





**Technical information**  
**Information technique**  
**Technische Auskunft**

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**Kodifizierungs-System**

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**Applications**  
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**B01**

Inserts

Turning

Automatic lathes

Ceramic tools

Parting & grooving

Threading

Drills

Cartridges

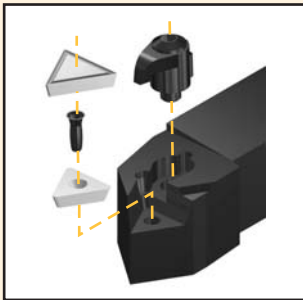
Brazed tools

Milling cutters

Solid carbide

Boring heads

Arbors & adaptors

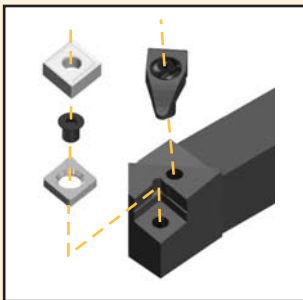
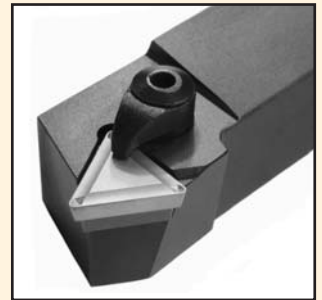


### (C) Top clamp

The classic positive insert clamping system is designed to hold flat positive inserts, both with additional or sintered chipbreaker.

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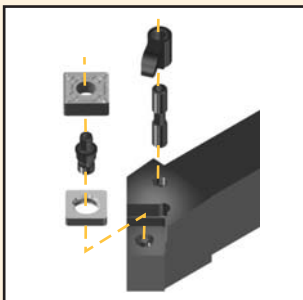
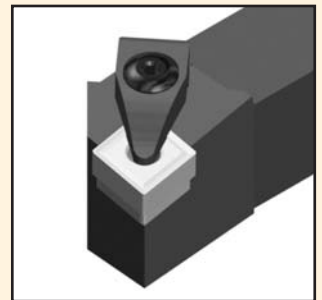


### (D) Dimple lock

The "D" clamping system avoids insert movement during high feed or heavily interrupted machining, due to its accurate indexing that holds the insert securely clamped.

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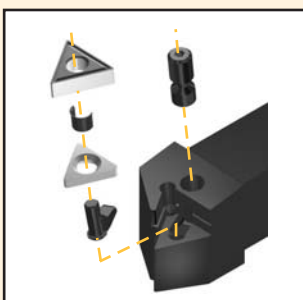


### (M-K) Double lock

The double lock system offers good rigidity in negative inserts clamping, it is the first choice for center hole negative ceramic and cermet inserts.

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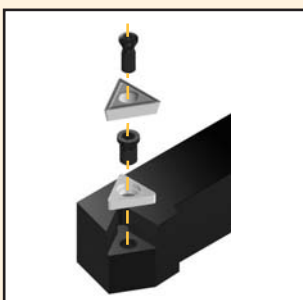
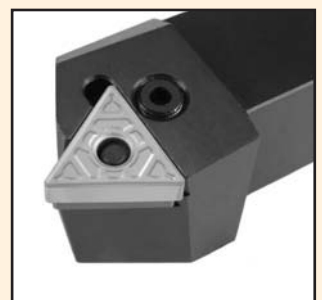


### (P) Lever lock

The classic lever lock system allows a wide range of applications, it is the first choice for general purpose turning toolholders.

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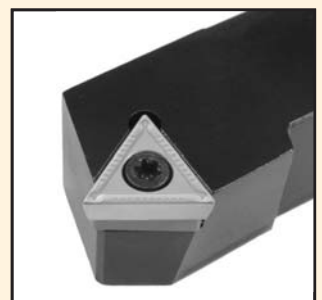


### (S) Center screw

Since the advent of the TORX screw it has been possible to hold with complete safety positive inserts with center hole. Our range covers all the screw fixing permutations.

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<b>P</b>	<b>C</b>	<b>L</b>	<b>N</b>	<b>R</b>	<b>25</b>	<b>25</b>	<b>M</b>	<b>12</b>
1	2	3	4	5	6	7	8	9

Inserts

Turning

Automatic lathes

Ceramic tools

Parting & grooving

Threading

Drills

Cartridges

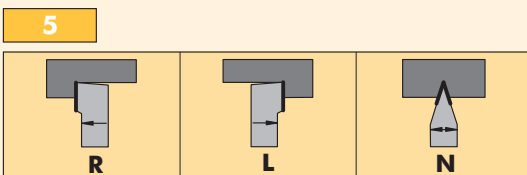
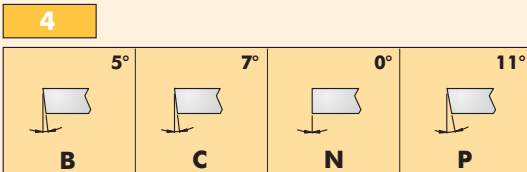
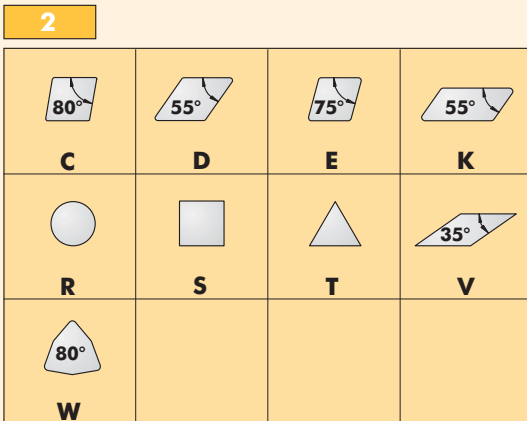
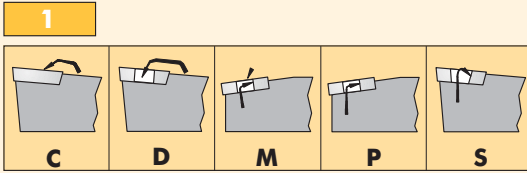
Brazed tools

Milling cutters

Solid carbide

Boring heads

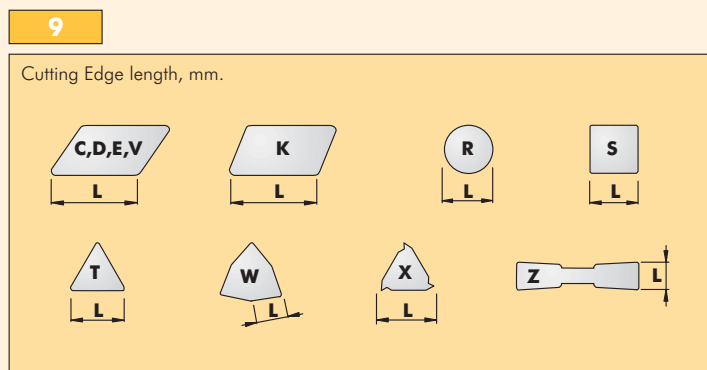
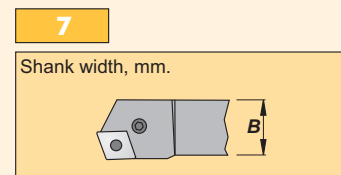
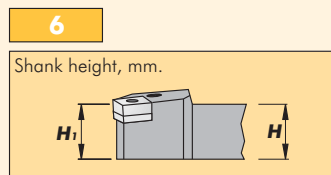
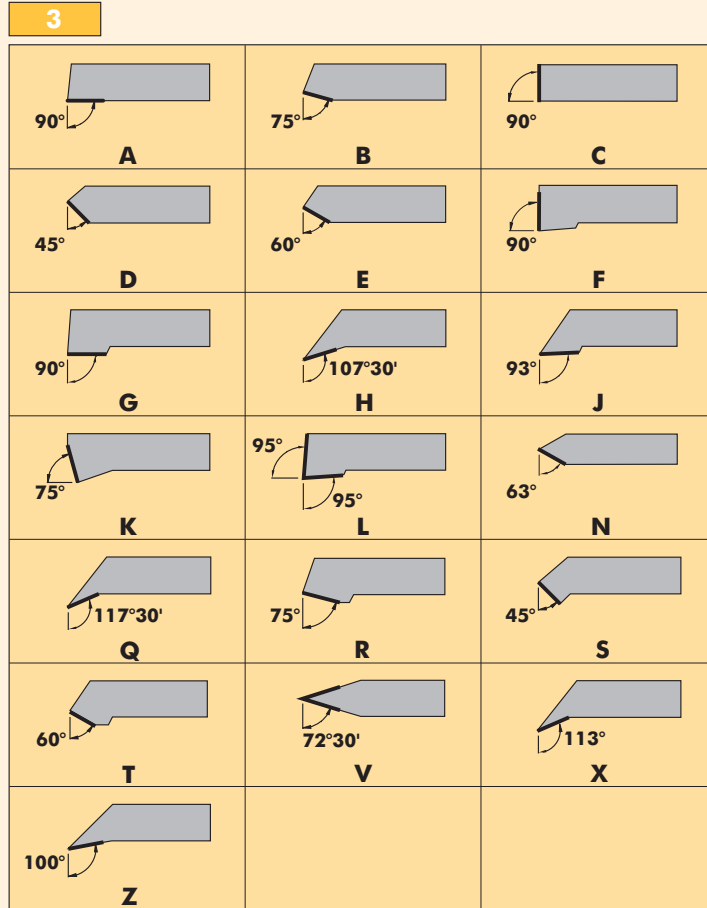
Arbors & adaptors



**8**

Tool length, mm.

<b>D</b>	60	<b>P</b>	170
<b>E</b>	70	<b>R</b>	200
<b>F</b>	80	<b>S</b>	250
<b>H</b>	100	<b>T</b>	300
<b>K</b>	125	<b>U</b>	350
<b>L</b>	140	<b>V</b>	400
<b>M</b>	150	<b>X</b>	Special



Top clamp toolholders - .....

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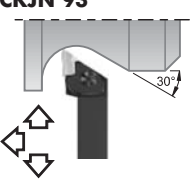
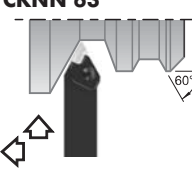
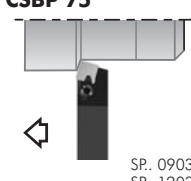
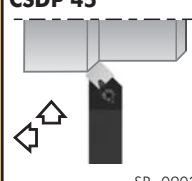
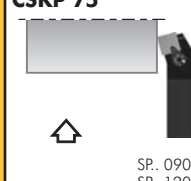
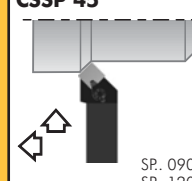
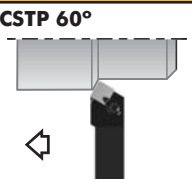
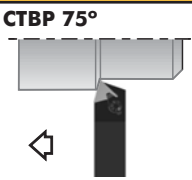
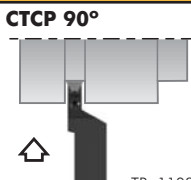
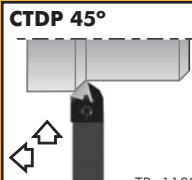
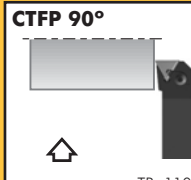
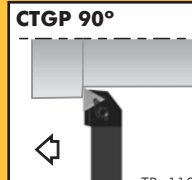
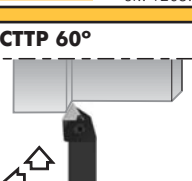
Brazed tools

Milling cutters

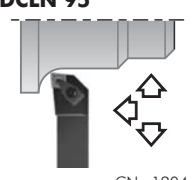
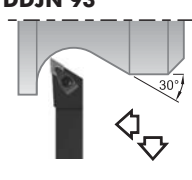
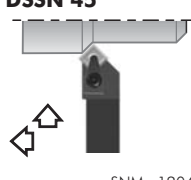
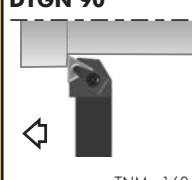
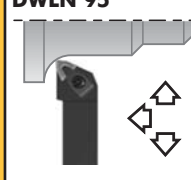
Solid carbide

Boring heads

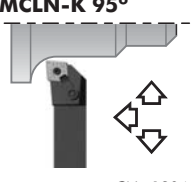
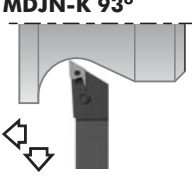
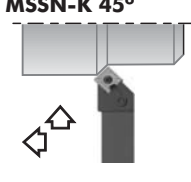
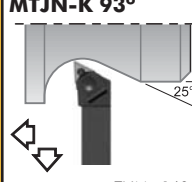
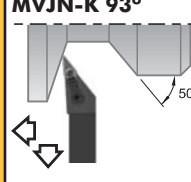

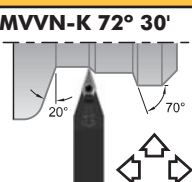
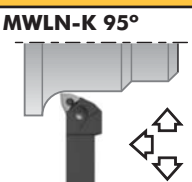
Arbors & adaptors

<p><b>CKJN 93°</b></p>  <p>Page B.07 KNUX 1604..</p>	<p><b>CKNN 63°</b></p>  <p>Page B.07 KNUX 1604..</p>	<p><b>CSBP 75°</b></p>  <p>Page B.07 SP. 0903.. SP. 1203.. SP. 1904..</p>	<p><b>CSDP 45°</b></p>  <p>Page B.08 SP. 0903.. SP. 1203..</p>	<p><b>CSKP 75°</b></p>  <p>Page B.08 SP. 0903.. SP. 1203.. SP. 1904..</p>	<p><b>CSSP 45°</b></p>  <p>Page B.08 SP. 0903.. SP. 1203.. SP. 1904..</p>
<p><b>CSTP 60°</b></p>  <p>Page B.09 SP. 0903.. SP. 1203..</p>	<p><b>CTBP 75°</b></p>  <p>Page B.09 TP. 1103.. TP. 1603..</p>	<p><b>CTCP 90°</b></p>  <p>Page B.09 TP. 1103.. TP. 1603.. TP. 2204..</p>	<p><b>CTDP 45°</b></p>  <p>Page B.10 TP. 1103.. TP. 1603.. TP. 2204..</p>	<p><b>CTFP 90°</b></p>  <p>Page B.10 TP. 1103.. TP. 1603.. TP. 2204..</p>	<p><b>CTGP 90°</b></p>  <p>Page B.10 TP. 1103.. TP. 1603.. TP. 2204..</p>
<p><b>CTTP 60°</b></p>  <p>Page B.11 TP. 0902.. TP. 1103.. TP. 1603..</p>					

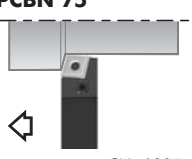
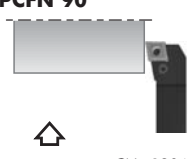
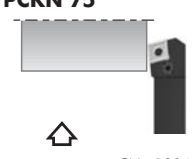
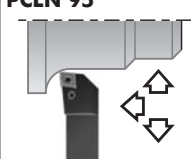
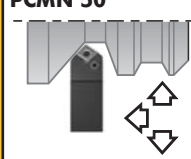
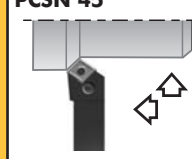
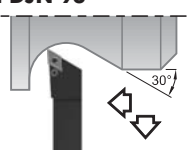
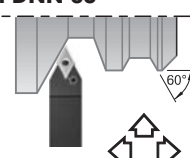
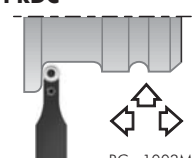
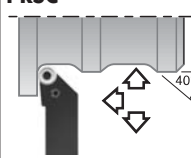
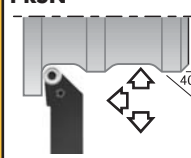
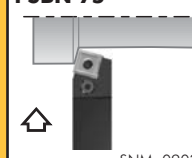
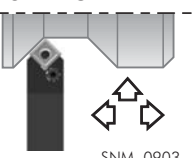
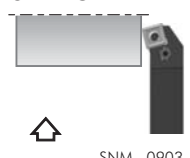
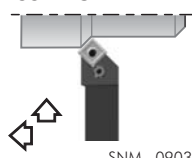
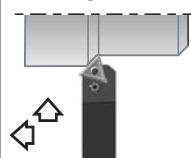
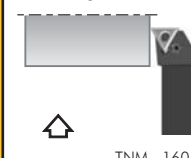
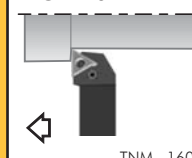
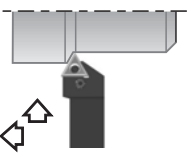
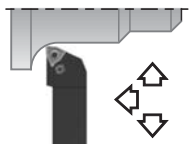
Dimple lock toolholders - .....

