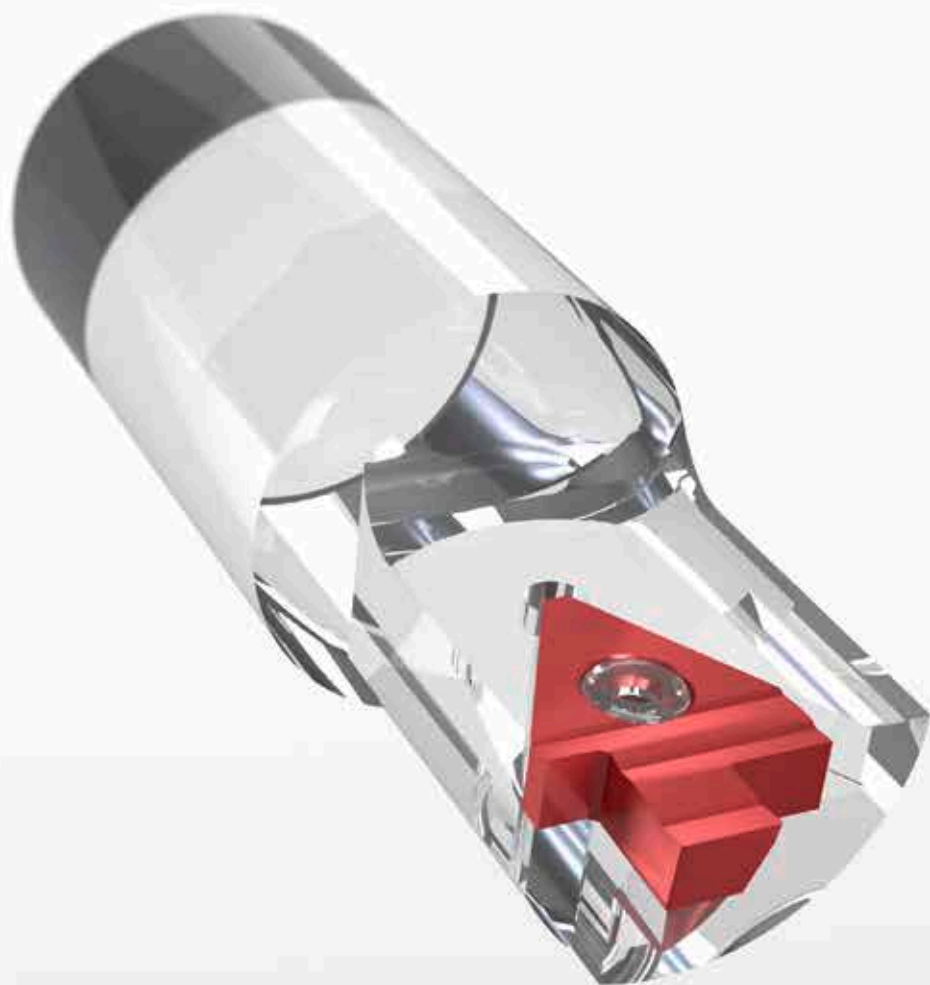


Precision indexable inserts + holders





PEOPLE

Cooperate in fair partnership



AMBITION

Question yesterday to provide new solutions for today and tomorrow



SYNERGY

Share our strength

Corporate philosophy

PEOPLE – AMBITION – SYNERGY

These 3 components are the foundation for the success of MAS GmbH.

Trust the experts with more than 40 years of experience in cutting technologies. The specialists with the most modern equipment for the development, design and manufacture of tools. The partners who discover synergies between man and technology and who are able to harness them for your success.

The utmost objective of every project is our customers' and partners' success. Our own success goes hand in hand.

This is and will remain our guide for the future!



