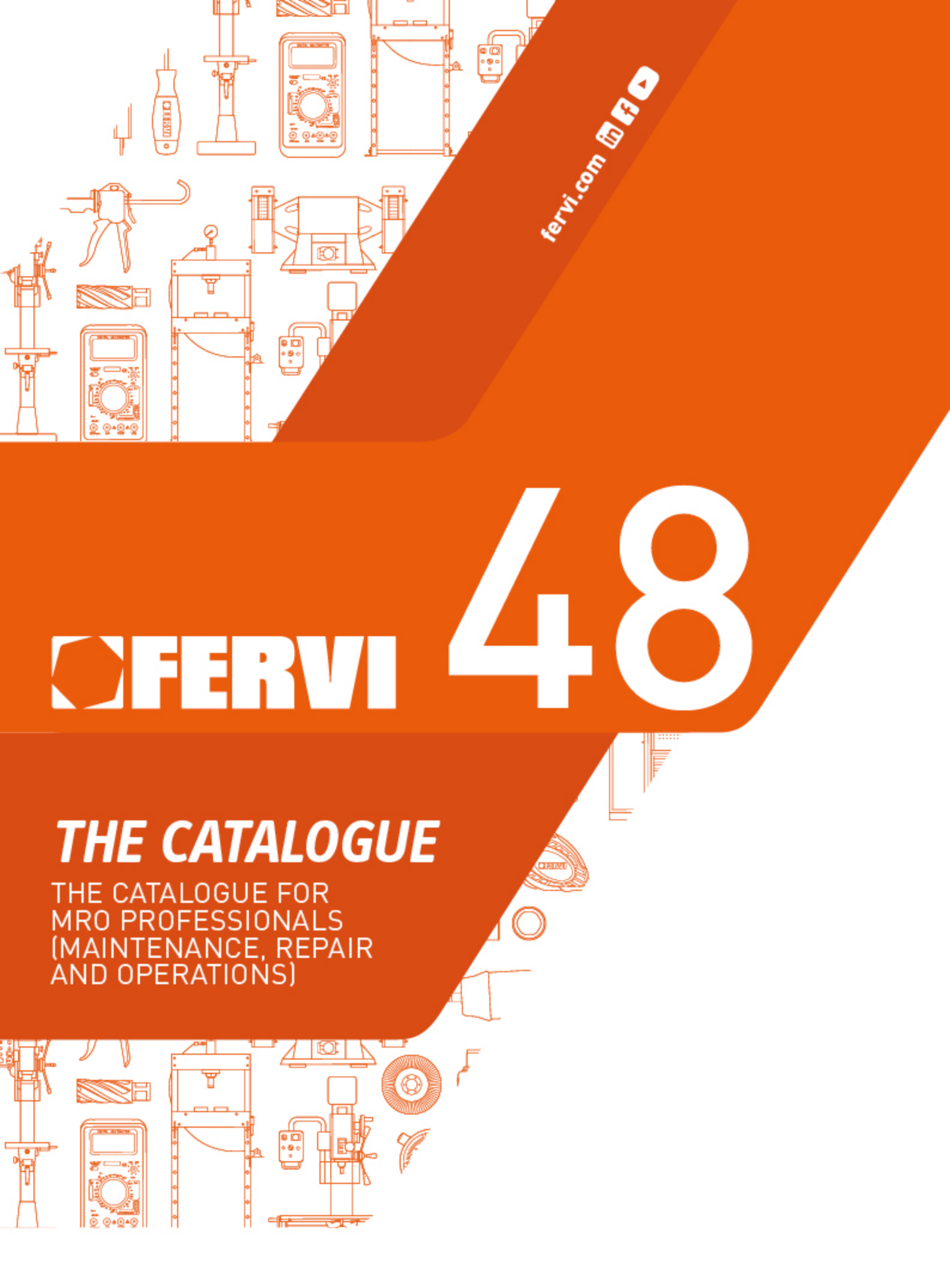




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48

THE CATALOGUE

THE CATALOGUE FOR
MRO PROFESSIONALS
(MAINTENANCE, REPAIR
AND OPERATIONS)



TOOLS FOR TURNING AND MILLING

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IDENTIFICATION OF TURNING TOOLS FOR EXTERNAL PROCESSING

S	T	G	C	R	16
1	2	3	4	5	6

3 - Type of tool

1 - Locking method

2 - Insert shape

4 - Insert clearance angle

5 - Tool direction

6 - Tool shank size

IDENTIFICATION OF TURNING TOOLS FOR INTERNAL PROCESSING

S	S	S	C	R	16
1	2	3	4	5	6

3 - Type of tool

1 - Locking method

2 - Insert shape

4 - Insert clearance angle

5 - Tool direction

6 - Tool shank diameter

CHOICE OF INSERT SHAPE ACCORDING TO THE TYPE OF PROCESSING TO BE CARRIED OUT

	S	T	C	K	D
External turning					
Axial Turning / Facing	○	○	●	○	○
Profiling	-	○	-	○	●
Facing	●	○	○	○	○
Plunge turning	-	○	-	-	-

	S	T	C	K	D
Internal turning					
Axial Turning / Facing	○	●	○	-	○
Profiling	-	○	-	○	●
Facing	-	○	●	-	○

Key

- Recommended shape
- Possible shape
- Not usable


RECOMMENDED VALUES FOR CUTTING SPEED V_c (m/min) FOR TURNING

Materials to be processed		External turning		Internal turning		Shape tool	Truncation	Threading with tool
		Sgrossatura	Finitura	Sgrossatura	Finitura			
P	Rm Steel < 600 N/mm ²	100*	150*	70*	100*	50*	95*	25*
	Rm steel 600-100 N/mm ²	95*	120*	50*	95*	30*	70*	18*
	Rm steel 1000-1200 N/mm ²	65*	80*	40*	65*	25*	55*	15*
M	Stainless Steel	60*	70*	35*	60*	20*	50*	15*
K	Cast iron HB < 180	90*	100*	65*	90*	30*	80*	15*
	Cast iron HB > 180	60*	70*	40*	60*	20*	55*	12*
N	Brass/Bronze	165*	260*	80*	160*	40*	100*	25*
	Copper	220*	350*	100*	220*	80*	200*	25*
	Aluminium	300*	650*	200*	400*	150*	300*	35*

* Values for brazed tools, for mechanically clamped tools the value can be increased by 15%