<p><b>DCLN 95°</b></p>  <p>Page B.12 CN. 1204.. CN. 1906..</p>	<p><b>DDJN 93°</b></p>  <p>Page B.12 DN. 1506..</p>	<p><b>DSSN 45°</b></p>  <p>Page B.12 SNM. 1204.. SNM. 1906..</p>	<p><b>DTGN 90°</b></p>  <p>Page B.13 TNM. 1604.. TNM. 2204..</p>	<p><b>DWLN 95°</b></p>  <p>Page B.13 WNMG 0804..</p>	
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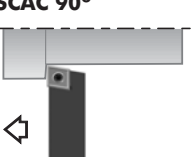
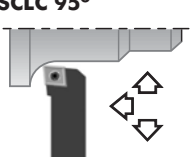
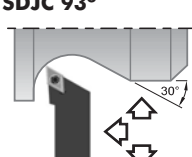
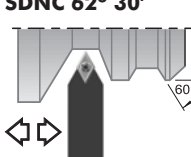
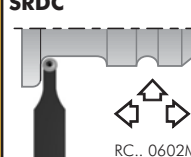
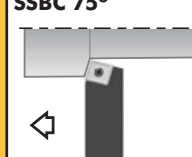
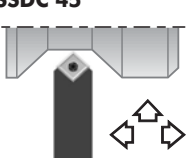
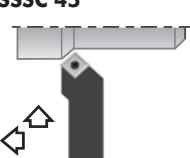
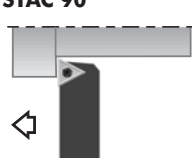
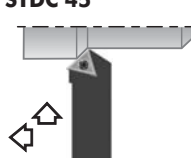
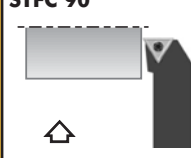
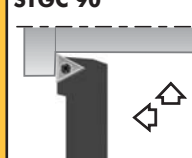
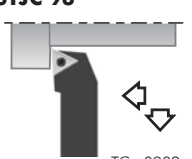
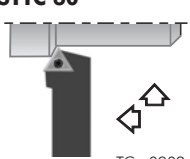
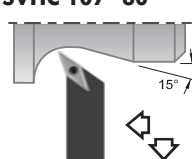
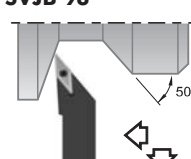
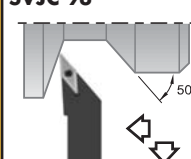
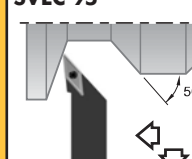
Double lock toolholders - .....

<p><b>MCLN-K 95°</b></p>  <p>Page B.14 CN. 1204.. CN. 1906..</p>	<p><b>MDJN-K 93°</b></p>  <p>Page B.14 DN. 1506..</p>	<p><b>MSSN-K 45°</b></p>  <p>Page B.14 SNM. 1204..</p>	<p><b>MTJN-K 93°</b></p>  <p>Page B.15 TNM. 1604.. TNM. 2204..</p>	<p><b>MVJN-K 93°</b></p>  <p>Page B.15 VN. 1604..</p>	<p><b>MVQN-K 117° 30'</b></p>  <p>Page B.15 VN. 1604..</p>
<p><b>MVFN-K 72° 30'</b></p>  <p>Page B.16 VN. 1604..</p>	<p><b>MWLN-K 95°</b></p>  <p>Page B.16 WNM. 0804..</p>				

Lever lock toolholders - .....

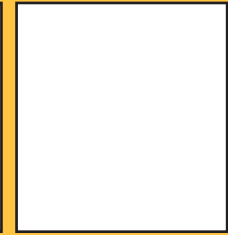
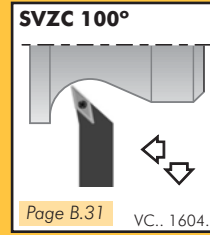
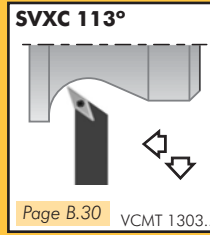
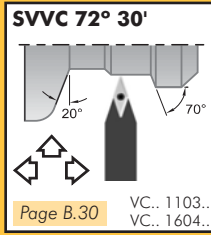
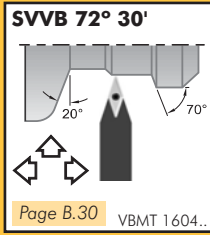
<p><b>PCBN 75°</b></p>  <p>Page B.17 CN.. 1204.. CN.. 1606.. CN.. 1906..</p>	<p><b>PCFN 90°</b></p>  <p>Page B.17 CN.. 1204.. CN.. 1606.. CN.. 1906..</p>	<p><b>PCKN 75°</b></p>  <p>Page B.17 CN.. 1204.. CN.. 1906.. CN.. 2509..</p>	<p><b>PCLN 95°</b></p>  <p>Page B.18 CN.. 0903.. ... CN.. 2509..</p>	<p><b>PCMN 50°</b></p>  <p>Page B.18 CN.. 1204.. CN.. 1906..</p>	<p><b>PCSN 45°</b></p>  <p>Page B.18 CN.. 1204.. CN.. 1606.. CN.. 1906..</p>
<p><b>PDJN 93°</b></p>  <p>Page B.19 DN.. 1104.. DN.. 1506..</p>	<p><b>PDNN 63°</b></p>  <p>Page B.19 DN.. 1506..</p>	<p><b>PRDC</b></p>  <p>Page B.19 RC.. 1003M0 ... RC.. 3209M0</p>	<p><b>PRSC</b></p>  <p>Page B.20 RC.. 10..32 RNMG 09..25</p>	<p><b>PRSN</b></p>  <p>Page B.20 RC.. 10..32 RNMG 09..25</p>	<p><b>PSBN 75°</b></p>  <p>Page B.20 SNM..0903.. ... SNM.. 2507..</p>
<p><b>PSDN 45°</b></p>  <p>Page B.21 SNM..0903.. ... SNM.. 2507..</p>	<p><b>PSKN 75°</b></p>  <p>Page B.21 SNM.. 0903.. ... SNM.. 2507..</p>	<p><b>PSSN 45°</b></p>  <p>Page B.21 SNM.. 0903.. ... SNM.. 2507..</p>	<p><b>PTDN 45°</b></p>  <p>Page B.22 TNM.. 2204</p>	<p><b>PTFN 90°</b></p>  <p>Page B.22 TNM.. 1604.. TNM.. 2204.. TNM.. 2706..</p>	<p><b>PTGN 90°</b></p>  <p>Page B.22 TNM.. 1604.. ... TNM.. 3307..</p>
<p><b>PTTN 60°</b></p>  <p>Page B.23 TNM.. 1604.. TNM.. 2204..</p>	<p><b>PWLN 95°</b></p>  <p>Page B.23 WNM.. 0604.. WNM.. 0804..</p>				

Center screw toolholders - .....

<p><b>SCAC 90°</b></p>  <p>Page B.24 CC.. 0602.. CC.. 09T3.. CC.. 1204..</p>	<p><b>SCLC 95°</b></p>  <p>Page B.24 CC.. 0602.. CC.. 09T3.. CC.. 1204..</p>	<p><b>SDJC 93°</b></p>  <p>Page B.24 DC.. 0702.. DC.. 11T3..</p>	<p><b>SDNC 62° 30'</b></p>  <p>Page B.25 DC.. 0702.. DC.. 11T3..</p>	<p><b>SRDC</b></p>  <p>Page B.25 RC.. 0602M0 RC.. 0803M0 RC.. 10T3M0 RC.. 1204M0</p>	<p><b>SSBC 75°</b></p>  <p>Page B.25 SC.. 09T3.. SC.. 1204..</p>
<p><b>SSDC 45°</b></p>  <p>Page B.26 SC.. 09T3.. SC.. 1204..</p>	<p><b>SSSC 45°</b></p>  <p>Page B.26 SC.. 09T3.. SC.. 1204..</p>	<p><b>STAC 90°</b></p>  <p>Page B.26 TC.. 0902.. TC.. 1102.. TC.. 16T3..</p>	<p><b>STDC 45°</b></p>  <p>Page B.27 TC.. 0902.. TC.. 1102.. TC.. 16T3..</p>	<p><b>STFC 90°</b></p>  <p>Page B.27 TC.. 0902.. TC.. 1102.. TC.. 16T3..</p>	<p><b>STGC 90°</b></p>  <p>Page B.27 TC.. 0902.. TC.. 1102.. TC.. 16T3..</p>
<p><b>STJC 93°</b></p>  <p>Page B.28 TC.. 0902.. TC.. 1102.. TC.. 16T3..</p>	<p><b>STTC 60°</b></p>  <p>Page B.28 TC.. 0902.. TC.. 1102.. TC.. 16T3..</p>	<p><b>SVHC 107° 30'</b></p>  <p>Page B.28 VC.. 1604..</p>	<p><b>SVJB 93°</b></p>  <p>Page B.29 VBMT 1604..</p>	<p><b>SVJC 93°</b></p>  <p>Page B.29 VC.. 1103 VC.. 1604..</p>	<p><b>SVLC 95°</b></p>  <p>Page B.29 VCMT 1303..</p>

- Inserts
- Turning
- Automatic lathes
- Ceramic tools
- Parting & grooving
- Threading
- Drills
- Cartridges
- Brazed tools
- Milling cutters
- Solid carbide
- Boring heads
- Arbors & adaptors

Inserts



Turning

Automatic  
lathes

Ceramic  
tools

Parting &  
grooving

Threading

Drills

Cartridges

Brazed  
tools

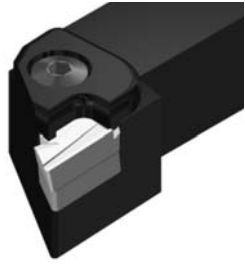
Milling  
cutters

Solid  
carbide

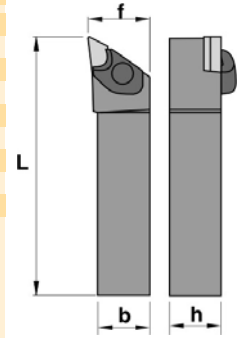
Boring  
heads

Arbors &  
adaptors

**CKJN 93°**



REF.	h	b	L	f	KNUX						
<b>CKJN L 2020 K16</b>	20	20	125	30	1604..	246	169	504	423	495	328 403
<b>CKJN R 2020 K16</b>	20	20	125	30	1604..	246	169	504	423	495	327 403
<b>CKJN L 2525 M16</b>	25	25	150	32	1604..	246	169	504	424	495	328 403
<b>CKJN R 2525 M16</b>	25	25	150	32	1604..	246	169	504	424	495	327 403
<b>CKJN L 3225 P16</b>	32	25	170	32	1604..	246	169	504	424	495	328 403
<b>CKJN R 3225 P16</b>	32	25	170	32	1604..	246	169	504	424	495	327 403
<b>CKJN L 3232 P16</b>	32	32	170	40	1604..	246	169	504	424	495	328 403
<b>CKJN R 3232 P16</b>	32	32	170	40	1604..	246	169	504	424	495	327 403
<b>CKJN L 4025 R16</b>	40	25	200	32	1604..	246	169	504	424	495	328 403
<b>CKJN R 4025 R16</b>	40	25	200	32	1604..	246	169	504	424	495	327 403



Inserts

Turning

Automatic lathes

Ceramic tools

Parting & grooving

Threading

Drills

Cartridges

Brazed tools

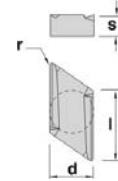
Milling cutters

Solid carbide

Boring heads

Arbors & adaptors

REF.	l	s	d
<b>KNUX 1604.. 05</b>	16,00	4,76	9,52
<b>KNUX 1604.. 10</b>	16,00	4,76	9,52

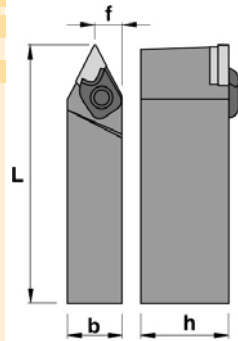


For more information see page: A.45

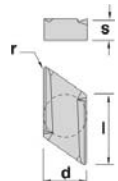
**CKNN 63°**



REF.	h	b	L	f	KNUX						
<b>CKNN L 4025 R16</b>	40	25	200	14,3	1604..	246	169	504	424	495	328 403
<b>CKNN R 4025 R16</b>	40	25	200	14,3	1604..	237	169	504	424	495	327 403
<b>CKNN L 5032 S16</b>	50	32	250	16,8	1604..	246	169	504	424	495	328 403
<b>CKNN R 5032 S16</b>	50	32	250	16,8	1604..	237	169	504	424	495	327 403



REF.	l	s	d
<b>KNUX 1604.. 05</b>	16,00	4,76	9,52
<b>KNUX 1604.. 10</b>	16,00	4,76	9,52

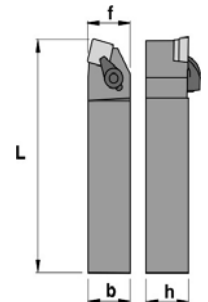


For more information see page: A.45

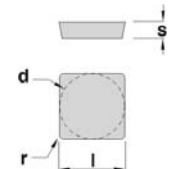
**CSBP 75°**



REF.	h	b	L	f	SP.				
<b>CSBP R/L 1212 F09</b>	12	12	80	11	0903..	227	525	309	402
<b>CSBP R/L 1616 H09</b>	16	16	100	13	0903..	227	525	309	402
<b>CSBP R/L 2020 K09</b>	20	20	125	17	0903..	227	525	309	402
<b>CSBP R/L 2020 K12</b>	20	20	125	17	1203..	229	503	314	402
<b>CSBP R/L 2525 M12</b>	25	25	150	22	1203..	229	503	314	402
<b>CSBP R/L 3225 P12</b>	32	25	170	22	1203..	229	503	314	402
<b>CSBP R/L 3232 P19</b>	32	32	170	27	1904..	231	504	320	403
<b>CSBP R/L 4040 S19</b>	40	40	250	35	1904..	231	504	320	403
<b>CSBP R/L 5050 T19</b>	50	50	300	43	1904..	231	504	320	403



REF.	l	s	d
<b>SP. 0903..</b>	9,52	3,18	9,52
<b>SP. 1203..</b>	12,70	3,18	12,70
<b>SP. 1904..</b>	19,05	4,76	19,05



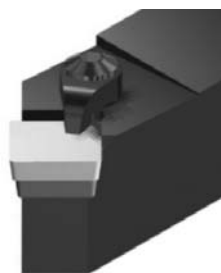
For more information see page: A.51



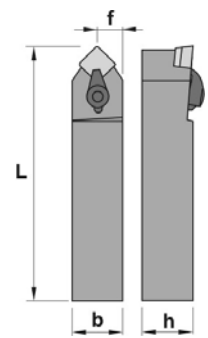


Inserts

**CSDP 45°**



REF.	h	b	L	f	SP.				
<b>CSDP R/L 1010 E09</b>	10	10	70	5,6	0903..	207	525	-	-
<b>CSDP R/L 1212 F09</b>	12	12	80	7,6	0903..	227	525	309	402
<b>CSDP R/L 1616 H09</b>	16	16	100	11,6	0903..	227	525	309	402
<b>CSDP R/L 2020 K12</b>	20	20	125	14,0	1203..	229	503	314	402
<b>CSDP R/L 2525 M12</b>	25	25	150	19,0	1203..	229	503	314	402
<b>CSDP N 1010 E09</b>	10	10	70	5,0	0903..	207	525	-	-
<b>CSDP N 1212 F09</b>	12	12	80	6,0	0903..	227	525	309	402
<b>CSDP N 1616 H09</b>	16	16	100	8,0	0903..	227	525	309	402
<b>CSDP N 2020 K12</b>	20	20	125	10,0	1203..	229	503	314	402
<b>CSDP N 2525 M12</b>	25	25	150	12,5	1203..	229	503	314	402



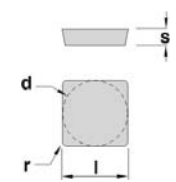
Turning

Automatic lathes

Ceramic tools



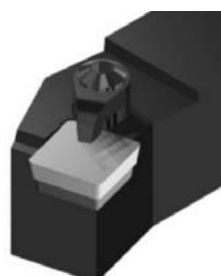
REF.	l	s	d
<b>SP. 0903..</b>	9,52	3,18	9,52
<b>SP. 1203..</b>	12,70	3,18	12,70



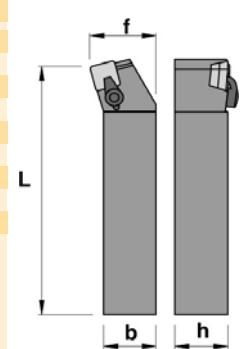
For more information see page: A.51

Parting & grooving

**CSKP 75°**



REF.	h	b	L	f	SP.				
<b>CSKP R/L 1212 F09</b>	12	12	80	16	0903..	227	525	309	402
<b>CSKP R/L 1616 H09</b>	16	16	100	20	0903..	227	525	309	402
<b>CSKP R/L 2020 K09</b>	20	20	125	25	0903..	227	525	309	402
<b>CSKP R/L 2020 K12</b>	20	20	125	25	1203..	229	503	314	402
<b>CSKP R/L 2525 M12</b>	25	25	150	32	1203..	229	503	314	402
<b>CSKP R/L 3225 P12</b>	32	25	170	32	1203..	229	503	314	402
<b>CSKP R/L 3232 P19</b>	32	32	170	40	1904..	231	504	320	403
<b>CSKP R/L 4040 S19</b>	40	40	250	50	1904..	231	504	320	403
<b>CSKP R/L 5050 T19</b>	50	50	300	60	1904..	231	504	320	403