Precision indexable inserts + holders

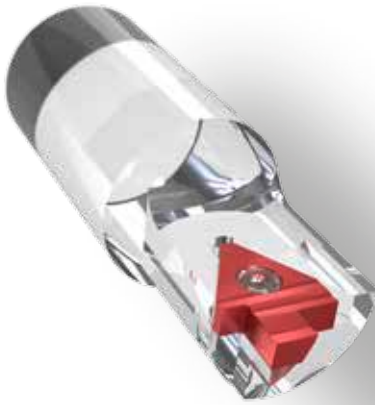


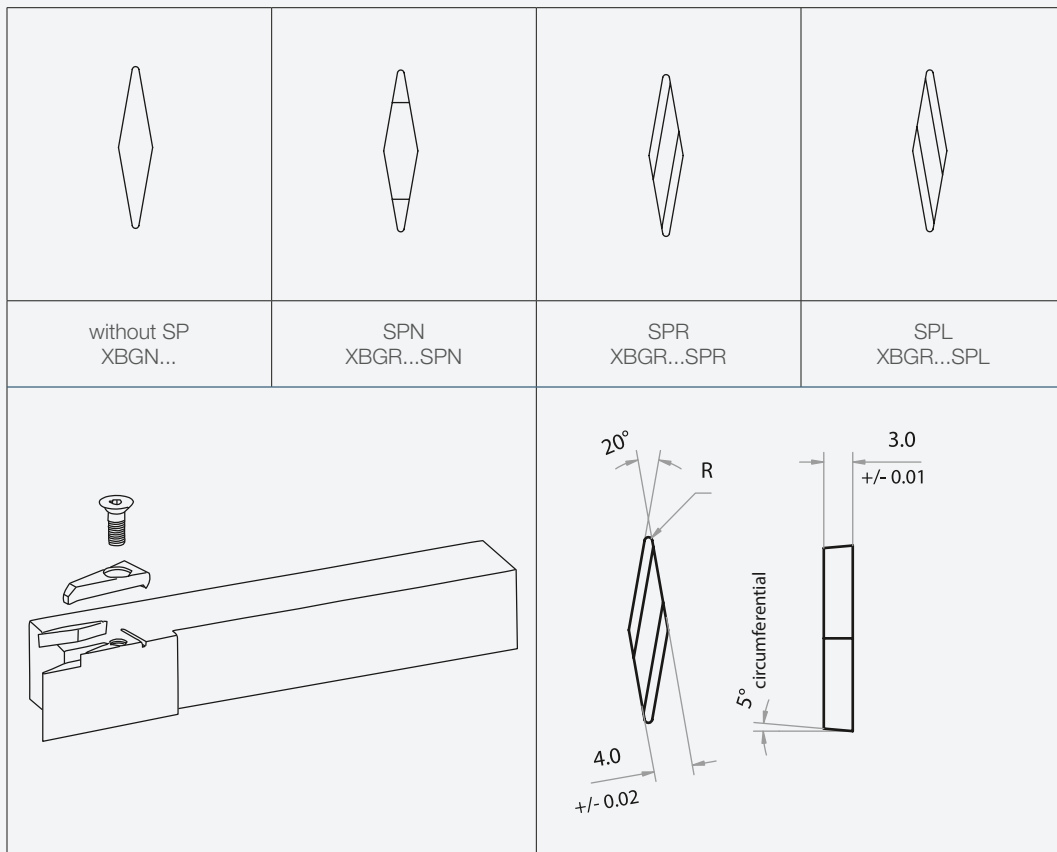
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Copying indexable insert

XBG 20° point angle

- Precision insert - ground on all sides

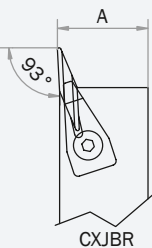
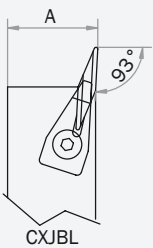
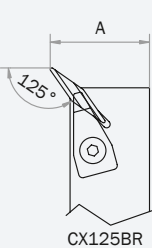
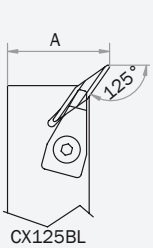
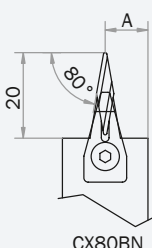


Order number	R
XBGN100302-TIN	0.2
XBGN100304-TIN	0.4
XBGR100302SPR-TIN	0.2
XBGR100304SPR-TIN	0.4
XBGR100302SPL-TIN	0.2
XBGR100304SPL-TIN	0.4
XBGR100302SPN-TIN	0.2
XBGR100304SPN-TIN	0.4

Tool holders

XBG ... 1003 external fixture

- incl. clamping bracket
- Standard stock program

				
CXJBR	CXJBL	CX125BR	CX125BL	CX80BN
Tool holders CXJBR Right-hand	Tool holders CXJBL Left-hand	Tool holders CX125BR Right-hand	Tool holders CX125BL Left-hand	Tool holders CX80BN Neutral

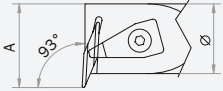
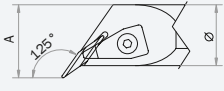
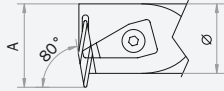
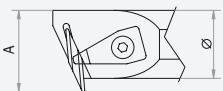
Order number	Shank	Dimension A	Clamping bracket
CXJBR1212H1003	12x12x100	12.5	SF003
CXJBR1616H1003	16x16x100	16.5	SF003
CXJBR2020K1003	20x20x125	20.5	SF003
CXJBR2525L1003	25x25x140	25.5	SF003
CX125BR1212H1003	12x12x100	17.0	SF003
CX125BR1616H1003	16x16x100	21.0	SF003
CX125BR2020K1003	20x20x125	25.0	SF003
CX125BR2525L1003	25x25x140	30.0	SF003
CX80BN1212H1003	12x12x100	6.0	SF003
CX80BN1616H1003	16x16x100	8.0	SF003
CX80BN2020K1003	20x20x125	10.0	SF003
CX80BN2525L1003	25x25x140	12.5	SF003
CXJBL1212H1003	12x12x100	12.5	SF003
CXJBL1616H1003	16x16x100	16.5	SF003
CXJBL2020K1003	20x20x125	20.5	SF003
CXJBL2525L1003	25x25x140	25.5	SF003
CX125BL1212H1003	12x12x100	17.0	SF003
CX125BL1616H1003	16x16x100	21.0	SF003
CX125BL2020K1003	20x20x125	25.0	SF003
CX125BL2525L1003	25x25x140	30.0	SF003