RECOMMENDED FEED VALUES (mm/rev) FOR TURNING

MATERIALS TO BE PROCESSED		External turning		Internal turning		Shape tool	Truncation
		Roughing	Finish	Roughing	Finish		
P	Rm Steel < 600 N/mm ²	0.1 – 0.4*	0.05 – 0.2*	0.05 – 0.3*	0.05 – 0.2*	0.02 – 0.05*	0.05 – 0.1*
	Rm steel 600-100 N/mm ²	0.1 – 0.4*	0.05 – 0.15*	0.05 – 0.3*	0.05 – 0.1*	0.02 – 0.05*	0.05 – 0.1*
	Rm steel 1000-1200 N/mm ²	0.1 – 0.4*	0.05 – 0.15*	0.05 – 0.3*	0.05 – 0.1*	0.02 – 0.05*	0.05*
M	Stainless Steel	0.1 – 0.4*	0.05 – 0.15*	0.05 – 0.3*	0.05 – 0.1*	0.02 – 0.05*	0.02 – 0.05*
K	Cast iron HB < 180	0.1 – 0.6*	0.05 – 0.2*	0.05 – 0.6*	0.05 – 0.2*	0.02 – 0.05*	0.05 – 0.1*
	Cast iron HB > 180	0.1 – 0.8*	0.05 – 0.25*	0.05 – 0.5*	0.05 – 0.2*	0.02 – 0.05*	0.02 – 0.05*
N	Brass/Bronze	0.1 – 0.8*	0.05 – 0.25*	0.05 – 0.6*	0.05 – 0.2*	0.02 – 0.1*	0.05 – 0.2*
	Copper	0.1 – 0.6*	0.05 – 0.25*	0.05 – 0.5*	0.05 – 0.25*	0.02 – 0.05*	0.05 – 0.1*
	Aluminium	0.1 – 0.8*	0.05 – 0.25*	0.05 – 0.4*	0.05 – 0.2*	0.02 – 0.2*	0.05 – 0.3*

* Values for brazed tools, for mechanically clamped tools the value can be increased by 15%

THICKNESS OF SURFACE TREATMENT IN THE TURNING (mm)

Thickness of surface treatment		Ø particular					
Roughing	0.5 - 10	Up to 25	25 - 70	50 - 75	75 - 100	100 - 150	150 - 300
Finish	0.2 - 20						
Truncation	Equal to the thickness of the cutter insert						

MAIN TURNING FORMULAS

- $V_t = (n \times \pi \times D) \div 1000$
- $n = (V_t \times 1000) \div (\pi \times D)$
- $V_f = n \times F_z$

Key

V_c : Cutting speed in metres per minute. It is the peripheral speed with which the cutting edge removes material. (m/min)

n : Spindle rotation speed in revolutions per minute (rpm)

D : Workpiece diameter in millimetres (mm)

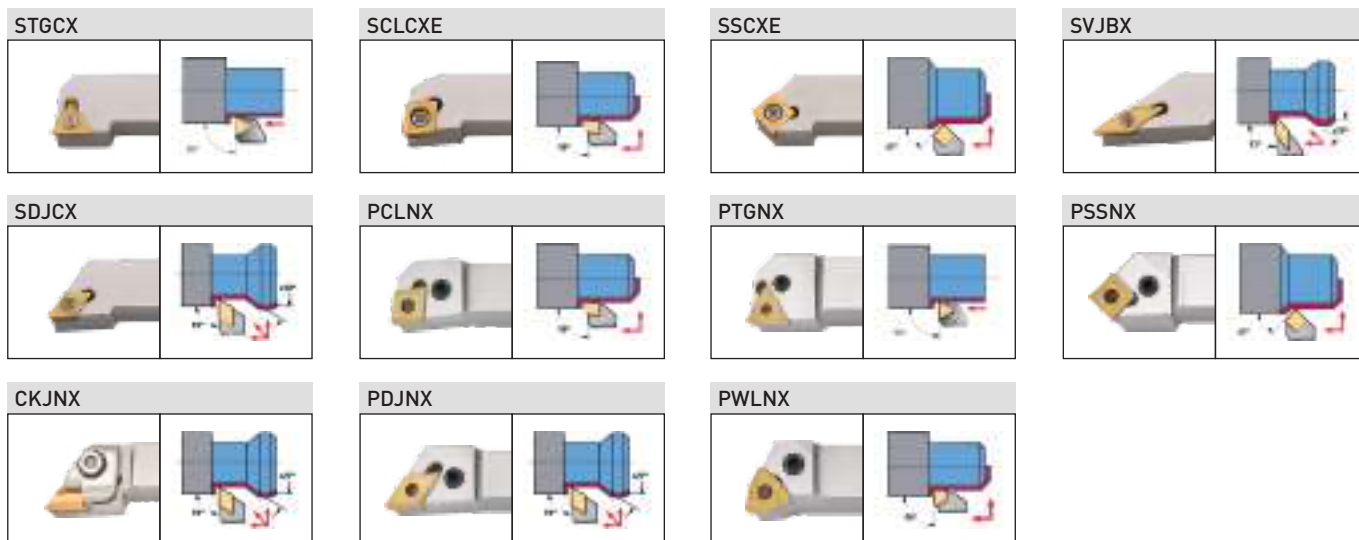
F_z : Tool feed (per tooth) per revolution in millimetres (mm/revolution)

V_f : Tool feed speed in millimetres per minute (mm/min)