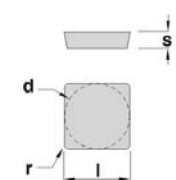
Threading

Drills

Cartridges



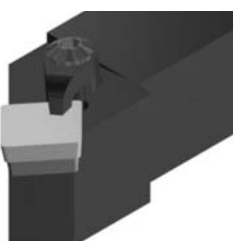
REF.	l	s	d
<b>SP. 0903..</b>	9,52	3,18	9,52
<b>SP. 1203..</b>	12,70	3,18	12,70
<b>SP. 1904..</b>	19,05	4,76	19,05



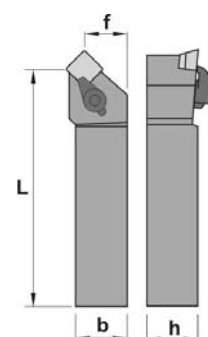
For more information see page: A.51

Brazed tools

**CSSP 45°**



REF.	h	b	L	f	SP.				
<b>CSSP R/L 1212 F09</b>	12	12	80	16	0903..	227	525	309	402
<b>CSSP R/L 1616 H09</b>	16	16	100	20	0903..	227	525	309	402
<b>CSSP R/L 2020 K12</b>	20	20	125	25	1203..	229	503	314	402
<b>CSSP R/L 2525 M12</b>	25	25	150	32	1203..	229	503	314	402
<b>CSSP R/L 3225 P12</b>	32	25	170	32	1203..	229	503	314	402
<b>CSSP R/L 3232 P19</b>	32	32	170	40	1904..	231	504	320	403
<b>CSSP R/L 4040 S19</b>	40	40	250	50	1904..	231	504	320	403



Milling cutters

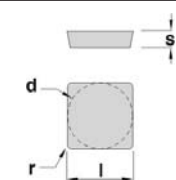
Solid carbide

Boring heads

Arbors & adaptors



REF.	l	s	d
<b>SP. 0903..</b>	9,52	3,18	9,52
<b>SP. 1203..</b>	12,70	3,18	12,70
<b>SP. 1904..</b>	19,05	4,76	19,05

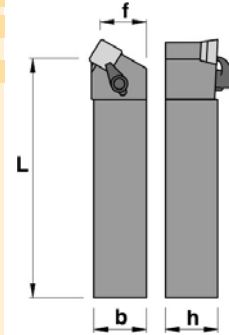


For more information see page: A.51

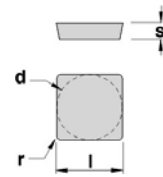
**CSTP 60°**



REF.	h	b	L	f	SP.				
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<b>CSTP R/L 2020 K09</b>	20	20	125	17	0903..	227	525	309	402
<b>CSTP R/L 2020 K12</b>	20	20	125	17	1203..	229	503	314	402
<b>CSTP R/L 2525 M12</b>	25	25	150	22	1203..	229	503	314	402

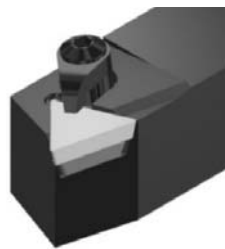


REF.	l	s	d
<b>SP. 0903..</b>	9,52	3,18	9,52
<b>SP. 1203..</b>	12,70	3,18	12,70

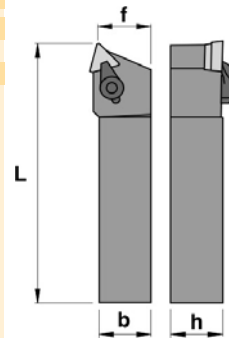


For more information see page: A.51

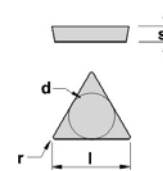
**CTBP 75°**



REF.	h	b	L	f	TP.				
<b>CTBP R/L 1212 F11</b>	12	12	80	11	1103..	227	525	-	-
<b>CTBP R/L 1616 H11</b>	16	16	100	13	1103..	227	525	-	-
<b>CTBP R/L 2020 K16</b>	20	20	125	17	1603..	229	503	317	402
<b>CTBP R/L 2525 M16</b>	25	25	150	22	1603..	229	503	317	402



REF.	l	s	d
<b>TP. 1103..</b>	11,00	3,18	6,35
<b>TP. 1603..</b>	16,50	3,18	9,52

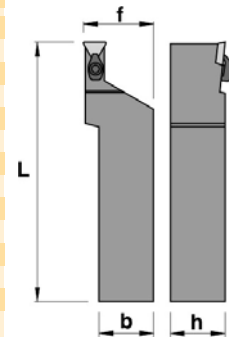


For more information see page: A.54,55

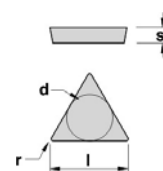
**CTCP 90°**



REF.	h	b	L	f	TP.				
<b>CTCP N 1009 E11</b>	10	9	70	11	1103..	234	525	-	-
<b>CTCP N 2009 K11</b>	20	9	125	11	1103..	234	525	-	-
<b>CTCP N 2509 R11</b>	25	9	200	11	1103..	234	525	-	-
<b>CTCP N 2513 R16</b>	25	13	200	16	1603..	235	503	317	402
<b>CTCP N 2518 R22</b>	25	18	200	22	2204..	231	504	324	403
<b>CTCP N 4018 R22</b>	40	18	200	22	2204..	231	504	324	403
<b>CTCP R/L 1212 F11</b>	12	12	80	16	1103..	234	525	-	-
<b>CTCP R/L 1616 H11</b>	16	16	100	20	1103..	234	525	-	-
<b>CTCP R/L 2020 K11</b>	20	20	125	25	1103..	234	525	-	-
<b>CTCP R/L 2525 M11</b>	25	25	150	32	1103..	234	525	-	-
<b>CTCP R/L 3225 P16</b>	32	25	170	32	1603..	235	503	317	402
<b>CTCP R/L 3232 P16</b>	32	32	170	40	1603..	235	503	317	402
<b>CTCP R/L 3225 P22</b>	32	25	170	32	2204..	231	504	324	403
<b>CTCP R/L 3232 P22</b>	32	32	170	40	2204..	231	504	324	403



REF.	l	s	d
<b>TP. 1103..</b>	11,00	3,18	6,35
<b>TP. 1603..</b>	16,50	3,18	9,52
<b>TP. 2204..</b>	22,00	4,76	12,70



For more information see page: A.54,55

Inserts

Turning

Automatic lathes

Ceramic tools

Parting & grooving

Threading

Drills

Cartridges

Brazed tools

Milling cutters

Solid carbide

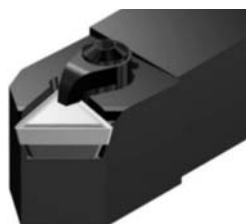
Boring heads

Arbors & adaptors

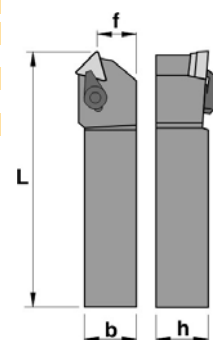


Inserts

**CTDP 45°**



REF.	h	b	L	f	TP.				
<b>CTDP R/L 1212 F11</b>	12	12	80	6,3	1103..	227	525	-	-
<b>CTDP R/L 1616 H11</b>	16	16	100	10,3	1103..	227	525	-	-
<b>CTDP R/L 2020 K16</b>	20	20	125	12,2	1603..	229	503	317	402
<b>CTDP R/L 2525 M16</b>	25	25	150	17,2	1603..	229	503	317	402
<b>CTDP R/L 3232 P16</b>	32	32	170	23,5	1603..	229	503	317	402
<b>CTDP R/L 3232 P22</b>	32	32	170	20,5	2204..	231	504	324	403



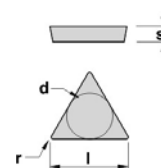
Turning

Automatic lathes

Ceramic tools



REF.	l	s	d
<b>TP. 1103..</b>	11,00	3,18	6,35
<b>TP. 1603..</b>	16,50	3,18	9,52
<b>TP. 2204..</b>	22,00	4,76	12,70



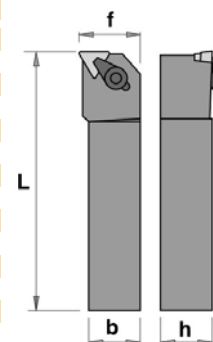
For more information see page: A.54,55

Parting & grooving

**CTFP 90°**



REF.	h	b	L	f	TP.				
<b>CTFP R/L 1010 E11</b>	10	10	70	12	1103..	200	545	-	-
<b>CTFP R/L 1212 F11</b>	12	12	80	16	1103..	227	525	-	-
<b>CTFP R/L 1616 H11</b>	16	16	100	20	1103..	227	525	-	-
<b>CTFP R/L 2020 K11</b>	20	20	125	25	1103..	227	525	-	-
<b>CTFP R/L 2020 K16</b>	20	20	125	25	1603..	229	503	317	402
<b>CTFP R/L 2525 M16</b>	25	25	150	32	1603..	229	503	317	402
<b>CTFP R/L 3225 P16</b>	32	25	170	32	1603..	229	503	317	402
<b>CTFP R/L 3232 P16</b>	32	32	170	40	1603..	229	503	317	402
<b>CTFP R/L 4040 S16</b>	40	40	250	50	1603..	229	503	317	402
<b>CTFP R/L 5050 T16</b>	50	50	300	60	1603..	229	503	317	402
<b>CTFP R/L 3232 P22</b>	32	32	170	40	2204..	231	504	324	403
<b>CTFP R/L 4040 S22</b>	40	40	250	50	2204..	231	504	324	403
<b>CTFP R/L 5050 T22</b>	50	50	300	60	2204..	231	504	324	403



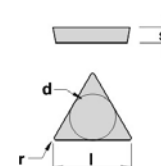
Threading

Drills

Cartridges



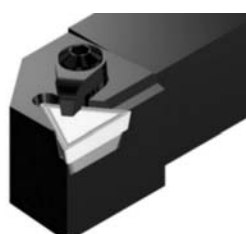
REF.	l	s	d
<b>TP. 1103..</b>	11,00	3,18	6,35
<b>TP. 1603..</b>	16,50	3,18	9,52
<b>TP. 2204..</b>	22,00	4,76	12,70



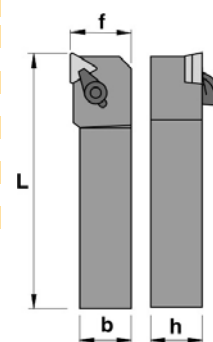
For more information see page: A.54,55

Brazed tools

**CTGP 90°**



REF.	h	b	L	f	TP.				
<b>CTGP R/L 1010 E11</b>	10	10	70	12	1103..	200	545	-	-
<b>CTGP R/L 1212 F11</b>	12	12	80	16	1103..	207	525	-	-
<b>CTGP R/L 1616 H11</b>	16	16	100	20	1103..	207	525	-	-
<b>CTGP R/L 2020 K11</b>	20	20	125	25	1103..	207	525	-	-
<b>CTGP R/L 2020 K16</b>	20	20	125	25	1603..	209	503	317	402
<b>CTGP R/L 2525 M16</b>	25	25	150	32	1603..	209	503	317	402
<b>CTGP R/L 3225 P16</b>	32	25	170	32	1603..	209	503	317	402
<b>CTGP R/L 3232 P22</b>	32	32	170	40	2204..	231	504	324	403
<b>CTGP R/L 4040 S22</b>	40	40	250	50	2204..	231	504	324	403
<b>CTGP R/L 5050 T22</b>	50	50	300	60	2204..	231	504	324	403



Milling cutters

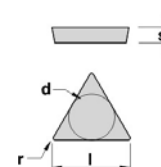
Solid carbide

Boring heads

Arbors & adaptors



REF.	l	s	d
<b>TP. 1103..</b>	11,00	3,18	6,35
<b>TP. 1603..</b>	16,50	3,18	9,52
<b>TP. 2204..</b>	22,00	4,76	12,70

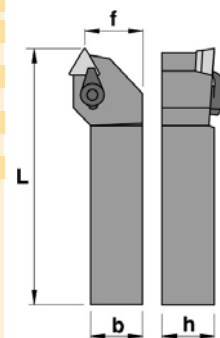


For more information see page: A.54,55

**CTTP 60°**



REF.	h	b	L	f	TP.				
<b>CTTP R/L 0808 D09</b>	8	8	60	7	0902..	200	545	-	-
<b>CTTP R/L 1010 E09</b>	10	10	70	9	0902..	200	545	-	-
<b>CTTP R/L 1010 E11</b>	10	10	70	9	1103..	200	545	-	-
<b>CTTP R/L 1212 F11</b>	12	12	80	11	1103..	227	525	-	-
<b>CTTP R/L 1616 H11</b>	16	16	100	13	1103..	227	525	-	-
<b>CTTP R/L 2020 K11</b>	20	20	125	17	1103..	227	525	-	-
<b>CTTP R/L 2020 K16</b>	20	20	125	17	1603..	229	503	317	402
<b>CTTP R/L 2525 M16</b>	25	25	150	22	1603..	229	503	317	402



Inserts

Turning

Automatic lathes

Ceramic tools

Parting & grooving

Threading

Drills

Cartridges

Brazed tools

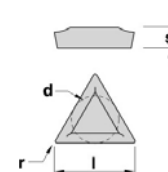
Milling cutters

Solid carbide

Boring heads

Arbors & adaptors

REF.	l	s	d
<b>TP. 0902..</b>	9,62	2,38	5,55
<b>TP. 1103..</b>	11,00	3,18	6,35
<b>TP. 1603..</b>	16,50	3,18	9,52



For more information see page: A.54,55



Inserts

Turning

Automatic lathes

Ceramic tools

Parting & grooving

Threading

Drills

Cartridges

Brazed tools

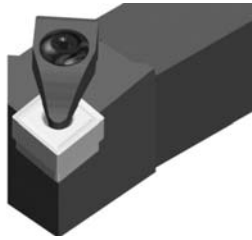
Milling cutters

Solid carbide

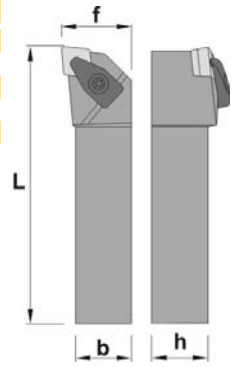
Boring heads

Arbors & adaptors

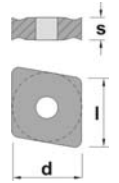
**DCLN 95°**



REF.	h	b	L	f	CN..						
<b>DCLN R/L 2020 K12</b>	20	20	125	25	1204..	ICSN-432	470	242	487	495	504
<b>DCLN R/L 2525 M12</b>	25	25	150	32	1204..	ICSN-432	470	242	487	495	504
<b>DCLN R/L 3232 P12</b>	32	32	170	40	1204..	ICSN-432	470	242	487	495	504
<b>DCLN R/L 3232 P19</b>	32	32	170	40	1906..	369	478	249	487	495	504
<b>DCLN R/L 4040 S19</b>	40	40	250	50	1906..	369	478	249	487	495	504

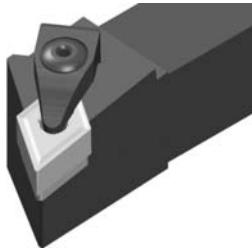


REF.	l	s	d
CN.. 1204..	12,90	4,76	12,70
CN.. 1906..	19,30	6,35	19,05

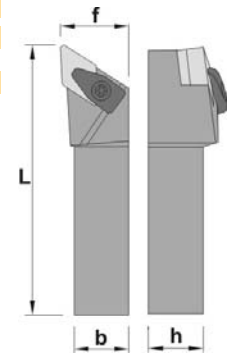


For more information see page: A.39,40

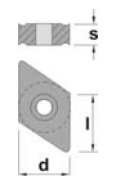
**DDJN 93°**



REF.	h	b	L	f	DN..						
<b>DDJN R/L 2020 K15</b>	20	20	125	25	1506..	IDSN-432	470	242	487	495	504
<b>DDJN R/L 2525 M15</b>	25	25	150	32	1506..	IDSN-432	470	242	487	495	504
<b>DDJN R/L 3232 P15</b>	32	32	170	40	1506..	IDSN-432	470	242	487	495	504

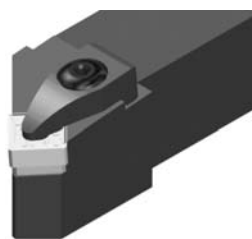


REF.	l	s	d
DN.. 1506..	15,50	6,35	12,70

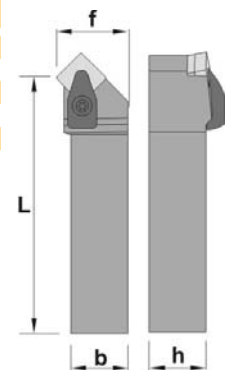


For more information see page: A.42,43

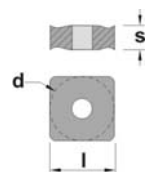
**DSSN 45°**



REF.	h	b	L	f	SN..						
<b>DSSN R/L 2020 K12</b>	20	20	125	25	1204..	ISSN-432	470	242	487	495	504
<b>DSSN R/L 2525 M12</b>	25	25	150	32	1204..	ISSN-432	470	242	487	495	504
<b>DSSN R/L 3225 P12</b>	32	25	170	32	1204..	ISSN-432	470	242	487	495	504
<b>DSSN R/L 3232 P19</b>	32	32	170	40	1906..	359	478	249	487	495	504
<b>DSSN R/L 4040 S19</b>	40	40	250	50	1906..	359	478	249	487	495	504