- Dimension A referred to XBGN100304

Tool holders

XBG... 1003 boring bars right-hand

- incl. clamping bracket
- Standard stock program

			
S...CXUBR Version right-hand	S...CX125BR Version right-hand	S...CX80BR Version right-hand	S...CXLBR Version right-hand

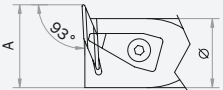
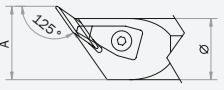
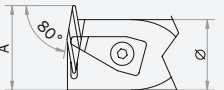
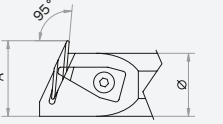
Order number	Shank	Dimension A	Clamping bracket
... CXU ...			
S16HCXUBR	Ø 16x100	20	SF003
S20MCXUBR	Ø 20x150	24	SF003
S25RCXUBR	Ø 25x200	29	SF003
... CX80 ...			
S16HCX80BR	Ø 16x100	20	SF003
S20MCX80BR	Ø 20x150	24	SF003
S25RCX80BR	Ø 25x200	29	SF003
... CX125 ...			
S16HCX125BR	Ø 16x100	20	SF003
S20MCX125BR	Ø 20x150	24	SF003
S25RCX125BR	Ø 25x200	29	SF003
... CXL ...			
S16HCXLBR	Ø 16x100	20	SF003
S20MCXLBR	Ø 20x150	24	SF003
S25RCXLBR	Ø 25x200	29	SF003

Order number	Spare part
M3.5X8.6TX15	Clamping screw
SF003	Clamping bracket (incl. screw)

Tool holders

XBG ... 1003 boring bars left-hand

- incl. clamping bracket
- Standard stock program

			
S...CXUBL Version left-hand	S...CX125BL Version left-hand	S...CX80BL Version left-hand	S...CXLBL Version left-hand

Order number	Shank	Dimension A	Clamping bracket
... CXU ...			
S16HCXUBL	Ø 16x100	20	SF003
S20MCXUBL	Ø 20x150	24	SF003
S25RCXUBL	Ø 25x200	29	SF003
... CX80 ...			
S16HCX80BL	Ø 16x100	20	SF003
S20MCX80BL	Ø 20x150	24	SF003
S25RCX80BL	Ø 25x200	29	SF003
... CX125 ...			
S16HCX125BL	Ø 16x100	20	SF003
S20MCX125BL	Ø 20x150	24	SF003
S25RCX125BL	Ø 25x200	29	SF003
... CXL ...			
S16HCXLBL	Ø 16x100	20	SF003
S20MCXLBL	Ø 20x150	24	SF003
S25RCXLBL	Ø 25x200	29	SF003

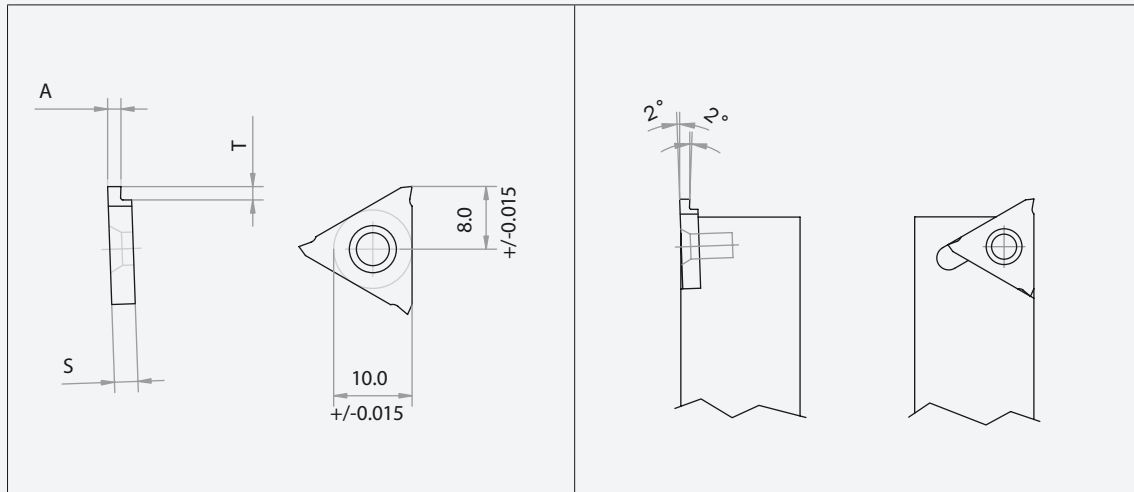
Order number	Spare part
M3.5X8.6TX15	Clamping screw
SF003	Clamping bracket (incl. screw)