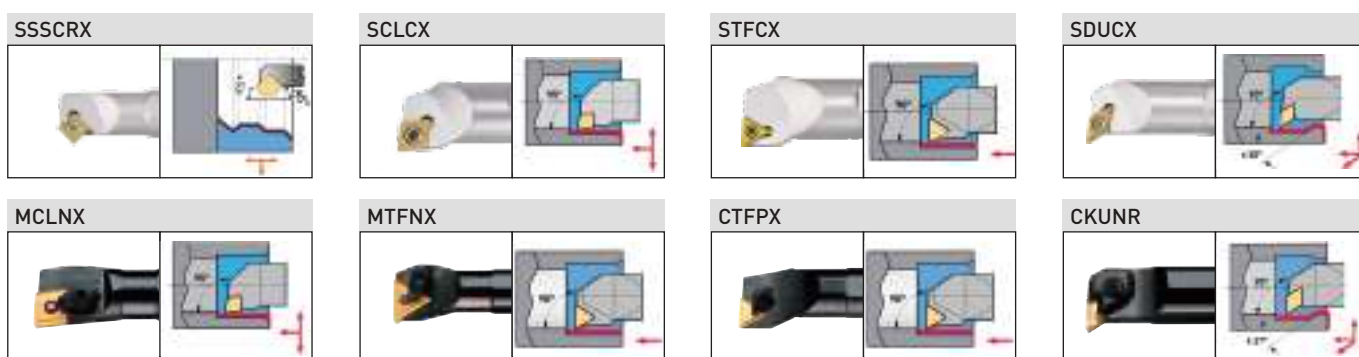
π : its value is 3.14



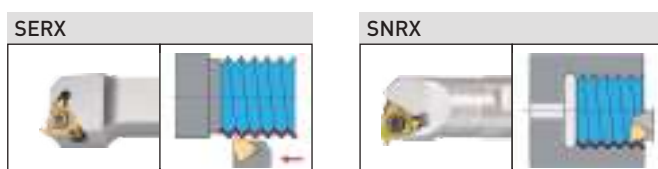
TPOLOGY OF TOOLS FOR EXTERNAL TURNING



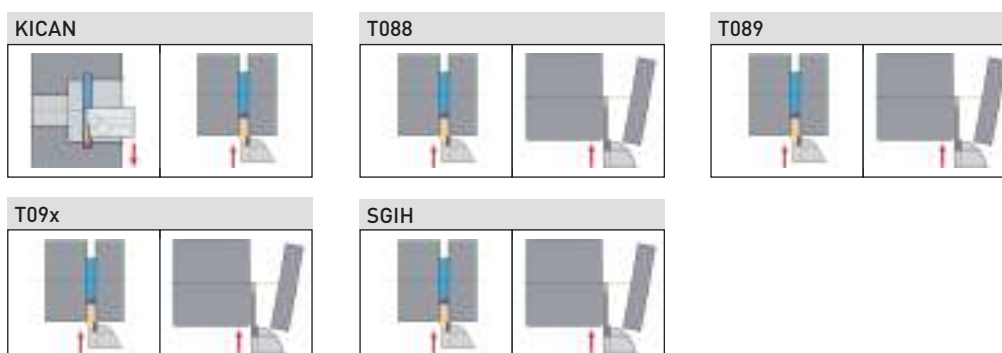
TPOLOGY OF TOOLS FOR INTERNAL TURNING



TPOLOGY OF THREADING TOOLS



TPOLOGY OF TOOLS FOR GROOVING AND PARTING OFF



B007-
INDEXABLE CARBIDE TOOL HOLDER SET

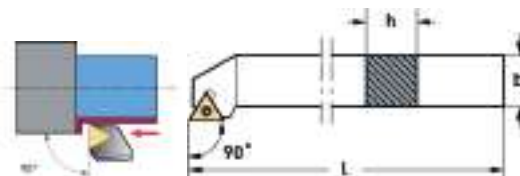
Insert included, useful for having a set that allows you to perform most turning operations with small lathes.



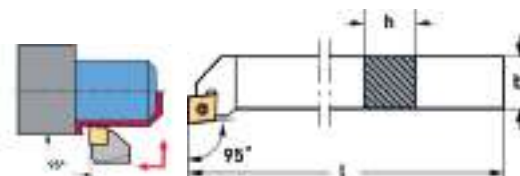
Art.	Ext. shank / Insert	Int. shank / Insert	Length	Screw
B007/10	10 mm / TCMT110204...	8 mm / TCMT090204...	Ext: 63 mm / Int: 100 mm	KV250
B007/12	12 mm / TCMT110204...	10 mm / TCMT110204...	Ext: 88 mm / Int: 125 mm	KV250
B007/16	16 mm / TCMT16T304...	12 mm / TCMT110204...	Ext: 100 mm / Int: 150 mm	Ext: KV400 / Int: KV250
B007/20	20 mm / TCMT16T304...	16 mm / TCMT110204...	Ext: 115 mm / Int: 200 mm	Ext: KV400 / Int: KV250
B007/25	25 mm / TCMT16T304...	20 mm / TCMT110204...	Ext: 150 mm / Int: 250 mm	Ext: KV400 / Int: KV250
B007/32	32 mm / TCMT16T304...	25 mm / TCMT16T304...	Ext: 170 mm / Int: 250 mm	KV400


KITSTGCX
EXTERNAL TOOL HOLDER WITH INSERTS

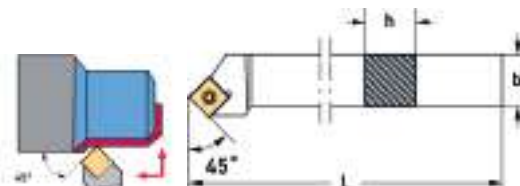

Art.	Ext. tool holder	Bits	b	h	l
KITSTGCR16	STGCR16/11	TCMT110204N x 10 Pcs	16 mm	16 mm	100 mm
KITSTGCR20	STGCR20	TCMT16T304N x 10 Pcs	20 mm	20 mm	125 mm
KITSTGCR25	STGCR25	TCMT16T304N x 10 Pcs	25 mm	25 mm	150 mm


KITSCLCXE
EXTERNAL TOOL HOLDER WITH INSERTS


Art.	Ext. tool holder	Bits	b	h	l
KITSCLCR12E	SCLCR12E	CCMT09T304N x 10 Pcs	12 mm	12 mm	80 mm
KITSCLCR16E	SCLCR16E	CCMT09T304N x 10 Pcs	16 mm	16 mm	100 mm
KITSCLCR20E	SCLCR20E	CCMT120408N x 10 Pcs	20 mm	20 mm	125 mm
KITSCLCR25E	SCLCR25E	CCMT120408N x 10 Pcs	25 mm	25 mm	150 mm


KITSSSCXE
EXTERNAL TOOL HOLDER WITH INSERTS

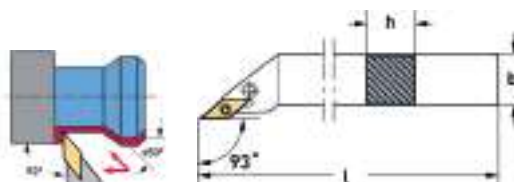

Art.	Ext. tool holder	Bits	b	h	l
KITSSSCR20E	SSSCR20E	SCMT120408N x 10 Pcs	20 mm	20 mm	125 mm
KITSSSCR25E	SSSCR25E	SCMT120408N x 10 Pcs	25 mm	25 mm	150 mm