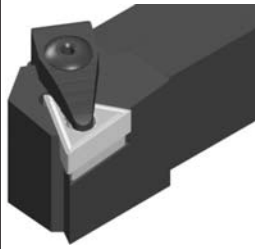


REF.	l	s	d
SN.. 1204..	12,70	4,76	12,70
SN.. 1906..	19,05	6,35	19,05

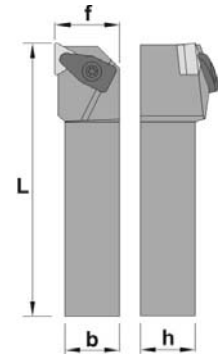


For more information see page: A.50

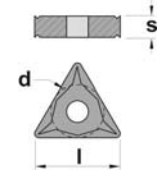
**DTGN 90°**



REF.	h	b	L	f	TN..						
<b>DTGN R/L 2020 K16</b>	20	20	125	25	1604..	ITSN-322	465	238	485	496	525
<b>DTGN R/L 2525 M16</b>	25	25	150	32	1604..	ITSN-322	465	238	485	496	525
<b>DTGN R/L 2525 M22</b>	25	25	150	32	2204..	ITSN-433	470	242	487	495	504
<b>DTGN R/L 3232 P22</b>	32	32	170	40	2204..	ITSN-433	470	242	487	495	504

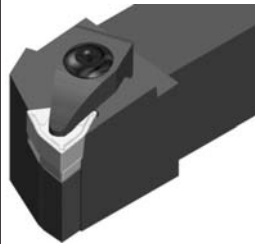


REF.	l	s	d
<b>TN.. 1604..</b>	16,50	4,76	9,52
<b>TN.. 2204..</b>	22,00	4,76	12,70

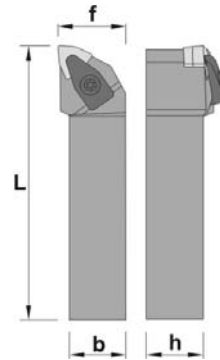


For more information see page: A.52,53,54

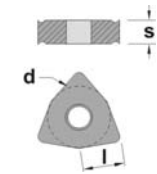
**DWLN 95°**



REF.	h	b	L	f	WN..						
<b>DWLN R/L 2020 K08</b>	20	20	125	25	0804..	IWSN-432	470	242	487	495	504
<b>DWLN R/L 2525 M08</b>	25	25	150	32	0804..	IWSN-432	470	242	487	495	504
<b>DWLN R/L 3232 P08</b>	32	32	170	40	0804..	IWSN-432	470	242	487	495	504



REF.	l	s	d
<b>WN.. 0804..</b>	8,14	4,76	12,7



For more information see page: A.57,58

Inserts

Turning

Automatic lathes

Ceramic tools

Parting & grooving

Threading

Drills

Cartridges

Brazed tools

Milling cutters

Solid carbide

Boring heads

Arbors & adaptors





Inserts

Turning

Automatic lathes

Ceramic tools

Parting & grooving

Threading

Drills

Cartridges

Brazed tools

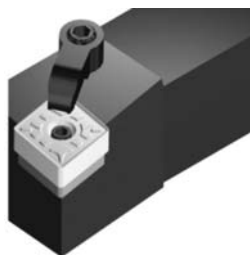
Milling cutters

Solid carbide

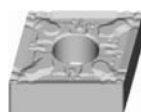
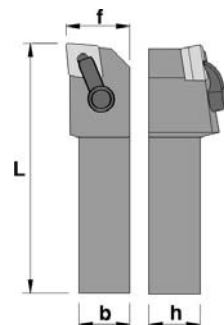
Boring heads

Arbors & adaptors

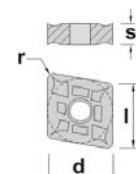
**MCLN-K 95°**



REF.	h	b	L	f	CN..						
<b>MCLN R/L 2020 L12-K</b>	20	20	125	25	1204..	221	165	503	ICSN-432	446	525
<b>MCLN R/L 2525 M12-K</b>	25	25	150	32	1204..	221	165	503	ICSN-432	446	525
<b>MCLN R/L 3225 P12-K</b>	32	25	170	32	1204..	221	165	503	ICSN-432	446	525
<b>MCLN R/L 2525 M19-K</b>	25	25	150	32	1906..	212	189	504	ICSN-633	468	504
<b>MCLN R/L 3232 P19-K</b>	32	32	170	40	1906..	212	189	504	ICSN-633	468	504



REF.	l	s	d
<b>CN.. 1204..</b>	12,90	4,76	12,70
<b>CN.. 1906..</b>	19,30	6,35	19,05

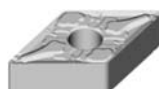
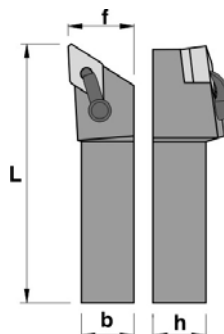


For more information see page: A.39,40

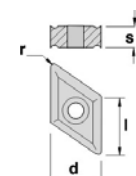
**MDJN-K 93°**



REF.	h	b	L	f	DN..						
<b>MDJN R/L 2020 K15-K</b>	20	20	125	25	1506..	222	165	503	IDSN-432	456	525
<b>MDJN R/L 2525 M15-K</b>	25	25	150	32	1506..	222	165	503	IDSN-432	456	525
<b>MDJN R/L 3225 P15-K</b>	32	25	170	32	1506..	222	165	503	IDSN-432	456	525

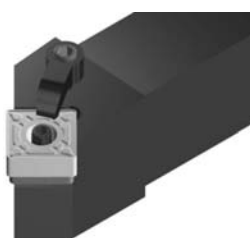


REF.	l	s	d
<b>DN.. 1506..</b>	15,50	6,35	12,70

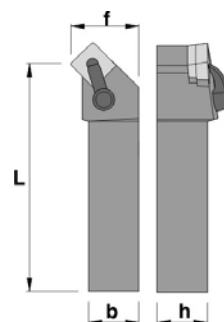


For more information see page: A.42,43

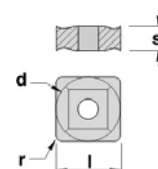
**MSSN-K 45°**



REF.	h	b	L	f	SN..						
<b>MSSN R/L 2020 K12-K</b>	20	20	125	27	1204..	221	165	503	ISSN-432	446	525
<b>MSSN R/L 2525 M12-K</b>	25	25	150	32	1204..	221	165	503	ISSN-432	446	525

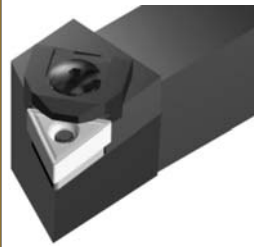


REF.	l	s	d
<b>SN.. 1204..</b>	12,70	4,76	12,70

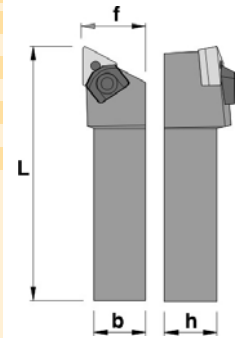


For more information see page: A.49,50

**MTJN-K 93°**



REF.	h	b	L	f	TN..					
MTJN R/L 2020 K16-K	20	20	125	25	1604..	232	525	341	452	483
MTJN R/L 2525 M16-K	25	25	150	32	1604..	232	525	341	452	483
MTJN R/L 2525 M22-K	25	25	150	32	2204..	219	503	ITSN-433	461	484
MTJN R/L 3225 P22-K	32	25	170	32	2204..	219	503	ITSN-433	461	484
MTJN R/L 3232 P22-K	32	32	170	40	2204..	219	503	ITSN-433	461	484
MTJN R/L 4025 R22-K	40	25	200	32	2204..	219	503	ITSN-433	461	484
MTJN R/L 5032 S22-K	50	32	250	40	2204..	219	503	ITSN-433	461	484



Inserts

Turning

Automatic lathes

Ceramic tools

Parting & grooving

Threading

Drills

Cartridges

Brazed tools

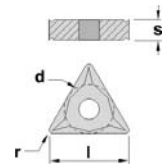
Milling cutters

Solid carbide

Boring heads

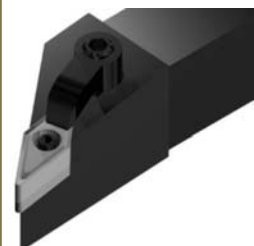
Arbors & adaptors

REF.	l	s	d
TN.. 1604..	16,50	4,76	9,52
TN.. 2204..	22,00	4,76	12,70

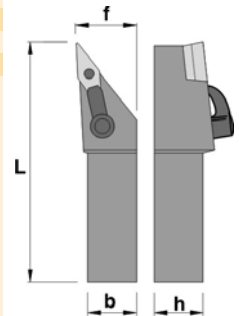


For more information see page: A.52,53,54

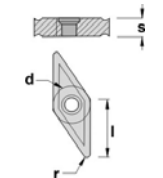
**MVJN-K 93°**



REF.	h	b	L	f	VN..					
MVJN R/L 2020 K16-K	20	20	125	25	1604..	266	165	503	IVSN-322	434 502
MVJN R/L 2525 M16-K	25	25	150	32	1604..	266	165	503	IVSN-322	434 502
MVJN R/L 3225 P16-K	32	25	170	32	1604..	266	165	503	IVSN-322	434 502



REF.	l	s	d
VN.. 1604..	16,50	4,76	9,52

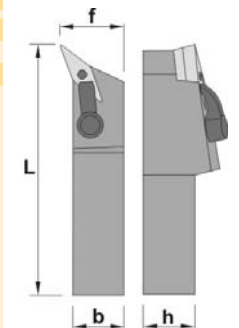


For more information see page: A.56

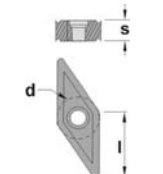
**MVQN-K 117° 30'**



REF.	h	b	L	f	VN..					
MVQN R/L 2020 K16-K	20	20	125	25	1604..	266	165	503	IVSN-322	434 502
MVQN R/L 2525 M16-K	25	25	150	32	1604..	266	165	503	IVSN-322	434 502
MVQN R/L 3225 P16-K	32	25	170	32	1604..	266	165	503	IVSN-322	434 502



REF.	l	s	d
VN.. 1604..	16,50	4,76	9,52



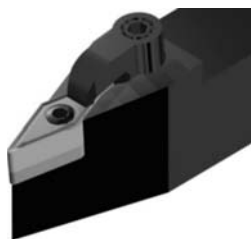
For more information see page: A.56



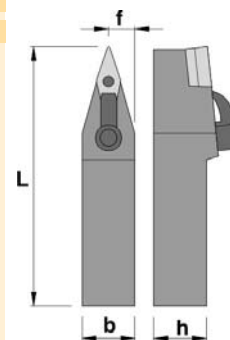
Inserts

Turning

**MVVN-K 72° 30'**



REF.	h	b	L	f	VN..					
<b>MVVN N 2020 K16-K</b>	20	20	125	10,0	1604..	266	165	503	IVSN-322	434 502
<b>MVVN N 2525 M16-K</b>	25	25	150	12,5	1604..	266	165	503	IVSN-322	434 502

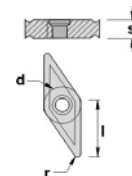


Automatic lathes

Ceramic tools



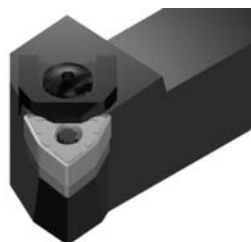
REF.	l	s	d
<b>VN.. 1604..</b>	16,50	4,76	9,52



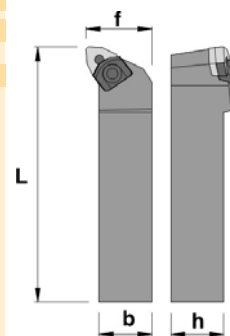
For more information see page: A.56

Parting & grooving

**MWLN-K 95°**



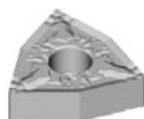
REF.	h	b	L	f	WN..					
<b>MWLN R/L 2020 K08-K</b>	20	20	125	25	0804..	208	525	IWSN-432	461	484
<b>MWLN R/L 2525 M08-K</b>	25	25	150	32	0804..	208	525	IWSN-432	461	484
<b>MWLN R/L 3232 P08-K</b>	32	32	170	40	0804..	208	525	IWSN-432	461	484



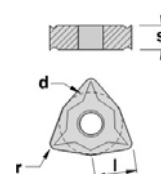
Threading

Drills

Cartridges



REF.	l	s	d
<b>WN.. 0804..</b>	8,14	4,76	12,70



For more information see page: A.57

Brazed tools

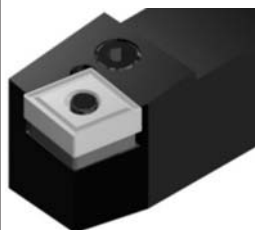
Milling cutters

Solid carbide

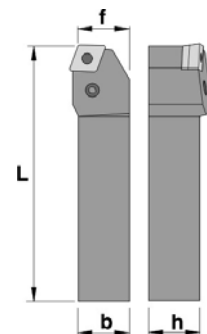
Boring heads

Arbors & adaptors

**PCBN 75°**



REF.	h	b	L	f	CN..						
PCBN R/L 2020 K12	20	20	125	17	1204..	812	163	503	302	412	002
PCBN R/L 2525 M12	25	25	150	22	1204..	812	163	503	302	412	002
PCBN R/L 2525 M16	25	25	150	22	1606..	816	170	503	366	415	005
PCBN R/L 3225 P16	32	25	170	22	1606..	816	170	503	366	415	005
PCBN R/L 3232 P16	32	32	170	27	1606..	816	170	503	366	415	005
PCBN R/L 3225 P19	32	25	170	22	1906..	819	164	504	369	419	029
PCBN R/L 3232 P19	32	32	170	27	1906..	819	164	504	369	419	029
PCBN R/L 4040 S19	40	40	250	35	1906..	819	164	504	369	419	029



Inserts

Turning

Automatic lathes

Ceramic tools

Parting & grooving

Threading

Drills

Cartridges

Brazed tools

Milling cutters

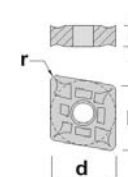
Solid carbide

Boring heads

Arbors & adaptors

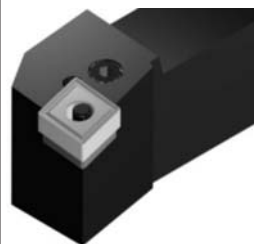


REF.	l	s	d
CN.. 1204..	12,90	4,76	12,70
CN.. 1606..	16,10	6,35	15,88
CN.. 1906..	19,30	6,35	19,05

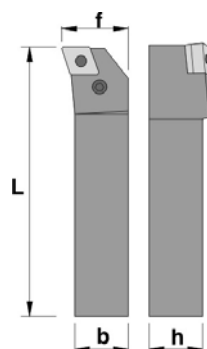


For more information see page: A.39,40

**PCFN 90°**



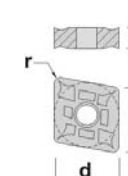
REF.	h	b	L	f	CN..						
PCFN R/L 2525 M12	25	25	150	32	1204..	812	163	503	302	412	002
PCFN R/L 2525 M16	25	25	150	32	1606..	816	170	503	366	415	005
PCFN R/L 3225 P16	32	25	170	32	1606..	816	170	503	366	415	005
PCFN R/L 3232 P16	32	32	170	40	1606..	816	170	503	366	415	005
PCFN R/L 3225 P19	32	25	170	32	1906..	819	164	504	369	419	029
PCFN R/L 3232 P19	32	32	170	40	1906..	819	164	504	369	419	029
PCFN R/L 4040 S19	40	40	250	50	1906..	819	164	504	369	419	029



Drills

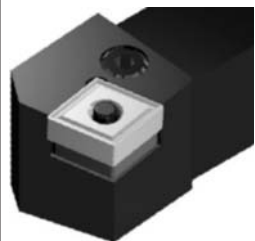


REF.	l	s	d
CN.. 1204..	12,90	4,76	12,70
CN.. 1606..	16,10	6,35	15,88
CN.. 1906..	19,30	6,35	19,05

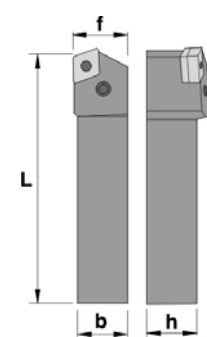


For more information see page: A.39,40

**PCKN 75°**



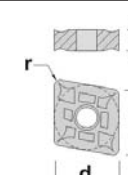
REF.	h	b	L	f	CN..						
PCKN R/L 2020 K12	20	20	125	25	1204..	812	163	503	302	412	002
PCKN R/L 2525 M12	25	25	150	32	1204..	812	163	503	302	412	002
PCKN R/L 3225 P12	32	25	170	32	1204..	812	163	503	302	412	002
PCKN R/L 3232 P19	32	32	170	40	1906..	819	164	504	369	419	029
PCKN R/L 4040 S19	40	40	250	50	1906..	819	164	504	369	419	029