Precision indexable inserts

for cutting grooves for lock washers

Version right-hand

- Indexable precision grooving insert with chip breaker
- Fully ground



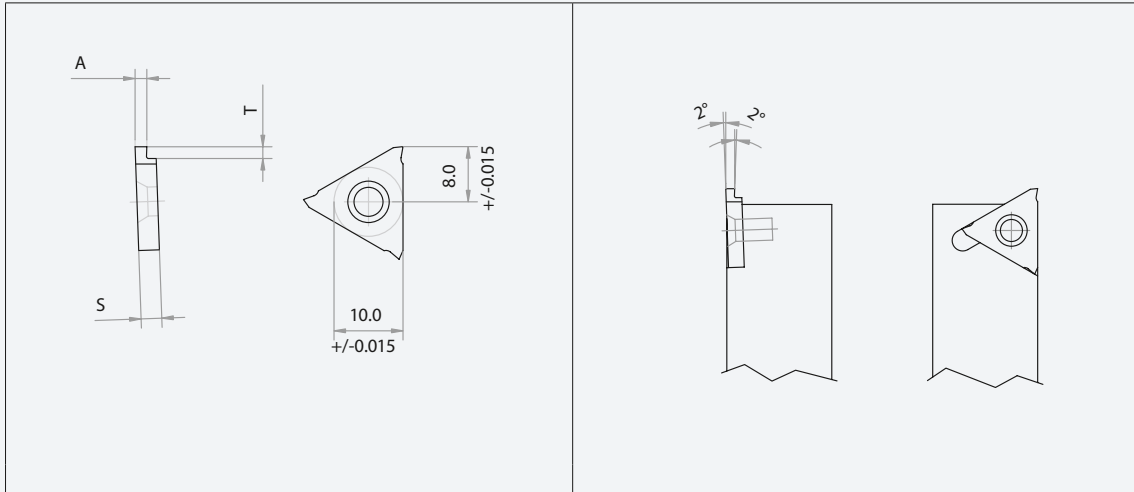
Order number	Groove width	Grooving width	Max. grooving depth	Indexable insert thickness S
TN1003E0.58SPRTIN	0.50	0.58	0.80	3.0
TN1003E0.78SPRTIN	0.70	0.78	0.80	3.0
TN1003E0.88SPRTIN	0.80	0.88	1.00	3.0
TN1003E0.98SPRTIN	0.90	0.98	1.00	3.0
TN1003E1.20SPRTIN	1.10	1.20	1.20	3.0
TN1003E1.40SPRTIN	1.30	1.40	1.40	3.0
TN1003E1.70SPRTIN	1.60	1.70	1.70	3.0
TN1003E1.95SPRTIN	1.85	1.95	1.95	3.0
TN1003E2.25SPRTIN	2.15	2.25	2.25	3.0
TN1003E2.75SPRTIN	2.65	2.75	2.75	3.0
TN1004E3.25SPRTIN	3.15	3.25	3.25	4.0

- Grooving widths in all special dimensions available on short notice
- Grooving widths in all intermediate dimensions available on short notice
- Ordering example for 1.78 ± 0.02 - TN1003 E1.78SPRTIN

Refer also to the following page ►

Version left-hand

- Indexable precision grooving insert with chip breaker
- Fully ground

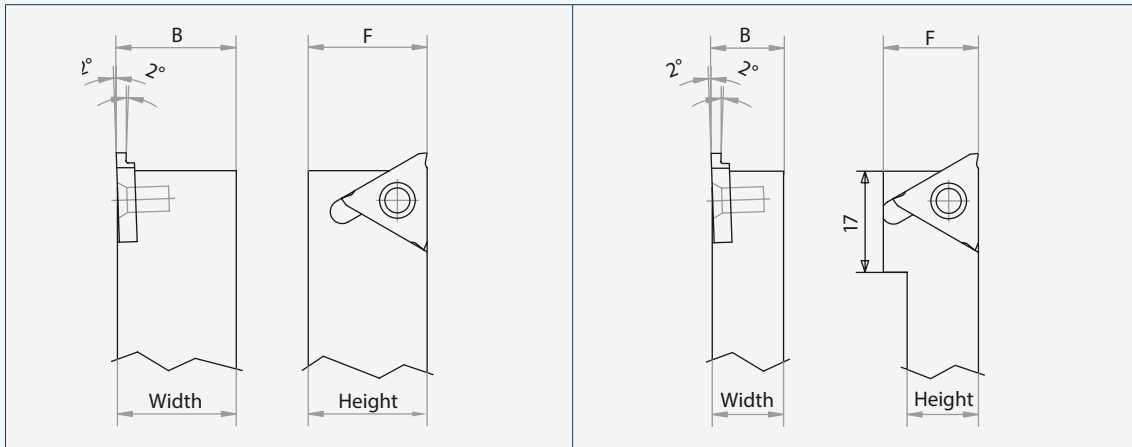


Order number	Groove width	Grooving width	Max. grooving depth	Indexable insert thickness S
TN1003E0.58SPLTIN	0.50	0.58	0.80	3.0
TN1003E0.78SPLTIN	0.70	0.78	0.80	3.0
TN1003E0.88SPLTIN	0.80	0.88	1.00	3.0
TN1003E0.98SPLTIN	0.90	0.98	1.00	3.0
TN1003E1.20SPLTIN	1.10	1.20	1.20	3.0
TN1003E1.40SPLTIN	1.30	1.40	1.40	3.0
TN1003E1.70SPLTIN	1.60	1.70	1.70	3.0
TN1003E1.95SPLTIN	1.85	1.95	1.95	3.0
TN1003E2.25SPLTIN	2.15	2.25	2.25	3.0
TN1003E2.75SPLTIN	2.65	2.75	2.75	3.0
TN1004E3.25SPLTIN	3.15	3.25	3.25	4.0