KITSVJBX

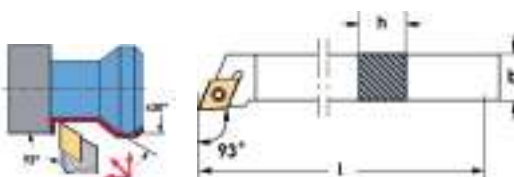
EXTERNAL TOOL HOLDER WITH INSERTS



Art.	Ext. tool holder	Bits	b	h	l
KITSVJBR20	SVJBR20	VBMT160404N x 10 Pcs	20 mm	20 mm	125 mm
KITSVJBR25	SVJBR25	VBMT160404N x 10 Pcs	25 mm	25 mm	150 mm

KITSDJCX

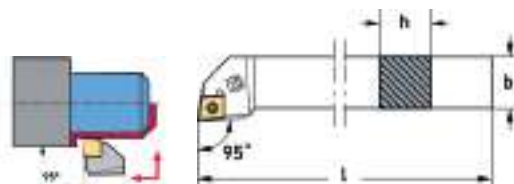
EXTERNAL TOOL HOLDER WITH INSERTS



Art.	Ext. tool holder	Bits	b	h	l
KITSDJCR10	SDJCR10	DCMT070204N x 10 Pcs	10 mm	10 mm	70 mm
KITSDJCR12	SDJCR12	DCMT070204N x 10 Pcs	12 mm	12 mm	80 mm
KITSDJCR16	SDJCR16	DCMT070204N x 10 Pcs	16 mm	16 mm	100 mm
KITSDJCR20	SDJCR20	DCMT11T304N x 10 Pcs	20 mm	20 mm	125 mm
KITSDJCR25	SDJCR25	DCMT11T304N x 10 Pcs	25 mm	25 mm	150 mm

KITPCLNX

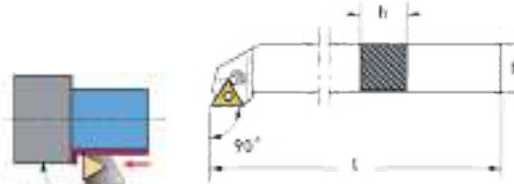
EXTERNAL TOOL HOLDER WITH INSERTS



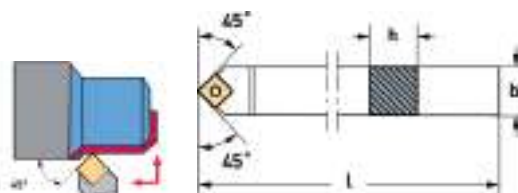
Art.	Ext. tool holder	Bits	b	h	l
KITPCLNR16	PCLNR16	CNMG120404N x 10 Pcs	16 mm	16 mm	100 mm
KITPCLNR20	PCLNR20	CNMG120404N x 10 Pcs	20 mm	20 mm	125 mm
KITPCLNR25	PCLNR25	CNMG120404N x 10 Pcs	25 mm	25 mm	150 mm

KITPTGNX

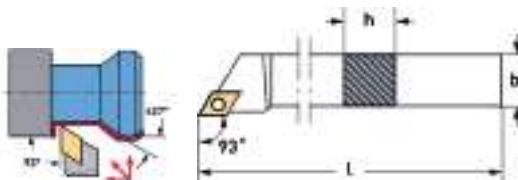
EXTERNAL TOOL HOLDER WITH INSERTS



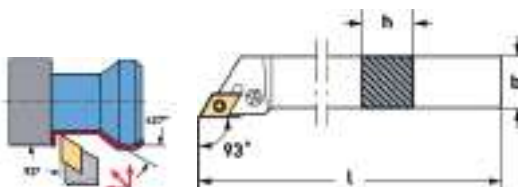
Art.	Ext. tool holder	Bits	b	h	l
KITPTGNR16	PTGNR16	TNMG160404N x 10 Pcs	16 mm	16 mm	100 mm
KITPTGNR20	PTGNR20	TNMG160404N x 10 Pcs	20 mm	20 mm	125 mm
KITPTGNR25	PTGNR25	TNMG160404N x 10 Pcs	25 mm	25 mm	150 mm

KITPSSNX
EXTERNAL TOOL HOLDER WITH INSERTS


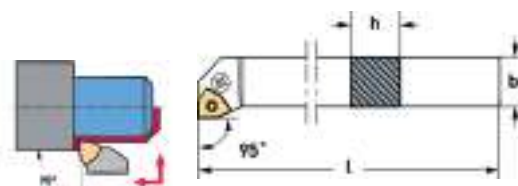
Art.	Ext. tool holder	Bits	b	h	l
KITPSSNR16	PSSNR16	SNMG120404F15 x 10 Pcs	16 mm	16 mm	100 mm
KITPSSNR20	PSSNR20	SNMG120404F15 x 10 Pcs	20 mm	20 mm	125 mm
KITPSSNR25	PSSNR25	SNMG120404F15 x 10 Pcs	25 mm	25 mm	150 mm

KITCKJX
EXTERNAL TOOL HOLDER WITH INSERTS


Art.	Ext. tool holder	Bits	b	h	l
KITCKJ16	CKJNR16	KNUX160405RN x 10 Pcs	20 mm	16 mm	100mm
KITCKJ20	CKJNR20	KNUX160405RN x 10 Pcs	20mm	20mm	125mm
KITCKJ25	CKJNR25	KNUX160405RN x 10 Pcs	25mm	25mm	150mm

KITPDJNX
EXTERNAL TOOL HOLDER WITH INSERTS


Art.	Ext. tool holder	Bits	b	h	l
KITPDJNR20	PDJNR20	DNMG150608N x 10 Pcs	20 mm	20 mm	125 mm
KITPDJNR25	PDJNR25	DNMG150608N x 10 Pcs	25 mm	25 mm	150 mm

