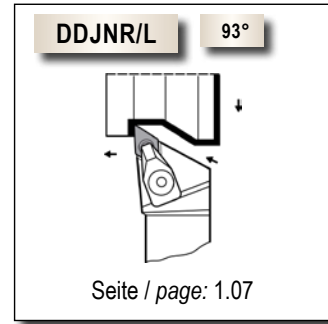
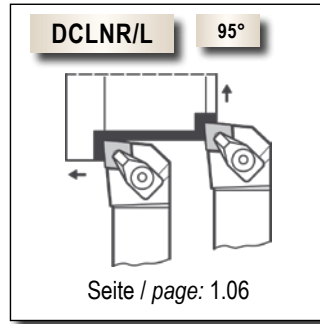
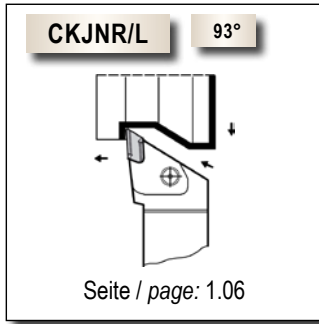
HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/Micro
Schneidwerkzeuge
Mini/Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills



Übersicht - Außendrehen Overview - External Turning

Drehen
Turning

Fräswerkzeuge
Milling Tools

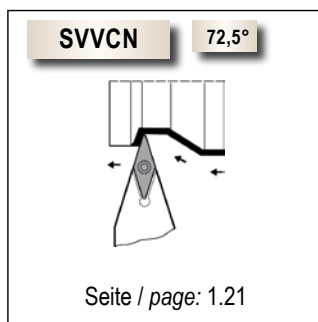
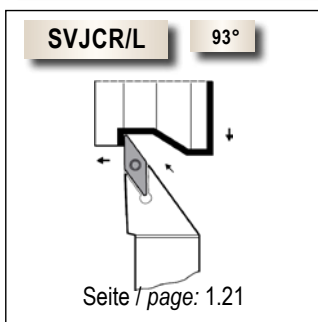
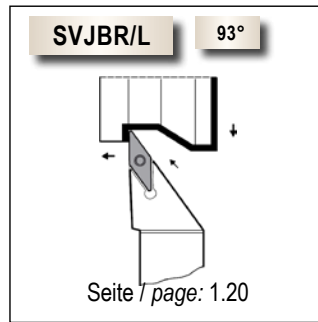
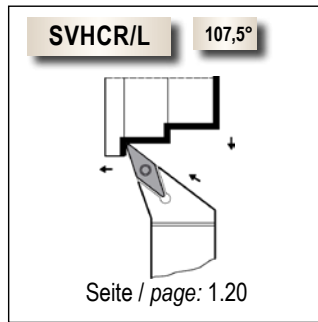
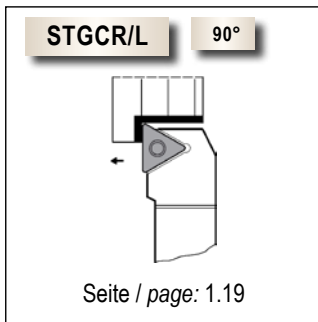
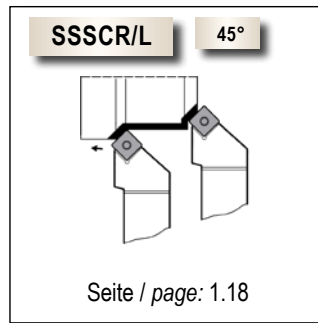
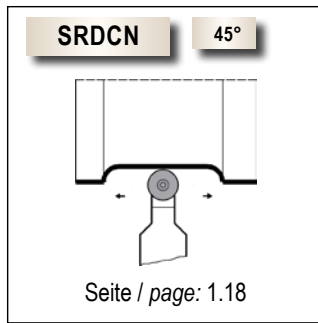
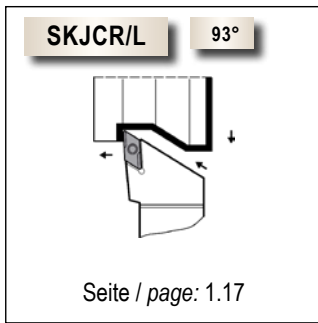
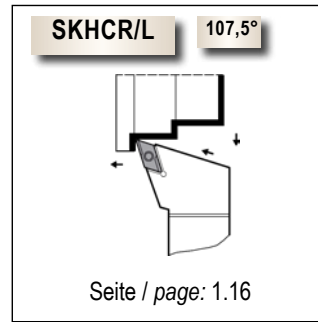
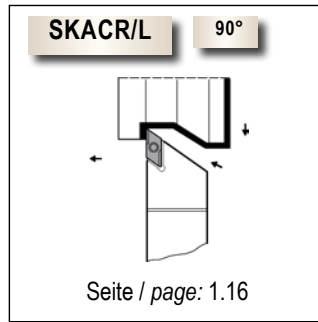
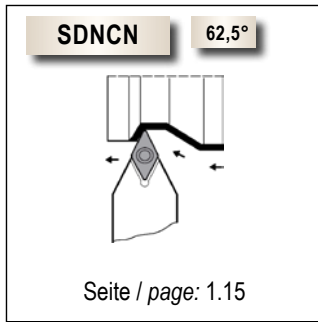
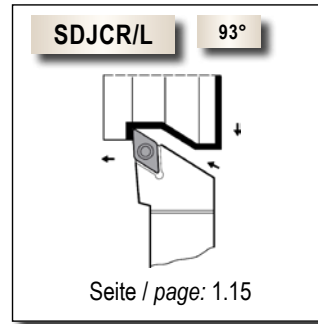
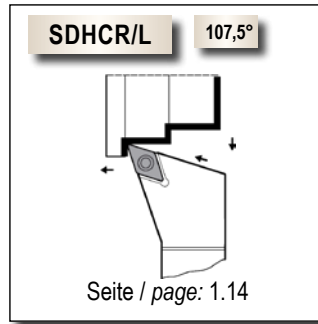
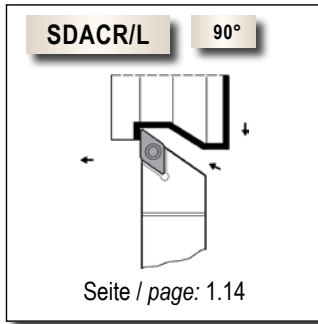
HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

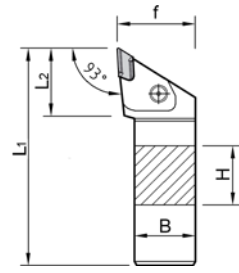
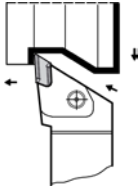
Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

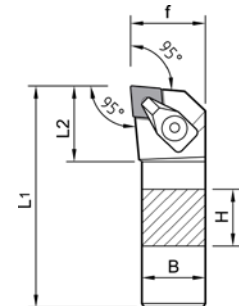
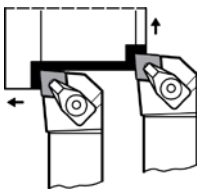


CKJNR/L 93°



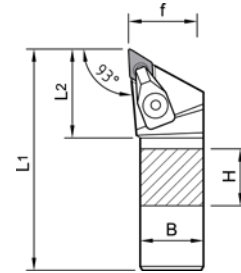
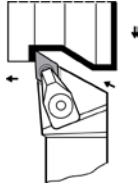
Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.49	Ersatzteile Spare Parts							
	R	L	H	B	L ₁	L ₂	f									
CKJNR 2020 K16	○		20	20	125	32	25	KNUX 1604→R	48.11.705	48.11.105	48.12.606 (SW4)	48.11.503	48.11.500 + 48.11.504	48.11.208	48.11.301	48.12.605 (SW2)
2525 M16	○		25	25	150	32	32							48.11.209		
3232 P16	○		32	32	170	32	40									
CKJNL 2020 K16		○	20	20	125	32	25	KNUX 1604→L	48.11.706	48.11.105	48.12.606 (SW4)	48.11.503	48.11.500 + 48.11.504	48.11.301	48.12.605 (SW2)	
2525 M16		○	25	25	150	32	32							48.11.209		
3232 P16		○	32	32	170	32	40									

DCLNR/L 95°



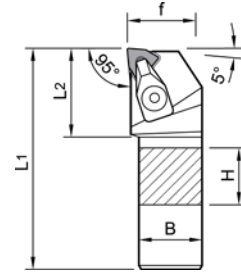
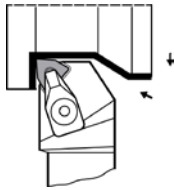
Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.44	Ersatzteile Spare Parts							
	R	L	H	B	L ₁	L ₂	f									
DCLNR/L 2020 K12	○	○	20	20	125	30	25	CN → 1204 →	48.34.701	48.34.101	48.12.606 (SW4)	48.33.501	48.33.502	48.33.201	48.34.102	48.12.604 (SW2,5)
2525 M12	○	○	25	25	150	32	32									
3232 P12	○	○	32	32	170	32	40									

DDJNR/L 93°



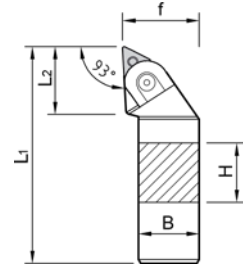
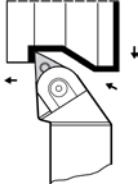
Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.48	Ersatzteile Spare Parts								
	R	L	H	B	L ₁	L ₂	f										
DDJNR/L 2020 K15	●	○	20	20	125	38	25	DN ** 1506 **									
2525 M15	●	○	25	25	150	38	32										
3232 P15	○	○	32	32	170	38	40										48.34.701

DWLNR/L 95°



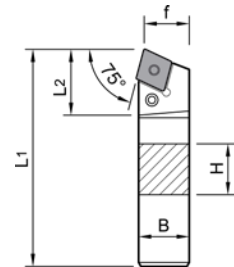
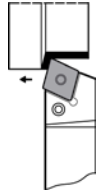
Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.59	Ersatzteile Spare Parts								
	R	L	H	B	L ₁	L ₂	f										
DWLNR/L 2020 K08	○	○	20	20	125	35	25	WN ** 0804 **									
2525 M08	○	○	25	25	150	35	32										
																	48.34.701

MTJNR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.54	Ersatzteile Spare Parts													
	R	L	H	B	L ₁	L ₂	f															
MTJNR/L 2020 K16	●	○	20	20	125	35	25	TN .. 1604 ..														
2525 M16	●	●	25	25	150	35	32									48.10.707	48.10.510	48.10.205	48.10.105	48.33.501	48.10.503	48.12.603 (SW3)
3232 P16	○	○	32	32	170	35	40									48.10.708	48.10.511	48.10.206	48.34.101		48.33.502	48.12.606 (SW4)
2525 M22	●	●	25	25	150	40	32	TN .. 2204 ..														
3232 P22	○	○	32	32	170	40	40									48.10.708	48.10.511	48.10.206	48.34.101	48.33.502	48.12.606 (SW4)	

PCBNR/L 75°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.44	Ersatzteile Spare Parts										
	R	L	H	B	L ₁	L ₂	f												
PCBNR/L 2020 K12	○	○	20	20	125	27	17	CN .. 1204 ..											
2525 M12	○	○	25	25	150	27	22								48.12.414	48.12.113	48.33.201	48.12.901	48.12.603 (SW3)
3232 P12			32	32	170	27	22								48.12.415	48.12.114	48.12.202	48.12.902	
2525 M16	○		25	25	150	33	22	CN .. 1606 ..											
3232 P16			32	32	170	33	27								48.12.416	48.12.115	48.12.203	48.12.903	
3232 P19	○		32	32	170	40	27	CN .. 1906 ..											
4040 S19			40	40	250	40	35								48.12.416	48.12.115	48.12.203	48.12.903	48.12.606 (SW4)

PCLNR/L 95°



Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

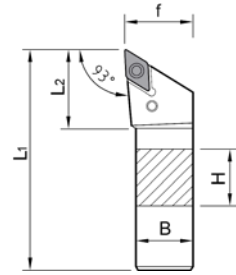
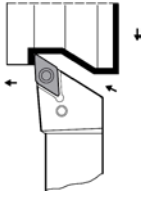
Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

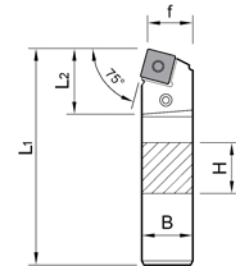
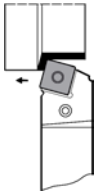
Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.44	Ersatzteile Spare Parts					
	R	L	H	B	L ₁	L ₂	f							
PCLNR/L 1616 H09	○	○	16	16	100	20	20	CN .. 0903 ..						48.12.604 (SW2,5)
2020 K09	○	○	20	20	125	22	25							
2525 M09	○	○	25	25	150	22	32							
1616 H12	●	●	16	16	100	28	20	CN .. 1204 ..						48.12.603 (SW3)
2020 K12	●	●	20	20	125	28	25							
2525 M12	●	●	25	25	150	28	32							
3232 P12	○	○	32	32	170	28	32							
2525 M16	○	○	25	25	150	33	32	CN .. 1606 ..						48.12.902
3232 P16	○	○	32	32	170	33	40							
3232 P19	○	○	32	32	170	38	40	CN .. 1906 ..						48.12.903
4040 S19	○	○	40	40	250	38	50							

PDJNR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.48	Ersatzteile Spare Parts										
	R	L	H	B	L ₁	L ₂	f												
PDJNR/L 1616 H11	●	○	16	16	100	25	20	DN .. 1104 ..											
2020 K11	●	●	20	20	125	25	25								48.12.417	48.12.116	48.12.204	48.12.905	48.12.604 (SW2,5)
2525 M11	○	○	25	25	150	30	32												
2020 K15	●	●	20	20	125	35	25	DN .. 1506 ..											
2525 M15	●	●	25	25	150	35	32								48.12.418	48.12.113	48.33.202	48.12.901	48.12.603 (SW3)
3232 P15	○	○	32	32	170	35	40												

PSBNR/L 75°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.52	Ersatzteile Spare Parts										
	R	L	H	B	L ₁	L ₂	f												
PSBNR/L 2020 K12			20	20	125	28	17	SN .. 1204 ..											
2525 M12			25	25	150	28	22								48.12.414	48.12.113	48.12.205	48.12.901	48.12.603 (SW3)
3232 P12			32	32	170	28	27												
2525 M15			25	25	150	35	22	SN .. 1506 ..											
3232 P15			32	32	170	37	27								48.12.415	48.12.114	48.12.206	48.12.902	
3232 P19			32	32	170	40	27												
4040 S19			40	40	250	40	35	SN .. 1906 ..											
									48.12.416	48.12.115	48.12.236	48.12.903	48.12.606 (SW4)						

PSKNR/L 75°



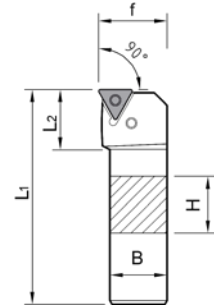
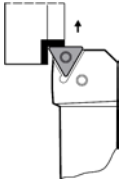
Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions				Seite / Page: 1.52	Ersatzteile Spare Parts					
	R	L	H	B	L ₁	L ₂		f					
PSKNR/L 2020 K12			20	20	125	26	25	SN .. 1204 ..	48.12.414	48.12.113	48.12.205	48.12.901	48.12.603 (SW3)
2525 M12			25	25	150	26	32						
2525 M15			25	25	150	32	32	SN .. 1506 ..	48.12.415	48.12.114	48.12.206	48.12.902	
3232 P15			32	32	170	32	40						
3232 P19			32	32	170	40	40	SN .. 1906 ..	48.12.416	48.12.115	48.12.236	48.12.903	48.12.606 (SW4)
4040 S19			40	40	250	50	50						

PSSNR/L 45°



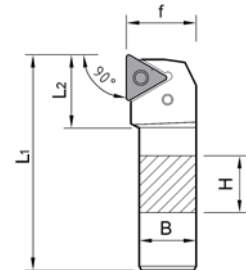
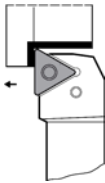
Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions				Seite / Page: 1.52	Ersatzteile Spare Parts					
	R	L	H	B	L ₁	L ₂		f					
PSSNR/L 2020 K12	●	○	20	20	125	30	25	SN .. 1204 ..	48.12.414	48.12.113	48.12.205	48.12.901	48.12.603 (SW3)
2525 M12	●	○	25	25	150	30	32						
2525 M15			25	25	150	30	32	SN .. 1506 ..	48.12.415	48.12.114	48.12.206	48.12.902	
3232 P15			32	32	170	40	40						
3232 P19	○	○	32	32	170	40	40	SN .. 1906 ..	48.12.416	48.12.115	48.12.236	48.12.903	48.12.606 (SW4)
4040 S19	○	○	40	40	250	40	50						

PTFNR/L 90°



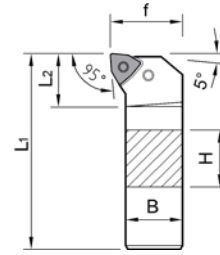
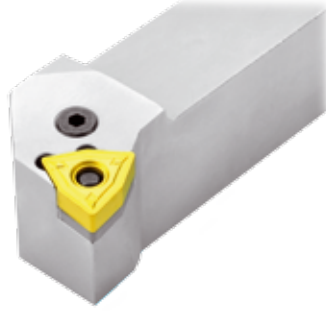
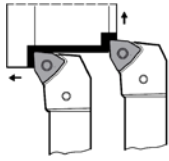
Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.54	Ersatzteile Spare Parts				
	R	L	H	B	L ₁	L ₂	f						
PTFNR/L 1616 H16	○	○	16	16	100	20	20	TN .. 1604 ..	48.12.417	48.12.116	48.12.229	48.12.905	48.12.604 (SW2,5)
2020 K16	○	○	20	20	125	20	25						
2525 M16	○	○	25	25	150	20	32						
2525 M22	○	○	25	25	150	25	32	TN .. 2204 ..	48.12.414	48.12.113	48.12.230	48.12.901	48.12.603 (SW3)
3232 P22			32	32	170	25	40						
3232 P27			32	32	170	33	40	TN .. 2706 ..	48.12.415	48.12.114	48.12.231	48.12.902	
4040 S27			40	40	250	33	50						

PTGNR/L 90°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.54	Ersatzteile Spare Parts				
	R	L	H	B	L ₁	L ₂	f						
PTGNR/L 1616 H16			16	16	100	20	20	TN .. 1604 ..	48.12.417	48.12.116	48.12.229	48.12.905	48.12.604 (SW2,5)
2020 K16	○	○	20	20	125	20	25						
2525 M16	○	○	25	25	150	20	32						
3232 P16			32	32	170	20	40	TN .. 2204 ..	48.12.414	48.12.113	48.12.230	48.12.901	48.12.603 (SW3)
2525 M22	○	○	25	25	150	28	32						
3232 P22			32	32	170	28	40	TN .. 2706 ..	48.12.415	48.12.114	48.12.231	48.12.902	
3232 P27			32	32	170	33	40						
4040 S27			40	40	250	33	50						

PWLNR/L 95°



Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

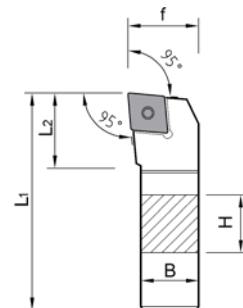
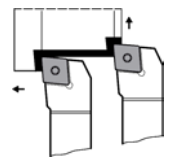
Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendelplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions				Seite / Page: 1.59	Ersatzteile Spare Parts					
	R	L	H	B	L ₁	L ₂		f					
PWLNR/L 1616 H06	○	○	16	16	100	20	20	WN-0604-..					
2020 K06	○	○	20	20	125	20	25						
2525 M06	○	○	25	25	150	20	32						
2020 K08	●	●	20	20	125	26	25	WN-0804-..					
2525 M08	●	●	25	25	150	26	32						
3232 P08	○	○	32	32	170	26	40						

SCLCR/L 95°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions				Seite / Page: 1.42	Ersatzteile Spare Parts				
	R	L	H	B	L ₁	L ₂		f				
SCLCR/L 0808 D06	●	○	8	8	60	12	10	CC-0602-..				
1010 F06	●	○	10	10	80	12	12					
1212 F09	●	●	12	12	80	16	16	CC-09T3-..				
1616 H09	●	●	16	16	100	16	20					
2020 K09	●	●	20	20	125	25	25					
1616 H12	○	○	16	16	100	20	20	CC-1204-..				
2020 K12	●	●	20	20	125	25	25					
2525 M12	●	●	25	25	150	25	32					
3232 P12	○	○	32	25	170	25	40					

SDACR/L 90°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.46	Ersatzteile Spare Parts			
	R	L	H	B	L ₁	L ₂	f					
SDACR/L 0808 K07			8	8	125	14	8.5	DC -- 0702 --				
1010 M07			10	10	150	14	10.5					
1212 M07			12	12	150	14	12.5					
1212 M11			12	12	150	21	12.5	DC -- 11T3 --				
2525 M11			25	25	150	21	25.5					

SDHCR/L 107,5°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.46	Ersatzteile Spare Parts			
	R	L	H	B	L ₁	L ₂	f					
SDHCR/L 1010 E07	○		10	10	70	15	12	DC -- 0702 --				
1212 F07	○	○	12	12	80	15	16					
1616 H11	●	○	16	16	100	16	20	DC -- 11T3 --				
2020 K11	●	●	20	20	125	21	25					
2525 M11	●	●	25	25	150	22	32					