- Grooving widths in all special dimensions available on short notice
- Grooving widths in all intermediate dimensions available on short notice
- Ordering example for 1.78 ± 0.02 - TN1003 E1.78SPRTIN

Tool holders for grooving inserts

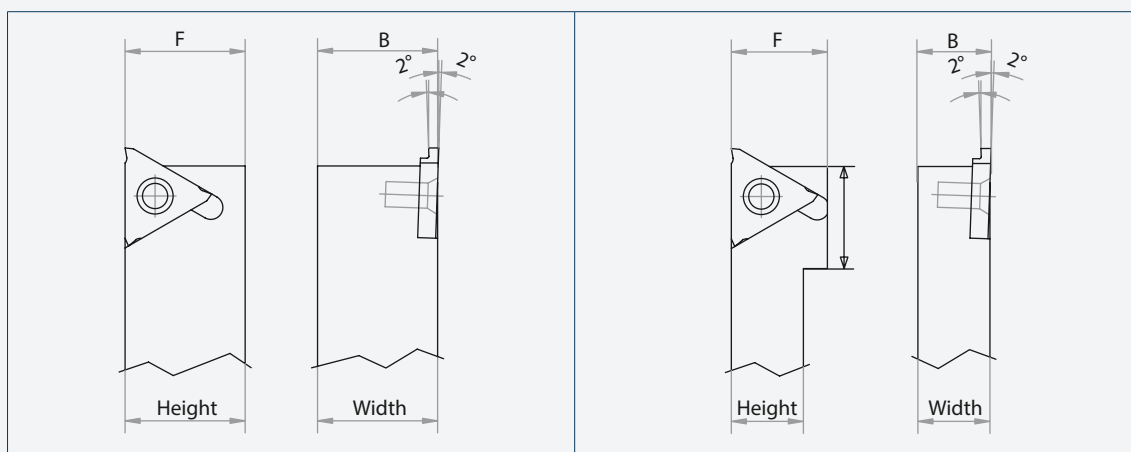
Version right-hand



Order number	Height x width x length	Dimension F	Dimension B	incl. screw
1010-100-T1003RA	10 x 10 x 100	16	10.2	M3.5X8.6TX15
1212-100-T1003RA	12 x 12 x 100	16	12.2	M3.5X8.6TX15
1616-100-T1003RA	16 x 16 x 100	16	16.2	M3.5X8.6TX15
2020-125-T1003RA	20 x 20 x 125	20	20.2	M3.5X8.6TX15
2525-150-T1003RA	25 x 25 x 150	25	25.2	M3.5X8.6TX15

Refer also to the following page ►

Version left-hand

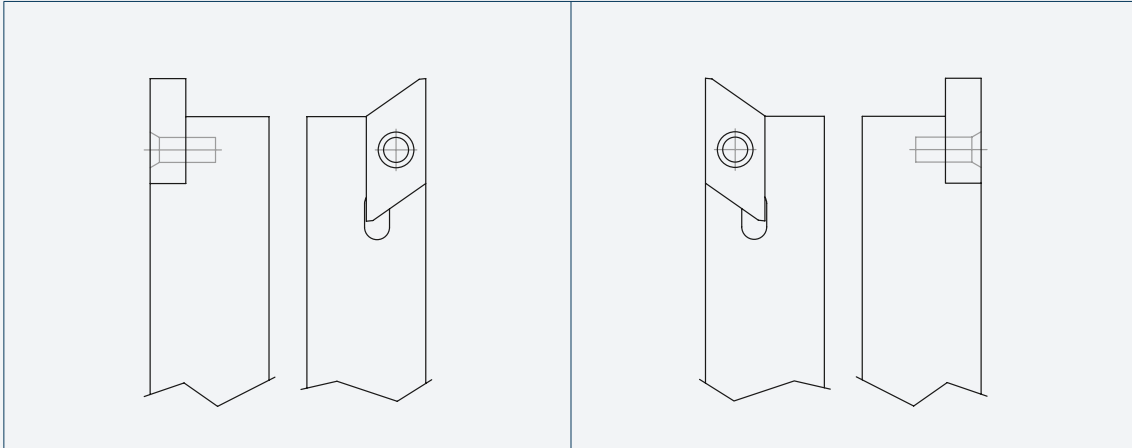


Order number	Height x width x length	Dimension F	Dimension B	incl. screw
1010-100-T1003LA	10 x 10 x 100	16	10.2	M3.5X8.6TX15
1212-100-T1003LA	12 x 12 x 100	16	12.2	M3.5X8.6TX15
1616-100-T1003LA	16 x 16 x 100	16	16.2	M3.5X8.6TX15
2020-125-T1003LA	20 x 20 x 125	20	20.2	M3.5X8.6TX15
2525-150-T1003LA	25 x 25 x 150	25	25.2	M3.5X8.6TX15