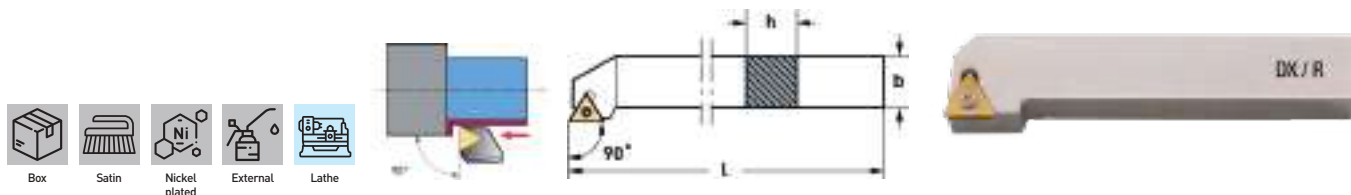
KITPWLNX
EXTERNAL TOOL HOLDER WITH INSERTS


Art.	Ext. tool holder	Bits	b	h	l
KITPWLNR20	PWLNR20	WNMG080408N x 10 Pcs	20 mm	20 mm	125 mm
KITPWLNR25	PWLNR25	WNMG080408N x 10 Pcs	25 mm	25 mm	150 mm



STGCX

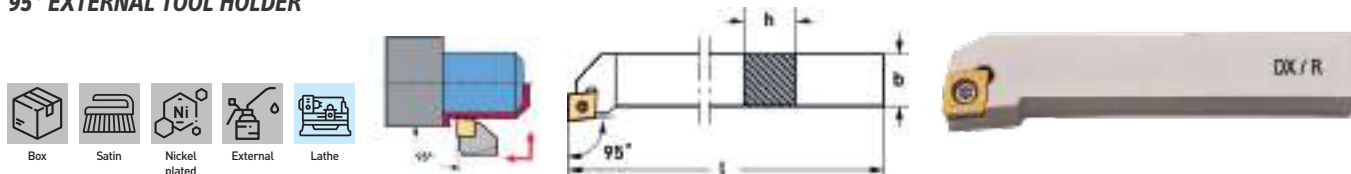
90° EXTERNAL TOOL HOLDER



Art.	Side	b	h	l	Screw	Bushing	Base	Insert (not included)
STGCR16/11	Dx/R	16 mm	16 mm	100 mm	KV250	-----	-----	TCMT1102...
STGCL16/11	Sx/L	16 mm	16 mm	100 mm	KV250	-----	-----	TCMT1102...
STGCR20	Dx/R	20 mm	20 mm	125 mm	KV350	BU3550	BSTG16	TCMT16T3...
STGCL20	Sx/L	20 mm	20 mm	125 mm	KV350	BU3550	BSTG16	TCMT16T3...
STGCR25	Dx/R	25 mm	25 mm	150 mm	KV350	BU3550	BSTG16	TCMT16T3...
STGCL25	Sx/L	25 mm	25 mm	150 mm	KV350	BU3550	BSTG16	TCMT16T3...

SCLCXE

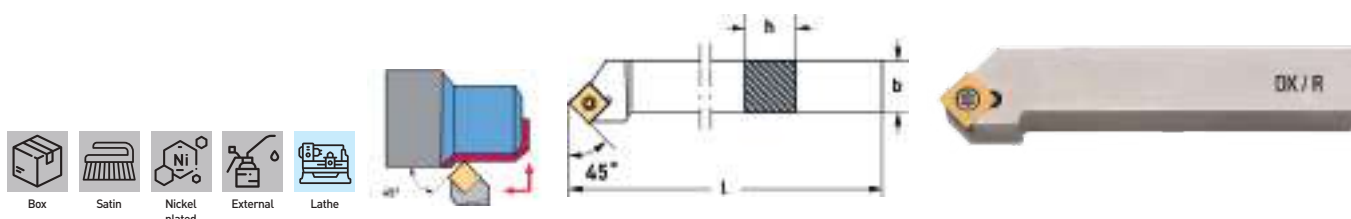
95° EXTERNAL TOOL HOLDER



Art.	Side	b	h	l	Screw	Bushing	Base	Insert (not included)
SCLCR12E	Dx/R	12 mm	12 mm	80 mm	KV350	-----	-----	CCMT09T3...
SCLCL12E	Sx/L	12 mm	12 mm	80 mm	KV350	-----	-----	CCMT09T3...
SCLCR16E	Dx/R	16 mm	16 mm	100 mm	KV350	BU3550	BSCL09	CCMT09T3...
SCLCL16E	Sx/L	16 mm	16 mm	100 mm	KV350	BU3550	BSCL09	CCMT09T3...
SCLCR20E	Dx/R	20 mm	20 mm	125 mm	KV401	BU4560	BSCL12	CCMT1204...
SCLCL20E	Sx/L	20 mm	20 mm	125 mm	KV401	BU4560	BSCL12	CCMT1204...
SCLCR25E	Dx/R	25 mm	25 mm	150 mm	KV401	BU4560	BSCL12	CCMT1204...
SCLCL25E	Sx/L	25 mm	25 mm	150 mm	KV401	BU4560	BSCL12	CCMT1204...

SSSCXE

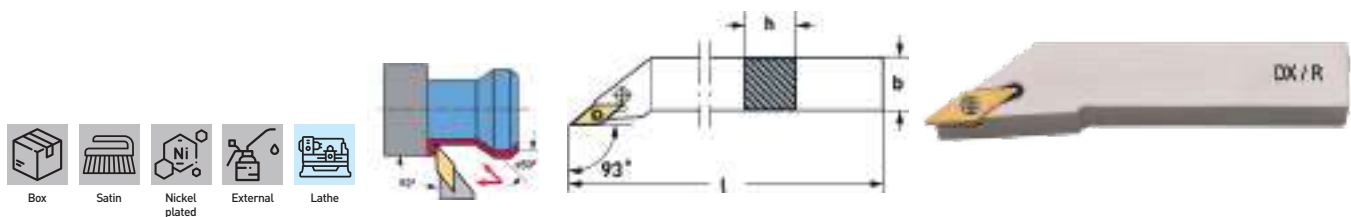
45° EXTERNAL TOOL HOLDER



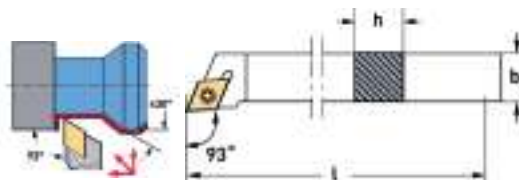
Art.	Side	b	h	l	Screw	Bushing	Base	Insert (not included)
SSSCR20E	Dx/R	20 mm	20 mm	125 mm	KV400	BU4560	BSSS12	SCMT1204...
SSSCL20E	Sx/L	20 mm	20 mm	125 mm	KV400	BU4560	BSSS12	SCMT1204...
SSSCR25E	Dx/R	25 mm	25 mm	150 mm	KV450	BU4560	BSSS12	SCMT1204...
SSSCL25E	Sx/L	25 mm	25 mm	150 mm	KV450	BU4560	BSSS12	SCMT1204...