SDJCR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions				Seite / Page: 1.46	Ersatzteile Spare Parts				
	R	L	H	B	L ₁	L ₂		f				
SDJCR/L 1010 E07	○		10	10	70	15	12	DC..0702..	48.24.107	-	-	56.33.612 (T08)
1212 F07	●	○	12	12	80	15	16					
1616 H11	●	●	16	16	100	26	20	DC..11T3..	48.13.102	48.13.203	48.13.301	56.33.613 (T15)
2020 K11	●	●	20	20	125	26	25					
2525 M11	●	●	25	25	150	29	32					

SDNCN 62,5°



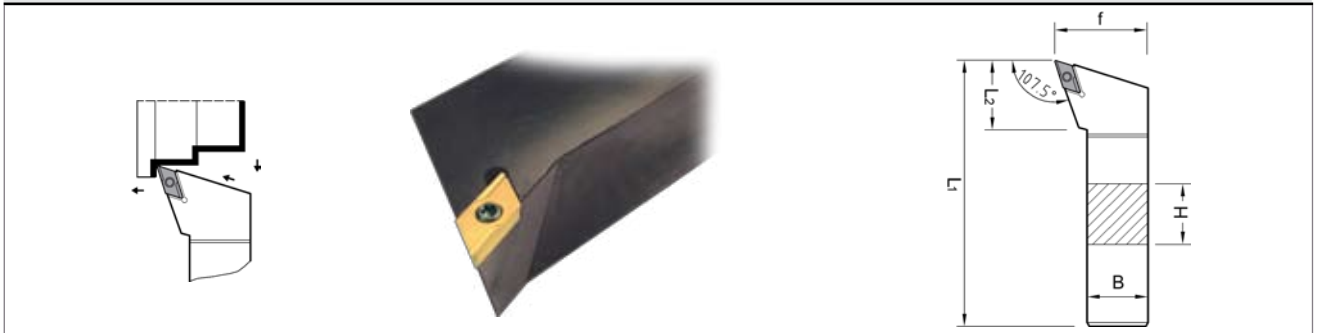
Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions				Seite / Page: 1.46	Ersatzteile Spare Parts				
	R	L	H	B	L ₁	L ₂		f				
SDNCN 1010 E07	○		10	10	70	20	5	DC..0702..	48.24.107	-	-	56.33.612 (T08)
1212 F07	○		12	12	80	20	6					
1212 M07			12	12	150	20	6					
1212 M11			12	12	150	30	6	DC..11T3..	48.13.102	48.13.203	48.13.301	56.33.613 (T15)
1616 H11	●		16	16	100	30	8					
2020 K11	●		20	20	125	30	10					
2525 M11	○		25	25	150	30	12.5					

SKACR/L 90°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.49	Ersatzteile Spare Parts			
	R	L	H	B	L ₁	L ₂	f					
SKACR/L 1212 M11	○	●	12	12	150	-	10.5	KC-X 1103 ..	48.13.104	-	-	56.33.612 (T08)
1616 M11	○	●	16	16	150	-	12.5					
2020 M11	○	●	20	20	150	-	16.5					

SKHCR/L 107,5°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.49	Ersatzteile Spare Parts			
	R	L	H	B	L ₁	L ₂	f					
SKHCR/L 1212 F11	○	●	12	12	80	15	16	KC-X 1103 ..	48.13.104	-	-	56.33.612 (T08)
1616 H11	○	●	16	16	100	24	20					
2020 K11	○	●	20	20	125	24	25					
2525 M11	○	●	25	25	150	29	32					

SKJCR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.49	Ersatzteile <i>Spare Parts</i>			
	R	L	H	B	L ₁	L ₂	f					
SKJCR/L 1212 F11	○		12	12	80	15	16	KC-X 1103 -- R/L	48.13.104	-	-	56.33.612 (T08)
1616 H11	○	○	16	16	100	24	20					
2020 K11	○	○	20	20	125	24	25					
2525 M11	○	○	20	25	150	29	32					

Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM- Fräser
HDS-/ Solid Carbide
Endmills

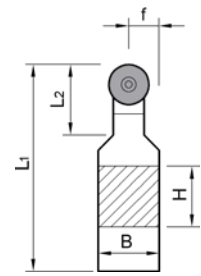
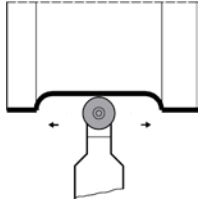
Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

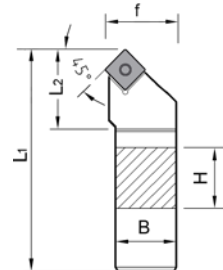
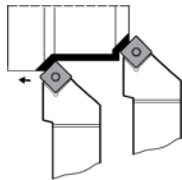
Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

SRDCN 45°



Bezeichnung Part Number	Lager Stock	Maße [mm] Dimensions					Seite / Page: 1.50	Ersatzteile Spare Parts			
		H	B	L ₁	L ₂	f					
SRDCN 1212 F06		12	12	80	12	6	RC-T 0602 ..	48.24.107	-	-	56.33.612 (T08)
1616 H06		16	16	100	12	8					
2020 K06	○	20	20	125	12	10					
2525 M06	○	25	25	150	12	12.5	RC-T 0803 ..	48.13.105	-	-	56.33.613 (T15)
1616 H08		16	16	100	16	8					
2020 K08	○	20	20	125	16	10					
2525 M08	○	25	25	150	16	12.5	RC-T 1003 ..	48.13.102	48.13.204	48.13.301	56.33.613 (T15)
1616 H10		16	16	100	20	8					
2020 K10		20	20	125	20	10					
2525 M10	○	25	25	150	20	12.5					

SSSCR/L 45°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.51	Ersatzteile Spare Parts			
	R	L	H	B	L ₁	L ₂	f					
SSSCR/L 1212 F09	●		12	12	80	18	16	SC .. 09T3 ..	48.13.102	-	-	56.33.613 (T15)
1616 H09	●	○	16	16	100	20	20					
2020 K09	●	○	20	20	125	22	25					
1616 H12			16	16	100	25	20	SC .. 1204 ..	48.13.103	48.13.206	48.13.302	56.33.613 (T15)
2020 K12	●	○	20	20	125	25	25					
2525 M12	●	○	25	25	150	25	32					
3225 P12			32	25	170	25	38					

STGCR/L 90°



Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

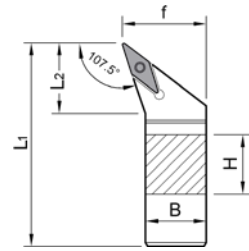
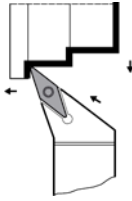
Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

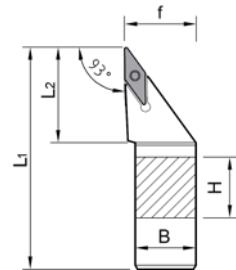
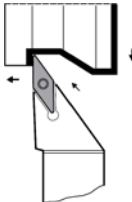
Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					 Seite / Page: 1.53	Ersatzteile <i>Spare Parts</i>			
	R	L	H	B	L ₁	L ₂	f					
STGCR/L 0808 D09	○		8	8	60	8	10	TC.. 0902..	L60M2.2x5	-	-	75.20.621 (T06)
1010 E09	○		10	10	70	10	12					
1212 F11			12	12	80	15	16	TC.. 1102..	48.24.107	-	-	56.33.612 (T08)
1616 H11	○		16	16	100	15	20					
1616 H16			16	16	100	22	20					
2020 K16	○		20	20	125	22	25	TC.. 16T3..	48.13.102	48.13.207	48.13.301	56.33.613 (T15)
2525 M16	○		25	25	150	22	32					

SVHCR/L 107,5°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.57	Ersatzteile Spare Parts			
	R	L	H	B	L ₁	L ₂	f					
SVHCR/L 1212 F11			12	12	80	11.5	16	VC .. 1103 ..	48.24.107	-	-	56.33.612 (T08)
1616 H11			16	16	100	11.5	20					
2020 K11			20	20	125	14.5	25					
2525 M11			25	25	150	20.0	32	VC .. 1604 ..	48.13.102	48.13.209	48.13.301	56.33.613 (T15)
1616 H16			16	16	100	13.5	20					
2020 K16	●		20	20	125	13.5	25					
2525 M16	●		25	25	150	20.0	32					

SVJBR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.56	Ersatzteile Spare Parts			
	R	L	H	B	L ₁	L ₂	f					
SVJBR/L 1212 F11	○		12	12	80	11.5	16	VB .. 1103 ..	48.24.107	-	-	56.33.612 (T08)
1616 M11	○	○	16	16	100	11.5	20					
2020 K11			20	20	125	14.5	25					
2525 M11			25	25	150	20.0	32	VB .. 1604 ..	48.13.102	48.13.209	48.13.301	56.33.613 (T15)
1616 H16			16	16	100	29.5	20					
2020 K16	●	●	20	20	125	29.5	25					
2525 M16	●	○	25	25	150	32.5	32					

SVJCR/L 93°



Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendelplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.57	Ersatzteile Spare Parts			
	R	L	H	B	L ₁	L ₂	f					
SVJCR/L 1010 E11	○		10	10	70	14.5	12	VC.. 1103..	48.24.107	-	-	56.33.612 (T08)
1212 F11	●	○	12	12	80	22.0	16					
1616 H11	●	●	16	16	100	25.0	20					
2020 K11	●	○	20	20	125	32.0	25					
2525 M11	●	○	25	25	150	38.0	32	VC.. 1604..	48.13.102	48.13.209	48.13.301	56.33.613 (T15)
1616 H16	●	○	16	16	100	29.5	20					
2020 K16	●	●	20	20	125	29.5	25					
2525 M16	●	●	25	25	150	32.5	32					
3225 P16	○	○	32	25	170	35.0	32					

SVVCN 72,5°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.57	Ersatzteile Spare Parts			
	R	L	H	B	L ₁	L ₂	f					
SVVCN 1010 E11	○		10	10	70	18	5	VC.. 1103..	48.24.107	-	-	56.33.612 (T08)
1212 F11	○		12	12	80	27	6					
1616 H11			16	16	100	27	8					
2020 K11	○		20	20	125	27	10					
2525 M11			25	25	150	41	12	VC.. 1604..	48.13.102	48.13.209	48.13.301	56.33.613 (T15)
1616 H16	○		16	16	100	36	8					
2020 K16	○		20	20	125	41	10					
2525 M16	○		25	25	150	41	12					

ISO - Bezeichnungssystem für Bohrstanen / ISO Designation System for Boring Bars

Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/Micro
Schneidwerkzeuge
Mini/Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepaltenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

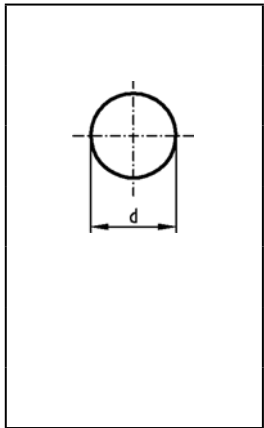
A
Stahlschaft mit
Kühlbohrung
*Steel shank with
coolant hole*

B
Stahlschaft mit
Dämpfung
*Steel shank with
vibration clamping*

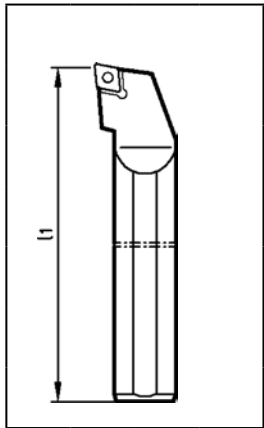
C
Hartmetallschaft mit
Stahlkopf
*Hardmetal shank with
steel head*

E
Hartmetallschaft mit
Stahlkopf und
Kühlbohrung
*Hardmetal shank with
steel head and coolant
hole*

S
Stahlschaft
Steel shank



D ₁ (mm)
08
10
12
16
20
25
32
40
50
60



L ₁ (mm)		L ₁ (mm)	
32	A	150	M
40	B	160	N
50	C	170	P
60	D	180	Q
70	E	200	R
80	F	250	S
90	G	300	T
100	H	350	U
110	J	400	V
125	K	450	W
140	L	500	Y
Sonderlänge <i>Special length</i>			X

Von oben geklemmt
Top clamping

Von oben und über
Bohrung geklemmt
Top and hole clamping

Von oben und über
Bohrung geklemmt
Top and hole clamping

Über Bohrung geklemmt
Hole clamping

Durch Bohrung
aufgeschraubt
With screw through hole

A

32

S

P


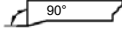

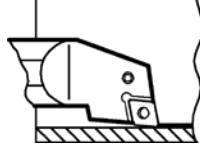
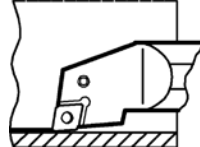
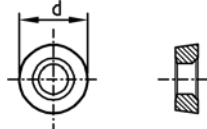
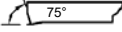

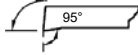
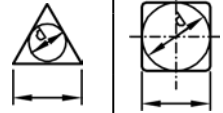
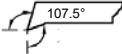

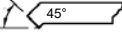

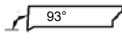
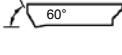

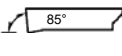








Schaftausführung
Type of Shank

Schaft- Ø
Shank- Ø

Halterlänge
Length

Klemmsystem
Clamping Method

ISO - Bezeichnungssystem für Bohrstangen / ISO Designation System for Boring Bars

	80° C	 F																																										
	55° D	 K					3° A	<table border="1"> <tr><th>d (mm)</th></tr> <tr><td>06</td></tr> <tr><td>08</td></tr> <tr><td>10</td></tr> <tr><td>12</td></tr> <tr><td>16</td></tr> <tr><td>20</td></tr> <tr><td>25</td></tr> <tr><td>32</td></tr> </table>	d (mm)	06	08	10	12	16	20	25	32																											
d (mm)																																												
06																																												
08																																												
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25																																												
32																																												
	75° E	 L	5° B																																									
	86° M	 Q	7° C																																									
	35° V	 S	15° D	<table border="1"> <tr><th colspan="4">d</th></tr> <tr><th>(mm)</th><th>(inch)</th><th>(mm)</th><th>(mm)</th></tr> <tr><td>06</td><td>5/32</td><td>3.96</td><td>03</td></tr> <tr><td>09</td><td>7/32</td><td>5.55</td><td>05</td></tr> <tr><td>11</td><td>1/4</td><td>6.35</td><td>06</td></tr> <tr><td>16</td><td>3/8</td><td>9.52</td><td>09</td></tr> <tr><td>22</td><td>1/2</td><td>12.7</td><td>12</td></tr> <tr><td>27</td><td>5/8</td><td>15.8</td><td>15</td></tr> <tr><td>33</td><td>3/4</td><td>19.0</td><td>19</td></tr> <tr><td>44</td><td>1</td><td>25.4</td><td>25</td></tr> </table>	d				(mm)	(inch)	(mm)	(mm)	06	5/32	3.96	03	09	7/32	5.55	05	11	1/4	6.35	06	16	3/8	9.52	09	22	1/2	12.7	12	27	5/8	15.8	15	33	3/4	19.0	19	44	1	25.4	25
	d																																											
(mm)	(inch)	(mm)	(mm)																																									
06	5/32	3.96	03																																									
09	7/32	5.55	05																																									
11	1/4	6.35	06																																									
16	3/8	9.52	09																																									
22	1/2	12.7	12																																									
27	5/8	15.8	15																																									
33	3/4	19.0	19																																									
44	1	25.4	25																																									
	85° A	 U	20° E																																									
	82° B	 W	25° F																																									
	55° K	 Y	30° G																																									
		Sonderform Special Style X	0° N																																									
	H		11° P																																									
	L		Sonstige Others O																																									
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	S																																											
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C	L	N	L	12
Plattenform <i>Shape</i>	Halterform <i>Style</i>	Freiwinkel <i>Clearance Angle</i>	Halterausführung <i>Holder Execution</i>	Schneidenlänge <i>Length of Cutting Edge</i>

Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Übersicht - Innendrehen Overview - Internal Turning

Drehwerkzeuge
Turning Tools

Fräswerkzeuge
Milling Tools

VHM-Fräser
Solid Carbide
Endmills

Stechdreh-
werkzeuge
Grooving Tools

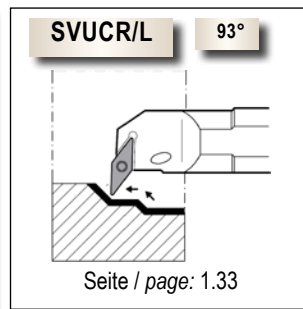
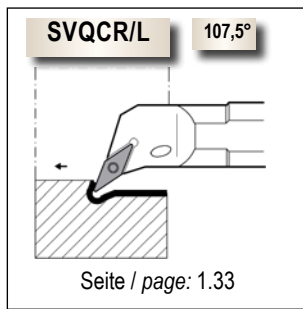
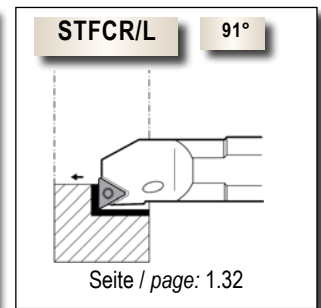
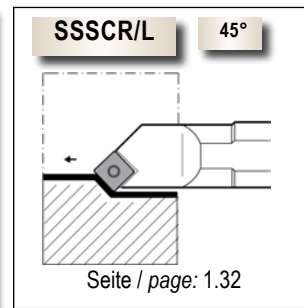
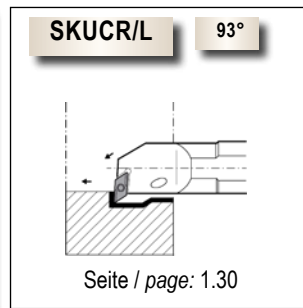
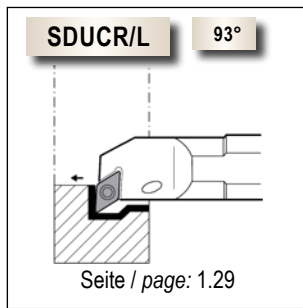
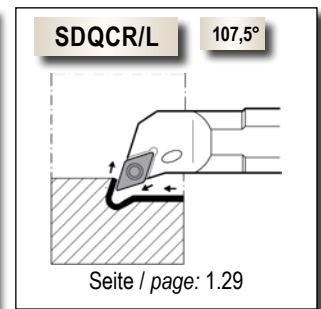
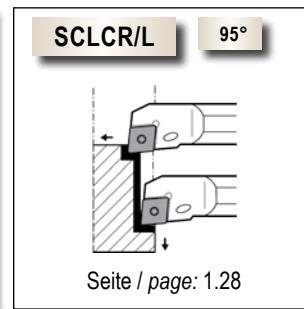
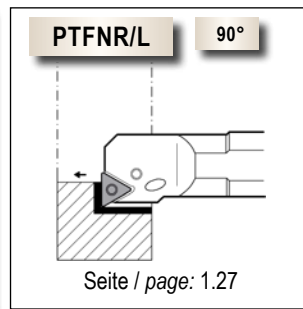
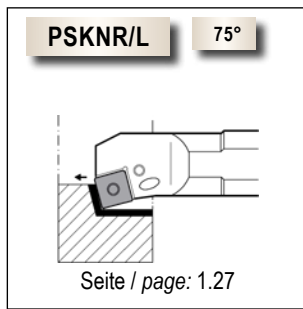
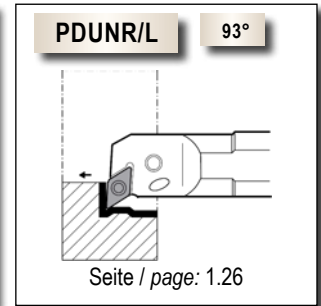
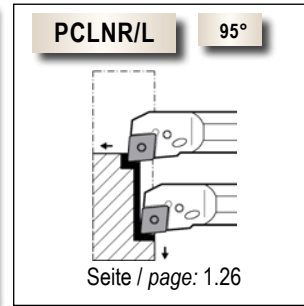
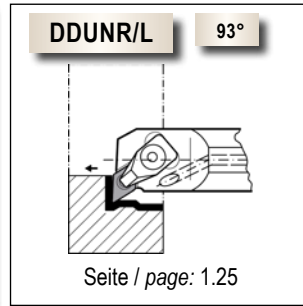
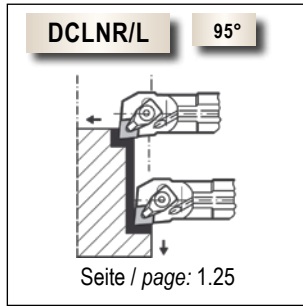
Mini
Schneidwerkzeuge
Mini Tools

Micro
Schneidwerkzeuge
Micro Tools

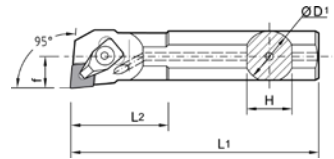
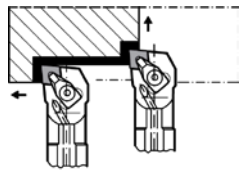
Gewinde-
werkzeuge
Threading Tools