Arbors & adaptors



REF.	l	s	d
CN.. 1204..	12,90	4,76	12,70
CN.. 1906..	19,30	6,35	19,05

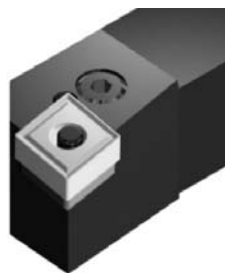


For more information see page: A.39,40

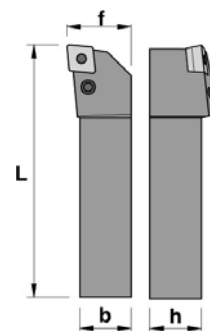
Inserts

Turning

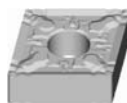
**PCLN 95°**



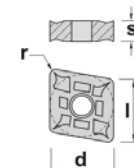
REF.	h	b	L	f	CN..						
PCLN R/L 1616 H09	16	16	100	20	0903..	809	162	525	368	409	009
PCLN R/L 2020 K09	20	20	125	25	0903..	809	162	525	368	409	009
PCLN R/L 2525 M09	25	25	150	32	0903..	809	162	525	368	409	009
PCLN R/L 1616 H12	16	16	100	20	1204..	842	173	503	302	412	002
PCLN R/L 2020 K12	20	20	125	25	1204..	812	163	503	302	412	002
PCLN R/L 2525 M12	25	25	150	32	1204..	812	163	503	302	412	002
PCLN R/L 3225 P12	32	25	170	32	1204..	812	163	503	302	412	002
PCLN R/L 3232 P12	32	32	170	40	1204..	812	163	503	302	412	002
PCLN R/L 2525 M16	25	25	150	32	1606..	816	170	503	366	415	005
PCLN R/L 3225 P16	32	25	170	32	1606..	816	170	503	366	415	005
PCLN R/L 3232 P16	32	32	170	40	1606..	816	170	503	366	415	005
PCLN R/L 4040 S16	40	40	250	50	1606..	816	170	503	366	415	005
PCLN R/L 2525 M19	25	25	150	32	1906..	819	164	504	369	419	029
PCLN R/L 3225 P19	32	25	170	32	1906..	819	164	504	369	419	029
PCLN R/L 3232 P19	32	32	170	40	1906..	819	164	504	369	419	029
PCLN R/L 4040 S19	40	40	250	50	1906..	819	164	504	369	419	059
PCLN R/L 4040 S25	40	40	250	50	2509..	825	168	505	365	425	035
PCLN R/L 5050 T25	50	50	300	60	2509..	825	168	505	365	425	035



Ceramic tools



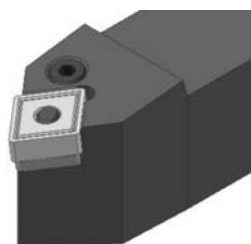
REF.	l	s	d
CN.. 0903..	9,65	3,18	9,52
CN.. 1204..	12,90	4,76	12,70
CN.. 1606..	16,10	6,35	15,88
CN.. 1906..	19,30	6,35	19,05
CN.. 2509..	25,80	9,52	25,40



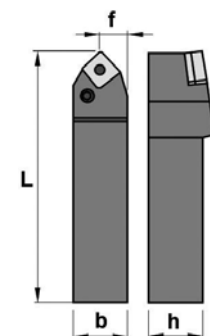
For more information see page: A.39,40

Parting & grooving

**PCMN 50°**



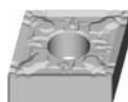
REF.	h	b	L	f	CN..						
PCMN N 2020 K12	20	20	125	10,0	1204..	812	163	503	302	412	002
PCMN N 2525 M12	25	25	150	12,5	1204..	812	163	503	302	412	002
PCMN N 3225 P12	32	25	170	12,5	1204..	812	163	503	302	412	002
PCMN N 3232 P19	32	32	170	16,0	1906..	819	164	504	369	419	029
PCMN N 4040 S19	40	40	250	20,0	1906..	819	164	504	369	419	029



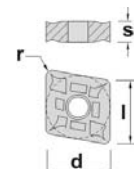
Threading

Drills

Cartridges



REF.	l	s	d
CN.. 1204..	12,90	4,76	12,70
CN.. 1906..	19,30	6,35	19,05



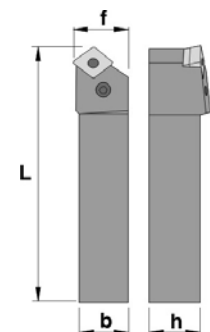
For more information see page: A.39,40

Brazed tools

**PCSN 45°**



REF.	h	b	L	f	CN..						
PCSN R/L 2020 K12	20	20	125	25	1204..	812	163	503	302	412	002
PCSN R/L 2525 M12	25	25	150	32	1204..	812	163	503	302	412	002
PCSN R/L 2525 M16	25	25	150	32	1606..	816	170	503	366	415	005
PCSN R/L 3225 P16	32	25	170	32	1606..	816	170	503	366	415	005
PCSN R/L 3232 P16	32	32	170	40	1606..	816	170	503	366	415	005
PCSN R/L 3225 P19	32	25	170	32	1906..	819	164	504	369	419	029
PCSN R/L 3232 P19	32	32	170	40	1906..	819	164	504	369	419	029
PCSN R/L 4040 S19	40	40	250	50	1906..	819	164	504	369	419	029

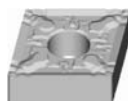


Milling cutters

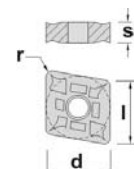
Solid carbide

Boring heads

Arbors & adaptors

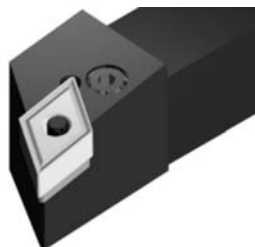


REF.	l	s	d
CN.. 1204..	12,90	4,76	12,70
CN.. 1606..	16,10	6,35	15,88
CN.. 1906..	19,30	6,35	19,05

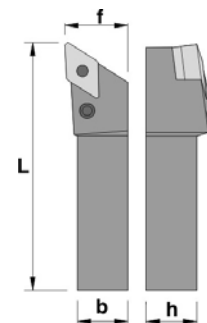


For more information see page: A.39,40

**PDJN 93°**



REF.	h	b	L	f	DN..						
PDJN R/L 1616 H11	16	16	100	20	1104..	809	162	525	311	409	009
PDJN R/L 2020 K11	20	20	125	25	1104..	809	162	525	311	409	009
PDJN R/L 2525 M11	25	25	150	32	1104..	809	162	525	311	409	009
PDJN R/L 3225 P11	32	25	170	32	1104..	809	162	525	311	409	009
PDJN R/L 2020 K15	20	16	125	25	1506..	845	172	503	305	412	002
PDJN R/L 2525 M15	25	25	150	32	1506..	845	172	503	305	412	002
PDJN R/L 3225 P15	32	25	170	32	1506..	845	172	503	305	412	002
PDJN R/L 3232 P15	32	32	170	40	1506..	845	172	503	305	412	002
PDJN R/L 4025 R15	40	25	200	32	1506..	845	172	503	305	412	002
PDJN R/L 5032 S15	50	32	250	40	1506..	845	172	503	305	412	002



Inserts

Turning

Automatic lathes

Ceramic tools

Parting & grooving

Threading

Drills

Cartridges

Brazed tools

Milling cutters

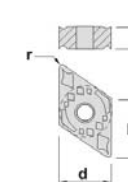
Solid carbide

Boring heads

Arbors & adaptors

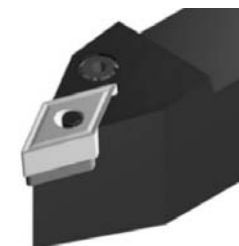


REF.	l	s	d
DN.. 1104..	11,60	4,76	9,52
DN.. 1506..	15,50	6,35	12,70

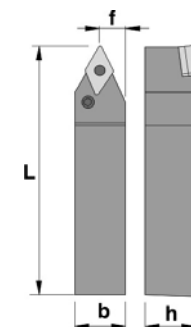


For more information see page: A.42,43

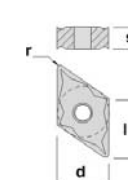
**PDNN 63°**



REF.	h	b	L	f	DN..						
PDNN R/L/N 2020 K15	20	20	125	10,0	1506..	845	172	503	305	412	002
PDNN R/L/N 2525 M15	25	25	150	12,5	1506..	845	172	503	305	412	002
PDNN R/L/N 3225 P15	32	25	170	12,5	1506..	845	172	503	305	412	002
PDNN R/L/N 3232 P15	32	32	170	16,0	1506..	845	172	503	305	412	002
PDNN R/L/N 4025 S15	40	25	250	12,5	1506..	845	172	503	305	412	002
PDNN R/L/N 5032 S15	50	32	250	16,0	1506..	845	172	503	305	412	002

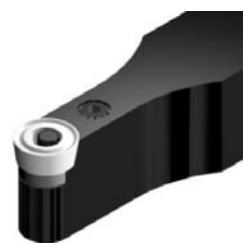


REF.	l	s	d
DN.. 1506..	15,50	6,35	12,70

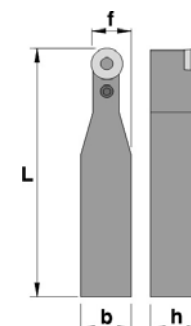


For more information see page: A.42,43

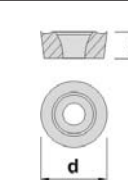
**PRDC**



REF.	h	b	L	f	RC..						
PRDC N 2020 K10	20	20	125	15,0	1003..	820	175	502	310	410	009
PRDC N 2020 K12	20	20	125	16,0	1204..	822	162	525	303	410	009
PRDC N 2525 M10	25	25	150	18,5	1204..	822	162	525	303	410	009
PRDC N 2525 M12	25	25	150	18,5	1204..	822	162	525	303	410	009
PRDC N 3225 P10	32	25	170	18,5	1204..	822	162	525	303	410	009
PRDC N 3225 P12	32	25	170	18,5	1204..	822	162	525	303	410	009
PRDC N 4025 S12	40	25	250	18,5	1204..	822	162	525	303	410	009
PRDC N 3225 P16	32	25	170	20,5	1606..	826	176	525	386	416	002
PRDC N 3232 P16	32	32	170	24,0	1606..	826	176	525	386	416	002
PRDC N 3232 P20	32	32	170	26,0	2006..	830	178	503	380	415	005
PRDC N 4040 S20	40	40	250	30,0	2006..	830	178	503	380	415	005
PRDC N 4040 S25	40	40	250	32,5	2507..	835	180	504	385	419	029
PRDC N 4040 U25	40	40	350	32,5	2507..	835	180	504	385	419	029
PRDC N 5050 U25	50	50	350	37,5	2507..	835	180	504	385	419	029
PRDC N 5050 V32	50	50	400	41,0	3209..	852	168	505	383	425	035



REF.	l	s	d
RC.. 1003M0	-	3,18	10,00
RC.. 1204M0	-	4,76	12,00
RC.. 1606M0	-	6,35	16,00
RC.. 2006M0	-	6,35	20,00
RC.. 2507M0	-	7,94	25,00
RC.. 3209M0	-	9,52	32,00

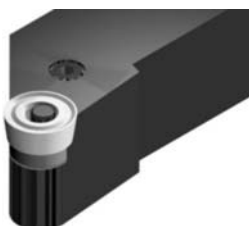


For more information see page: A.45,46

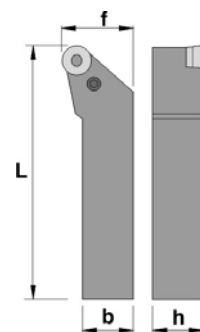
Inserts

Turning

**PRSC**



REF.	h	b	L	f	RC..						
PRSC R/L 2020 K10	20	20	125	25	1003..	820	175	502	310	410	009
PRSC R/L 2525 M10	25	25	150	32	1003..	820	175	502	310	410	009
PRSC R/L 2020 K12	20	20	125	25	1204..	822	162	525	303	410	009
PRSC R/L 2525 M12	25	25	150	32	1204..	822	162	525	303	410	009
PRSC R/L 3225 P10	32	25	170	32	1204..	822	162	525	303	410	009
PRSC R/L 3225 P12	32	25	170	32	1204..	822	162	525	303	410	009
PRSC R/L 2525 M16	25	25	150	32	1606..	826	176	525	386	416	002
PRSC R/L 3225 P16	32	25	170	32	1606..	826	176	525	386	416	002
PRSC R/L 3232 P20	32	32	170	40	2006..	830	178	503	380	415	005
PRSC R/L 4040 S20	40	40	250	50	2006..	830	178	503	380	415	005
PRSC R/L 4040 S25	40	40	250	50	2507..	835	180	504	385	419	029
PRSC R/L 5050 T32	50	50	300	63	3209..	852	168	505	383	425	035



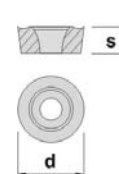
Automatic lathes

Ceramic tools



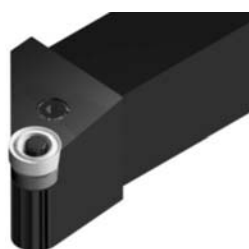
REF.	l	s	d
RC.. 1003M0	-	3,18	10,00
RC.. 1204M0	-	4,76	12,00
RC.. 1606M0	-	6,35	16,00
RC.. 2006M0	-	6,35	20,00
RC.. 2507M0	-	7,94	25,00
RC.. 3209M0	-	9,52	32,00

For more information see page: A.45,46

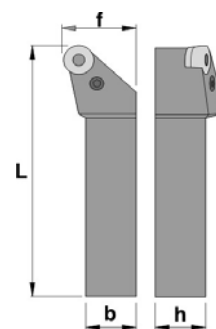


Parting & grooving

**PRSN**



REF.	h	b	L	f	RNMG						
PRSN R/L 2020 K09	20	20	125	25	0903..	809	162	525	391	410	009
PRSN R/L 2525 M12	25	25	150	32	1204..	812	163	503	393	412	002
PRSN R/L 3225 P15	32	25	170	32	1506..	815	178	503	395	415	005
PRSN R/L 3232 P19	32	32	170	40	1906..	819	164	504	399	419	029
PRSN R/L 4040 S25	40	40	250	50	2509..	825	168	505	396	425	035



Threading

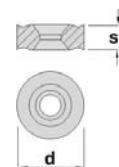
Drills

Cartridges



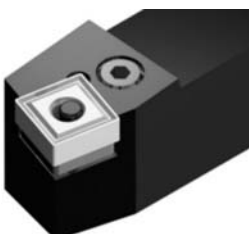
REF.	l	s	d
RNMG 090300	-	3,18	9,52
RNMG 120400	-	4,76	12,70
RNMG 150600	-	6,35	15,88
RNMG 190600	-	6,35	19,05
RNMG 250900	-	9,52	25,40

For more information see page: A.46

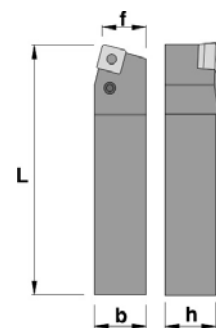


Brazed tools

**PSBN 75°**



REF.	h	b	L	f	SN..						
PSBN R/L 1212 F09	12	12	80	11	0903..	805	174	502	-	-	-
PSBN R/L 1616 H09	16	16	100	13	0903..	809	162	525	358	410	009
PSBN R/L 2020 K09	20	20	125	17	0903..	809	162	525	358	410	009
PSBN R/L 2020 K12	20	20	125	17	1204..	812	163	503	313	412	002
PSBN R/L 2525 M12	25	25	150	22	1204..	812	163	503	313	412	002
PSBN R/L 3225 P12	32	25	170	22	1204..	812	163	503	313	412	002
PSBN R/L 2525 M15	25	25	150	22	1506..	816	170	503	355	415	005
PSBN R/L 3232 P15	32	32	170	27	1506..	816	170	503	355	415	005
PSBN R/L 3232 P19	32	32	170	27	1906..	819	164	504	359	419	029
PSBN R/L 4040 S19	40	40	250	35	1906..	819	164	504	359	419	029
PSBN R/L 4040 S25	40	40	250	35	2509..	825	168	505	357	425	035
PSBN R/L 5050 T25	50	50	300	43	2509..	825	168	505	357	425	035



Milling cutters

Solid carbide

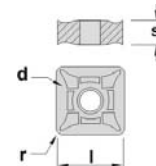
Boring heads

Arbors & adaptors



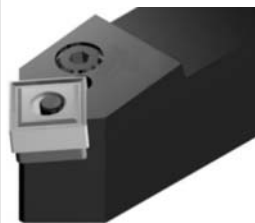
REF.	l	s	d
SN.. 0903..	9,52	3,18	9,52
SN.. 1204..	12,70	4,76	12,70
SN.. 1506..	15,88	6,35	15,88
SN.. 1906..	19,05	6,35	19,05
SN.. 2507..	25,40	7,94	25,40

For more information see page: A.49,50

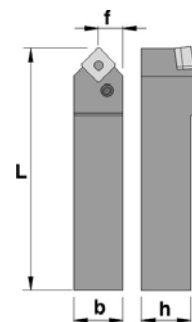




**PSDN 45°**



REF.	h	b	L	f	SN..						
<b>PSDN N 1010 E09</b>	10	10	70	5,0	0903..	805	174	502	-	-	-
<b>PSDN N 1212 F09</b>	12	12	80	6,0	0903..	805	174	502	-	-	-
<b>PSDN N 1616 H09</b>	16	16	100	8,0	0903..	809	162	525	358	410	009
<b>PSDN N 2020 K12</b>	20	20	125	10,0	1204..	812	163	503	313	412	002
<b>PSDN N 2525 M12</b>	25	25	150	12,5	1204..	812	163	503	313	412	002
<b>PSDN N 3232 P12</b>	32	32	170	16,0	1204..	812	163	503	313	412	003
<b>PSDN N 3225 P19</b>	32	25	170	12,5	1906..	819	164	504	359	419	029
<b>PSDN N 3232 P19</b>	32	32	170	16,0	1906..	819	164	504	359	419	029
<b>PSDN N 4040 S25</b>	40	40	250	25,0	2509..	825	168	505	357	425	035