Tool holders

for indexable profiling inserts

Tool holder, external



• Right-hand version

• Left-hand version

System of order numbers

Ordering example:

height	width	length	semi-finished parts	version R/L
12	12	100	L1004	RN

resulting order number: 1212-100-L1004 RN

Refer also to the following page ►

Order number	incl. screw
... 1212 ...	
1212-100-L1004RN	M3.5X8.6TX15
1212-100-L1004LN	M3.5X8.6TX15
1212-100-L1006RN	M3.5X11TX15
1212-100-L1006LN	M3.5X11TX15
1212-100-L1008RN	M3.5X12.5TX15
1212-100-L1008LN	M3.5X12.5TX15
1212-100-L1010RN	M3.5X12.5TX15
1212-100-L1010LN	M3.5X12.5TX15
... 1616 ...	
1616-100-L1004RN	M3.5X8.6TX15
1616-100-L1004LN	M3.5X8.6TX15
1616-100-L1006RN	M3.5X11TX15
1616-100-L1006LN	M3.5X11TX15
1616-100-L1008RN	M3.5X15TX15
1616-100-L1008LN	M3.5X15TX15
1616-100-L1010RN	M3.5X15TX15
1616-100-L1010LN	M3.5X15TX15
... 2020 ...	
2020-125-L1004RN	M3.5X8.6TX15
2020-125-L1004LN	M3.5X8.6TX15
2020-125-L1006RN	M3.5X11TX15
2020-125-L1006LN	M3.5X11TX15
2020-125-L1008RN	M3.5X15TX15
2020-125-L1008LN	M3.5X15TX15
2020-125-L1010RN	M3.5X15TX15
2020-125-L1010LN	M3.5X15TX15
... 2525 ...	
2525-150-L1004RN	M3.5X8.6TX15
2525-150-L1004LN	M3.5X8.6TX15
2525-150-L1006RN	M3.5X11TX15
2525-150-L1006LN	M3.5X11TX15
2525-150-L1008RN	M3.5X15TX15
2525-150-L1008LN	M3.5X15TX15
2525-150-L1010RN	M3.5X15TX15
2525-150-L1010LN	M3.5X15TX15

K20 modular grooving tool-holder

System for changing cartridge

PSK-K20

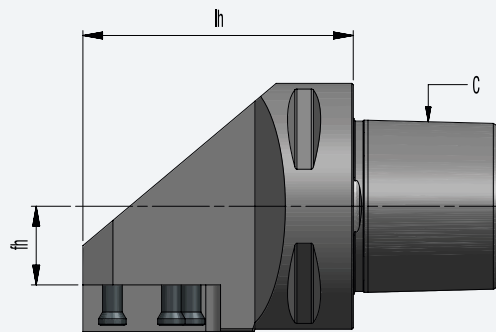


Illustration shows right version

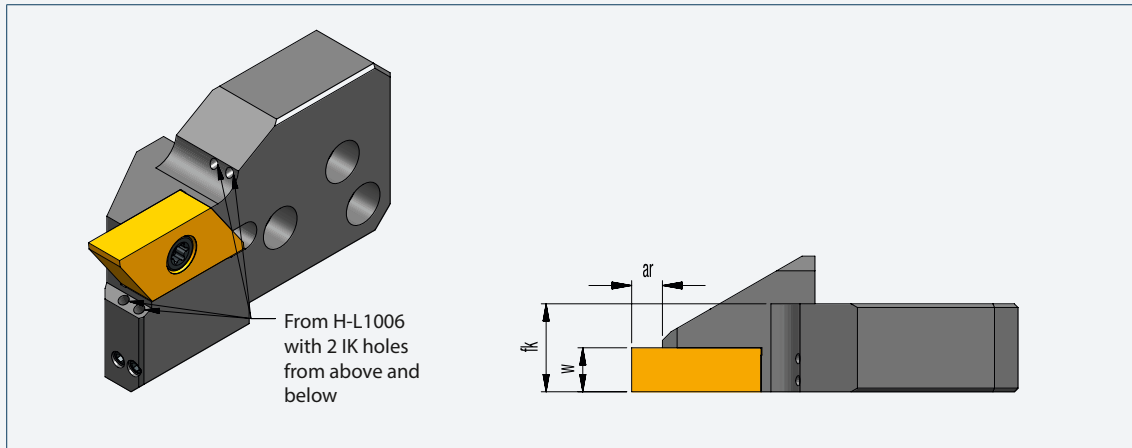
Order number	fh	lh	C
GND R C3 1046-K20	10	46	C3
GND R C4 1255-K20	12	55	C4
GND R C5 1655-K20	16	55	C5
GND R C6 2260-K20	22	60	C6

- Tool cartridges, see page 15
- Clamping screw BFTX0414
- Tightening torque (Nm) 3.4
- Wrench T x 15