Wendplattenbohrer
Indexable Drills

VHM-Bohrer
Solid Carbide Drills



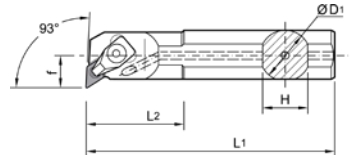
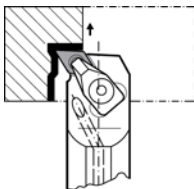
DCLNR/L 95°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.44	Ersatzteile Spare Parts							
	R	L	Dmin	D ₁	H	L ₁	L ₂		f							
A25R DCLNR/L 12	●	●	32	25	23	200	50	17	CN ↔ 1204 ↔							
A32S DCLNR/L 12	○	○	40	32	30	250	60	22								
A40T DCLNR/L 12			50	40	37	300	60	27								
A50U DCLNR/L 12			63	50	47	350	65	35								

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

DDUNR/L 93°



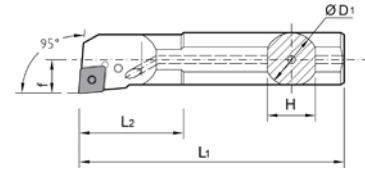
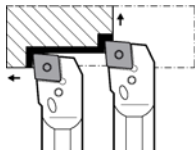
Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.48	Ersatzteile Spare Parts							
	R	L	Dmin	D ₁	H	L ₁	L ₂		f							
A32S DDUNR/L 15			40	32	30	250	55	22	DN ↔ 1506 ↔							
A40T DDUNR/L 15			50	40	37	300	55	27								

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

PCLNR/L 95°

Drehen
Turning

Fräswerkzeuge
Milling Tools



HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/Micro
Schneidwerkzeuge
Mini/Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Seite / Page: 1.44	Ersatzteile Spare Parts				
	R	L	Dmin	D ₁	H	L ₁	L ₂	f						
A25R PCLNR/L 12	●	●	32	25	24	200	40	17	CN .. 1204 ..			-	-	
A32T PCLNR/L 12	●	●	40	32	30	300	50	22		48.23.103	48.23.402	-	-	48.12.604 (SW2,5)
A40T PCLNR/L 12	●	○	54	40	38.5	300	55	27		48.12.113	48.12.414	48.33.204	-	48.12.603 (SW3)
A50U PCLNR/L 12	○	○	63	50	48.5	350	56	35		-	-	48.23.201	48.12.901	-

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

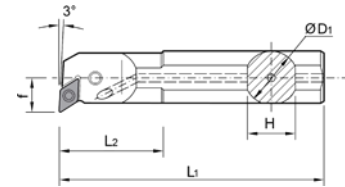
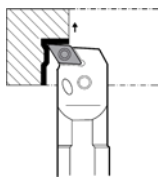
S : Stahlschaft / Steel Shank

PDUNR/L 93°

Mini/Micro
Schneidwerkzeuge
Mini/Micro Tools

Gewinde-
werkzeuge
Threading Tools

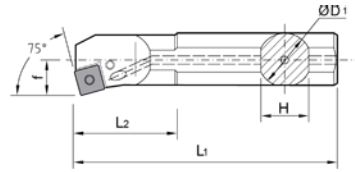
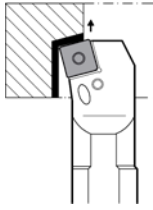
Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Seite / Page: 1.48	Ersatzteile Spare Parts				
	R	L	Dmin	D ₁	H	L ₁	L ₂	f						
A20Q PDUNR/L 11	●	○	25	20	19	180	-	16	DN .. 1104 ..			-	-	
A25R PDUNR/L 11	○	○	31.5	25	24	200	-	18.5		48.23.102	48.23.403	-	-	48.12.605 (SW2)
A32S PDUNR/L 11	○	○	40	32	31	250	-	22		48.12.116	48.12.417	48.12.204	48.12.905	-
A32S PDUNR/L 15	●	○	40	32	31	250	50	22	DN .. 1506 ..			-	-	
A40T PDUNR/L 15	●	○	50	40	38.5	300	50	27		48.12.113	48.12.418	48.33.202	48.12.901	48.12.603 (SW3)

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

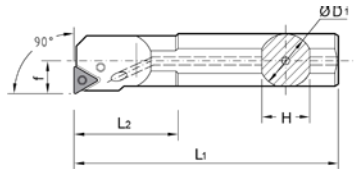
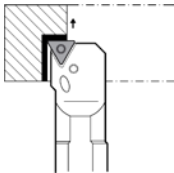
PSKNR/L 75°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Seite / Page: 1.52	Ersatzteile Spare Parts				
	R	L	Dmin	D ₁	H	L ₁	L ₂	f						
A25R PSKNR/L 12	○	○	32	25	24	200	42	17	SN .. 1204 ..			-	-	
A32S PSKNR/L 12	○	○	44	32	31	250	50	22				48.23.203	48.12.901	
A40T PSKNR/L 12	○	○	54	40	38.5	300	55	27				48.23.203	48.12.901	

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

PTFNR/L 90°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Seite / Page: 1.54	Ersatzteile Spare Parts				
	R	L	Dmin	D ₁	H	L ₁	L ₂	f						
S16R PTFNR/L 11	○	○	21	16	15	150	-	11	TN .. 1103 ..			-	-	
S20S PTFNR/L 11	○	○	25	20	19	180	-	13				-	-	
A25R PTFNR/L 16	○	○	32	25	24	200	40	17	TN .. 1604 ..			-	-	
A32S PTFNR/L 16	○	○	44	32	31	250	50	22				48.23.202	48.12.905	
A40T PTFNR/L 16	○	○	54	40	38.5	300	55	27				48.23.202	48.12.905	

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

S : Stahlschaft / Steel Shank

SCLCR/L 95°

Drehen
Turning

Fräswerkzeuge
Milling Tools

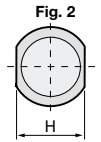
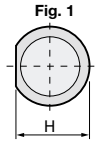
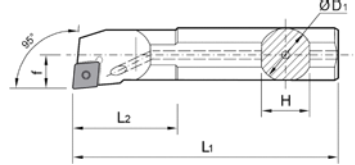
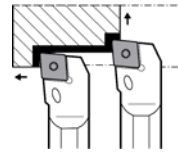
HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills






Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/Micro
Schneidwerkzeuge
Mini/Micro Tools

Gewinde-
werkzeuge
Threading Tools

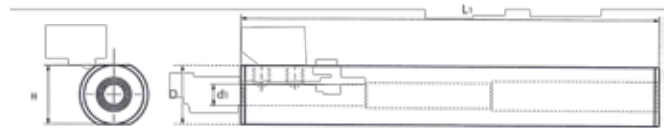
Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills





Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Fig.	 Seite / Page: 1.42	Ersatzteile Spare Parts			
	R	L	Dmin	D ₁	H	L ₁	L ₂	f						
E04G SCLCR/L 0305	●	●	5	4	3.8	90	-	2.5	1	CCET 0301 ..	48.24.142	-	-	75.20.621 (T06)
E05H SCLCR/L 0306	●	○	6	5	4.4	100	-	3.0						
E06J SCLCR/L 0307	○	●	7	6	5.7	110	-	3.5						
E06J SCLCR/L 0407	●	●	7	6	5.7	110	-	3.5						
E07K SCLCR/L 0408	●	●	8	7	6.4	125	-	4.0						
A0608H SCLCR/L 06	●	●	8	8	7	100	25	4.5	2	CC .. 0602 ..	48.24.107	-	-	56.33.612 (T08)
A0810J SCLCR/L 06	●	●	11	10	9	110	32	6.0						
A1012K SCLCR/L 06	●	●	13	12	11	125	38	7.0						
A1216M SCLCR/L 06	●	●	16	16	15	150	50	9.0						
A08F SCLCR/L 06	●	●	11	8	7	80	16	5.5						
A10H SCLCR/L 06	●	●	13	10	9	100	20	6.0	2	CC .. 0602 ..	48.24.107	-	-	56.33.612 (T08)
A12K SCLCR/L 06	●	●	17	12	11	125	23	9.0						
A16M SCLCR/L 09	●	●	21	16	15	150	30	11.0						
A20Q SCLCR/L 09	●	●	25	20	18	180	38	13.0						
A25R SCLCR/L 09	●	●	32	25	23	200	39	17.0						
A32S SCLCR/L 12	○	○	40	32	31	250	50	22.0	1	CC .. 09T3 ..	48.24.108	-	-	56.33.613 (T15)
A40T SCLCR/L 12	○	○	50	40	38.5	300	60	27.0						
E08K SCLCR/L 06	●	●	11	8	7.5	125	-	5.0						
E10M SCLCR/L 06	●	●	14	10	9.5	150	-	6.0						
E12Q SCLCR/L 06	●	●	17	12	11.5	180	-	9.0						
E16R SCLCR/L 09	●	●	21	16	15.5	200	32	11.0	1	CC .. 0602 ..	48.24.107	-	-	56.33.612 (T08)
E20S SCLCR/L 09	●	●	25	20	19	250	38	13.0						
E25T SCLCR/L 09	●	●	32	25	24	300	45	17.0						
E32T SCLCR/L 12	○	○	40	32	30	300	50	22.0						
E40T SCLCR/L 12	○	○	50	40	38	300	60	27.0						

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant
 E : Hartmetallschaft mit Innenkühlung / Carbide Shank with inner coolant
 S : Stahlschaft / Steel Shank

Schafthülsen Sleeves for Shanks



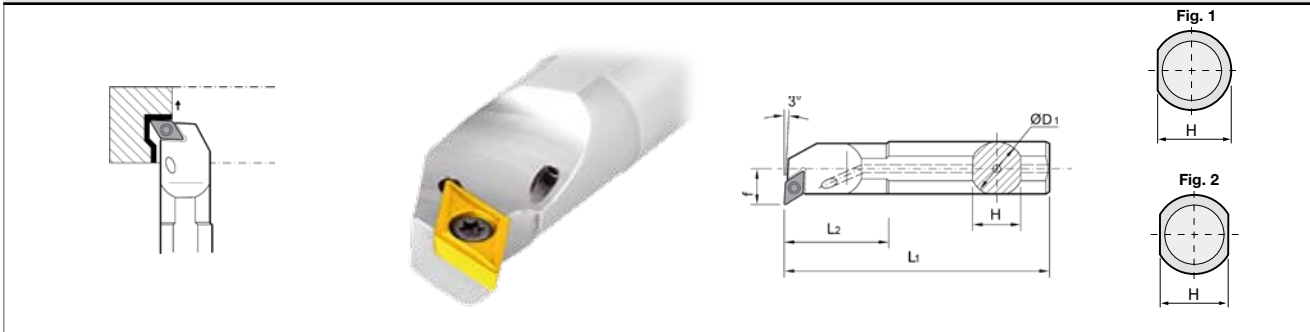
Bezeichnung Part Number	Lager Stock	Maße [mm] Dimensions				Ersatzteile Spare Parts		Passende Bohrstangen Suitable Boring Bars
		D	d ₁	H	L ₁			
SH 0416	●	16	4	14	100	32.35.101	48.12.605	E04G SCLCR/L 0305 E05H SCLCR/L 0306
SH 0516	●		5					

SDQCR/L 107,5°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Fig.		Ersatzteile Spare Parts								
	R	L	Dmin	D ₁	H	L ₁	L ₂	f			Seite / Page: 1.46								
A10H SDQCR/L 07	●	●	12.5	10	9	100	20	7	2	DC .. 0702 ..	48.24.107	-	-	56.33.612 (T08)					
A12K SDQCR/L 07	●	●	17	12	11	125	24	9											
A16M SDQCR/L 07	●	●	21	16	15	150	30	11											
A20Q SDQCR/L 07	●	●	25	20	18	180	32	13											
A16Q SDQCR/L 11	●	●	21	16	15	180	32	11											
A20Q SDQCR/L 11	●	●	25	20	18	180	32	13											
A25R SDQCR/L 11	●	●	32	25	23	200	40	17	1	DC .. 0702 ..	48.24.107	-	-	56.33.612 (T08)					
E10M SDQCR/L 07	●	●	14	10	9.5	150	-	7											
E12Q SDQCR/L 07	●	●	17	12	11.5	180	-	9											
E16R SDQCR/L 07	●	●	21	16	15.5	200	-	11											
E20S SDQCR/L 07	●	○	25	20	19	250	-	13											
E25T SDQCR/L 11	●	○	32	25	24	300	-	17											
E32T SDQCR/L 11	○	○	40	32	30	300	50	22											
E40T SDQCR/L 11	○	○	50	40	38	300	60	27											
															DC .. 11T3 ..	48.24.108	-	-	56.33.613 (T15)

SDUCR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Fig.		Ersatzteile Spare Parts								
	R	L	Dmin	D ₁	H	L ₁	L ₂	f			Seite / Page: 1.46								
A0810H SDUCR/L 07	●	●	12.5	10	9	100	22	7	2	DC .. 0702 ..	48.24.107	-	-	56.33.612 (T08)					
A1012K SDUCR/L 07	●	●	15.5	12	11	125	28	9											
A1216M SDUCR/L 07	●	●	19.5	16	15	150	36	11											
A10H SDUCR/L 07	●	●	14	10	9	100	20	7											
A12K SDUCR/L 07	●	●	17	12	11	125	24	9											
A16M SDUCR/L 07	●	●	21	16	15	150	30	11											
A16M SDUCR/L 11	○	○	20	16	15	150	30	11											
A20Q SDUCR/L 11	●	●	25	20	18	180	32	13											
A25R SDUCR/L 11	●	●	32	25	23	200	40	17											
A32S SDUCR/L 11	●	○	40	32	31	250	50	22											
A40T SDUCR/L 11	○	○	50	40	37	300	60	27	1	DC .. 11T3 ..	48.13.102	48.13.203	48.13.301	56.33.613 (T15)					
E10M SDUCR/L 07	●	●	14	10	9.5	150	-	7											
E12Q SDUCR/L 07	●	●	17	12	11.5	180	-	9											
E16R SDUCR/L 07	●	●	21	16	15.5	200	-	11											
E20S SDUCR/L 11	●	○	25	20	19	250	-	13											
E25T SDUCR/L 11	●	○	32	25	24	300	-	17											
E32T SDUCR/L 11	○	○	40	32	31	300	50	22											
E40T SDUCR/L 11	○	○	50	40	38	300	60	27											
															DC .. 0702 ..	48.24.107	-	-	56.33.612 (T08)
									DC .. 11T3 ..	48.24.108	-	-	56.33.613 (T15)						
														48.13.102	48.13.203	48.13.301			

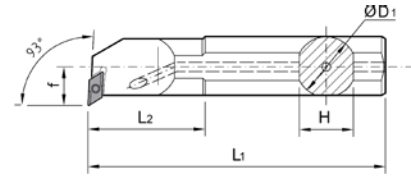
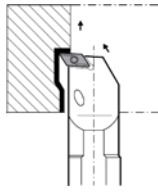
A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

E : Hartmetallschaft mit Innenkühlung / Carbide Shank with inner coolant

● JD-Lager / JD-Stock
○ begrenzte Lagerhaltung - auf Anfrage / limited stock - upon request

SKUCR/L 93°

Drehen
Turning



Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Seite / Page: 1.49	Ersatzteile Spare Parts			
	R	L	Dmin	D ₁	H	L ₁	L ₂	f					
A12K SKUCR/L 11	●	●	17	12	11.5	125	-	9.3	KC-X 1103 **	48.13.104	-	-	56.33.612 (T08)
A16M SKUCR/L 11	●	●	21	16	15	150	-	11.3					
A20Q SKUCR/L 11	●	●	25	20	19	180	-	13.5					
A25R SKUCR/L 11	●	●	32	25	24	200	-	17.0					

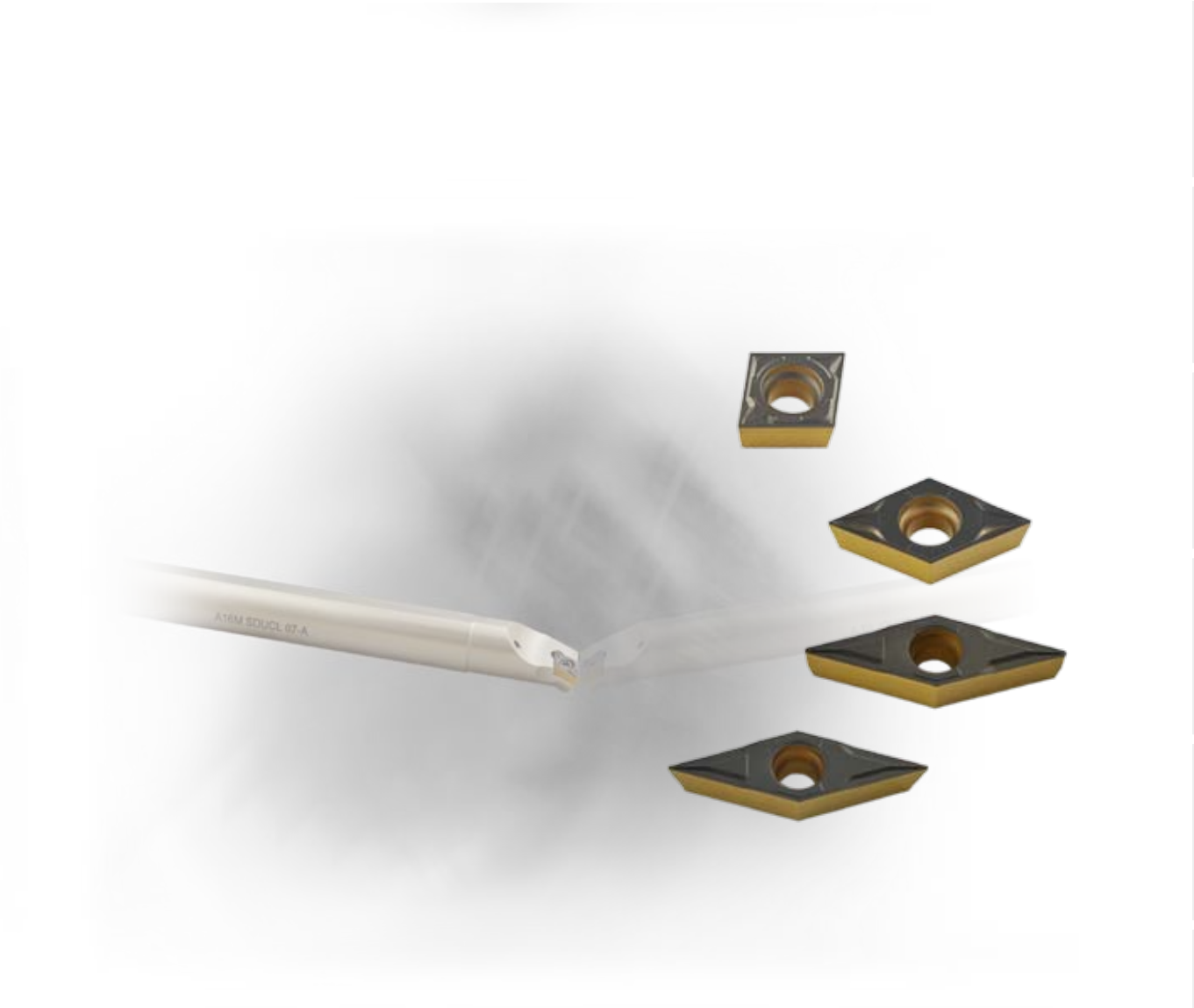
A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

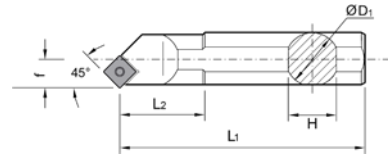
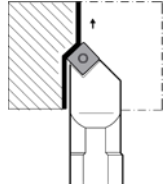
Mini/Micro
Schneidwerkzeuge
Mini/Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills



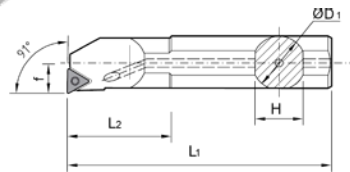
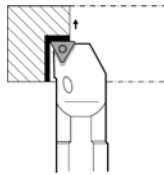
SSSCR/L 45°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.51	Ersatzteile Spare Parts				
	R	L	Dmin	D ₁	H	L ₁	L ₂		f				
A16M SSSCR/L 09			21	16	15	150	30	11	SC .. 09T3 ..	48.24.108	-	-	56.33.613 (T15)
A20Q SSSCR/L 09	●	○	25	20	18	180	32	13					
A25R SSSCR/L 09			32	25	23	200	36	17					
A32S SSSCR/L 12			40	32	31	250	50	22	SC .. 1204 ..	48.13.103	48.13.206	48.13.302	
A40T SSSCR/L 12			49	40	39	300	60	27					

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

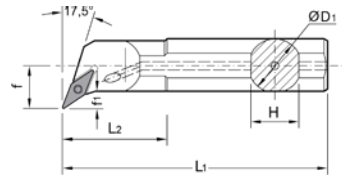
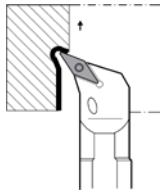
STFCR/L 90°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.53	Ersatzteile Spare Parts				
	R	L	Dmin	D ₁	H	L ₁	L ₂		f				
A12K STFCR/L 11			17	12	11	125	30	9	TC .. 1102 ..	48.24.107	-	-	56.33.612 (T08)
A16Q STFCR/L 11			21	16	15	180	35	11					
A20Q STFCR/L 11			25	20	18	180	36	13					
A25R STFCR/L 16			32	25	23	200	49	17	TC .. 16T3 ..	48.13.102	48.13.207	48.13.301	56.33.613 (T15)
A32S STFCR/L 16			40	32	31	250	50	22					

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

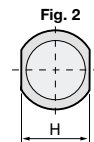
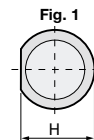
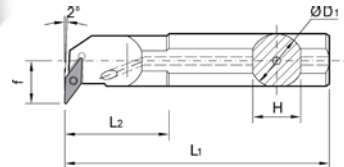
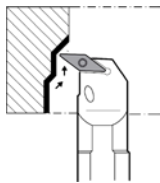
SVQCR/L 107,5°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Seite / Page: 1.57	Ersatzteile Spare Parts			
	R	L	Dmin	D ₁	H	L ₁	L ₂	f					
A16Q SVQCR/L 11	●		21	16	15	180	30	11	VC .. 1103 ..	48.24.107	-	-	56.33.612 (T08)
A20Q SVQCR/L 11	○		25	20	18	180	32	13					
A25R SVQCR/L 11	○		32	25	23	200	36	17					
A32S SVQCR/L 16			40	32	30	250	50	22	VC .. 1604 ..	48.13.102	48.13.208	48.13.301	56.33.613 (T15)

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

SVUCR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Fig.	Seite / Page: 1.57	Ersatzteile Spare Parts			
	R	L	Dmin	D ₁	H	L ₁	L ₂	f						
A16Q SVUCR/L 11	●	○	21	16	15	180	30	11	2	VC .. 1103 ..	48.24.107	-	-	56.33.612 (T08)
A20Q SVUCR/L 11	●	○	25	20	18	180	32	13						
A25R SVUCR/L 11	○	○	32	25	23	200	36	17						
E16R SVUCR/L 11	○	○	21	16	15.5	200	16	11	1	VC .. 1103 ..	48.24.107	-	-	56.33.612 (T08)
E20S SVUCR/L 11	○	○	25	20	19	250	20	13						
E25T SVUCR/L 11	○	○	32	25	24	300	25	17						

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

E : Hartmetallschaft mit Innenkühlung / Carbide Shank with inner coolant

SET A08H-A16M SCLCR/L 95°

Bohrstangen mit IK
Boring Bars with IC

Drehen
Turning

Fräswerkzeuge
Milling Tools

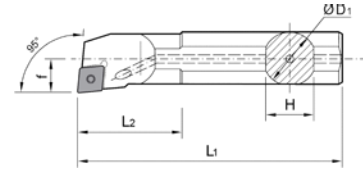
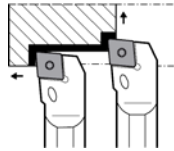
HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/Micro
Schneidwerkzeuge
Mini/Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills



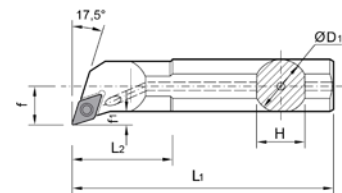
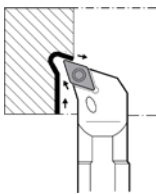
Bestehend aus: Consisting of:	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.42	Ersatzteile Spare Parts				
	R	L	Dmin	D ₁	H	L ₁	L ₂		f				
A08H SCLCR/L 06			10	8	7	100	16	5	CC .. 0602 ..	48.24.107	-	-	56.33.612 (T08)
A10J SCLCR/L 06	•	•	12	10	9	110	20	7					
A12K SCLCR/L 06	•	•	16	12	11	125	22	9					
A16M SCLCR/L 09			20	16	15	150	30	11	CC .. 09T3 ..	48.24.108			56.33.613 (T15)

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

Bitte wählen Sie linkes oder rechtes Set. Please choose left or right set.