Inserts

Turning

Automatic lathes

Ceramic tools

Parting & grooving

Threading

Drills

Cartridges

Brazed tools

Milling cutters

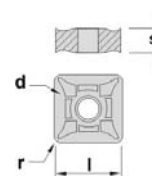
Solid carbide

Boring heads

Arbors & adaptors

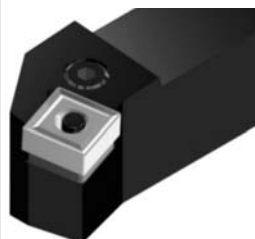


REF.	l	s	d
<b>SN.. 0903..</b>	9,52	3,18	9,52
<b>SN.. 1204..</b>	12,70	4,76	12,70
<b>SN.. 1506..</b>	15,88	6,35	15,88
<b>SN.. 1906..</b>	19,05	6,35	19,05
<b>SN.. 2507..</b>	25,40	7,94	25,40

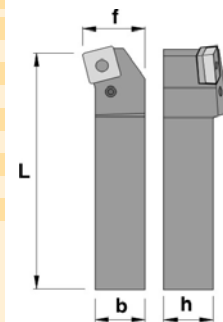


For more information see page: A.49,50

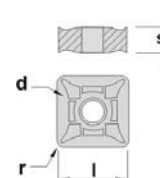
**PSKN 75°**



REF.	h	b	L	f	SN..						
<b>PSKN R/L 1616 H09</b>	16	16	100	20	0903..	809	162	525	358	410	009
<b>PSKN R/L 2020 K09</b>	20	20	125	25	0903..	809	162	525	358	410	009
<b>PSKN R/L 2020 K12</b>	20	20	125	25	1204..	812	163	503	313	412	002
<b>PSKN R/L 2525 M12</b>	25	25	150	32	1204..	812	163	503	313	412	002
<b>PSKN R/L 3225 P12</b>	32	25	170	32	1204..	812	163	503	313	412	002
<b>PSKN R/L 2525 M15</b>	25	25	150	32	1506..	816	170	503	355	415	005
<b>PSKN R/L 3232 P15</b>	32	32	170	40	1506..	816	170	503	355	415	005
<b>PSKN R/L 3232 P19</b>	32	32	170	40	1906..	819	164	504	359	419	029
<b>PSKN R/L 4040 S19</b>	40	40	250	50	1906..	819	164	504	359	419	029
<b>PSKN R/L 5050 T25</b>	50	50	300	60	2509..	825	168	505	357	425	035



REF.	l	s	d
<b>SN.. 0903..</b>	9,52	3,18	9,52
<b>SN.. 1204..</b>	12,70	4,76	12,70
<b>SN.. 1506..</b>	15,88	6,35	15,88
<b>SN.. 1906..</b>	19,05	6,35	19,05
<b>SN.. 2507..</b>	25,40	7,94	25,40

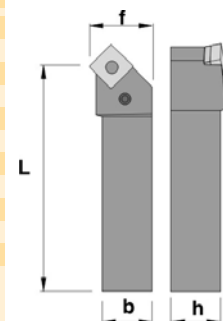


For more information see page: A.49,50

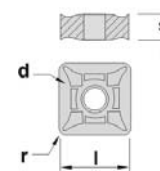
**PSSN 45°**



REF.	h	b	L	f	SN..						
<b>PSSN R/L 1616 H09</b>	16	16	100	20	0903..	809	162	525	358	410	009
<b>PSSN R/L 2020 K09</b>	20	20	125	25	0903..	809	162	525	358	410	009
<b>PSSN R/L 2020 K12</b>	20	20	125	25	1204..	812	163	503	313	412	002
<b>PSSN R/L 2525 M12</b>	25	25	150	32	1204..	812	163	503	313	412	002
<b>PSSN R/L 3225 P12</b>	32	25	170	32	1204..	812	163	503	313	412	002
<b>PSSN R/L 2525 M15</b>	25	25	150	32	1506..	816	170	503	355	415	005
<b>PSSN R/L 3232 P15</b>	32	32	170	40	1506..	816	170	503	355	415	005
<b>PSSN R/L 3232 P19</b>	32	32	170	40	1906..	819	164	504	359	419	029
<b>PSSN R/L 4040 P19</b>	40	40	250	50	1906..	819	164	504	359	419	029
<b>PSSN R/L 5050 T19</b>	50	50	300	60	1906..	819	164	504	359	419	029
<b>PSSN R/L 4040 S25</b>	40	40	250	50	2509..	825	168	505	357	425	035
<b>PSSN R/L 5050 T25</b>	50	50	300	60	2509..	825	168	505	357	425	035



REF.	l	s	d
<b>SN.. 0903..</b>	9,52	3,18	9,52
<b>SN.. 1204..</b>	12,70	4,76	12,70
<b>SN.. 1506..</b>	15,88	6,35	15,88
<b>SN.. 1906..</b>	19,05	6,35	19,05
<b>SN.. 2507..</b>	25,40	7,94	25,40



For more information see page: A.49,50



Inserts

Turning

Automatic lathes

Ceramic tools

Parting & grooving

Threading

Drills

Cartridges

Brazed tools

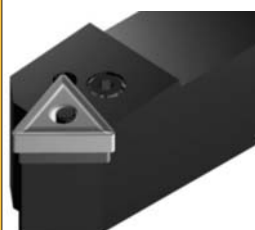
Milling cutters

Solid carbide

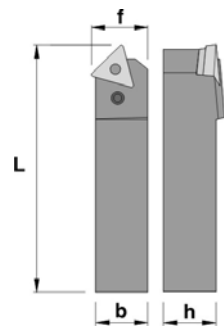
Boring heads

Arbors & adaptors

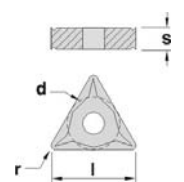
**PTDN 45°**



REF.	h	b	L	f	TN..						
<b>PTDN R/L 2525 M22</b>	25	25	150	27	2204..	812	163	503	323	412	002
<b>PTDN R/L 3225 P22</b>	32	25	170	27	2204..	812	163	503	323	412	002

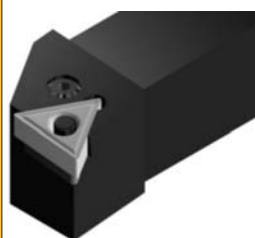


REF.	l	s	d
<b>TN.. 2204..</b>	22,00	4,76	12,70

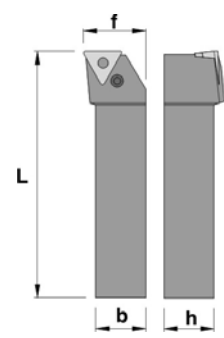


For more information see page: A.52,53

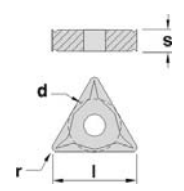
**PTFN 90°**



REF.	h	b	L	f	TN..						
<b>PTFN R/L 1616 H16</b>	16	16	100	20	1604..	809	162	525	336	409	009
<b>PTFN R/L 2020 K16</b>	20	20	125	25	1604..	809	162	525	336	409	009
<b>PTFN R/L 2525 M16</b>	25	25	150	32	1604..	809	162	525	336	409	009
<b>PTFN R/L 3225 P16</b>	32	25	170	32	1604..	809	162	525	336	409	009
<b>PTFN R/L 2525 M22</b>	25	25	150	32	2204..	812	163	503	323	412	002
<b>PTFN R/L 3225 P22</b>	32	25	170	32	2204..	812	163	503	323	412	002
<b>PTFN R/L 3232 P22</b>	32	32	170	40	2204..	812	163	503	323	412	002
<b>PTFN R/L 3232 P27</b>	32	32	170	40	2706..	815	178	503	349	415	005
<b>PTFN R/L 4040 S27</b>	40	40	250	50	2706..	815	178	503	349	415	005

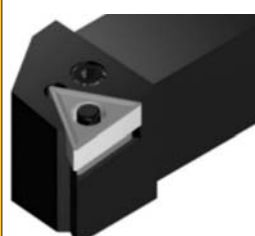


REF.	l	s	d
<b>TN.. 1604..</b>	16,50	4,76	9,52
<b>TN.. 2204..</b>	22,00	4,76	12,70
<b>TN.. 2706..</b>	27,00	6,35	15,88

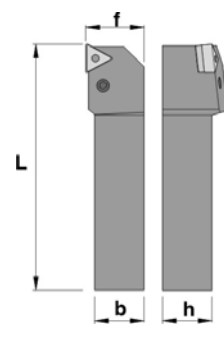


For more information see page: A.52,53,54

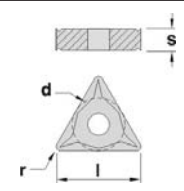
**PTGN 90°**



REF.	h	b	L	f	TN..						
<b>PTGN R/L 1616 H16</b>	16	16	100	20	1604..	809	162	525	336	409	009
<b>PTGN R/L 2020 K16</b>	20	20	125	25	1604..	809	162	525	336	409	009
<b>PTGN R/L 2525 M16</b>	25	25	150	32	1604..	809	162	525	336	409	009
<b>PTGN R/L 3225 P16</b>	32	25	170	32	1604..	809	162	525	336	409	009
<b>PTGN R/L 2525 M22</b>	25	25	150	32	2204..	812	163	503	323	412	002
<b>PTGN R/L 3225 P22</b>	32	25	170	32	2204..	812	163	503	323	412	002
<b>PTGN R/L 3232 P22</b>	32	32	170	40	2204..	812	163	503	323	412	002
<b>PTGN R/L 4040 S22</b>	40	40	250	50	2204..	812	163	503	323	412	002
<b>PTGN R/L 3232 S27</b>	32	32	170	40	2706..	815	178	503	349	415	005
<b>PTGN R/L 4040 S27</b>	40	40	250	50	2706..	815	178	503	349	415	005
<b>PTGN R/L 5050 T33</b>	50	50	300	60	3307..	819	164	504	333	433	029

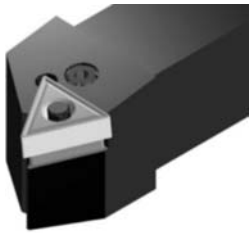


REF.	l	s	d
<b>TN.. 1604..</b>	16,50	4,76	9,52
<b>TN.. 2204..</b>	22,00	4,76	12,70
<b>TN.. 2706..</b>	27,00	6,35	15,88
<b>TN.. 3307..</b>	33,00	7,93	19,05

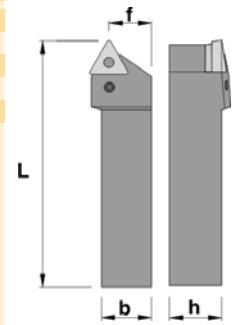


For more information see page: A.52,53,54

**PTTN 60°**



REF.	h	b	L	f	TN..						
<b>PTTN R/L 1616 H16</b>	16	16	100	13	1604..	809	162	525	336	409	009
<b>PTTN R/L 2020 K16</b>	20	20	125	17	1604..	809	162	525	336	409	009
<b>PTTN R/L 2525 M16</b>	25	25	150	22	1604..	809	162	525	336	409	009
<b>PTTN R/L 2525 M22</b>	25	25	150	22	2204..	812	163	503	323	412	002
<b>PTTN R/L 3225 P22</b>	32	25	170	22	2204..	812	163	503	323	412	002



Inserts

Turning

Automatic lathes

Ceramic tools

Parting & grooving

Threading

Drills

Cartridges

Brazed tools

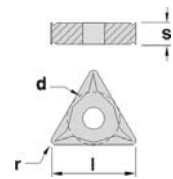
Milling cutters

Solid carbide

Boring heads

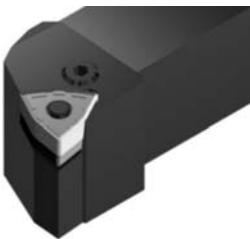
Arbors & adaptors

REF.	l	s	d
<b>TN.. 1604..</b>	16,50	4,76	9,52
<b>TN.. 2204..</b>	22,00	4,76	12,70

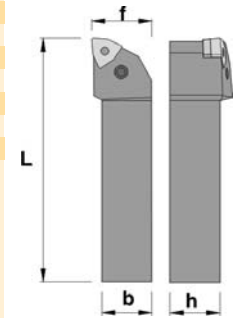


For more information see page: A.52,53,54

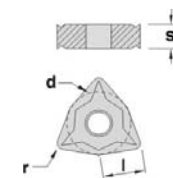
**PWLN 95°**



REF.	h	b	L	f	WN..						
<b>PWLN R/L 1616 H06</b>	16	16	100	20	0604..	809	162	525	307	409	009
<b>PWLN R/L 2020 K06</b>	20	20	125	25	0604..	809	162	525	307	409	009
<b>PWLN R/L 2525 M06</b>	25	25	150	32	0604..	809	162	525	307	409	009
<b>PWLN R/L 2020 K08</b>	20	20	125	25	0804..	812	163	503	308	412	002
<b>PWLN R/L 2525 M08</b>	25	25	150	32	0804..	812	163	503	308	412	002
<b>PWLN R/L 3225 P08</b>	32	25	170	32	0804..	812	163	503	308	412	002
<b>PWLN R/L 3232 P08</b>	32	32	170	40	0804..	812	163	503	308	412	002



REF.	l	s	d
<b>WN.. 0604..</b>	6,14	4,76	9,52
<b>WN.. 0804..</b>	8,14	4,76	12,70



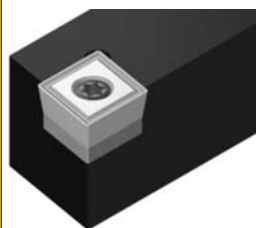
For more information see page: A.57,58



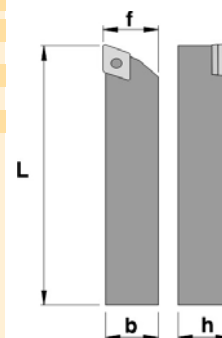


- Inserts
- Turning
- Automatic lathes
- Ceramic tools
- Parting & grooving
- Threading
- Drills
- Cartridges
- Brazed tools
- Milling cutters
- Solid carbide
- Boring heads
- Arbors & adaptors

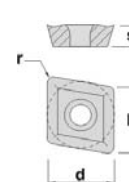
**SCAC 90°**



REF.	h	b	L	f	CC..				
SCAC R/L 0808 D06	8	8	60	8,5	0602..	125	507	-	-
SCAC R/L 1010 E06	10	10	70	10,5	0602..	125	507	-	-
SCAC R/L 1212 F09	12	12	80	12,5	09T3..	140	515	-	-
SCAC R/L 1616 H09	16	16	100	16,5	09T3..	140	515	-	-
SCAC R/L 2020 K12	20	20	125	20,5	1204..	196	523	361	195
SCAC R/L 2525 M12	25	25	150	25,5	1204..	196	523	361	195

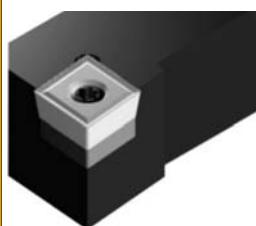


REF.	l	s	d
CC.. 0602..	6,45	2,38	6,35
CC.. 09T3..	9,65	3,97	9,52
CC.. 1204..	12,90	4,76	12,70

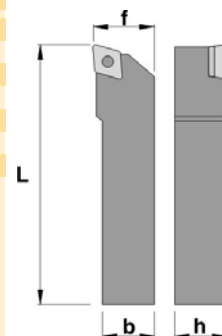


For more information see page: A.38

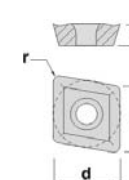
**SCLC 95°**



REF.	h	b	L	f	CC..				
SCLC R/L 0808 D06	8	8	60	10	0602..	125	507	-	-
SCLC R/L 1010 E06	10	10	70	12	0602..	125	507	-	-
SCLC R/L 1212 F09	12	12	80	16	09T3..	140	515	-	-
SCLC R/L 1616 H09	16	16	100	20	09T3..	140	515	-	-
SCLC R/L 2020 K09	20	20	125	25	09T3..	140	515	-	-
SCLC R/L 2020 K12	20	20	125	25	1204..	196	523	361	195
SCLC R/L 2525 M12	25	25	150	32	1204..	196	523	361	195

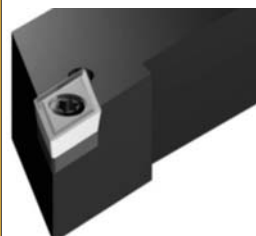


REF.	l	s	d
CC.. 0602..	6,45	2,38	6,35
CC.. 09T3..	9,65	3,97	9,52
CC.. 1204..	12,90	4,76	12,70