GLR grooving system

Cartridges

GLR-K20



Order number	fk	w	ar	Indexable insert	incl. screw
GLR-K20-L1004	12.00	4.00	4.20	H-L1004	M3.5X8.6TX15
GLR-K20-L1006	12.00	6.00	4.20	H-L1006	M3.5X11TX15
GLR-K20-L1008	12.00	8.00	4.20	H-L1008	M3.5X15TX15
GLR-K20-L1010	12.00	10.00	4.20	H-L1010	M3.5X15TX15
GLR-K20-L1011	12.00	11.00	4.20	H-L1011	M3.5X15TX15
GLR-K20-L1013	12.00	13.00	4.20	H-L1013	M3.5X15TX15

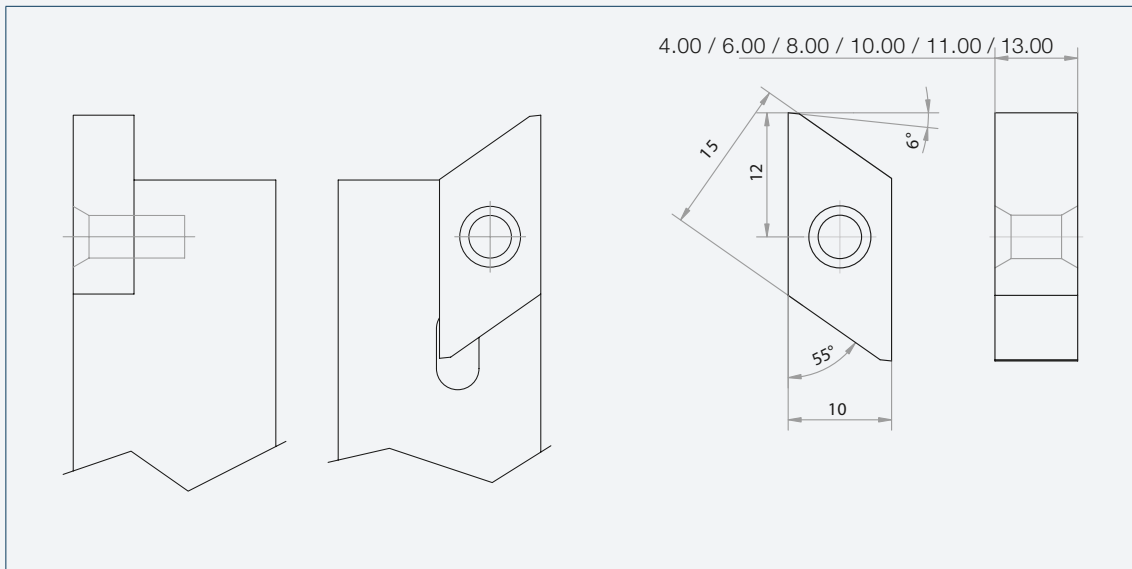
- Indexable profiling inserts, see page 16

Semi-finished parts

as initial inserts for indexable profiling inserts

With two edges

- Precision version ground on all sides
- Very stable system
- All versions in K20M and P20 from stock
- Screw recess on both sides
- In insert thicknesses 4.00 / 6.00 / 8.00 / 10.00 / 11.00 / 13.00 from stock



Order number	Carbide grades		Insert thickness ±0.01
	K20M	P20	
H-L1004	●	○	4.00
H-L1006	●	●	6.00
H-L1008	●	●	8.00
H-L1010	●	○	10.00
H-L1011	●	○	11.00
H-L1013	●	○	13.00

● in stock ○ on request

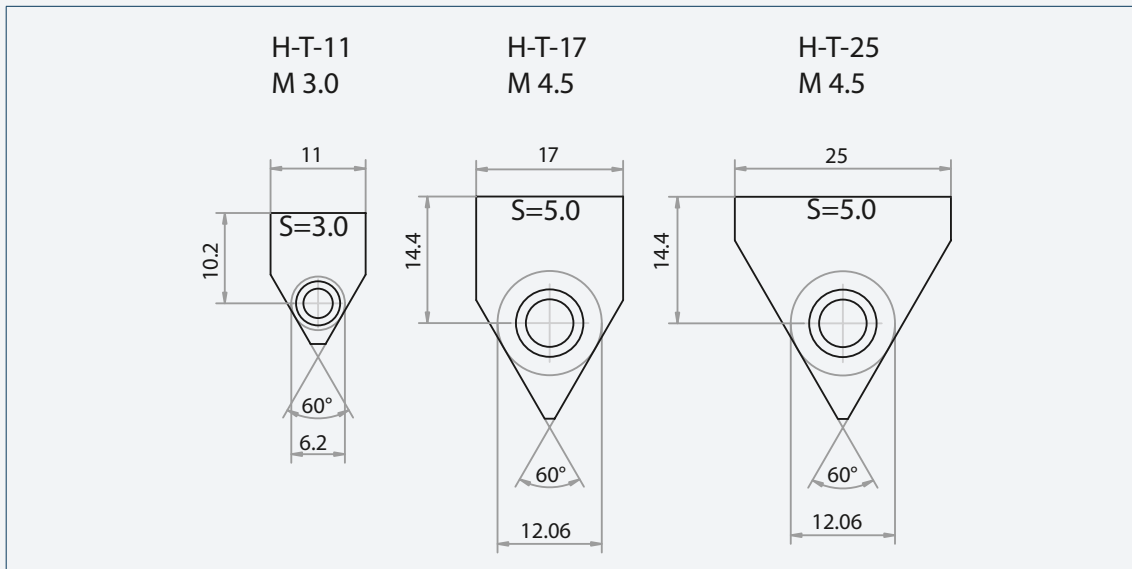
- All dimensions ground - tolerance ±0.02