SET A10J-A16M SDQCR/L 107,5°

Bohrstangen mit IK
Boring Bars with IC



Bestehend aus: Consisting of:	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.46	Ersatzteile Spare Parts				
	R	L	Dmin	D ₁	H	L ₁	L ₂		f				
A10J SDQCR/L 07			12	10	9	110	20	7	DC .. 0702 ..	48.24.107	-	-	56.33.612 (T08)
A12K SDQCR/L 07	•	•	16	12	11	125	22	9					
A16M SDQCR/L 07			20	16	15	150	30	11					

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

Bitte wählen Sie linkes oder rechtes Set. Please choose left or right set.

SET A10J-A16M SDUCR/L 93°

Bohrstangen mit IK
Boring Bars with IC



Bestehend aus: Consisting of:	Lager Stock		Maße [mm] Dimensions						Seite / Page: 1.46	Ersatzteile Spare Parts			
	R	L	Dmin	D ₁	H	L ₁	L ₂	f					
A10J SDUCR/L 07			12	10	9	110	20	7	DC-- 0702--	48.24.107	-	-	56.33.612 (T08)
A12K SDUCR/L 07	●	●	16	12	11	125	24	9					
A16M SDUCR/L 07			20	16	15	150	30	11					

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

Bitte wählen Sie linkes oder rechtes Set. Please choose left or right set.

Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM- Fräser
HDS-/ Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

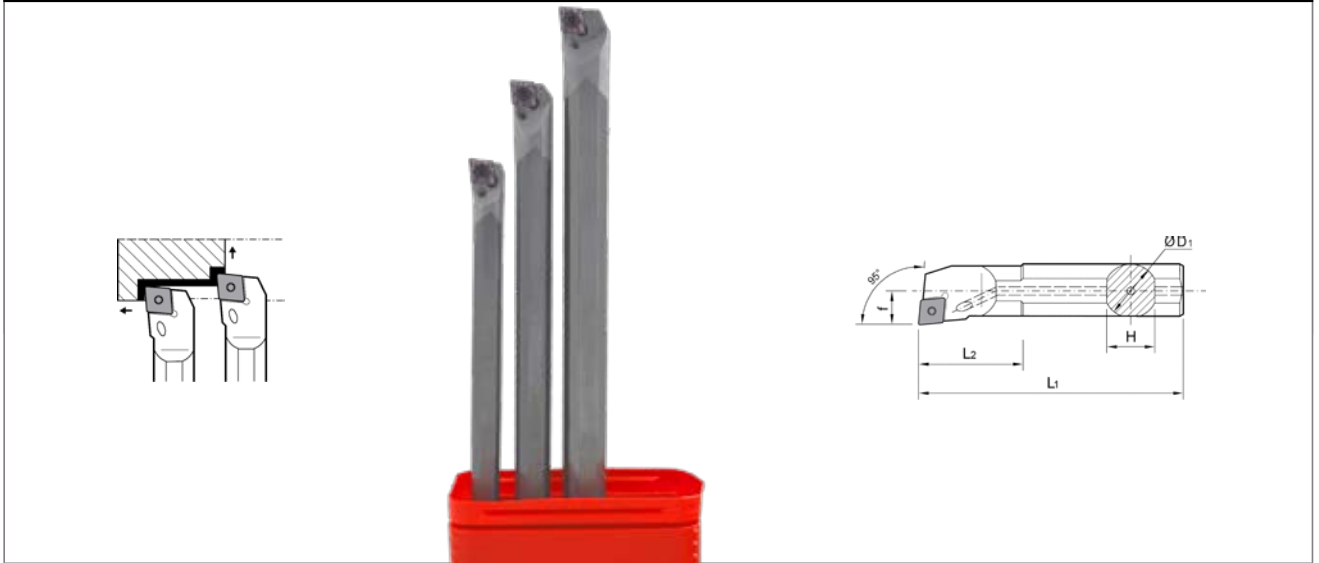
Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

SET E-SCLCR/L 95°

Hartmetall Bohrstangen mit IK
Carbide Boring Bars with IC



Bezeichnung Part Number	Lager Stock		Bestehend aus: Consisting of:					Seite / Page: 1.42	Ersatzteile Spare Parts								
	R	L	Dmin	D ₁	H	L ₁	L ₂		f								
E08K SCLCR/L 06			11	8	7.5	125	17	5	CC.. 0602..								
E10M SCLCR/L 06	●	●	14	10	9.5	150	20	6						48.24.107	-	-	56.33.612 (T08)
E12Q SCLCR/L 06			17	12	11.5	180	22	9									

E : Hartmetallschaft mit Innenkühlung / Carbide Shank with inner coolant
Bitte wählen Sie linkes oder rechtes Set. Please choose left or right set.

SET E-SDUCR/L 93°

Hartmetall Bohrstangen mit IK
Carbide Boring Bars with IC



Bezeichnung Part Number	Lager Stock		Bestehend aus: Consisting of:					Seite / Page: 1.46	Ersatzteile Spare Parts				
	R	L	Dmin	D ₁	H	L ₁	L ₂		f				
E10M SDUCR/L 07			14	10	9.5	150	-	7	DC.. 0702..				
E12Q SDUCR/L 07	●	●	17	12	11.5	180	-	9					

E : Hartmetallschaft mit Innenkühlung / Carbide Shank with inner coolant
Bitte wählen Sie linkes oder rechtes Set. Please choose left or right set.

SET A0608H-A1216M SLCR/L 06₉₅ Abgesetzte Bohrstangen mit IK Boring Bars with IC



Bestehend aus: Consisting of:	Lager Stock		Maße [mm] Dimensions						Seite / Page: 1.42	Ersatzteile Spare Parts			
	R	L	Dmin	D ₁	H	L ₁	L ₂	f					
A0608H SLCR/L 06			8	8	7	100	25.0	4.5	CC.. 0602..	48.24.107	-	-	56.33.612 (T08)
A0810J SLCR/L 06	●	●	11	10	9	110	32.0	6.0					
A1012K SLCR/L 06			13	12	11	125	38.0	7.0					
A1216M SLCR/L 06			16	16	15	150	50.0	9.0					

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

Bitte wählen Sie linkes oder rechtes Set. Please choose left or right set.

SET A0810H-A1216M SDUCR/L 07₉₃ Abgesetzte Bohrstangen mit IK Boring Bars with IC

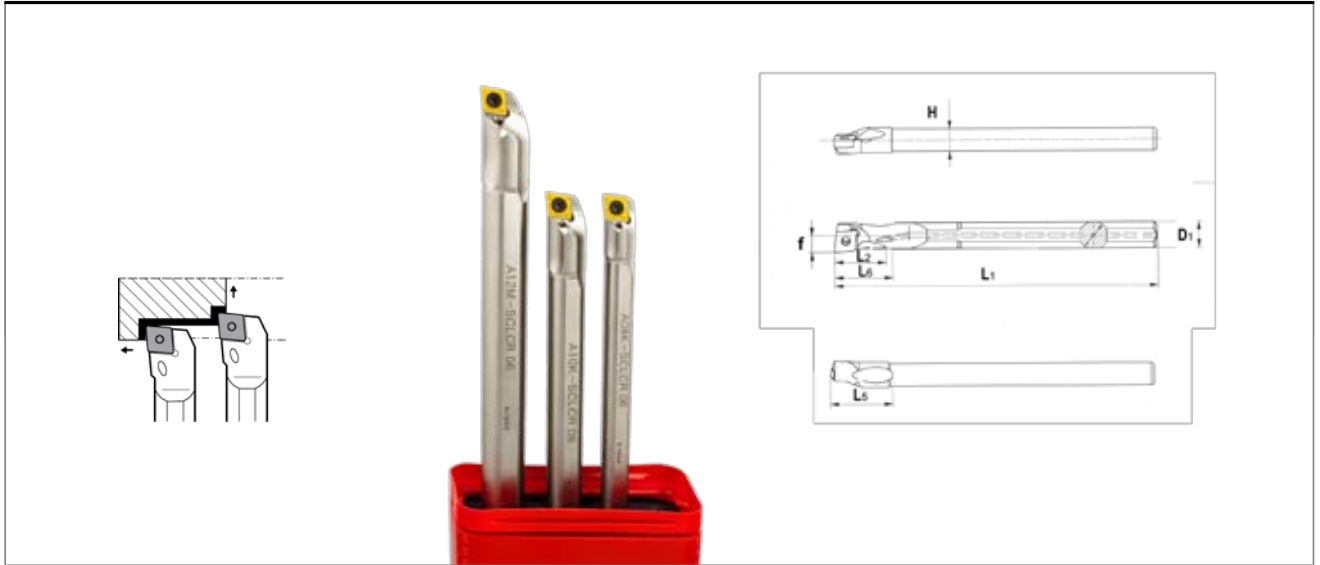


Bestehend aus: Consisting of:	Lager Stock		Maße [mm] Dimensions						Seite / Page: 1.46	Ersatzteile Spare Parts			
	R	L	Dmin	D ₁	H	L ₁	L ₂	f					
A0810H SDUCR/L 07			12.5	10	9	100	22	7	DC.. 0702..	48.24.107	-	-	56.33.612 (T08)
A1012K SDUCR/L 07	●	●	15.5	12	11	125	28	9					
A1216M SDUCR/L 07			19.5	16	15	150	36	11					

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

Bitte wählen Sie linkes oder rechtes Set. Please choose left or right set.

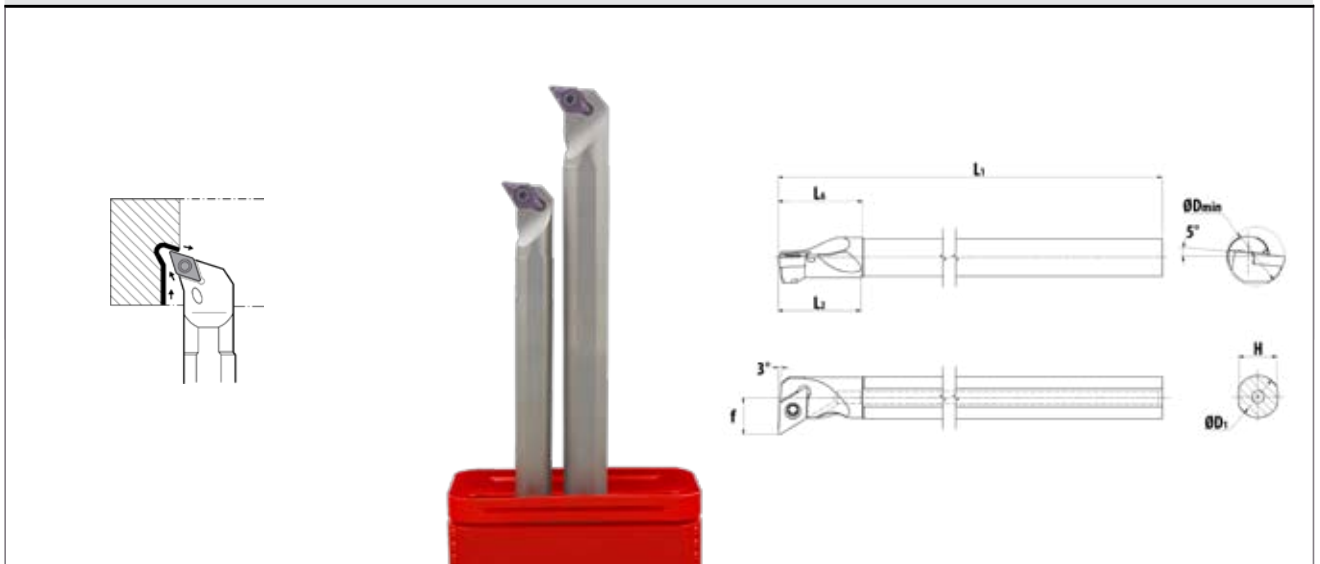
SET A08K-A12M SCLCR/L 06-CB ^{95°} Vibrationsreduzierte Bohrstangen Anti Vibration Bars



Bezeichnung Part Number	Lager Stock		Bestehend aus: Consisting of:							Seite / Page: 1.42	Ersatzteile Spare Parts				
	R	L	Dmin	D ₁	H	L ₁	L ₂	f	L ₃		L ₆				
A08K SCLCR/L 06-CB			10	8	7	125	16	5	20	17	CC.. 0602..	48.24.107	-	-	56.33.612 (T08)
A10K SCLCR/L 06-CB	•	•	12	10	9	125	20	6	25	21					
A12M SCLCR/L 06-CB			14	12	11	150	24	7	30	25					

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant
 Bitte wählen Sie linkes oder rechtes Set. Please choose left or right set.

SET A10K-A12M SDUCR/L 07-CB ^{93°} Vibrationsreduzierte Bohrstangen Anti Vibration Bars



Bezeichnung Part Number	Lager Stock		Bestehend aus: Consisting of:							Seite / Page: 1.46	Ersatzteile Spare Parts			
	R	L	Dmin	D ₁	H	L ₁	L ₂	f	L ₃		L ₆			
A10K SDUCR/L 07-CB	•	•	14	10	9	125	20	9	22	DC.. 0702..	48.24.107	-	-	56.33.612 (T08)
A12M SDUCR/L 07-CB			16	12	11	150	21	11	24					

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant
 Bitte wählen Sie linkes oder rechtes Set. Please choose left or right set.



ISO - Bezeichnungssystem für Wendschneidplatten ISO Designation System for Indexable Inserts

- Drehen
Turning
- Fräswerkzeuge
Milling Tools
- HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills
- Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools
- Mini/Micro
Schneidwerkzeuge
Mini/Micro Tools
- Gewinde-
werkzeuge
Threading Tools
- Wendeplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

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ISO - Bezeichnungssystem für Wendeschneidplatten
ISO Designation System for Indexable Inserts

							<p>F</p> <p>Scharf <i>Sharp</i></p>		<p>R</p>																																																						
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16	04	04	E	R
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Schneidenlänge <i>Length of Cutting Edge</i>	Plattendicke <i>Thickness of Insert</i>	Eckenradius <i>Corner Radius</i>	Schneidkante <i>Cutting Edge</i>	Schneidrichtung <i>Cutting Direction</i>
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Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
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Mini/ Micro
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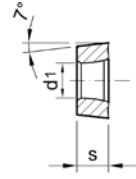
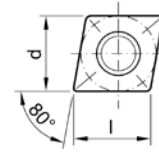
Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

CC

Drehen
Turning



80°



Fräswerkzeuge
Milling Tools

Werkstück / Workpiece	Stahl / Steel	A (P)	○	○	○	●	●	●	●	●	●	●	○
	Rostfreier Stahl / Stainless steel	R (M)	○	●	●	○	○	○	○	○	○	○	○
	Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○
	Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	●	●	○	○	○	○	○	○	○	○	○
	Gehärteter Stahl / Hardened steel	H											○

Machinentyp
Machining types

● Hauptanwendung / Main application
○ Nebenanwendung / Additional application

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]		
		TK 5210+	TK 5310	TK 5710	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TWS7225	TK 1210	l	Ø d	s	Ø d ₁
	03 01 02 L					●								○	3.30	3.50	1.39	1.90	0,01~0,05	0,10~0,30
	03 01 02 R					○								○	3.30	3.50	1.39	1.90	0,01~0,10	0,10~0,30
	04 01 02 L					○								○	4.10	4.30	1.79	2.30	0,01~0,10	0,10~0,50
	04 01 02 R					○								○	4.10	4.30	1.79	2.30	0,01~0,10	0,10~0,50

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Werkstück / Workpiece	Stahl / Steel	A (P)	○	○	○	●	●	●	●	●	●	●	○
	Rostfreier Stahl / Stainless steel	R (M)	○	●	●	○	○	○	○	○	○	○	○
	Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○
	Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	●	●	○	○	○	○	○	○	○	○	○
	Gehärteter Stahl / Hardened steel	H											○

Machinentyp
Machining types

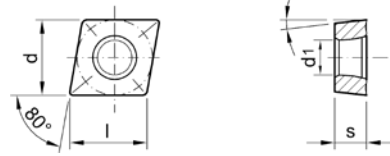
● Hauptanwendung / Main application
○ Nebenanwendung / Additional application

Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]		
		TK 5210+	TK 5310	TK 5710	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TWS7225	TK 1210	l	Ø d	s	Ø d ₁
	06 02 02 -ALX		●	●									●	●	6.20	6.35	2.38	2.80	0,01~0,30	0,05~3,00
	06 02 04 -ALX		●	●									●	●	6.00	6.35	2.38	2.80	0,02~0,40	0,10~3,00
	09 T3 02 -ALX		●	●									●	●	9.40	9.52	3.97	4.40	0,01~0,30	0,05~3,00
	09 T3 04 -ALX		●	●									●	●	9.20	9.52	3.97	4.40	0,02~0,40	0,10~4,00
	09 T3 08 -ALX		●	●									●	●	8.80	9.52	3.97	4.40	0,03~0,50	0,10~5,00
	12 04 02 -ALX		○	●									●	●	12.60	12.70	4.76	5.50	0,01~0,30	0,50~5,00
	12 04 04 -ALX		●	●									●	●	12.40	12.70	4.76	5.50	0,02~0,40	0,10~5,00
	12 04 08 -ALX		●	●									●	●	12.00	12.70	4.76	5.50	0,03~0,50	0,10~5,00

Wendeplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

CC



Werkstück / Workpiece	Stahl / Steel	A (P)	●	●	●	●	●	●	●	●	●	●	●	○
	Rostfreier Stahl / Stainless steel	R (M)	○	●	●	●	●	●	●	●	●	●	●	●
	Guss / Cast iron	F (K)	○	●	●	●	●	●	●	●	●	●	●	●
	Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○	○
	Gehärteter Stahl / Hardened steel	H	○	○	○	○	○	○	○	○	○	○	○	○

Machinentyp / Machining types
 ● Hauptanwendung / Main application
 ○ Nebenanwendung / Additional application