SVJBX

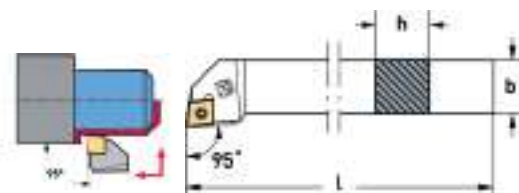
93° EXTERNAL TOOL HOLDER



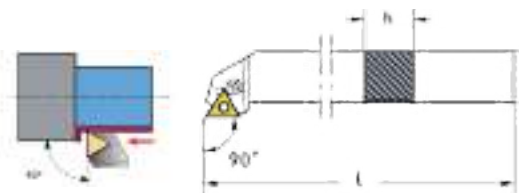
Art.	Side	b	h	l	Screw	Bushing	Base	Insert (not included)
SVJBR20	Dx/R	20 mm	20 mm	125 mm	KV350	BU3550	BSVJ16	VBMT1604...
SVJBL20	Sx/L	20 mm	20 mm	125 mm	KV350	BU3550	BSVJ16	VBMT1604...
SVJBR25	Dx/R	25 mm	25 mm	150 mm	KV350	BU3550	BSVJ16	VBMT1604...
SVJBL25	Sx/L	25 mm	25 mm	150 mm	KV350	BU3550	BSVJ16	VBMT1604...

SDJCX
93° EXTERNAL TOOL HOLDER


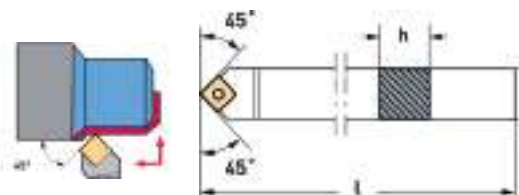
Art.	Side	b	h	l	Screw	Bushing	Base	Insert (not included)
SDJCR10	Dx/R	10 mm	10 mm	70 mm	KV250	-----	-----	DCMT0702...
SDJCR12	Dx/R	12 mm	12 mm	80 mm	KV250	-----	-----	DCMT0702...
SDJCR16	Dx/R	16 mm	16 mm	100 mm	KV250	-----	-----	DCMT0702...
SDJCR20	Dx/R	20 mm	20 mm	125 mm	KV350	BU3550	BSDJ11	DCMT11T3...
SDJCL20	Sx/L	20 mm	20 mm	125 mm	KV350	BU3550	BSDJ11	DCMT11T3...
SDJCR25	Dx/R	25 mm	25 mm	150 mm	KV350	BU3550	BSDJ11	DCMT11T3...
SDJCL25	Sx/L	25 mm	25 mm	150 mm	KV350	BU3550	BSDJ11	DCMT11T3...

PCLNX
95° EXTERNAL TOOL HOLDER


Art.	Side	b	h	l	Spare parts	Insert (not included)
PCLNR16	Dx/R	16 mm	16 mm	100 mm	RICAPCLN	CNMG1204...
PCLNR20	Dx/R	20 mm	20 mm	125 mm	RICAPCLN	CNMG1204...
PCLNL20	Sx/L	20 mm	20 mm	125 mm	RICAPCLN	CNMG1204...
PCLNR25	Dx/R	25 mm	25 mm	150 mm	RICAPCLN	CNMG1204...
PCLNL25	Sx/L	25 mm	25 mm	150 mm	RICAPCLN	CNMG1204...

PTGNX
90° EXTERNAL TOOL HOLDER


Art.	Side	b	h	l	Spare parts	Insert (not included)
PTGNR16	Dx/R	16 mm	16 mm	100 mm	RICAPTGN	TNMG1604...
PTGNR20	Dx/R	20 mm	20 mm	125 mm	RICAPTGN	TNMG1604...
PTGNL20	Sx/L	20 mm	20 mm	125 mm	RICAPTGN	TNMG1604...
PTGNR25	Dx/R	25 mm	25 mm	150 mm	RICAPTGN	TNMG1604...
PTGNL25	Sx/L	25 mm	25 mm	150 mm	RICAPTGN	TNMG1604...

PSSNX
45° EXTERNAL TOOL HOLDER


Art.	Side	b	h	l	Spare parts	Insert (not included)
PSSNR16	Dx/R	16 mm	16 mm	100 mm	RICAPSSN	SNMG1204...
PSSNR20	Dx/R	20 mm	20 mm	125 mm	RICAPSSN	SNMG1204...
PSSNL20	Sx/L	20 mm	20 mm	125 mm	RICAPSSN	SNMG1204...
PSSNR25	Dx/R	25 mm	25 mm	150 mm	RICAPSSN	SNMG1204...
PSSNL25	Sx/L	25 mm	25 mm	150 mm	RICAPSSN	SNMG1204...



CKJNX

93° EXTERNAL TOOL HOLDER

Box

Satin

Nickel plated

External

Lathe

Art.	Side	b	h	l	Bracket	Screw	Base	Insert (not included)
CKJNR16	Dx/R	20 mm	16 mm	100 mm	STAFCKJNR	VITECKJN	BASECKJNR	KNUX160405R...
CKJNR20	Dx/R	20 mm	20 mm	125 mm	STAFCKJNR	VITECKJN	BASECKJNR	KNUX160405R...
CKJNL20	Sx/L	20 mm	20 mm	125 mm	STAFCKJNL	VITECKJN	BASECKJNL	KNUX160405L...
CKJNR25	Dx/R	25 mm	25 mm	150 mm	STAFCKJNR	VITECKJN	BASECKJNR	KNUX160405R...
CKJNL25	Sx/L	25 mm	25 mm	150 mm	STAFCKJNL	VITECKJN	BASECKJNL	KNUX160405L...

PDJNX

93° EXTERNAL TOOL HOLDER

Art.	Side	b	l	h	Spare parts	Insert (not included)
PDJNR20	Dx/R	20 mm	20 mm	125 mm	PDJNRKIT	DNMG1506...
PDJNR25	Dx/R	25 mm	25 mm	150 mm	PDJNRKIT	DNMG1506...
PDJNL25	Sx/L	25 mm	25 mm	150 mm	PDJNRKIT	DNMG1506...