System of order numbers

Ordering example

type	carbide grades	resulting order number:
H-L1006	K20M	H-L1006 K20M

Single edge



Order number

H-T-11 K20M

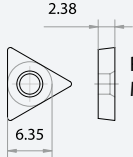
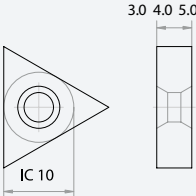
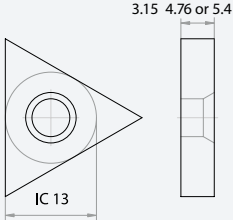
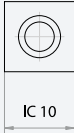
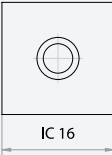
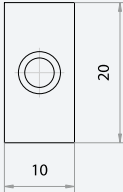
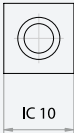

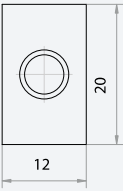
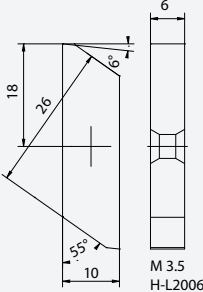
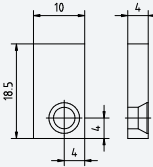
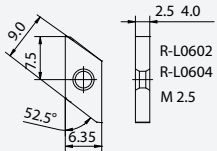
H-T-17 K20M

H-T-25 K20M

- Ground on thickness and contact faces (60° V-block)

Blank program

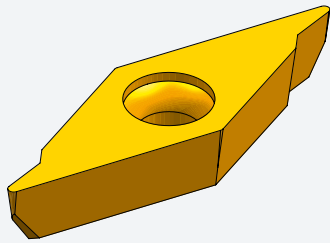
Overview

 <p>R-T0602 M2.5</p>	 <p>R-T1003 R-T1004 R-T1005 R-T1006 M3.5</p>	 <p>R-T1303 R-T1304 R-T1305 M4.5</p>
 <p>R-S1003 3.2 thick M3.5 Lowering one-sided</p>	 <p>R-S1604 4.00 thick M3.5 Lowering one-sided</p>	 <p>R-A1004 4.76 thick M3.5 Lowering on both sides</p>
 <p>R-S1003 3.2 thick M3.5 Lowering one-sided</p>	 <p>R-S1604 4.00 thick M3.5 Lowering one-sided</p>	 <p>R-A1204 4.76 thick M4.5 Lowering one-sided</p>
 <p>M 3.5 H-L2006</p>	 <p>R-132155 4.0 thick M3.5 Lowering one-sided</p>	 <p>R-L0602 R-L0604 M 2.5</p>

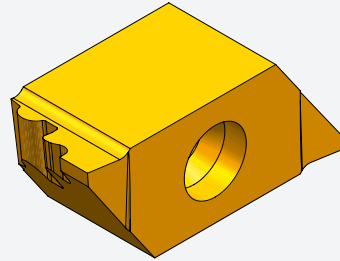
- Finished dimensions ground
- Blanks with allowance

Special solutions

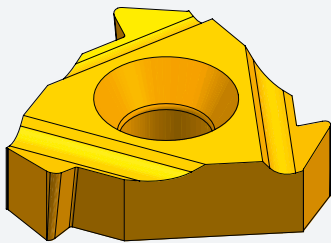
Examples



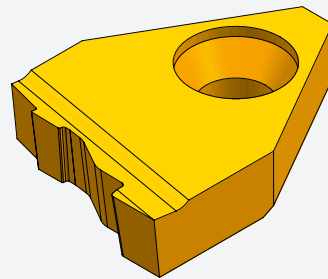
- Contoured indexable insert with neck



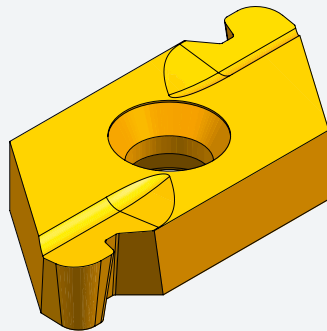
- Radial grooving insert 2 edges



- Threaded insert



- Radial grooving insert 1 edges



- Radial inside grooving insert

- Many other special solutions available on request



PEOPLE

Cooperate in fair partnership



AMBITION

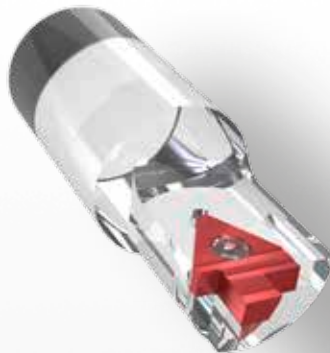
Question yesterday's, in order to develop new solutions for today and tomorrow



SYNERGY

Share our strength

Precision indexable inserts



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 MAS PWP 9.2018

Changes / Errors excepted

Precision indexable inserts