Wendelplatten / Inserts	Bezeichnung / Part Number	Beschichtet / Coated											Maße / Dimensions [mm]				Schnittdaten / Cutting Data [mm]			
		TK 5210+	TK 5310	TK 5710	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025	TP 5345	TWS7225	TK 1210	l	Ø d	s	Ø d ₁	f _m (mm/rev)
	06 02 02 -F30									●					6.30	6.35	2.38	2.80	0,03~0,11	0,06~1,70
	06 02 04 -F30									●					6.00	6.35	2.38	2.80	0,05~0,17	0,10~1,70
	09 T3 02 -F30									●					9.50	9.52	3.97	4.40	0,04~0,15	0,08~2,00
	09 T3 04 -F30									●					9.20	9.52	3.97	4.40	0,06~0,23	0,11~2,00
	12 04 02 -F30									○					12.70	12.70	4.76	5.50	0,05~0,15	0,10~2,00
	12 04 04 -F30									●					12.40	12.70	4.76	5.50	0,07~0,27	0,14~2,00
	06 02 04 -JTM												●	6.00	6.35	2.38	2.80	0,06~0,20	0,20~2,00	
	06 02 08 -JTM												●	5.70	6.35	2.38	2.80	0,08~0,30	0,20~2,00	
	09 T3 04 -JTM												●	9.40	9.52	3.97	4.40	0,06~0,20	0,20~3,00	
	09 T3 08 -JTM												●	8.80	9.52	3.97	4.40	0,10~0,30	0,30~3,00	
	12 04 04 -JTM												●	12.40	12.70	4.76	5.50	0,05~0,25	0,20~1,50	
	12 04 08 -JTM												●	12.00	12.70	4.76	5.50	0,20~0,40	0,80~3,50	
	06 02 04 -M30			●						●				6.00	6.35	2.38	2.80	0,05~0,20	0,40~1,00	
	06 02 08 -M30									●				5.70	6.35	2.38	2.80	0,05~0,25	0,40~1,00	
	09 T3 04 -M30			●						●				9.40	9.52	3.97	4.40	0,05~0,20	0,40~1,50	
	09 T3 08 -M30			●						●				8.80	9.52	3.97	4.40	0,05~0,25	0,40~1,50	
	12 04 04 -M30			●						○				12.40	12.70	4.76	5.56	0,05~0,20	0,50~2,00	
	12 04 08 -M30			●						●				12.00	12.70	4.76	5.56	0,05~0,25	0,50~2,00	
	06 02 04 -MD									●				6.00	6.35	2.38	2.80	0,06~0,17	0,20~2,30	
	06 02 08 -MD									●				5.60	6.35	2.38	2.80	0,08~0,23	0,40~2,30	
	09 T3 04 -MD									●				9.20	9.52	3.97	4.40	0,06~0,17	0,20~2,50	
	09 T3 08 -MD									○				8.80	9.52	3.97	4.40	0,08~0,23	0,30~2,50	
	12 04 04 -MD									●				12.40	12.70	4.76	5.50	0,06~0,17	0,30~3,50	
	12 04 08 -MD									●				12.00	12.70	4.76	5.50	0,08~0,23	0,50~3,50	

Drehen / Turning

Fräswerkzeuge / Milling Tools

HDS-/VHM-Fräser / Solid Carbide Endmills

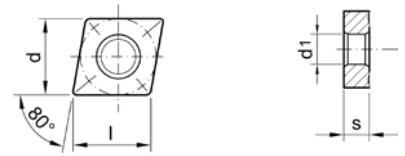
Stech- und Abstechwerkzeuge / Grooving and Parting off Tools

Mini/ Micro Schneidwerkzeuge / Mini/ Micro Tools

Gewinde- werkzeuge / Threading Tools

Wendelplattenbohrer / VHM-Bohrer / Indexable Drills / Solid Carbide Drills

CN



Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/Micro
Schneidwerkzeuge
Mini/Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepaltenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Werkstück/Worpiece	Stahl / Steel	A (P)	○	○	○	●	●	●	●	●	●	●	●	○
	Rostfreier Stahl / Stainless steel	R (M)	○	●	●	○	○	○	○	○	○	○	○	○
Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○
Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	●	●	○	○	○	○	○	○	○	○	○	○	○
Gehärteter Stahl / Hardened steel	H													○

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated										Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]			
		TK S210+	TK S310	TK S710	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+		TP 5025	TP 5345	TWS7225	TK 1210	l	Ø d	s	Ø d ₁
	12 04 04 - A20		○	●		●								●	12.40	12.70	4.76	5.16	0,05~0,28	0,23~4,80
	12 04 08 - A20		○	●		●								●	12.00	12.70	4.76	5.16	0,10~0,40	0,80~3,50

Machinentyp
Machining types

● Hauptanwendung / Main application
○ Nebenanwendung / Additional application

Werkstück/Worpiece	Stahl / Steel	A (P)	○	○	○	●	●	●	●	●	●	●	○
	Rostfreier Stahl / Stainless steel	R (M)	○	●	●	○	○	○	○	○	○	○	○
Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○
Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	●	●	○	○	○	○	○	○	○	○	○	○
Gehärteter Stahl / Hardened steel	H												○

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated										Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]			
		TK S210+	TK S310	TK S710	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+		TP 5025	TP 5345	TWS7225	TK 1210	l	Ø d	s	Ø d ₁
	12 04 04 - C22													●	12.40	12.70	4.76	5.16	0,05~0,30	0,60~3,50
	12 04 08 - C22													●	12.00	12.70	4.76	5.16	0,10~0,40	0,80~4,00
	12 04 04 - JBF													●	12.40	12.70	4.76	5.16	0,08~0,18	0,10~2,00
	12 04 08 - JBF													●	12.00	12.70	4.76	5.16	0,10~0,35	0,10~2,50
	12 04 04 - JBM													●	12.40	12.70	4.76	5.16	0,10~0,25	0,35~3,00
	12 04 08 - JBM													●	12.00	12.70	4.76	5.16	0,10~0,40	0,40~3,50
	12 04 12 - JBM													●	11.60	12.70	4.76	5.16	0,13~0,50	0,40~3,50
	12 04 04 - JBR													●	12.40	12.70	4.76	5.16	0,15~0,40	0,40~4,50
	12 04 08 - JBR													●	12.00	12.70	4.76	5.16	0,25~0,55	1,20~5,00
	12 04 12 - JBR													○	11.60	12.70	4.76	5.16	0,25~0,70	1,75~8,00
	12 04 04 - MD													●	12.40	12.70	4.76	5.16	0,05~0,35	0,80~4,50
	12 04 08 - MD													●	12.00	12.70	4.76	5.16	0,08~0,45	1,00~4,50
	12 04 12 - MD													○	11.60	12.70	4.76	5.16	0,10~0,50	1,20~4,50
	12 04 04 - S30				●										12.40	12.70	4.76	5.16	0,05~0,25	0,50~4,50
	12 04 08 - S30				●										12.00	12.70	4.76	5.16	0,10~0,40	0,50~4,50

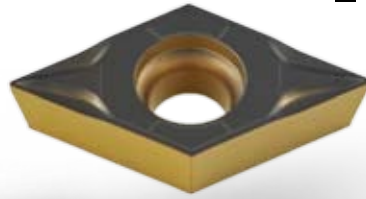
Machinentyp
Machining types

● Hauptanwendung / Main application
○ Nebenanwendung / Additional application

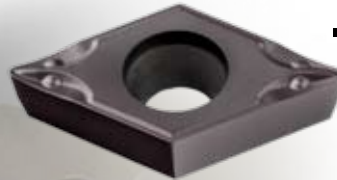
Unsere bewährten Geometrien

Our well known geometries

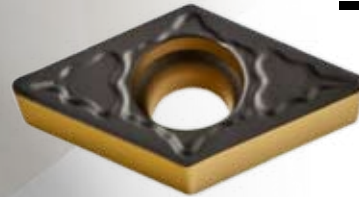
- F30



- M30



- MD



- S30

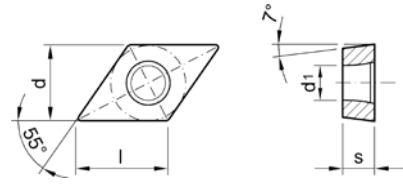


- C22



DC

Drehen
Turning



Fräswerkzeuge
Milling Tools

Werkstück / Workpiece	Stahl / Steel	A (P)	○	○	○	●	●	●	●	●	●	●	●	○
	Rostfreier Stahl / Stainless steel	R (M)	○	○	○	○	○	○	○	○	○	○	○	○
	Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○
	Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○	○
	Gehärteter Stahl / Hardened steel	H	○	○	○	○	○	○	○	○	○	○	○	○

Machinentyp
Machining types

● Hauptanwendung / Main application
○ Nebenanwendung / Additional application

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated												Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]		
		TK S210+	TK S310	TK S710	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP 4025+	TP 5025	TP 5345		TWS7225	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)
	07 02 02 - ALX		●	●										●	●	7.50	6.35	2.38	2.80	0,01~0,30	0,05~3,00
	07 02 04 - ALX		●	●										●	●	7.30	6.35	2.38	2.80	0,02~0,40	0,10~4,00
	07 02 08 - ALX			○										○	○	6.80	6.35	2.38	2.80	0,02~0,40	0,10~4,00
	11 T3 02 - ALX		●	●										●	●	11.40	9.52	3.97	4.40	0,02~0,30	0,05~4,00
	11 T3 04 - ALX		●	●										●	●	11.20	9.52	3.97	4.40	0,03~0,50	0,10~5,00
	11 T3 08 - ALX		●	●										●	●	10.80	9.52	3.97	4.40	0,03~0,50	0,10~5,00

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

	07 02 02 - F30													●	●	7.50	6.35	2.38	2.80	0,03~0,11	0,06~1,50
	07 02 04 - F30													●	●	7.30	6.35	2.38	2.80	0,05~0,17	0,10~1,50
	11 T3 02 - F30													●	●	11.60	9.52	3.97	4.40	0,04~0,15	0,08~2,00
	11 T3 04 - F30													●	●	11.20	9.52	3.97	4.40	0,06~0,23	0,11~2,00

Mini/Micro
Schneidwerkzeuge
Mini/Micro Tools

	07 02 04 - JTM													●	●	7.30	6.35	2.38	2.80	0,06~0,20	0,20~2,00
	07 02 08 - JTM													●	●	7.10	6.35	2.38	2.80	0,08~0,30	0,20~2,00
	11 T3 04 - JTM													●	●	11.20	9.52	3.97	4.40	0,08~0,25	0,30~3,00
	11 T3 08 - JTM													●	●	10.80	9.52	3.97	4.40	0,10~0,35	0,30~3,00
	11 T3 12 - JTM													○	○	10.40	9.52	3.97	4.40	0,05~0,25	0,20~1,50

Gewinde-
werkzeuge
Threading Tools

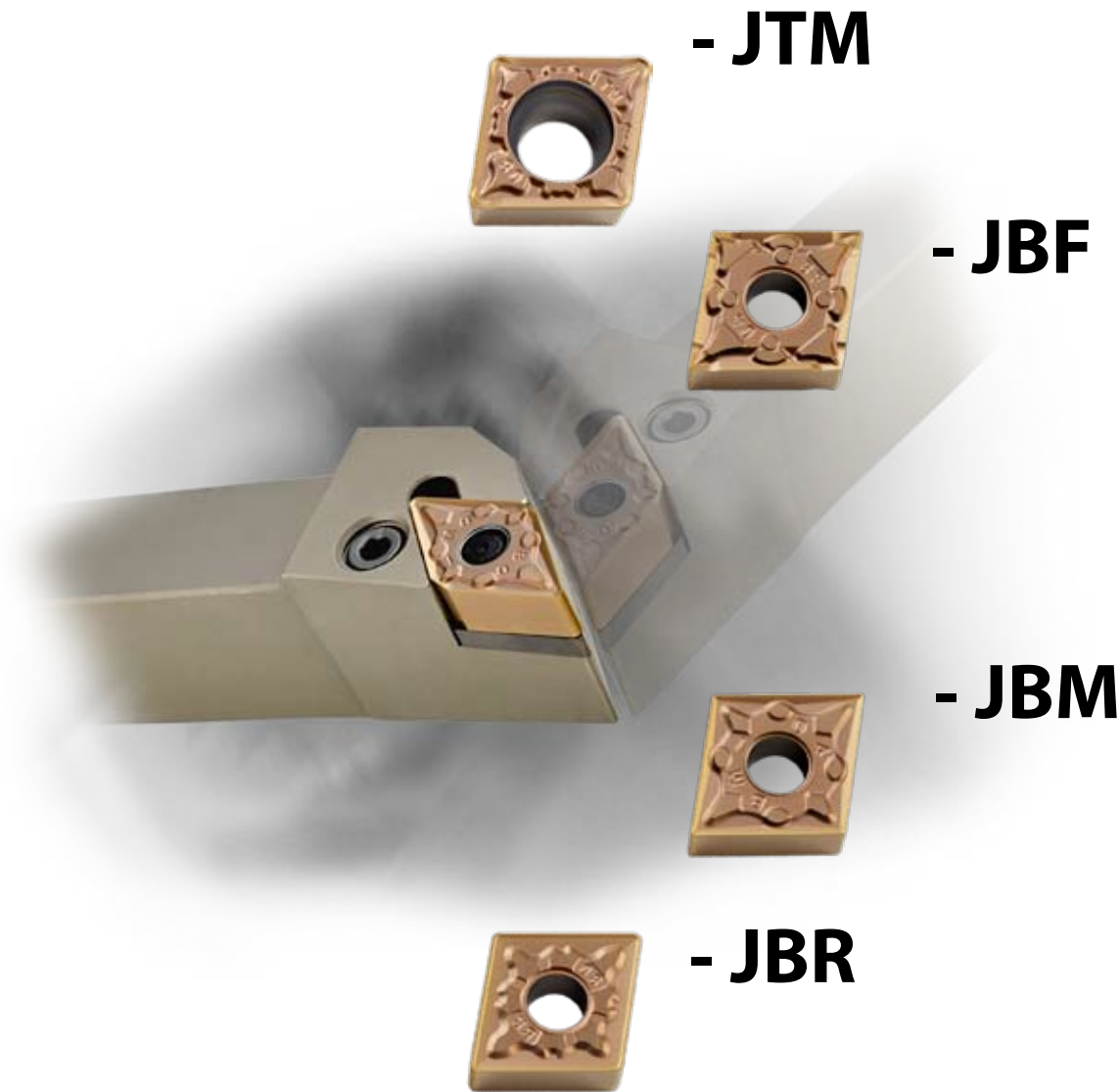
	07 02 04 - M30				●									●	●	7.30	6.35	2.38	2.80	0,05~0,20	0,20~1,50
	07 02 08 - M30				●									●	●	7.10	6.35	2.38	2.80	0,05~0,25	0,20~1,50
	11 T3 04 - M30				●									●	●	11.20	9.52	3.97	4.40	0,08~0,23	0,25~2,00
	11 T3 08 - M30				●									●	●	10.80	9.52	3.97	4.40	0,08~0,25	0,25~2,00

Wendeplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

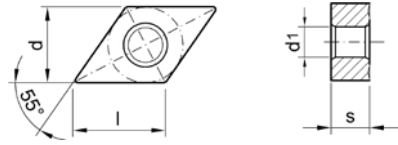
	07 02 04 - MD													●	●	7.30	6.35	2.38	2.80	0,06~0,17	0,20~2,40
	11 T3 04 - MD													●	●	11.20	9.52	3.97	4.40	0,06~0,17	0,30~3,00
	11 T3 08 - MD													●	●	10.80	9.52	3.97	4.40	0,08~0,23	0,50~3,00

Unsere neuen Geometrien

Our new geometries



DN



Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

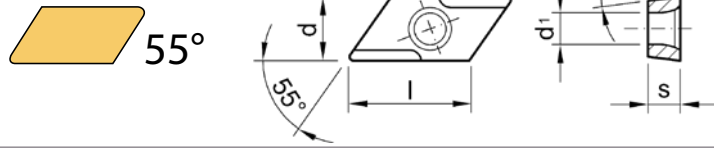
Wendepaltenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Werkstück/Worpiece	Beschichtet Coated										Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]					
	TK 5210+	TK 5310	TK 5710	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP 4025+		TP 5025	TP 5345	TWS 7225	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)	a _p (mm)
Stahl / Steel	A (P)	●	●	●	●	●	●	●	●	●	●	●	●	○							
Rostfreier Stahl / Stainless steel	R (M)	○	●	●	○	○	○	○	○	○	○	○	○	○							
Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○							
Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○							
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	●	●	○	○	○	○	○	○	○	○	○	○	○							
Gehärteter Stahl / Hardened steel	H													○							
DNGG-A20 	15 06 04 - A20		○	●		●								●	15.50	12.70	6.35	5.16	0,05~0,25	0,80~3,50	
	15 06 08 - A20		○	●		●								●	15.50	12.70	6.35	5.16	0,05~0,40	0,80~3,50	

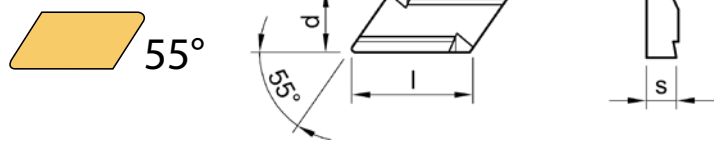
Machinentyp Machining types
● Hauptanwendung / Main application
○ Nebenanwendung / Additional application

Werkstück/Worpiece	Beschichtet Coated										Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]					
	TK 5210+	TK 5310	TK 5710	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP 4025+		TP 5025	TP 5345	TWS 7225	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)	a _p (mm)
Stahl / Steel	A (P)	●	●	●	●	●	●	●	●	●	●	●	●	○							
Rostfreier Stahl / Stainless steel	R (M)	○	●	●	○	○	○	○	○	○	○	○	○	○							
Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○							
Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○							
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	●	●	○	○	○	○	○	○	○	○	○	○	○							
Gehärteter Stahl / Hardened steel	H													○							
DNMG-C22 	15 06 04 - C22													○	12.70	12.70	6.35	5.16	0,05~0,30	0,50~3,50	
	15 06 08 - C22													●	12.40	12.70	6.35	5.16	0,10~0,40	0,70~4,00	
DNMG-JBF 	15 06 04 - JBF													○	15.10	12.70	6.35	5.16	0,08~0,18	0,10~2,00	
	15 06 08 - JBF													○	14.70	12.70	6.35	5.16	0,10~0,35	0,10~2,50	
DNMG-JBM 	15 04 04 - JBM													○	15.10	12.70	4.76	3.81	0,10~0,25	0,35~3,00	
	15 04 08 - JBM													○	14.70	12.70	4.76	3.81	0,10~0,40	0,40~3,50	
	15 06 12 - JBM													○	14.40	12.70	4.76	5.16	0,13~0,50	0,80~4,50	
	15 06 04 - JBM													●	15.10	12.70	6.35	5.16	0,10~0,25	0,40~3,00	
	15 06 08 - JBM													●	14.70	12.70	6.35	5.16	0,10~0,40	0,50~5,50	
	15 06 12 - JBM													○	14.40	12.70	6.35	5.16	0,10~0,55	0,80~5,00	
DNMG-MD 	11 04 04 - MD													●	11.20	9.52	4.76	3.81	0,05~0,35	0,80~5,00	
	11 04 08 - MD													●	10.80	9.52	4.76	3.81	0,05~0,35	0,80~5,00	
	15 06 04 - MD													●	15.10	12.70	6.35	5.16	0,05~0,35	0,80~5,00	
	15 06 08 - MD													●	14.70	12.70	6.35	5.16	0,08~0,45	1,00~5,00	
	15 06 12 - MD													○	14.40	12.70	6.35	5.16	0,10~0,50	1,20~5,00	
DNMG-S30 	15 06 04 - S30			●											15.10	12.70	6.35	5.16	0,05~0,25	0,50~4,00	
	15 06 08 - S30			●											14.70	12.70	6.35	5.16	0,10~0,40	1,00~4,50	

Machinentyp Machining types
● Hauptanwendung / Main application
○ Nebenanwendung / Additional application

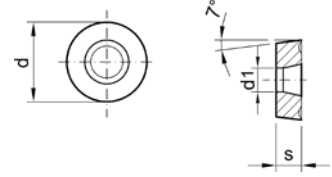
KC


Werkstück / Workpiece	Stahl / Steel	A (P)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	Machinentyp Machining types	●	Hauptanwendung / Main application	○	Nebenanwendung / Additional application
	Rostfreier Stahl / Stainless steel	R (M)	○	○	○	○	○	○	○	○	○	○	○	○	○	○		○	○	○	
	Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
	Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
	Gehärteter Stahl / Hardened steel	H	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]			
		TK 5210+	TK 5310	TK 5710	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP 4025+	TP 5025		TP 5345	TWS 7225	TK 1210	l	Ø d	s	Ø d ₁	f _m (mm/rev)
	11 03 01 - FL	○												○	11.60	6.35	3.18	2.80			
	11 03 02 - FL	○												○	11.60	6.35	3.18	2.80	0,07~0,40	0,30~3,00	
	11 03 04 - FL	●						●						○	11.60	6.35	3.18	2.80	0,10~0,50	0,50~3,00	
	11 03 08 - FL	●												○	11.60	6.35	3.18	2.80	0,13~0,50	0,50~3,50	
	11 03 01 - FR	○												○	11.60	6.35	3.18	2.80			
	11 03 02 - FR	○												○	11.60	6.35	3.18	2.80	0,07~0,40	0,30~3,00	
	11 03 04 - FR	●						●						○	11.60	6.35	3.18	2.80	0,10~0,50	0,50~3,00	
	11 03 08 - FR	●												○	11.60	6.35	3.18	2.80	0,13~0,50	0,50~3,00	