PWLNX

95° EXTERNAL TOOL HOLDER



Box



Satin



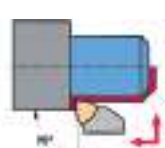
Nickel plated



External



Lathe







Art.	Side	b	h	l	Spare parts	Insert (not included)
PWLN20	Dx/R	20 mm	20 mm	125 mm	PWLNKIT	WNMG0804...
PWLN25	Dx/R	25 mm	25 mm	150 mm	PWLNKIT	WNMG0804...
PWNL25	Sx/L	25 mm	25 mm	150 mm	PWLNKIT	WNMG0804...

G007-

KNURLING TOOL WITH 3 PAIRS OF KNURLING WHEELS, WITH DIAMOND PATTERN

Diamond-shaped 45° for the execution of knurling for deformation in turning. Equipped with 2 spare wheels 0.8mm pitch.



Box



Burnished



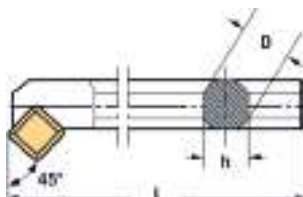
External



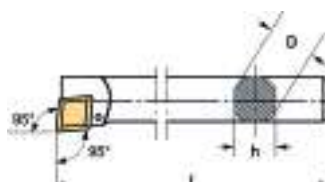
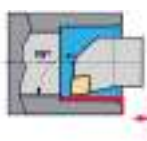
Lathe

Art.	Tool height	Pitch
G007/16	16 mm	0,8 - 1,2 - 1,8 mm
G007/20	20 mm	0,8 - 1,2 - 1,8 mm

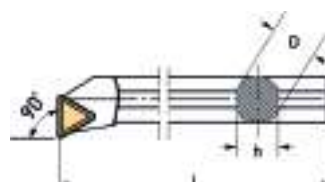
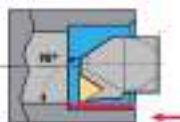


KITSSCRX
INTERNAL TOOL HOLDER WITH INSERTS


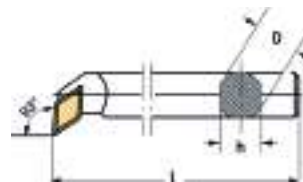
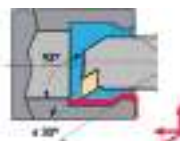
Art.	Int. tool holder	Bits	D	h	l
KITSSCR16	SSSCR16	SCMT09T30420A x 10 Pcs	16 mm	15 mm	200 mm
KITSSCR20	SSSCR20	SCMT09T30420A x 10 Pcs	20 mm	18 mm	250 mm
KITSSCR25	SSSCR25	SCMT09T30420A x 10 Pcs	25 mm	22,5 mm	300 mm

KITSCLCRX
INTERNAL TOOL HOLDER WITH INSERTS


Art.	Int. tool holder	Bits	D	h	l
KITSCLCR10	SCLCR10	CCMT060204N x 10 Pcs	10 mm	9 mm	140 mm
KITSCLCR12	SCLCR12	CCMT060204N x 10 Pcs	12 mm	11 mm	160 mm
KITSCLCR16	SCLCR16	CCMT09T304N x 10 Pcs	16 mm	14,5 mm	180 mm
KITSCLCR20	SCLCR20	CCMT09T304N x 10 Pcs	20 mm	18 mm	200 mm
KITSCLCR25	SCLCR25	CCMT09T304N x 10 Pcs	25 mm	22,5 mm	250 mm
KITSCLCR32	SCLCR32	CCMT09T304N x 10 Pcs	32 mm	22,5 mm	250 mm

KITSTFCRX
INTERNAL TOOL HOLDER WITH INSERTS


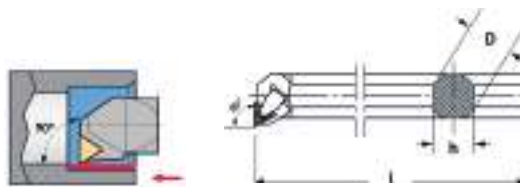
Art.	Int. tool holder	Bits	D	h	l
KITSTFCR10	STFCR10	TCMT110204N x 10 Pcs	10 mm	9 mm	150 mm
KITSTFCR12	STFCR12	TCMT110204N x 10 Pcs	12 mm	11 mm	150 mm
KITSTFCR16	STFCR16	TCMT110204N x 10 Pcs	16 mm	15,5 mm	200 mm
KITSTFCR20	STFCR20	CCMT09T304N x 10 Pcs	20 mm	18,5 mm	250 mm
KITSTFCR25	STFCR25	CCMT09T304N x 10 Pcs	25 mm	22,5 mm	250 mm

KITSDUCRX
INTERNAL TOOL HOLDER WITH INSERTS


Art.	Int. tool holder	Bits	D	h	l
KITSDUCR12	SDUCR12	DCMT070204N x 10 Pcs	12 mm	11 mm	160 mm
KITSDUCR16	SDUCR16	DCMT070204N x 10 Pcs	16 mm	15 mm	180 mm
KITSDUCR20	SDUCR20	DCMT11T304N x 10 Pcs	20 mm	18 mm	200 mm
KITSDUCR25	SDUCR25	DCMT11T304N x 10 Pcs	25 mm	23 mm	250 mm

KITMTFNRX

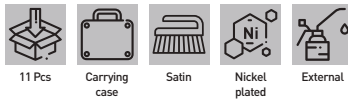
INTERNAL TOOL HOLDER WITH INSERTS



Art.	Int. tool holder	Bits	D	h	l
KITMTFNR16	MTFNR16	TNMG160408N x 10 Pcs	16 mm	15 mm	210 mm
KITMTFNR20	MTFNR20	TNMG160408N x 10 Pcs	20 mm	18 mm	255 mm

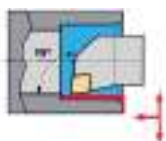
KITCKUNR25

INTERNAL TOOL HOLDER WITH INSERTS

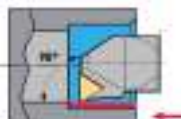


Art.	Int. tool holder	Bits	D	h	l
KITCKUNR25	CKUNR25	KNUX160405RN x 10 Pcs	25 mm	23 mm	300 mm