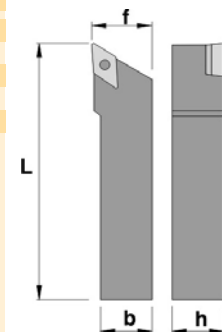


For more information see page: A.38

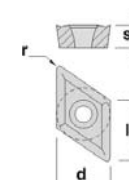
**SDJC 93°**



REF.	h	b	L	f	DC..				
SDJC R/L 1010 E07	10	10	70	12	0702..	125	507	-	-
SDJC R/L 1212 F07	12	12	80	16	0702..	125	507	-	-
SDJC R/L 1212 F11	12	12	80	16	11T3..	140	515	-	-
SDJC R/L 1616 H11	16	16	100	20	11T3..	133	521	371	194
SDJC R/L 2020 K11	20	20	125	25	11T3..	133	521	371	194
SDJC R/L 2525 M11	25	25	150	32	11T3..	133	521	371	194

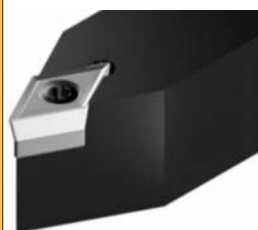


REF.	l	s	d
DC.. 0702..	7,75	2,38	6,35
DC.. 11T3..	11,60	3,97	9,52

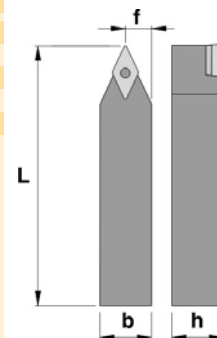


For more information see page: A.41

**SDNC 62° 30'**



REF.	h	b	L	f	DC..				
<b>SDNC N 0808 D07</b>	8	8	60	4,0	0702..	125	507	-	-
<b>SDNC N 1010 E07</b>	10	10	70	5,0	0702..	125	507	-	-
<b>SDNC N 1212 F07</b>	12	12	80	6,0	0702..	125	507	-	-
<b>SDNC N 1616 H11</b>	16	16	100	8,0	11T3..	133	521	371	194
<b>SDNC N 2020 K11</b>	20	20	125	10,0	11T3..	133	521	371	194
<b>SDNC N 2525 M11</b>	25	25	150	12,5	11T3..	133	521	371	194



Inserts

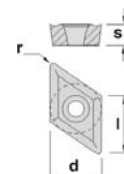
Turning

Automatic lathes

Ceramic tools



REF.	l	s	d
<b>DC.. 0702..</b>	7,75	2,38	6,35
<b>DC.. 11T3..</b>	11,60	3,97	9,52



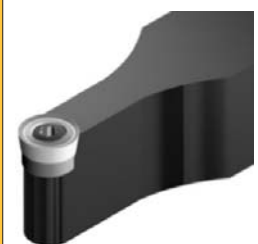
For more information see page: A.41

Parting & grooving

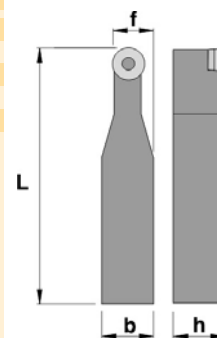
Threading

Drills

**SRDC**



REF.	h	b	L	f	RC..				
<b>SRDC N 2020 K10</b>	20	20	125	15,0	10T3..	133	521	381	194
<b>SRDC N 2525 M10</b>	25	25	150	17,5	10T3..	133	521	381	194
<b>SRDC N 2020 K12</b>	20	20	125	16,0	1204..	133	521	384	194
<b>SRDC N 2525 M12</b>	25	25	150	18,5	1204..	133	521	384	194
<b>SRDC N 3225 P12</b>	32	25	170	18,5	1204..	133	521	384	194
<b>SRDC N 3232 P12</b>	32	32	170	22,0	1204..	133	521	384	194

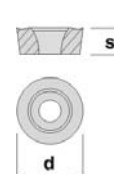


Cartridges

Brazed tools

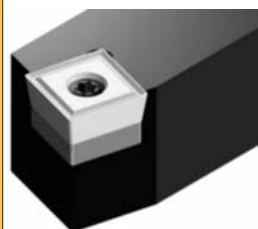


REF.	l	s	d
<b>RC.. 10T3M0</b>	-	3,97	10,00
<b>RC.. 1204M0</b>	-	4,76	12,00

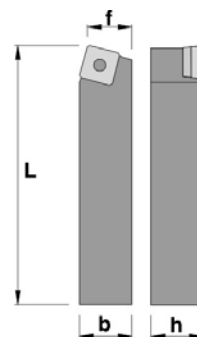


For more information see page: A.45,46

**SSBC 75°**



REF.	h	b	L	f	SC..				
<b>SSBC R/L 1212 F09</b>	12	12	80	11	09T3..	140	515	-	-
<b>SSBC R/L 1616 H09</b>	16	16	100	13	09T3..	140	515	-	-
<b>SSBC R/L 2020 K12</b>	20	20	125	17	1204..	196	523	351	195
<b>SSBC R/L 2525 M12</b>	25	25	150	22	1204..	196	523	351	195

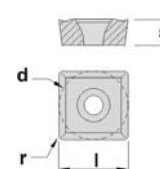


Milling cutters

Solid carbide



REF.	l	s	d
<b>SC.. 09T3..</b>	9,52	3,97	9,52
<b>SC.. 1204..</b>	12,70	4,76	12,70



For more information see page: A.47,48

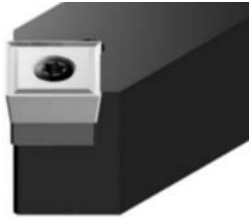
Boring heads

Arbors & adaptors

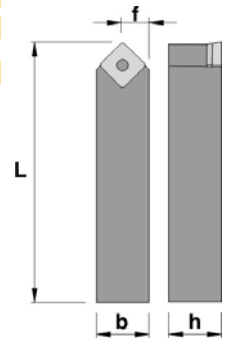


Inserts

**SSDC 45°**



REF.	h	b	L	f	SC..				
<b>SSDC N 1212 F09</b>	12	12	80	6,0	09T3..	140	515	-	-
<b>SSDC N 1616 H09</b>	16	16	100	8,0	09T3..	140	515	-	-
<b>SSDC N 2020 K12</b>	20	20	125	10,0	1204..	196	523	351	195
<b>SSDC N 2525 M12</b>	25	25	150	12,5	1204..	196	523	351	195



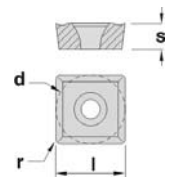
Turning

Automatic lathes

Ceramic tools



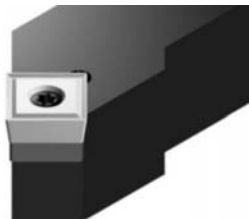
REF.	l	s	d
<b>SC.. 09T3..</b>	9,52	3,97	9,52
<b>SC.. 1204..</b>	12,70	4,76	12,70



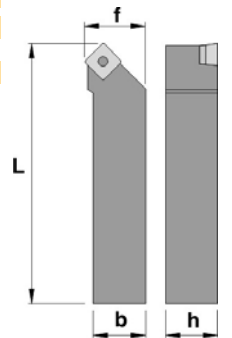
For more information see page: A.47,48

Parting & grooving

**SSSC 45°**



REF.	h	b	L	f	SC..				
<b>SSSC R/L 1212 F09</b>	12	12	80	16	09T3..	140	515	-	-
<b>SSSC R/L 1616 H09</b>	16	16	100	20	09T3..	140	515	-	-
<b>SSSC R/L 2020 K12</b>	20	20	125	25	1204..	196	523	351	195
<b>SSSC R/L 2525 M12</b>	25	25	150	32	1204..	196	523	351	195



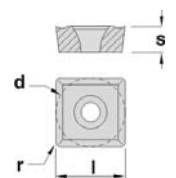
Threading

Drills

Cartridges



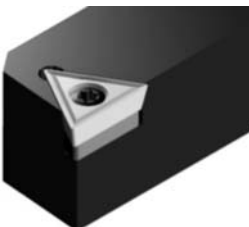
REF.	l	s	d
<b>SC.. 09T3M0</b>	9,52	3,97	9,52
<b>SC.. 1204M0</b>	12,70	4,76	12,70



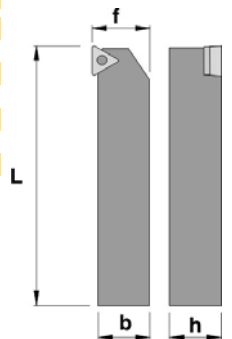
For more information see page: A.47,48

Brazed tools

**STAC 90°**



REF.	h	b	L	f	TC..				
<b>STAC R/L 0808 D09</b>	8	8	60	8,5	0902..	122	506	-	-
<b>STAC R/L 1010 E09</b>	10	10	70	10,5	0902..	122	506	-	-
<b>STAC R/L 1212 F11</b>	12	12	80	12,5	1102..	125	507	-	-
<b>STAC R/L 1616 H11</b>	16	16	100	16,5	1102..	125	507	-	-
<b>STAC R/L 1616 H16</b>	16	16	100	16,5	16T3..	133	521	341	194
<b>STAC R/L 2020 K16</b>	20	20	125	20,5	16T3..	133	521	341	194
<b>STAC R/L 2525 M16</b>	25	25	150	20,5	16T3..	133	521	341	194



Milling cutters

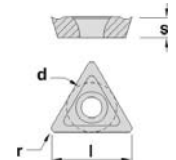
Solid carbide

Boring heads

Arbors & adaptors

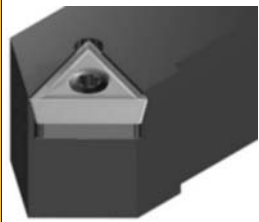


REF.	l	s	d
<b>TC.. 0902..</b>	9,62	2,38	5,55
<b>TC.. 1102..</b>	11,00	2,38	6,35
<b>TC.. 16T3..</b>	16,50	3,97	9,52

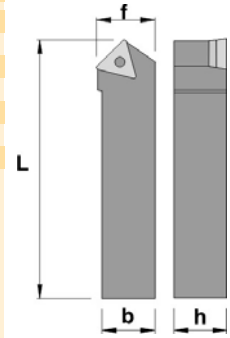


For more information see page: A.51,52

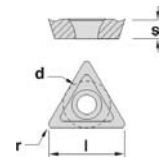
**STDC 45°**



REF.	h	b	L	f	TC..				
STDC R/L 0808 D09	8	8	60	10	0902..	122	506	-	-
STDC R/L 1010 E09	10	10	70	11	0902..	122	506	-	-
STDC R/L 1212 F11	12	12	80	13	1102..	125	507	-	-
STDC R/L 1616 H11	16	16	100	17	1102..	125	507	-	-
STDC R/L 1212 F16	12	12	80	17	16T3..	140	515	-	-
STDC R/L 1616 H16	16	16	100	17	16T3..	133	521	341	194
STDC R/L 2020 K16	20	20	125	22	16T3..	133	521	341	194
STDC R/L 2525 M16	25	25	150	27	16T3..	133	521	341	194

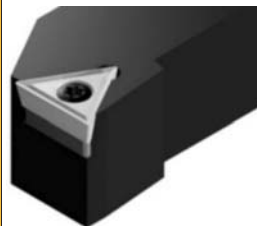


REF.	l	s	d
TC.. 0902..	9,62	2,38	5,55
TC.. 1102..	11,00	2,38	6,35
TC.. 16T3..	16,50	3,97	9,52

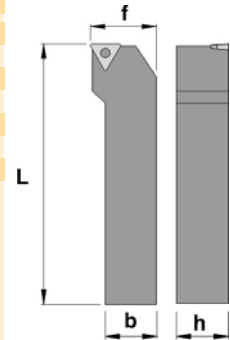


For more information see page: A.51,52

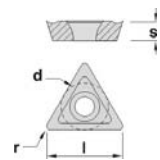
**STFC 90°**



REF.	h	b	L	f	TC..				
STFC R/L 0808 D09	8	8	60	10	0902..	122	506	-	-
STFC R/L 1010 E09	10	10	70	12	0902..	122	506	-	-
STFC R/L 1212 F11	12	12	80	16	1102..	125	507	-	-
STFC R/L 1616 H11	16	16	100	20	1102..	125	507	-	-
STFC R/L 1212 F16	12	12	80	16	16T3..	140	515	-	-
STFC R/L 1616 H16	16	16	100	20	16T3..	133	521	341	194
STFC R/L 2020 K16	20	20	125	25	16T3..	133	521	341	194
STFC R/L 2525 M16	25	25	150	32	16T3..	133	521	341	194

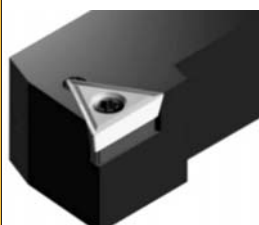


REF.	l	s	d
TC.. 0902..	9,62	2,38	5,55
TC.. 1102..	11,00	2,38	6,35
TC.. 16T3..	16,50	3,97	9,52

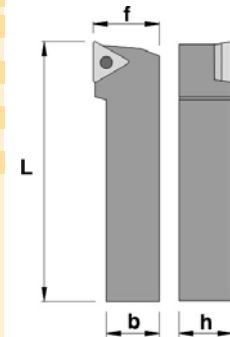


For more information see page: A.51,52

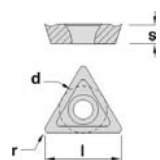
**STGC 90°**



REF.	h	b	L	f	TC..				
STGC R/L 0808 D09	8	8	60	10	0902..	122	506	-	-
STGC R/L 1010 E09	10	10	70	12	0902..	122	506	-	-
STGC R/L 1212 F11	12	12	80	16	1102..	125	507	-	-
STGC R/L 1616 H11	16	16	100	20	1102..	125	507	-	-
STGC R/L 1212 F16	12	12	80	16	16T3..	140	515	-	-
STGC R/L 1616 H16	16	16	100	20	16T3..	133	521	341	194
STGC R/L 2020 K16	20	20	125	25	16T3..	133	521	341	194
STGC R/L 2525 M16	25	25	150	32	16T3..	133	521	341	194



REF.	l	s	d
TC.. 0902..	9,62	2,38	5,55
TC.. 1102..	11,00	2,38	6,35
TC.. 16T3..	16,50	3,97	9,52



For more information see page: A.51,52

Inserts

Turning

Automatic lathes

Ceramic tools

Parting & grooving

Threading

Drills

Cartridges

Brazed tools

Milling cutters

Solid carbide

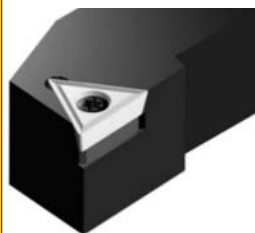
Boring heads

Arbors & adaptors

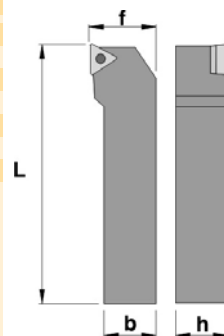


Inserts

**STJC 93°**



REF.	h	b	L	f	TC..				
STJC R/L 0808 D09	8	8	60	10	0902..	122	506	-	-
STJC R/L 1010 E09	10	10	70	12	0902..	122	506	-	-
STJC R/L 1212 F11	12	12	80	16	1102..	125	507	-	-
STJC R/L 1616 H11	16	16	100	20	1102..	125	507	-	-
STJC R/L 1212 F16	12	12	80	16	16T3..	140	515	-	-
STJC R/L 1616 H16	16	16	100	20	16T3..	133	521	341	194
STJC R/L 2020 K16	20	20	125	25	16T3..	133	521	341	194
STJC R/L 2525 M16	25	25	150	32	16T3..	133	521	341	194



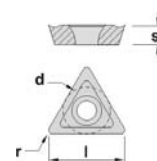
Turning

Automatic lathes

Ceramic tools



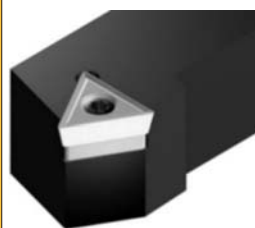
REF.	l	s	d
TC.. 0902..	9,62	2,38	5,55
TC.. 1102..	11,00	2,38	6,35
TC.. 16T3..	16,50	3,97	9,52



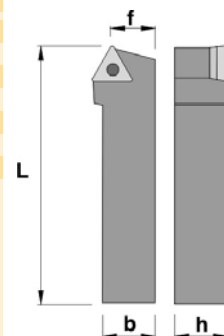
For more information see page: A.51,52

Parting & grooving

**STTC 60°**



REF.	h	b	L	f	TC..				
STTC R/L 0808 D09	8	8	60	7	0902..	122	506	-	-
STTC R/L 1010 E09	10	10	70	9	0902..	122	506	-	-
STTC R/L 1212 F11	12	12	80	11	1102..	125	507	-	-
STTC R/L 1616 H11	16	16	100	13	1102..	125	507	-	-
STTC R/L 1212 F16	12	12	80	11	16T3..	140	515	-	-
STTC R/L 1616 H16	16	16	100	13	16T3..	133	521	341	194
STTC R/L 2020 K16	20	20	125	17	16T3..	133	521	341	194
STTC R/L 2525 M16	25	25	150	22	16T3..	133	521	341	194



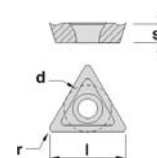
Threading

Drills

Cartridges



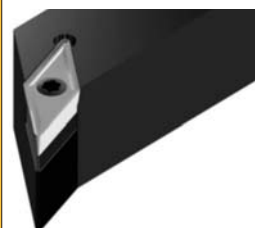
REF.	l	s	d
TC.. 0902..	9,62	2,38	5,55
TC.. 1102..	11,00	2,38	6,35
TC.. 16T3..	16,50	3,97	9,52