KN


Werkstück / Workpiece	Stahl / Steel	A (P)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	Machinentyp Machining types	●	Hauptanwendung / Main application	○	Nebenanwendung / Additional application
	Rostfreier Stahl / Stainless steel	R (M)	○	○	○	○	○	○	○	○	○	○	○	○	○	○		○	○		
	Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○			
	Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○			
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○			
	Gehärteter Stahl / Hardened steel	H	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○			
Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]			
		TK 5210+	TK 5310	TK 5710	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP 4025+	TP 5025		TP 5345	TWS 7225	TK 1210	l	Ø d	s	Ø d ₁	f _m (mm/rev)
	16 04 05 - L11														19.20	9.52	4.76	-	0,20~0,35	1,00~6,00	
	16 04 05 - R11														19.20	9.52	4.76	-	0,20~0,35	1,00~6,00	
	16 04 10 - L11														18.80	9.52	4.76	-	0,30~0,60	1,50~6,00	
	16 04 10 - R11														18.80	9.52	4.76	-	0,30~0,60	1,50~6,00	
	16 04 05 - R12														19.20	9.52	4.76	-	0,25~0,35	1,50~6,00	
	16 04 10 - L12														18.80	9.52	4.76	-	0,40~0,70	1,50~6,00	
	16 04 10 - R12														18.80	9.52	4.76	-	0,40~0,70	1,50~6,00	

RC



Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/Micro
Schneidwerkzeuge
Mini/Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepaltenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Werkstück/Workpiece	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]			
	TK 5210+	TK 5310	TK 5710	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TWS7225	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)
Stahl / Steel	A (P)	●	●	●	●	●	●	●	●	●	●	●	●	○						
Rostfreier Stahl / Stainless steel	R (M)	○	●	●	○	○	○	○	○	○	○	○	○	○						
Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○						
Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○						
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	●	●	○	○	○	○	○	○	○	○	○	○	○						
Gehärteter Stahl / Hardened steel	H													○						

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]			
		TK 5210+	TK 5310	TK 5710	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TWS7225	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)
	RCGT-ALX		○	●										●		10.00	3.18	4.00		0,10~0,30	1,00~3,00
	10 03 MO - ALX		○	●										●		12.00	4.76	4.40		0,10~0,35	1,00~3,50

Machinentyp
Machining types

● Hauptanwendung / Main application
○ Nebenanwendung / Additional application

Werkstück/Workpiece	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]			
	TK 5210+	TK 5310	TK 5710	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TWS7225	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)
Stahl / Steel	A (P)	●	●	●	●	●	●	●	●	●	●	●	●	○						
Rostfreier Stahl / Stainless steel	R (M)	○	●	●	○	○	○	○	○	○	○	○	○	○						
Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○						
Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○						
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	●	●	○	○	○	○	○	○	○	○	○	○	○						
Gehärteter Stahl / Hardened steel	H													○						

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]			
		TK 5210+	TK 5310	TK 5710	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TWS7225	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)
	RCMT-MO													●		6.00	2.38	-		0,04-0,17	0,50-2,40
	06 02 MO - JCP													●		8.00	3.18	-		0,10-0,80	0,80-3,20
	08 03 MO - JST													●		10.00	3.97	-		0,16-1,40	1,00-4,00
	10 T3 MO - JST													●		12.00	4.76	-		0,20-1,80	1,20-4,80
	12 04 MO - JST													●							

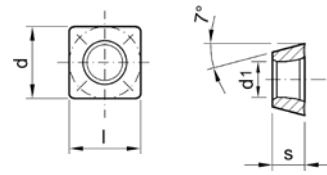
Machinentyp
Machining types

● Hauptanwendung / Main application
○ Nebenanwendung / Additional application

SC



90°



Werkstück/Worpiece	Stahl / Steel	A (P)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	Machinentyp Machining types	●	Hauptanwendung / Main application	○	Nebenanwendung / Additional application
	Rostfreier Stahl / Stainless steel	R (M)	○	●	○	○	○	○	○	○	○	○	○	○	○	○		○	○	○	
	Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
	Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
	Gehärteter Stahl / Hardened steel	H	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		

Wendepplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]			
		TK 5210+	TK 5310	TK 5710	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TWS7225	TK 1210	l	ø d	s	ø d ₁	f _m (mm/rev)
	09 T3 02 - ALX														○	9.30	9.52	3.97	4.40	0,02~0,40	0,10~4,00
	09 T3 04 - ALX		●	●											●	9.10	9.52	3.97	4.40	0,02~0,40	0,10~4,00
	09 T3 08 - ALX		○	○											○	8.70	9.52	3.97	4.40	0,03~0,50	0,10~5,00
	12 04 04 - ALX		●	●											●	12.30	12.70	4.76	5.50	0,02~0,40	0,10~5,00
	12 04 08 - ALX		○	○											○	11.90	12.70	4.76	5.50	0,03~0,50	0,10~5,00

Werkstück/Worpiece	Stahl / Steel	A (P)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	Machinentyp Machining types	●	Hauptanwendung / Main application	○	Nebenanwendung / Additional application
	Rostfreier Stahl / Stainless steel	R (M)	○	●	○	○	○	○	○	○	○	○	○	○	○	○		○	○		
	Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○			
	Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○			
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○			
	Gehärteter Stahl / Hardened steel	H	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○			

Wendepplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]			
		TK 5210+	TK 5310	TK 5710	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TWS7225	TK 1210	l	ø d	s	ø d ₁	f _m (mm/rev)
	09 T3 04 - F30														○	9.10	9.52	3.97	4.40	0,06~0,23	0,11~2,00
	12 04 04 - F30														○	12.30	12.70	4.76	5.50	0,07~0,27	0,14~2,00
	09 T3 04 - JTM														●	9.10	9.52	3.97	4.40	0,08~0,25	0,30~3,00
	09 T3 08 - JTM														●	8.70	9.52	3.97	4.40	0,10~0,30	0,30~3,00
	12 04 04 - JTM														●	12.30	12.70	4.76	5.56	0,10~0,25	0,30~3,50
	12 04 08 - JTM														●	11.90	12.70	4.76	5.56	0,15~0,35	0,30~4,00
	12 04 12 - JTM														○	11.50	12.70	4.76	5.56	0,05~0,25	0,20~1,50
	12 04 08 - M30			●										●	11.90	12.70	4.76	5.56	0,08~0,25	0,25~2,00	
	09 T3 04 - MD														●	9.10	9.52	3.97	4.40	0,06~0,17	0,20~2,50
	09 T3 08 - MD														○	8.70	9.52	3.97	4.40	0,08~0,23	0,30~2,50
	12 04 08 - MD														○	11.90	12.70	4.76	5.50	0,08~0,23	0,50~3,50

Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

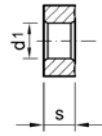
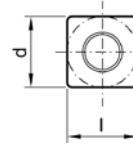
Wendepattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

SN

Drehen
Turning



90°



Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/Micro
Schneidwerkzeuge
Mini/Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendeplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

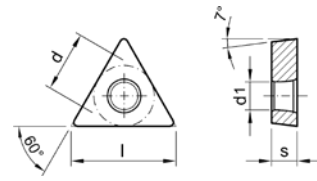
Werkstück/Worpiece	Stahl / Steel	A (P)	○	○	○	●	●	●	●	●	●	●	●	○
	Rostfreier Stahl / Stainless steel	R (M)	○	●	●	○	○	○	○	○	○	○	○	○
Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○
Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○	○	○
Gehärteter Stahl / Hardened steel	H	○	○	○	○	○	○	○	○	○	○	○	○	○

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated										Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]			
		TK 5210+	TK 5310	TK 5710	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP 4025+		TP 5025	TP 5345	TW 5725	TK 1210	l	Ø d	s	Ø d ₁
	SNMG-JBF 12 04 04 - JBF												●		12.30	12.70	4.76	5.16	0,08~0,18	0,10~2,00
	12 04 08 - JBF												●		11.90	12.70	4.76	5.16	0,10~0,40	0,30~5,50
	SNMG-JBM 12 04 04 - JBM												●		12.30	12.70	4.76	5.16	0,10~0,25	0,40~3,00
	12 04 08 - JBM												●		11.90	12.70	4.76	5.16	0,10~0,40	0,40~3,50
	12 04 12 - JBM												●		11.50	12.70	4.76	5.16	0,13~0,50	0,80~4,50
	SNMG-JBR 12 04 08 - JBR												●		11.90	12.70	4.76	5.16	0,15~0,40	0,40~4,50
	12 04 12 - JBR												●		11.50	12.70	4.76	5.16	0,25~0,55	1,20~4,50

Machinentyp
Machining types

● Hauptanwendung / Main application
○ Nebenanwendung / Additional application

TC



Werkstück/Workpiece	Stahl / Steel	A (P)																	Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]	
	Rostfreier Stahl / Stainless steel	R (M)																			l	∅ d	s	∅ d ₁	f _n (mm/rev)
	Guss / Cast iron	F (K)																							
	Nichtmet. Werkstoffe / Non-fer. metall.	N																							
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	●	●	○																				
	Gehärteter Stahl / Hardened steel	H																							

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated												Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]		
		TK 5210+	TK 5310	TK 5710	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025	TP 5345		TW57225	TK 1210	l	∅ d	s	∅ d ₁	f _n (mm/rev)
	11 02 02 - ALX		○	●											●	10.50	6.35	2.38	2.80	0,01~0,30	0,05~5,50
	11 02 04 - ALX		○	●											●	10.00	6.35	2.38	2.80	0,02~0,40	0,10~4,00
	11 02 08 - ALX		○	●											●	9.00	6.35	2.38	2.80	0,03~0,50	0,10~5,00
	16 T3 02 - ALX		○	○											○	15.00	9.52	3.97	4.40	0,01~0,30	0,05~4,50
	16 T3 04 - ALX		○	●											●	15.50	9.52	3.97	4.40	0,02~0,40	0,10~5,00
	16 T3 08 - ALX		○	●											●	14.50	9.52	3.97	4.40	0,03~0,50	0,10~5,00

Werkstück/Workpiece	Stahl / Steel	A (P)																	Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]	
	Rostfreier Stahl / Stainless steel	R (M)																			l	∅ d	s	∅ d ₁	f _n (mm/rev)
	Guss / Cast iron	F (K)																							
	Nichtmet. Werkstoffe / Non-fer. metall.	N																							
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	●	●	○																				
	Gehärteter Stahl / Hardened steel	H																							

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated												Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]		
		TK 5210+	TK 5310	TK 5710	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025	TP 5345		TW57225	TK 1210	l	∅ d	s	∅ d ₁	f _n (mm/rev)
	09 02 04 - F30														○	9.00	5.56	2.38	2.50	0,05~0,19	0,10~1,70
	11 02 04 - F30														○	10.00	6.35	3.18	2.80	0,05~0,19	0,10~1,70
	16 T3 04 - F30														○	15.50	9.52	3.97	4.40	0,06~0,23	0,11~2,00
	11 02 04 - JTM														○	10.00	6.35	2.38	2.80	0,08~0,25	0,30~3,00
	11 02 08 - JTM														○	9.00	6.35	2.38	2.80	0,10~0,30	0,30~3,00
	16 T3 04 - JTM														●	15.50	9.52	3.97	4.40	0,05~0,25	0,20~1,50
	16 T3 08 - JTM														●	14.50	9.52	3.97	4.40	0,10~0,30	0,30~3,00
	16 T3 12 - JTM														○	13.50	9.52	3.97	4.40	0,05~0,25	0,20~1,50

● JD-Lager / JD-Stock
○ begrenzte Lagerhaltung - auf Anfrage / limited stock - upon request

Trägerwerkzeuge
Toolholders : 1.19, 1.32

Spanbrecher
Chipbreaker : 1.73

Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

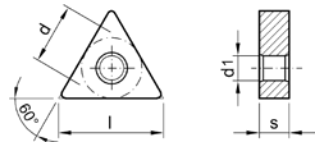
Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendeplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

TN

Drehen
Turning



Fräswerkzeuge
Milling Tools

Werkstück/Worpiece	Stahl / Steel	A (P)	○	○	○	●	●	●	●	●	●	●	○
	Rostfreier Stahl / Stainless steel	R (M)	○	●	●	○	○	○	○	○	○	○	○
Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○
Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	●	●	○	○	○	○	○	○	○	○	○	○
Gehärteter Stahl / Hardened steel	H	○	○	○	○	○	○	○	○	○	○	○	○

Machinentyp
Machining types

● Hauptanwendung / Main application
○ Nebenanwendung / Additional application

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated										Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]			
		TK5210+	TK5310	TK5710	TM5125	TM5130	TP2135	TP2235	TP3020	TP3120	TP4025+		TP5025	TP5345	TWS7225	TK1210	l	Ø d	s	Ø d ₁
	16 04 04 - A20		○	○										○	15.50	9.52	4.76	3.80	0,12~0,30	1,00~3,50
	16 04 08 - A20		○	○										○	14.50	9.52	4.76	3.80	0,15~0,35	1,30~3,50

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Werkstück/Worpiece	Stahl / Steel	A (P)	○	○	○	●	●	●	●	●	●	●	○
	Rostfreier Stahl / Stainless steel	R (M)	○	●	●	○	○	○	○	○	○	○	○
Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○
Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	●	●	○	○	○	○	○	○	○	○	○	○
Gehärteter Stahl / Hardened steel	H	○	○	○	○	○	○	○	○	○	○	○	○

Machinentyp
Machining types

● Hauptanwendung / Main application
○ Nebenanwendung / Additional application

Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated										Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]			
		TK5210+	TK5310	TK5710	TM5125	TM5130	TP2135	TP2235	TP3020	TP3120	TP4025+		TP5025	TP5345	TWS7225	TK1210	l	Ø d	s	Ø d ₁
	16 04 04 - JBF													●	15.50	9.52	4.76	3.81	0,08~0,18	0,10~2,00
	16 04 08 - JBF													●	14.50	9.52	4.76	3.81	0,10~0,35	0,10~2,50
	16 04 12 - JBF																			

Gewinde-
werkzeuge
Threading Tools

	16 04 04 - JBM													●	15.50	9.52	4.76	3.81	0,10~0,25	0,40~3,00
	16 04 08 - JBM													●	14.50	9.52	4.76	3.81	0,10~0,40	0,40~3,50
	16 04 12 - JBM													○	13.50	9.52	4.76	3.81	0,13~0,50	0,80~4,50

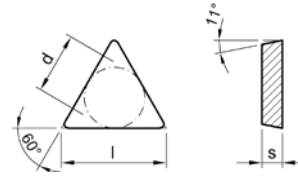
Wendeplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

	16 04 08 - JBR													●	14.50	9.52	4.76	3.81	0,14~0,40	0,40~4,50
	16 04 12 - JBR													●	13.50	9.52	4.76	3.81	0,25~0,55	1,20~5,00

	16 04 04 - MD													○	15.50	9.52	4.76	3.81	0,05~0,35	0,80~4,50
	16 04 08 - MD													○	14.50	9.52	4.76	3.81	0,08~0,45	1,00~4,50
	22 04 08 - MD													●	20.80	12.70	4.76	5.16	0,10~0,50	1,00~6,00

	16 04 04 - ER													●	15.50	9.52	4.76	3.81	0,10~0,30	0,80~3,00
	16 04 08 - ER													●	14.50	9.52	4.76	3.81	0,12~0,35	1,00~3,50

TP



Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendeplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Werkstück/Workpiece	Stahl / Steel	A (P)	○	○	○	●	●	●	●	●	●	●	○	Machinentyp Machining types	● Hauptanwendung / Main application ○ Nebenanwendung / Additional application	
	Rostfreier Stahl / Stainless steel	R (M)	○	●	●	○	○	○	○	○	○	○	○			
	Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○			
	Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○			
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○			
	Gehärteter Stahl / Hardened steel	H	○	○	○	○	○	○	○	○	○	○	○			

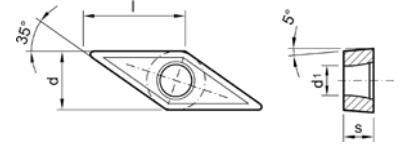
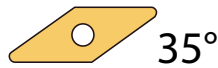
Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]		
		TK5210+	TK5310	TK5710	TM5125	TM5130	TP2135	TP2235	TP3020	TP3120	TP4025+	TP5025		TP5345	TWS7225	TK1210	l	Ø d	s	Ø d ₁
	16 03 04 - EL						○								15.50	9.52	3.18	-	0,08~0,25	0,50~4,00
	16 03 04 - ER						○								15.50	9.52	3.18	-	0,08~0,25	0,50~4,00

Werkstück/Workpiece	Stahl / Steel	A (P)	○	○	○	●	●	●	●	●	●	○	Machinentyp Machining types	● Hauptanwendung / Main application ○ Nebenanwendung / Additional application	
	Rostfreier Stahl / Stainless steel	R (M)	○	●	●	○	○	○	○	○	○	○			
	Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○			
	Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○			
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○			
	Gehärteter Stahl / Hardened steel	H	○	○	○	○	○	○	○	○	○	○			

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]		
		TK5210+	TK5310	TK5710	TM5125	TM5130	TP2135	TP2235	TP3020	TP3120	TP4025+	TP5025		TP5345	TWS7225	TK1210	l	Ø d	s	Ø d ₁
	16 03 04 - EN						○								15.50	9.52	3.18	-	0,08~0,25	1,00~5,00

VB

Drehen
Turning



Fräswerkzeuge
Milling Tools

Werkstück/Workpiece	Stahl / Steel	A (P)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Rostfreier Stahl / Stainless steel	R (M)	○	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○
Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Gehärteter Stahl / Hardened steel	H	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

Machinentyp
Machining types

● Hauptanwendung / Main application
○ Nebenanwendung / Additional application

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]			
		TK5210+	TK5310	TK5710	TM5125	TM5130	TP2135	TP2235	TP3020	TP3120	TP4025+	TP5025		TP5345	TWS7225	TK1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)
	11 03 02 - ALX		○	○											○	10.5	6.35	3.18	2.80	0,01~0,30	0,05~3,50
	11 03 04 - ALX		○	○											○	10.0	6.35	3.18	2.80	0,02~0,40	0,10~4,00
	16 04 04 - ALX			●											●	15.6	9.52	4.76	4.40	0,02~0,40	0,10~5,00
	16 04 08 - ALX			○	●										●	14.6	9.52	4.76	4.40	0,02~0,40	0,10~5,00

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Werkstück/Workpiece	Stahl / Steel	A (P)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Rostfreier Stahl / Stainless steel	R (M)	○	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○
Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Gehärteter Stahl / Hardened steel	H	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

Machinentyp
Machining types

● Hauptanwendung / Main application
○ Nebenanwendung / Additional application

Mini/Micro
Schneidwerkzeuge
Mini/Micro Tools

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]			
		TK5210+	TK5310	TK5710	TM5125	TM5130	TP2135	TP2235	TP3020	TP3120	TP4025+	TP5025		TP5345	TWS7225	TK1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)
	16 04 04 - F30														○	15.60	9.52	4.76	4.40	0,05~0,20	0,10~1,80

Gewinde-
werkzeuge
Threading Tools

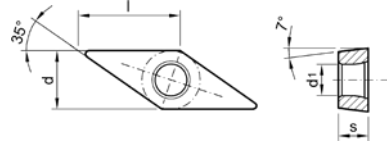
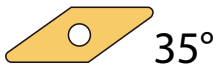
	11 03 04 - JTM														○	10.00	6.35	3.18	2.80	0,06~0,20	0,20~2,00
	11 03 08 - JTM														○	9.00	6.35	3.18	2.80	0,08~0,30	0,20~2,00
	16 04 04 - JTM														●	15.60	9.52	4.76	4.40	0,08~0,25	0,30~3,00
	16 04 08 - JTM														●	14.60	9.52	4.76	4.40	0,10~0,30	0,30~3,00
	16 04 12 - JTM														●	13.60	9.52	4.76	4.40	0,05~0,25	0,20~1,50

Wendeplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

	11 03 04 - M30				●											11.00	6.35	3.18	2.80	0,05~0,20	0,30~2,00
	16 04 04 - M30				●					●						16.64	9.52	4.76	4.40	0,05~0,20	0,30~2,50
	16 04 08 - M30				●					●						16.64	9.52	4.76	4.40	0,05~0,25	0,30~2,50

	16 04 04 - MD														○	15.60	9.52	4.76	4.40	0,09~0,19	0,30~2,70
	16 04 08 - MD														○	14.60	9.52	4.76	4.40	0,09~0,23	0,50~2,70

VC



Werkstück / Workpiece	Stahl / Steel	A (P)																
Rostfreier Stahl / Stainless steel	R (M)																	
Guss / Cast iron	F (K)																	
Nichtmet. Werkstoffe / Non-fer. metall.	N																	
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S																	
Gehärteter Stahl / Hardened steel	H																	

Machinentyp
Machining types

● Hauptanwendung / Main application
○ Nebenanwendung / Additional application

Wendepplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]			
		TK 5210+	TK 5310	TK 5710	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP 4025+	TP 5025		TP 5345	TWS 7225	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)
	11 03 02 - ALX		●	●											●	10.50	6.35	3.18	2.80	0,01~0,30	0,05~3,50
	11 03 04 - ALX		●	●											●	10.00	6.35	3.18	2.80	0,02~0,40	0,10~4,00
	11 03 08 - ALX		○	○											●	9.00	6.35	3.18	2.80	0,03~0,50	0,10~5,00
	13 03 02 - ALX		●	●											●	10.50	7.94	3.18	3.40	0,01~0,30	0,10~4,50
	13 03 04 - ALX		○	○											●	10.00	7.94	3.18	3.40	0,02~0,40	0,10~4,50
	16 04 02 - ALX		●	●											●	16.10	9.52	4.76	4.40	0,01~0,30	0,05~4,50
	16 04 04 - ALX		●	●											●	15.60	9.52	4.76	4.40	0,02~0,40	0,10~5,00
	16 04 08 - ALX		●	●											●	14.00	9.52	4.76	4.40	0,03~0,50	0,10~5,00
	16 04 12 - ALX		○	○											●	13.60	9.52	4.76	4.40	0,03~0,50	0,10~5,00
	22 05 30 - ALX		○	●											●	14.30	12.70	5.56	5.60	0,08~1,00	0,15~7,00

Werkstück / Workpiece	Stahl / Steel	A (P)																
Rostfreier Stahl / Stainless steel	R (M)																	
Guss / Cast iron	F (K)																	
Nichtmet. Werkstoffe / Non-fer. metall.	N																	
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S																	
Gehärteter Stahl / Hardened steel	H																	

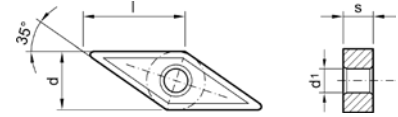
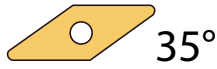
Machinentyp
Machining types

● Hauptanwendung / Main application
○ Nebenanwendung / Additional application

Wendepplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]			
		TK 5210+	TK 5310	TK 5710	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP 4025+	TP 5025		TP 5345	TWS 7225	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)
	11 03 02 - F30														○	10.50	6.35	3.18	2.80	0,03~0,13	0,07~1,50
	11 03 04 - F30														○	10.00	6.35	3.18	2.80	0,05~0,19	0,10~1,50
	16 04 04 - F30														●	15.60	9.52	4.76	4.40	0,05~0,20	0,10~1,80
	11 03 04 - JTM														●	10.00	6.35	3.18	2.80	0,06~0,20	0,20~2,00
	11 03 08 - JTM														●	9.00	6.35	3.18	2.80	0,08~0,30	0,20~2,00
	16 04 04 - JTM														●	15.60	9.52	4.76	4.40	0,08~0,25	0,30~3,00
	16 04 08 - JTM														●	14.00	9.52	4.76	4.40	0,10~0,30	0,30~3,00
	16 04 12 - JTM														○	13.60	9.52	4.76	4.40	0,05~0,25	0,20~1,50
	16 04 04 - M30				●										●	15.60	9.52	4.76	4.40	0,05~0,20	0,30~2,50
	16 04 04 - M30				●										●	14.00	9.52	4.76	4.40	0,05~0,25	0,30~2,50
	11 03 04 - MD														●	10.00	6.35	3.18	2.80	0,06~0,19	0,20~2,50
	16 04 04 - MD														●	15.60	9.52	4.76	4.40	0,06~0,19	0,30~2,70
	16 04 08 - MD														●	14.00	9.52	4.76	4.40	0,09~0,23	0,50~2,70

VN

Drehen
Turning



Fräswerkzeuge
Milling Tools

Werkstück/Worpiece	Stahl / Steel	A (P)	●	●	●	●	●	●	●	●	●	●	○
	Rostfreier Stahl / Stainless steel	R (M)	○	●	●	○	○	○	○	○	○	○	○
	Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○
	Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○
Gehärteter Stahl / Hardened steel	H											○	

Machinentyp
Machining types

● Hauptanwendung / Main application
○ Nebenanwendung / Additional application

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]		
		TK 5210+	TK 5310	TK 5710	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP 4025+	TP 5025		TP 5345	TWS 7225	TK 1210	l	Ø d	s	Ø d ₁
	VNMG-JBF													○	15.60	9.52	4.76	3.80	0,08~0,18	0,10~2,00
	16 04 04 - JBF 16 04 08 - JBF													●	14.60	9.52	4.76	3.80	0,10~0,35	0,10~2,50
	VNMG-JBM													●	15.60	9.52	4.76	3.80	0,08~0,18	0,10~2,00
	16 04 04 - JBM 16 04 08 - JBM													●	14.60	9.52	4.76	3.80	0,10~0,35	0,10~2,50
	16 04 12 - JBM													○	13.60	9.52	4.76	3.80	0,13~0,50	0,80~4,50
	VNMG-S30				○										16.60	9.52	4.76	3.81	0,08~0,35	0,50~4,00
	16 04 04 - S30 16 04 08 - S30				●										16.20	9.52	4.76	3.81	0,10~0,40	1,00~4,50

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/Micro
Schneidwerkzeuge
Mini/Micro Tools

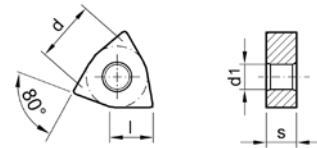
Gewinde-
werkzeuge
Threading Tools

Wendeplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

WN



80°



Werkstück / Workpiece	Stahl / Steel	A (P)	○	○	○	●	●	●	●	●	●	●	○
	Rostfreier Stahl / Stainless steel	R (M)	○	○	○	○	○	○	○	○	○	○	○
	Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○
	Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○
Gehärteter Stahl / Hardened steel	H											○	

Machinentyp / Machining types
 ● Hauptanwendung / Main application
 ○ Nebenanwendung / Additional application

Wendeplatten / Inserts	Bezeichnung / Part Number	Beschichtet / Coated											Unbeschichtet / Uncoated	Maße / Dimensions [mm]				Schnittdaten / Cutting Data [mm]			
		TK 5210+	TK 5310	TK 5710	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TW 5725	TK 1210	l	Ø d	s	Ø d ₁	f _m (mm/rev)
	06 04 04 - A20		○	○											○	6.20	9.52	4.76	3.80	0,10~0,30	0,50~3,00
	06 04 08 - A20		○	○											○	6.10	9.52	4.76	3.80	0,10~0,40	0,80~3,50
	08 04 04 - A20		○	●		●									○	8.40	12.70	4.76	5.16	0,10~0,45	0,50~4,50
	08 04 08 - A20		○	●		●									●	8.30	12.70	4.76	5.16	0,10~0,45	0,50~4,50
	08 04 04 - C22														○	8.40	12.70	4.76	5.16	0,05~0,30	0,80~4,00
	08 04 08 - C22														●	8.30	12.70	4.76	5.16	0,10~0,40	0,80~4,00
	08 04 04 - JBF														●	8.40	12.70	4.76	5.16	0,08~0,18	0,10~2,00
	08 04 08 - JBF														●	8.30	12.70	4.76	5.16	0,10~0,35	0,10~2,50
	06 04 12 - JBM														○	6.20	9.52	3.81	3.81	0,13~0,50	0,80~4,50
	06 T3 12 - JBM														○	6.10	9.52	3.81	3.81	0,13~0,50	0,80~4,50
	08 04 04 - JBM														●	8.40	12.70	4.76	5.16	0,10~0,25	0,40~3,00
	08 04 08 - JBM														●	8.30	12.70	4.76	5.16	0,10~0,40	0,40~3,50
	08 04 12 - JBM														○	8.20	12.70	4.76	5.16	0,13~0,50	0,80~4,50
	08 04 08 - JBR														●	8.30	12.70	4.76	5.16	0,15~0,40	0,40~4,50
	08 04 12 - JBR														●	8.20	12.70	4.76	5.16	0,25~0,55	1,20~5,00
	06 04 04 - MD														○	6.20	9.52	4.76	3.81	0,05~0,30	0,80~3,00
	06 04 08 - MD														●	6.10	9.52	4.76	3.81	0,10~0,35	1,00~3,00
	08 04 04 - MD														●	8.40	12.70	4.76	5.16	0,05~0,35	0,80~4,00
	08 04 08 - MD														●	8.30	12.70	4.76	5.16	0,08~0,45	1,00~4,00
	06 04 08 - S30				●											6.40	9.52	3.97	3.81	0,10~0,25	1,00~3,50
	08 04 04 - S30				●											8.40	12.70	4.76	5.16	0,05~0,25	0,50~3,50
	08 04 08 - S30				●											8.30	12.70	4.76	5.16	0,10~0,40	1,00~4,00

Drehen / Turning

Fräswerkzeuge / Milling Tools

HDS-/VHM-Fräser / Solid Carbide Endmills

Stech- und Abstechwerkzeuge / Grooving and Parting off Tools

Mini/ Micro Schneidwerkzeuge / Mini/ Micro Tools

Gewinde- werkzeuge / Threading Tools

Wendeplattenbohrer / VHM-Bohrer / Indexable Drills / Solid Carbide Drills

ALUMINIUM



**Für jede Anwendung
die richtige Sorte.**

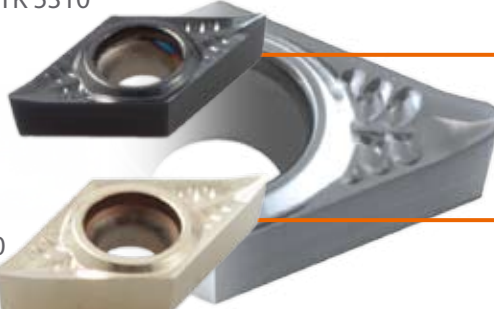
***For each application
the best grade.***

DCGT-TK 1210



Unbeschichtet *uncoated*
(Feinstkorn Micrograin)
für *for* Aluminium

DCGT-TK 5310



Saphittec für *for*
Aluminium, HRSA, GFK, CFK,

DCGT-TK 5710



Goldtec ZrN-beschichtet *coated*
Aluminium + Sonderlegierungen
Special Alloys

DCGT-TP 5345



für *for*
Niro Stainless Steel

CBN



CCMW CNMA CPMW

Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendeplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types	●	Hauptanwendung / Main application
	Rostfreier Stahl / Stainless steel	R (M)				○	Nebenanwendung / Additional application
	Guss / Cast iron	F (K)					
	Nichtmet. Werkstoffe / Non-fer. metall.	N					
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S					
	Gehärteter Stahl / Hardened steel	H					
Wendeplatten Inserts	Bezeichnung Part Number	Ecke Corner EW CDX 09					
		F	T				
CCMW 	06 02 02	○	○				
	06 02 04	○	○				
	06 02 08	○	○				
	09 T3 02	○	○				
	09 T3 04	○	○				
	09 T3 08	○	○				
	12 04 02	○	○				
	12 04 04	○	○				
	12 04 08	○	○				
Wendeplatten Inserts	Bezeichnung Part Number	Ecke Corner EW CDX 09					
		F	T				
CNMA 	09 03 02	○	○				
	09 03 04	○	○				
	09 03 08	○	○				
	12 04 02	○	○				
	12 04 04	○	○				
	12 04 08	○	○				
	12 04 12	○	○				
Wendeplatten Inserts	Bezeichnung Part Number	Ecke Corner EW CDX 09					
		F	T				
CPMW 	05 02 02	○	○				
	05 02 04	○	○				
	06 02 02	○	○				
	06 02 04	○	○				
	09 T3 02	○	○				
	09 T3 04	○	○				
	09 T3 08	○	○				
	12 04 02	○	○				
	12 04 04	○	○				
	12 04 08	○	○				

Bitte angeben / Please state : F: scharfe Ausführung / sharp version T: gefaste Ausführung / chamfered version

● JD-Lager / JD-Stock
○ begrenzte Lagerhaltung - auf Anfrage / limited stock - upon request

Trägerwerkzeuge : 1.06, 1.08, 1.09, 1.13, 1.25, 1.26, 1.28, 1.34-1.38
Toolholders

CBN



DCMW DNMA



EPMW

Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/Micro
Schneidwerkzeuge
Mini/Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepaltenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Werkstück Workpiece	Stahl / Steel	A (P)		
	Rostfreier Stahl / Stainless steel	R (M)		
Guss / Cast iron	F (K)			
Nichtmet. Werkstoffe / Non-fer. metall.	N			
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S			
Gehärteter Stahl / Hardened steel	H			

Wendeplatten Inserts	Bezeichnung Part Number	Ecke Corner EW CDX 09		Machinentyp Machining types
		F	T	
	07 02 02	○	○	
	07 02 04	○	○	
	07 02 08	○	○	
	11 T3 02	○	○	
	11 T3 04	○	○	
	11 T3 08	○	○	

● Hauptanwendung / Main application
○ Nebenanwendung / Additional application

Werkstück Workpiece	Stahl / Steel	A (P)		
	Rostfreier Stahl / Stainless steel	R (M)		
Guss / Cast iron	F (K)			
Nichtmet. Werkstoffe / Non-fer. metall.	N			
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S			
Gehärteter Stahl / Hardened steel	H			

Wendeplatten Inserts	Bezeichnung Part Number	Ecke Corner EW CDX 09		Machinentyp Machining types
		F	T	
	15 04 02	○	○	
	15 04 04	○	○	
	15 04 08	○	○	
	15 06 02	○	○	
	15 06 04	○	○	
	15 06 08	○	○	
	15 06 12	○	○	

● Hauptanwendung / Main application
○ Nebenanwendung / Additional application

Werkstück Workpiece	Stahl / Steel	A (P)		
	Rostfreier Stahl / Stainless steel	R (M)		
Guss / Cast iron	F (K)			
Nichtmet. Werkstoffe / Non-fer. metall.	N			
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S			
Gehärteter Stahl / Hardened steel	H			

Wendeplatten Inserts	Bezeichnung Part Number	Ecke Corner EW CDX 09		Machinentyp Machining types
		F	T	
	05 02 02	○	○	
	05 02 04	○	○	
	06 02 02	○	○	
	06 02 04	○	○	
	08 03 02	○	○	
	08 03 04	○	○	
	08 03 08	○	○	

● Hauptanwendung / Main application
○ Nebenanwendung / Additional application

Bitte angeben / Please state : F: scharfe Ausführung / sharp version T: gefaste Ausführung / chamfered version

CBN



90°

SCMW SNMA SNMN

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types	● Hauptanwendung / Main application ○ Nebenanwendung / Additional application
	Rostfreier Stahl / Stainless steel	R (M)				
	Guss / Cast iron	F (K)				
	Nichtmet. Werkstoffe / Non-fer. metall.	N				
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S				
	Gehärteter Stahl / Hardened steel	H				
Wendeplatten Inserts		Bezeichnung Part Number	Ecke Corner EW CDX 09			
			F	T		
SCMW 		09 03 02	○	○		
		09 03 04	○	○		
		09 03 08	○	○		
		09 T3 02	○	○		
		09 T3 04	○	○		
		09 T3 08	○	○		
		12 04 02	○	○		
		12 04 04	○	○		
	12 04 08	○	○			

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types	● Hauptanwendung / Main application ○ Nebenanwendung / Additional application
	Rostfreier Stahl / Stainless steel	R (M)				
	Guss / Cast iron	F (K)				
	Nichtmet. Werkstoffe / Non-fer. metall.	N				
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S				
	Gehärteter Stahl / Hardened steel	H				
Wendeplatten Inserts		Bezeichnung Part Number	Ecke Corner EW CDX 09			
			F	T		
SNMA 		12 03 02	○	○		
		12 04 02	○	○		
		12 04 08	○	○		

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types	● Hauptanwendung / Main application ○ Nebenanwendung / Additional application
	Rostfreier Stahl / Stainless steel	R (M)				
	Guss / Cast iron	F (K)				
	Nichtmet. Werkstoffe / Non-fer. metall.	N				
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S				
	Gehärteter Stahl / Hardened steel	H				
Wendeplatten Inserts		Bezeichnung Part Number	Ecke Corner EW CDX 09			
			F	T		
SNMN 		12 03 04	○	○		
		12 03 08	○	○		
		12 04 04	○	○		

Bitte angeben / Please state : F: scharfe Ausführung / sharp version T: gefaste Ausführung / chamfered version

CBN



90°

SPMN


60°

TCMW TNMA

Werkstück Workpiece	Stahl / Steel	A (P)		
	Rostfreier Stahl / Stainless steel	R (M)		
	Guss / Cast iron	F (K)		
	Nichtmet. Werkstoffe / Non-fer. metall.	N		
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S		
	Gehärteter Stahl / Hardened steel	H		

Wendeplatten Inserts	Bezeichnung Part Number	Ecke Corner EW CDX 09	
		F	T
SPMN 	09 03 02	○	○
	09 03 04	○	○
	09 03 08	○	○
	12 03 02	○	○
	12 03 04	○	○
	12 03 08	○	○

Machinentyp
Machining types

- Hauptanwendung / Main application
- Nebenanwendung / Additional application

Werkstück Workpiece	Stahl / Steel	A (P)		
	Rostfreier Stahl / Stainless steel	R (M)		
	Guss / Cast iron	F (K)		
	Nichtmet. Werkstoffe / Non-fer. metall.	N		
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S		
	Gehärteter Stahl / Hardened steel	H		

Wendeplatten Inserts	Bezeichnung Part Number	Ecke Corner EW CDX 09	
		F	T
TCMW 	09 02 02	○	○
	09 02 04	○	○
	09 02 08	○	○
	11 02 02	○	○
	11 02 04	○	○
	11 02 08	○	○
	16 T3 02	○	○
	16 T3 04	○	○
	16 T3 08	○	○

Machinentyp
Machining types

- Hauptanwendung / Main application
- Nebenanwendung / Additional application

Werkstück Workpiece	Stahl / Steel	A (P)		
	Rostfreier Stahl / Stainless steel	R (M)		
	Guss / Cast iron	F (K)		
	Nichtmet. Werkstoffe / Non-fer. metall.	N		
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S		
	Gehärteter Stahl / Hardened steel	H		

Wendeplatten Inserts	Bezeichnung Part Number	Ecke Corner EW CDX 09	
		F	T
TNMA 	16 04 02	○	○
	16 04 04	○	○
	16 04 08	○	○

Machinentyp
Machining types

- Hauptanwendung / Main application
- Nebenanwendung / Additional application

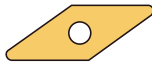
Bitte angeben / Please state : F: scharfe Ausführung / sharp version T: gefaste Ausführung / chamfered version

CBN



60°

TPMN



35°

VBMW VCMW

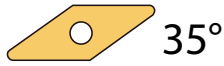
Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types <ul style="list-style-type: none"> ● Hauptanwendung / Main application ○ Nebenanwendung / Additional application
	Rostfreier Stahl / Stainless steel	R (M)			
	Guss / Cast iron	F (K)			
	Nichtmet. Werkstoffe / Non-fer. metall.	N			
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S			
	Gehärteter Stahl / Hardened steel	H			
Wendeplatten Inserts		Bezeichnung Part Number	Ecke Corner EW CDX 09		
			F	T	
TPMN 		11 03 02	○	○	
		11 03 04	○	○	
		11 02 08	○	○	

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types <ul style="list-style-type: none"> ● Hauptanwendung / Main application ○ Nebenanwendung / Additional application
	Rostfreier Stahl / Stainless steel	R (M)			
	Guss / Cast iron	F (K)			
	Nichtmet. Werkstoffe / Non-fer. metall.	N			
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S			
	Gehärteter Stahl / Hardened steel	H			
Wendeplatten Inserts		Bezeichnung Part Number	Ecke Corner EW CDX 09		
			F	T	
VBMW 		16 04 02	○	○	
		16 04 04	○	○	
		16 04 08	○	○	

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types <ul style="list-style-type: none"> ● Hauptanwendung / Main application ○ Nebenanwendung / Additional application
	Rostfreier Stahl / Stainless steel	R (M)			
	Guss / Cast iron	F (K)			
	Nichtmet. Werkstoffe / Non-fer. metall.	N			
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S			
	Gehärteter Stahl / Hardened steel	H			
Wendeplatten Inserts		Bezeichnung Part Number	Ecke Corner EW CDX 09		
			F	T	
VCMW 		11 03 02	○	○	
		11 03 04	○	○	
		11 03 08	○	○	
		16 04 02	○	○	
		16 04 04	○	○	
		16 04 08	○	○	
	16 04 12	○	○		

Bitte angeben / Please state : F: scharfe Ausführung / sharp version T: gefaste Ausführung / chamfered version

CBN



VNMA

Werkstück Workpiece	Stahl / Steel	A (P)		
	Rostfreier Stahl / Stainless steel	R (M)		
	Guss / Cast iron	F (K)		
	Nichtmet. Werkstoffe / Non-fer. metall.	N		
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S		
	Gehärteter Stahl / Hardened steel	H		

Wendeplatten Inserts	Bezeichnung Part Number	Ecke Corner EW CDX 09	
		F	T
	16 04 02	<input type="radio"/>	<input type="radio"/>
	16 04 04	<input type="radio"/>	<input type="radio"/>
	16 04 08	<input type="radio"/>	<input type="radio"/>

Machinentyp
Machining types

● Hauptanwendung / Main application
○ Nebenanwendung / Additional application

Bitte angeben / Please state : F: scharfe Ausführung / sharp version T: gefaste Ausführung / chamfered version

Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/Micro
Schneidwerkzeuge
Mini/Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendeplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

PKD



80°

CCMW CNMA



55°

DCMW

Werkstück Workpiece	Stahl / Steel	A (P)		
	Rostfreier Stahl / Stainless steel	R (M)		
	Guss / Cast iron	F (K)		
	Nichtmet. Werkstoffe / Non-fer. metall.	N		
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S		
	Gehärteter Stahl / Hardened steel	H		

Machinentyp
Machining types

- Hauptanwendung / Main application
- Nebenanwendung / Additional application

Wendeplatten Inserts	Bezeichnung Part Number	1 Ecke / Corner TY 1110 PKD	
		F	T
CCMW 	06 02 01		
	06 02 02		
	06 02 04		
	09 T3 02		
	09 T3 04		
	09 T3 08		
	12 04 04 12 04 08		

Werkstück Workpiece	Stahl / Steel	A (P)		
	Rostfreier Stahl / Stainless steel	R (M)		
	Guss / Cast iron	F (K)		
	Nichtmet. Werkstoffe / Non-fer. metall.	N		
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S		
	Gehärteter Stahl / Hardened steel	H		