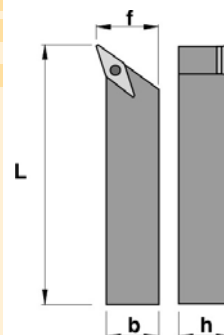
For more information see page: A.51,52

Brazed tools

**SVHC 107° 30'**



REF.	h	b	L	f	VC..				
SVHC R/L 2020 K16	20	20	125	25	1604..	133	521	378	194
SVHC R/L 2525 M16	25	25	150	32	1604..	133	521	378	194
SVHC R/L 3225 P16	32	25	170	32	1604..	133	521	378	194



Milling cutters

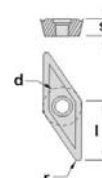
Solid carbide

Boring heads

Arbors & adaptors

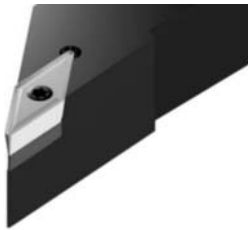


REF.	l	s	d
VC.. 1604..	16,50	4,76	9,52

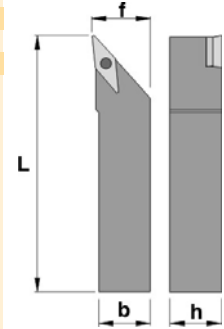


For more information see page: A.55,56

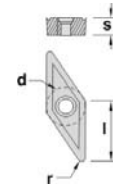
**SVJB 93°**



REF.	h	b	L	f	VBMT				
SVJB R/L 2020 K16	20	20	125	25	1604..	133	521	378	194
SVJB R/L 2525 M16	25	25	150	32	1604..	133	521	378	194
SVJB R/L 3225 P16	32	25	170	32	1604..	133	521	378	194

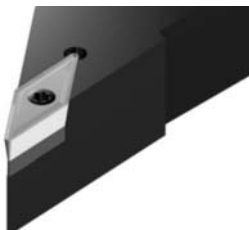


REF.	l	s	d
VBMT 1604..	16,50	4,76	9,52

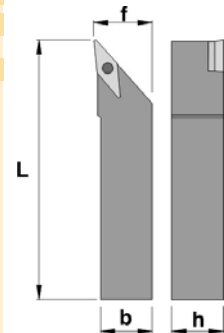


For more information see page: A.55

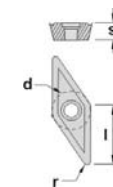
**SVJC 93°**



REF.	h	b	L	f	VC..				
SVJC R/L 2020 K16	20	20	125	25	1604..	133	521	378	194
SVJC R/L 2525 M16	25	25	150	32	1604..	133	521	378	194
SVJC R/L 3225 P16	32	25	170	32	1604..	133	521	378	194

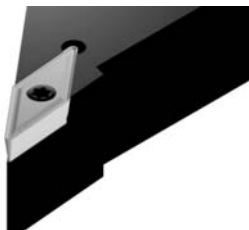


REF.	l	s	d
VC.. 1604..	16,50	4,76	9,52

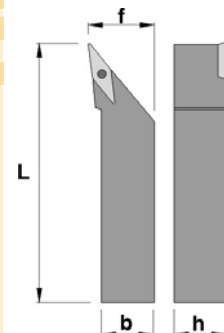


For more information see page: A.55,56

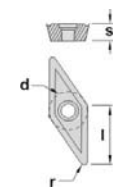
**SVLC 95°**



REF.	h	b	L	f	VC..				
SVLC R/L 1212 G13	12	12	90	16	1303..	130	508		
SVLC R/L 1616 H13	16	16	100	20	1303..	130	508		
SVLC R/L 2020 K13	20	20	125	25	1303..	130	508		
SVLC R/L 2525 M13	25	25	150	32	1303..	130	508		



REF.	l	s	d
VC.. 1303..	13,00	3,18	8,00



For more information see page: A.56

Inserts

Turning

Automatic lathes

Ceramic tools

Parting & grooving

Threading

Drills

Cartridges

Brazed tools

Milling cutters

Solid carbide

Boring heads

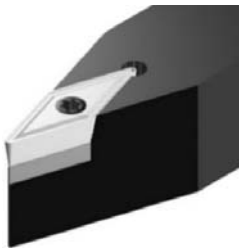
Arbors & adaptors



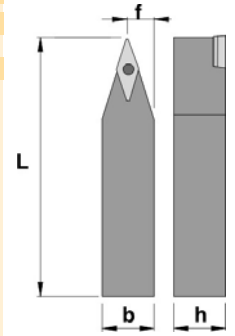


Inserts

**SVVB 72° 30'**



REF.	h	b	L	f	VBMT				
<b>SVVB N 2020 K16</b>	20	20	125	10,6	1604..	133	521	378	194
<b>SVVB N 2525 M16</b>	25	25	150	13,1	1604..	133	521	378	194
<b>SVVB N 3225 P16</b>	32	25	170	13,1	1604..	133	521	378	194



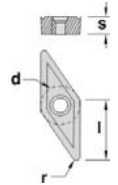
Turning

Automatic lathes

Ceramic tools



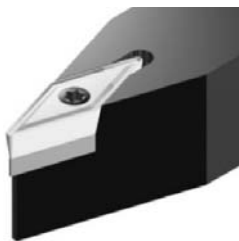
REF.	l	s	d
<b>VBMT 1604..</b>	16,50	4,76	9,52



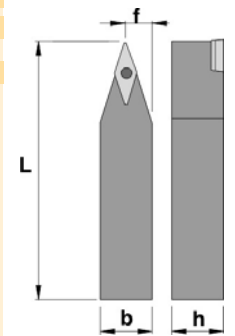
For more information see page: A.55

Parting & grooving

**SVVC 72° 30'**



REF.	h	b	L	f	VC..				
<b>SVVC N 2020 K16</b>	20	20	125	10,6	1604..	133	521	378	194
<b>SVVC N 2525 M16</b>	25	25	150	13,1	1604..	133	521	378	194
<b>SVVC N 3225 P16</b>	32	25	170	13,1	1604..	133	521	378	194



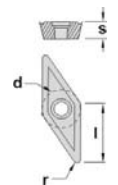
Threading

Drills

Cartridges



REF.	l	s	d
<b>VC.. 1604..</b>	16,50	4,76	9,52



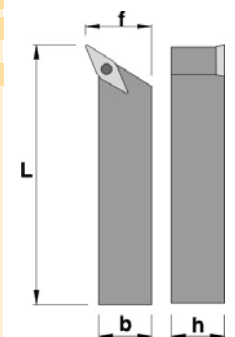
For more information see page: A.55,56

Brazed tools

**SVXC 113°**



REF.	h	b	L	f	VC..		
<b>SVXC R/L 1212 G13</b>	12	12	90	16	1303..	130	508
<b>SVXC R/L 1616 H13</b>	16	16	100	20	1303..	130	508
<b>SVXC R/L 2020 K13</b>	20	20	125	25	1303..	130	508
<b>SVXC R/L 2525 M13</b>	25	25	150	32	1303..	130	508



Milling cutters

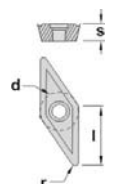
Solid carbide

Boring heads

Arbors & adaptors

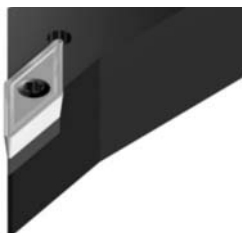


REF.	l	s	d
<b>VC.. 1303..</b>	13,00	3,18	8,00

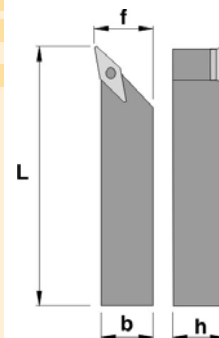


For more information see page: A.56

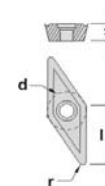
**SVZC 100°**



REF.	h	b	L	f	VC..				
<b>SVZC R/L 2020 K16</b>	20	20	125	25	1604..	133	521	378	194
<b>SVZC R/L 2525 M16</b>	25	25	150	32	1604..	133	521	378	194
<b>SVZC R/L 3225 P16</b>	32	25	170	32	1604..	133	521	378	194



REF.	l	s	d
<b>VC.. 1604..</b>	16,50	4,76	9,52



For more information see page: A.55,56

Inserts

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Inserts

Turning

## Nominal cutting speed and feed values for toolholders

Material <b>P</b>	HB	Condition	Cutting speed m/min.						Specific cutting force $K_c$ 0,4
			PM 25	PM 40	NC 25	TIN 16	TIN 22	TIN 32	
			0.3-0.6-1.2		0.1 - 0.3	0.1-0.4-0.8	0.1-0.4-0.8	0.2-0.5-1.2	
Unalloyed steel	125	C=0.15%	150 115 80		350 280	480 345 250	440 300 205	330 230 110	1900
	150	C=0.35%	145 105 70		270 230	440 315 230	400 275 190	300 210 150	2100
	200	C=0.60%	115 90 65		240 190	385 275 200	350 240 165	260 185 130	2250
Low alloyed steel	180	Annealed	90 70 45		300 260	380 265 195	320 220 170	200 140 100	2100
	275	Hardened	65 45 30		220 140	260 180 130	215 150 115	140 100 70	2600
	300	Hardened	60 40 25		230 180	240 165 120	200 135 105	125 90 60	2700
	350	Hardened	50 35 20		220 140	210 145 105	170 120 90	110 75 55	2850
High alloyed steel	200	Annealed	80 60 45		200 160	350 230 170	280 185 135	175 115 80	2600
	325	Hardened	40 25 20		200 160	170 110	120 80 60	85 55 40	3900
Stainless steel	200	Martensitic/Ferritic	110 95 75		270 130	295 240 190	275 210 165	225 180 145	2300
Steel castings	180	Unalloyed	60 50 35		300 260	260 185 145	230 160 120	135 105 75	2000
	200	Low alloyed	50 45 30		230 180	230 160 120	190 125 85	120 90 60	2500
	225	High alloyed	40 30 20		220 140	190 130 95	170 115 80	95 70 55	2700

Automatic lathes

Ceramic tools

Parting & grooving

Material <b>M</b>	HB	Condition	Cutting speed m/min.							Specific cutting force $K_c$ 0,4	
			PM 25	PM 40	NC 25	TIN 16	TIN 17	TIN 22	TIN 32		TIN 35
			0.1-0.3		0.1-0.3	0.1-0.4-0.8	0.1-0.3	0.2-0.4-0.6			0.2-0.4-0.6
Stainless steel annealed	180	Austenitic Ni > 8%, Cr 12-25% Austenitic/Ferritic Austenitic/Ferritic, Low S	205 170		240 200	180 150 120	600 100		190 160 130	190 160 130	2450
					160 130	180 150 120	400 100		190 160 100	190 160 130	
					160 130	180 150 120	400 100		140 110	160 130 100	
Heat resistant alloys	200	Annealed				50 20		40 20	40 20	3000	
	280	Aged				50 20		35 15	35 15	3050	
	250	Annealed				40 15		25 6	25 8	3500	
	350	Aged				35 20		15 4	15 4	4150	
320	Cast				25 10		15 4	15 4	4150		
Titanium alloys	400	Ti				140 80			80 130	1530	
	950	Cast a, almost a and a+b				45 25			15 35	1675	
	1050	Aged cast a+b				45 25			15 35	1690	

Threading

Drills

Cartridges

Material <b>K</b>	HB	Condition	Cutting speed m/min.						Specific cutting force $K_c$ 0,4
			KM 15	TIN 17	NC 25	TIN 16	TIN 22	ZR 10	
			0.2-0.5-1.0		0.2-0.5-1.0	0.2-0.5	0.2-0.5-1.0	0.2-0.5-1.0	
Hardened steel	350	Hardened steel	27 16 10	180 150 110		175 145 100			4500
	250	Manganese steel 12%	65 40 16	120 90 60		120 85 50			3600
Malleable cast iron	130	Ferritic	105 75 45	250 180 100		225 150 90			1100
	230	Pearlitic	80 60 30	160 100 60		155 95 55			1100
Cast iron	180	Low tensile strenght	135 95 60	180 120 80	300 200	165 110 70			1100
	260	High tensile strenght	95 65 40	140 105 60	250 180	120 90 55			1500
Nodular SG iron	160	Ferritic	115 80 45	220 180 100	250 180				1100
	250	Pearlitic	80 50 30	150 100 50	180 120				1800
Chilled cast iron	400		17 11	17 11					3000
Aluminium alloys	60	Non heat treatable	1750 1280 800	1750 1280 800				1750 1280 800	500
	100	Heat treatable	510 370 250	510 370 250				510 370 250	800
Aluminium alloys (Cast)	75	Non heat treatable	460 285 175	460 285 175				460 285 175	750
	90	Heat treatable	300 180 110	300 180 110				300 180 110	900
Bronze-Brass alloys	110	Lead alloys, Pb>1%	610 430 295	610 430 295				610 430 295	700
	90	Brass and bronze	310 250 195	310 250 195				310 250 195	750
	100	Inc. electrolytic copper	225 160 115	225 160 115				225 160 115	1750
Other materials		Hard plastics	380 240	380 240				380 240	
		Fibre	190 120	190 120				190 120	
		Hard rubber	225 160	225 160				225 160	

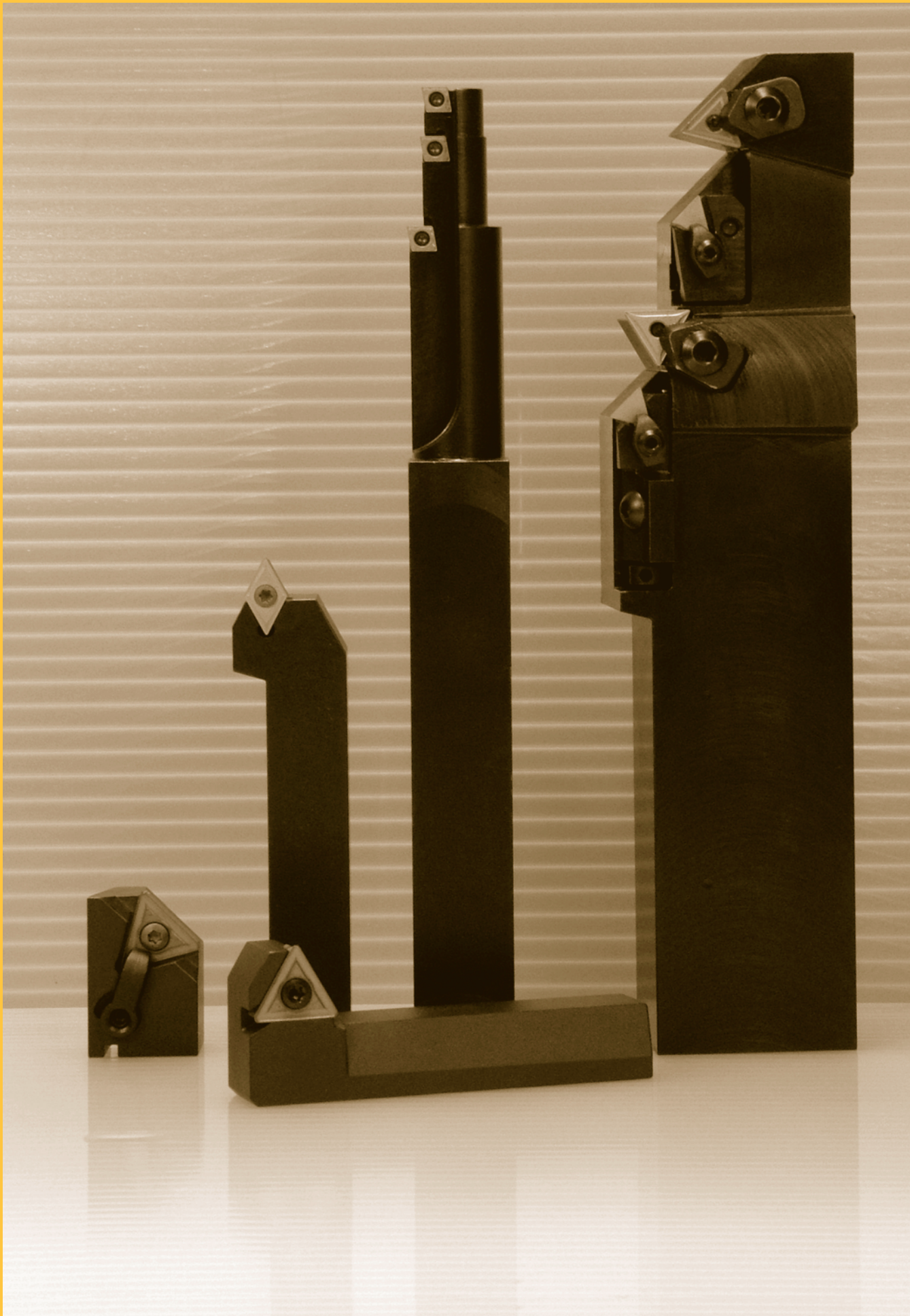
Brazed tools

Milling cutters

Solid carbide

Boring heads

Arbors & adaptors



Inserts

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carbide

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heads

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adaptors



**Inserts**

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**Milling cutters**

**Solid carbide**

**Boring heads**

**Arbors & adaptors**

A large white rectangular area with horizontal lines, intended for notes or technical specifications.