Machinentyp
Machining types

- Hauptanwendung / Main application
- Nebenanwendung / Additional application

Wendeplatten Inserts	Bezeichnung Part Number	1 Ecke / Corner TY 1110 PKD	
		F	T
CNMA 	12 04 04		
	12 04 08		

Werkstück Workpiece	Stahl / Steel	A (P)		
	Rostfreier Stahl / Stainless steel	R (M)		
	Guss / Cast iron	F (K)		
	Nichtmet. Werkstoffe / Non-fer. metall.	N		
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S		
	Gehärteter Stahl / Hardened steel	H		

Machinentyp
Machining types

- Hauptanwendung / Main application
- Nebenanwendung / Additional application

Wendeplatten Inserts	Bezeichnung Part Number	1 Ecke / Corner TY 1110 PKD	
		F	T
DCMW 	07 02 01		
	07 02 02		
	07 02 04		
	11 T3 02		
	11 T3 04		
	11 T3 08		

Bitte angeben / Please state : F: scharfe Ausführung / sharp version T: gefaste Ausführung / chamfered version

PKD


DNMA

RCMW

TCMW

Werkstück Workpiece	Stahl / Steel	A (P)			
	Rostfreier Stahl / Stainless steel	R (M)			
	Guss / Cast iron	F (K)			
	Nichtmet. Werkstoffe / Non-fer. metall.	N			
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S			
Gehärteter Stahl / Hardened steel	H				
Wendeplatten Inserts 	Bezeichnung Part Number	1 Ecke / Corner TY 1110 PKD		Machinentyp Machining types ● Hauptanwendung / Main application ○ Nebenanwendung / Additional application	
			F		T
		DNMA	○		○
		11 04 04	○		○
		15 06 04	○		○
	15 06 08				

Werkstück Workpiece	Stahl / Steel	A (P)			
	Rostfreier Stahl / Stainless steel	R (M)			
	Guss / Cast iron	F (K)			
	Nichtmet. Werkstoffe / Non-fer. metall.	N			
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S			
Gehärteter Stahl / Hardened steel	H				
Wendeplatten Inserts 	Bezeichnung Part Number	Fullface TY 1110 PKD		Machinentyp Machining types ● Hauptanwendung / Main application ○ Nebenanwendung / Additional application	
			F		T
		RCMW			
		06 02 00			
		08 03 00			
	10 03 00				
	12 T3 00				

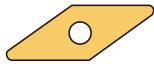
Werkstück Workpiece	Stahl / Steel	A (P)			
	Rostfreier Stahl / Stainless steel	R (M)			
	Guss / Cast iron	F (K)			
	Nichtmet. Werkstoffe / Non-fer. metall.	N			
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S			
Gehärteter Stahl / Hardened steel	H				
Wendeplattenbohrer VHM-Bohrer Indexable Drills Solid Carbide Drills 	Bezeichnung Part Number	1 Ecke / Corner TY 1110 PKD		Machinentyp Machining types ● Hauptanwendung / Main application ○ Nebenanwendung / Additional application	
			F		T
		TCMW			
		09 02 01			
		09 02 02			
		09 02 04			
		11 02 02			
		11 02 04			
		11 02 08			
		16 T3 04			
	16 T3 08				

Bitte angeben / Please state : F: scharfe Ausführung / sharp version T: gefaste Ausführung / chamfered version

PKD



60°



35°

TNMA

VCMW

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types <ul style="list-style-type: none"> ● Hauptanwendung / Main application ○ Nebenanwendung / Additional application
	Rostfreier Stahl / Stainless steel	R (M)			
	Guss / Cast iron	F (K)			
	Nichtmet. Werkstoffe / Non-fer. metall.	N			
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S			
	Gehärteter Stahl / Hardened steel	H			
Wendeplatten Inserts		Bezeichnung Part Number	1 Ecke / Corner TY 1110 PKD		
			F	T	
TNMA 		16 04 02			
		16 04 04			
		16 04 08			

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types <ul style="list-style-type: none"> ● Hauptanwendung / Main application ○ Nebenanwendung / Additional application
	Rostfreier Stahl / Stainless steel	R (M)			
	Guss / Cast iron	F (K)			
	Nichtmet. Werkstoffe / Non-fer. metall.	N			
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S			
	Gehärteter Stahl / Hardened steel	H			
Wendeplatten Inserts		Bezeichnung Part Number	1 Ecke / Corner TY 1110 PKD		
			F	T	
VCMW 		11 03 02			
		11 03 04			
		11 03 08			
		16 04 02			
		16 04 04			
		16 04 08			

Bitte angeben / Please state : F: scharfe Ausführung / sharp version T: gefaste Ausführung / chamfered version

Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendeplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Schneidstoffsorten-Übersicht zum Drehen Description of Carbide Grades for Turning

Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/Micro
Schneidwerkzeuge
Mini/Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

ISO	P						M				K					Gehärtet Hardened	
	hoch high		mittel medium		niedrig low	unterbrochener Schnitt intermittent cutting	hoch high	mittel medium		niedrig low	hoch high	mittel medium		niedrig low		niedrig low	
	P01	P10	P20	P30	P40	P50	M10	M20	M30	M40	K01	K10	K20	K30	K40		
Hartmetall beschichtet Coated Carbide			TWS 7225					TWS 7225				TK 5210+					
		TP 3020					TM 5125					TK 5310					
			TP 2135 TP 2235					TM 5130				TK 5710					
				TP 5345													
		TP 4025+															
			TP 3120					TP 4025+									
		TP 5025						TP 5025				TP 5025					
CBN																	CDX09
Hartmetall unbeschichtet Uncoated Carbide												TK 1210					

Schneidstoffsorten-Schlüssel zum Drehen
Code Explanation of Carbide Grades for Turning

C N M G 120404 - A20



Anwendung 1 Application 1	T	Drehen / Turning
	M	Fräsen / Milling
	G	Stechen / Grooving
	T	Gewinde / Threading
	D	Bohren / Drilling

Anwendung 2 Application 2	P	Stahl / Steel
	M	Niro / Stainless Steel
	K	Nichteisen, Kunststoff, Aluminium Non Metallic Materials
	S	warmfeste Legierungen / Heat Resistant Alloys
	H	gehärteter Stahl / Hardened Steel
	U	universell / all-purpose
	W	DIA
	X	CBN
	Y	PKD
	Z	Cermet
	D	DLC
	C	Keramik / Ceramics

Serien-Nr. Serial-No.	11-20	unbeschichtet / uncoated
	21-50	CVD
	51-99	PVD

ISO	10	
	20	
	30	
	40	
	50	
	...	

Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM- Fräser
HDS-/ Solid Carbide
Endmills


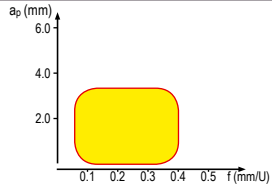

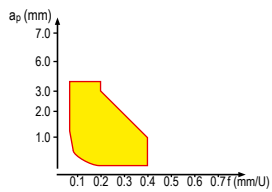

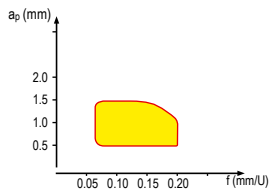

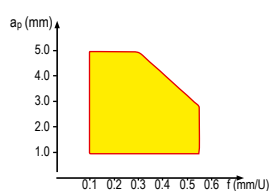

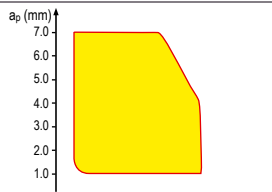

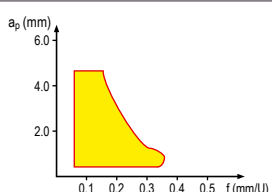

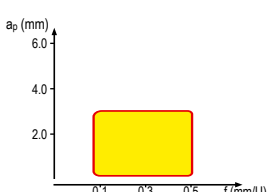
Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Spanleitstufen zum Drehen / Chipbreakers for Turning

Spanleitstufe Chipbreaker	Anwendungsbereich Application Range	Highlights	Highlights
A20 		<ul style="list-style-type: none"> Alu-Legierungen, Niro, St 37 scharfe Schneidkanten (Umfangschliff) extrem großer Spanwinkel 	<ul style="list-style-type: none"> Alu-alloys, stainless steel Sharp cutting edge (ground circumference) Extremely high helix
C22 		<ul style="list-style-type: none"> hervorragende Spankontrolle beim Kopierdrehen und der Innenbearbeitung sehr gute Oberflächen beim Plandrehen 	<ul style="list-style-type: none"> Excellent chip control while copy turning and internal machining Very good surface while face turning
JBF 		<ul style="list-style-type: none"> hohe Oberflächengüte durch gute Spankontrolle bei geringen Schnitttiefen 	<ul style="list-style-type: none"> High quality surface due to good chip control while low cutting depths
JBM 		<ul style="list-style-type: none"> weiter Anwendungsbereich bei der mittleren Schlichtbearbeitung bis hin zur mittleren Schruppbearbeitung typischer Einsatz in der universellen Anwendung auf CNC- Maschinen 	<ul style="list-style-type: none"> Wide range of application while middle finishing up to middle roughing Typical usage in universal working on CNC machines
JBR 		<ul style="list-style-type: none"> erste Wahl für unterbrochenen Schnitt und Schruppen im P- und M- Anwendungsbereich 	<ul style="list-style-type: none"> First choice for interrupted cut and roughing of P- and M- application range
MD 		<p>Standard-Geometrie im mittleren Bereich</p> <ul style="list-style-type: none"> vor allem CNC-Bearbeitung sehr gute Spankontrolle geeignet für Niro - Bearbeitung 	<p>Medium cutting</p> <ul style="list-style-type: none"> Wide range of chip control from medium-finishing to medium-roughing Chip breaker especially for CNC machining Suitable for stainless steel machining
S30 		<ul style="list-style-type: none"> scharfe, stabile Schneidkante hervorragende Spankontrolle auch bei langspanenden, weichen, rostfreien Stählen und Baustählen 	<ul style="list-style-type: none"> Sharp, strong cutting edge Excellent chip control also at long-chipping soft stainless and mild steels

Negative Wendeschneidplatten / Negative Inserts

Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills


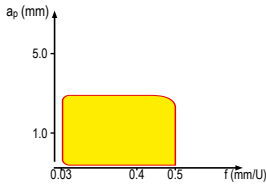

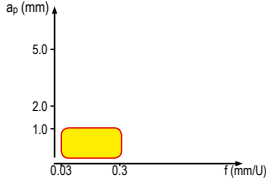

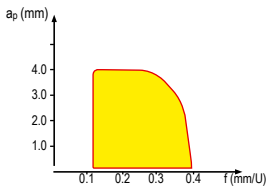

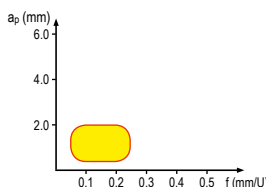

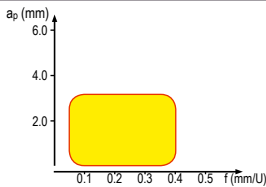
Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/Micro
Schneidwerkzeuge
Mini/Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepaltenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Spanleitstufen zum Drehen / Chipbreakers for Turning

Spanleitstufe Chipbreaker	Anwendungsbereich Application Range	Highlights	Highlights
ALX 		Aluminiumbearbeitung <ul style="list-style-type: none"> • sehr großer Spanwinkel, geschliffene Schneidkante • Bearbeitung von Aluminium, Kunststoffen, Feinstbearbeitung von Niro 	Aluminium cutting <ul style="list-style-type: none"> • Exclusive chipbreaker for aluminium and aluminium alloy, finishing of stainless steel • High rake angle, precision - ground cutting edge
F30 		Schlichtbearbeitung <ul style="list-style-type: none"> • großer Spanwinkel, scharfe Schneidkante • hohe Oberflächengüten, auch bei der Innenbearbeitung 	Finishing <ul style="list-style-type: none"> • High helix, sharp cutting edge • Very good surface quality, also in case of internal machining
JTM 		<ul style="list-style-type: none"> • universelle Geometrie für die mittlere Bearbeitung im P-, M- und S-Anwendungsbereich • exzellente Spankontrolle über einen sehr großen Vorschubbereich 	<ul style="list-style-type: none"> • Universal geometry for the middle machining in P-, M-, and S-application range • Excellent chip control for a wide range of feeds
M30 		Mittlere Bearbeitung bis Schlichten <ul style="list-style-type: none"> • optimale Spankontrolle auch bei zähen Zerspanung Materialien • hohe Oberflächengüte durch scharfe Schneidkante und geringe Schnittkräfte 	Medium cutting <ul style="list-style-type: none"> • Optimized chipcontrol at ductile materials • Very good surface due to sharp cutting edge and marginal cutting force
MD 		Mittlere Bearbeitung <ul style="list-style-type: none"> • auf antriebschwachen Maschinen und Bohrungsbearbeitung 	Medium cutting <ul style="list-style-type: none"> • Excellent chip control at wide range of cutting conditions • Suitable for stainless steel cutting

Positive Wendeschneidplatten / Positive Inserts

 Drehen
Turning

 Fräswerkzeuge
Milling Tools

 HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

 Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

 Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

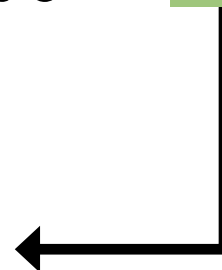
 Gewinde-
werkzeuge
Threading Tools

 Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Anwendung / Application

C N M G 120408 M ...

A	Aluminium / Aluminium
C	Kopieren / Copying
F	Schlichten / Finishing
H	Schweres Schruppen / Heavy Roughing
M	Mittlere Bearbeitung / Medium Cutting
R	Schruppen / Roughing
S	Mittlere Bearbeitung für Niro / Medium Cutting of Stainless Steel



Schnittdaten-Empfehlungen zum Drehen - allgemein Cutting Data Recommendations for Turning - in general

Werkstückwerkstoff Material	Legierung Alloy	Brinell-Härte hardness HB	VDI 3323 Gruppe	Schnittgeschwindigkeiten / Cutting speeds v_c [m/min]				
				TK 1210 (K10)	TK5210+ (K20C)	TK 5310 (K10C)	TK 5710 (K10C)	
A (P)	unlegierter Stahl / mild steel	geglüht / annealed $\leq 0,15\% C$	125	1			100 - 150	
		geglüht / annealed 0,15% - 0,45% C	150-250	2			80 - 140	
		vergütet / heat treated $\geq 0,45\% C$	300	3			70 - 110	
	niedriglegierter Stahl / lower alloyed steel	geglüht / annealed	180	6			80 - 130	
		vergütet / heat treated	275	7			70 - 120	
		vergütet / heat treated	300	8			60 - 90	
		vergütet / heat treated	350	9				
	hochlegierter Stahl / highly alloyed steel	geglüht / annealed	200	10			80 - 110	
		vergütet / heat treated	350	11				
	nichtrostender Stahl / corrosion-resistant steel	geglüht / annealed	200	12			130 - 180	
vergütet / heat treated		350	13					
R (M)	rostfreier Stahl / stainless steel	ferritisch, martensitisch, geglüht / ferritic, martensitic, annealed	200	14				
		austenitisch / austenitic	180	14			90 - 130	
		Duplex	230-260	14				
		austenitisch, ferritisch / austenitic, ferritic	330	14				
F (K)	Grauguss / grey cast iron	perlitisch, ferritisch / pearlitic, ferritic	180	15	140 - 200		160 - 220	
		perlitisch, martensitisch / pearlitic, martensitic	260	16	100 - 160		130 - 180	
	Grauguss mit Kugelgraphit / nodular cast iron	ferritisch / ferritic	160	17	160 - 200		150 - 220	
		perlitisch / pearlitic	250	18	110 - 150		120 - 170	
	Temperguss / malleable cast iron	ferritisch / ferritic	130	19	160 - 220		160 - 220	
		perlitisch / pearlitic	230	20	140 - 180		140 - 200	
N	Aluminium - Knetlegierungen / forging alloy	nicht aushärtbar / not hardenable	60	21	300 - 3000		250 - 2800	
		aushärtbar / hardenable	100	22	200 - 2000		180 - 2500	
	Aluminium - Gusslegierungen / casting alloy	nicht aushärtbar / not hardenable $< 12\% Si$	80	23	400 - 2000		300 - 1800	
		aushärtbar / hardenable $< 12\% Si$	90	24	400 - 1100		300 - 1800	
		nicht aushärtbar / not hardenable $> 12\% Si$	130	25	200 - 1000		170 - 1000	
	Kupfer und Kupfer-Legierungen (Bronze, Messing) / copper and copper alloys (bronze, brass)	Automatenlegierungen / free cutting alloys (1% Pb)		26	250 - 800		220 - 900	
		Messing, Rotguss / brass, red bronze		27	200 110		190 - 800	
		Bronze / bronze	90	28	150 - 600		150 - 650	
		bleifreies Kupfer und Elektrolytkupfer / unleaded copper	100	29	150 - 400		130 - 500	
	nichtmetallische Werkstoffe / non metallic materials	Duroplaste / thermoset	100	29	100 - 220		70 - 200	
faserverstärkte Kunststoffe / fiber reinforced plastic			29	80 - 200		70 - 220		
Hartgummi / ebonite			30	100 - 300		90 - 280		
S	warmfeste Legierungen / heat resistant alloys	Fe-Basis/base, geglüht / annealed	200	31		30 - 80	40 - 80	30 - 60
		Fe-Basis/base(Incoloy), ausgehärtet / hardened	280	32		20 - 55	35 - 55	20 - 50
		Ni-Basis/base (Inconel), geglüht / annealed	250	33		20 - 60	30 - 60	20 - 50
		Ni- oder Co-Basis, ausgehärtet / hardened	30-58 HRC	24		20 - 35	25 - 35	20 - 40
		Ni- oder Co-Basis, gegossen / cast	1500-2200 Nmm ²	35		20 - 40	20 - 40	20 - 30
	Titanlegierungen / titanium alloys	Reintitanium / Pure titanium	Rm 400	36		60 - 150	70 - 160	60 - 150
Alpha- + Beta-Legierungen / alloys	Rm 1050	37		30 - 90	50 - 130	30 - 70		
H	gehärteter Stahl / hardened steel	gehärtet und angelassen / hardened and tempered	55 HRC	38				
		gehärtet und angelassen / hardened and tempered	60 HRC	39				
	Hartguss / chilled cast iron	gegossen / cast	400	40				
Gehärtetes Gusseisen / hardened cast iron	gehärtet und angelassen / hardened and tempered	55 HRC	40					

Schnittdaten-Empfehlungen zum Drehen - allgemein

Cutting Data Recommendations for Turning - in general

Schnittgeschwindigkeiten / Cutting speeds v_c [m/min]										
TM 5125 (M25C)	TM 5130 (M30C)	TP 2135 TP 2235 (P35C)	TP 3020 (P10/P30C)	TP 3120 (P25C)	TP 4025+ (P25/M20C)	TP 5025 (P25C)	TP 5345 (P45C)	TWS 7225 (M25/P30C)	CDX09 (CBN)	TY 1110 (PKD)
120 - 280	80 - 150	170 - 230	180 - 300	180 - 300	120 - 280	120 - 280	180 - 240	190 - 280		
130 - 250	70 - 130	150 - 180	150 - 220	150 - 220	130 - 250	130 - 250	150 - 200	170 - 240		
100 - 180	70 - 120	110 - 150	120 - 200	120 - 200	100-180	100 - 180	150 - 200	130 - 200		
80 - 200		160 - 190	160 - 250	160 - 250	100 - 230	100 - 230	170 - 200	170 - 250		
60 - 180		80 - 140	90 - 180	90 - 180	80 - 200	80 - 200	100 - 160	100 - 190		
		70 - 130	80 - 170	80 - 170	60 - 180	60 - 180	90 - 150	90 - 170		
		60 - 120	120 - 190	120 - 190	50 - 130	50 - 130	80 - 140	80 - 160		
		110 - 200	80 - 160	80 - 160	80 - 180	80 - 180	130 - 170	130 - 200		
		40 - 80	120 - 180	120 - 180	50 - 120	50 - 120	80 - 130	80 - 150		
100 - 180	70 - 120	130 - 170	100 - 170	100 - 170	100 - 180	100 - 180	140 - 180	130 - 210		
70 - 150	60 - 100	100 - 160	90 - 180	90 - 180	70 - 150	70 - 150	115 - 170	110 - 190		
120 - 220	70 - 120	130 - 200	140 - 200	140 - 200	120 - 220	100 - 250	140 - 200	140 - 200		
80 - 200	80 - 150	90 - 190	90 - 180	90 - 180	100 - 200	90 - 150	110 - 190	90 - 200		
60 - 140	60 - 120	70 - 150				60 - 90	80 - 150	80 - 130		
50 - 120	50 - 100	40 - 60	60 - 90	60 - 90		50 - 80	55 - 75	80 - 100	80 - 150	
					130 - 280				300 - 1000	
					120 - 270				300 - 800	
					110 - 260				300 - 450	
					100 - 250				250 - 350	
					90 - 250					
					90 - 250					
							100 - 500			250 - 3500
							100 - 400			250 - 1300
							100 - 350			250 - 3500
							100 - 800			250 - 1500
							80 - 250			200 - 500
										100 - 600
										100 - 1300
										250 - 2500
										60 - 320
										80 - 250
										60 - 180
							40 - 70	80 - 110		
							30 - 60	60 - 100		
							30 - 60	35 - 80		
							20 - 30	30 - 40		
								20 - 35		
								60 - 100		
								30 - 60		
									80 - 200	
									40 - 180	
									40 - 180	

Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
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