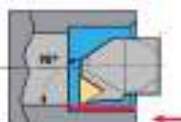


KISCLCR
SOLID BORING BAR SET 95°


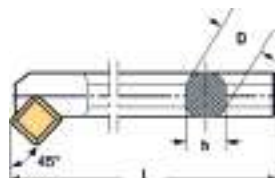
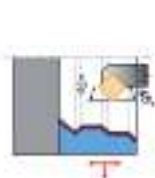
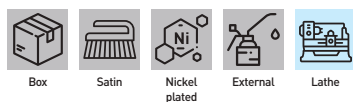
Int. tool holder	SCLCR08; SCLCR10; SCLCR12; SCLCR16
Bits	CCMT060204N x 10 Pcs
Torx key	T7 x 2 Pcs
Screw	T7 x 2,5 mm x 4 Pcs

KISTCMT
SOLID BORING BAR SET 90°


Int. tool holder	STFCR08; STFCR10; STFCR12; STFCR16; STFCR20
Bits	TCMT110204N x 10 Pcs
Torx key	T8 x 2 Pcs
Screw	T8 x 2,5 mm x 2 Pcs

KISTFCR
SOLID BORING BAR SET 90°


Int. tool holder	STFCR08; STFCR10; STFCR12; STFCR16; STFCR20
Insert (not included)	TCMT110204...
Torx key	T8 x 2 Pcs
Screw	T8 x 2,5 mm x 5 Pcs

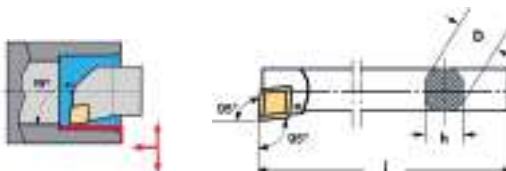
SSSCRX
45° INTERNAL TOOL HOLDER


Art.	D	h	l	Screw	Insert (not included)
SSSCR16	16 mm	15 mm	200 mm	KV400	SCMT09T3...
SSSCR20	20 mm	18 mm	250 mm	KV400	SCMT09T3...
SSSCR25	25 mm	22.5 mm	300 mm	KV400	SCMT09T3...



SCLCX

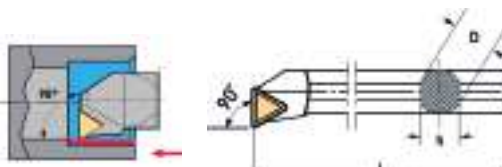
95° SOLID BORING BAR



Art.	Side	D	h	l	Screw	Insert (not included)
SCLCR08	Dx/R	8 mm	7 mm	125 mm	KV250	CCMT0602...
SCLCL08	Sx/L	8 mm	7 mm	125 mm	KV250	CCMT0602...
SCLCR10	Dx/R	10 mm	9 mm	140 mm	KV250	CCMT0602...
SCLCL10	Sx/L	10 mm	9 mm	140 mm	KV250	CCMT0602...
SCLCR12	Dx/R	12 mm	11 mm	160 mm	KV250	CCMT0602...
SCLCL12	Sx/L	12 mm	11 mm	160 mm	KV250	CCMT0602...
SCLCR16	Dx/R	16 mm	14,5 mm	180 mm	KV400	CCMT09T3...
SCLCL16	Sx/L	16 mm	14,5 mm	180 mm	KV400	CCMT09T3...
SCLCR20	Dx/R	20 mm	18 mm	200 mm	KV400	CCMT09T3...
SCLCL20	Sx/L	20 mm	18 mm	200 mm	KV400	CCMT09T3...
SCLCR25	Dx/R	25 mm	22,5 mm	250 mm	KV400	CCMT09T3...
SCLCL25	Sx/L	25 mm	22,5 mm	250 mm	KV400	CCMT09T3...
SCLCR32	Dx/R	32 mm	29 mm	300 mm	KV400	CCMT09T3...
SCLCL32	Sx/L	32 mm	29 mm	300 mm	KV400	CCMT09T3...

STFCX

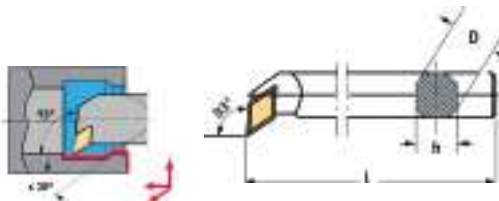
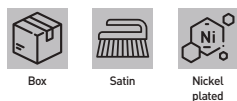
90° SOLID BORING BAR



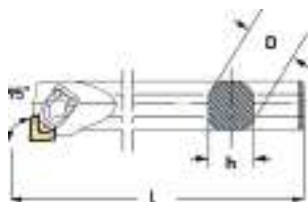
Art.	Side	D	h	l	Screw	Insert (not included)
STFCR08	Dx/R	8 mm	7 mm	125 mm	KV250	TCMT1102...
STFCL08	Sx/L	8 mm	7 mm	125 mm	KV250	TCMT1102...
STFCR10	Dx/R	10 mm	9 mm	150 mm	KV250	TCMT1102...
STFCL10	Sx/L	10 mm	9 mm	150 mm	KV250	TCMT1102...
STFCR12	Dx/R	12 mm	11 mm	150 mm	KV250	TCMT1102...
STFCL12	Sx/L	12 mm	11 mm	150 mm	KV250	TCMT1102...
STFCR16	Dx/R	16 mm	14,5 mm	200 mm	KV250	TCMT1102...
STFCL16	Sx/L	16 mm	14,5 mm	200 mm	KV250	TCMT1102...
STFCR20	Dx/R	20 mm	18,5 mm	250 mm	KV250	TCMT1102...
STFCL20	Sx/L	20 mm	18,5 mm	200 mm	KV250	TCMT1102...
STFCR25	Dx/R	25 mm	22,5 mm	250 mm	KV350	TCMT16T3...
STFCL25	Sx/L	25 mm	22,5 mm	250 mm	KV350	TCMT16T3...
STFCR32	Dx/R	32 mm	29 mm	300 mm	KV350	TCMT16T3...
STFCL32	Sx/L	32 mm	29 mm	300 mm	KV350	TCMT16T3...

SDUCX

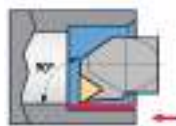
93° SOLID BORING BAR



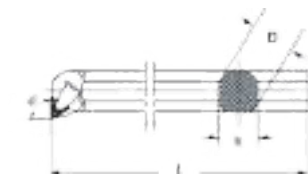
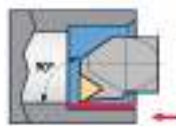
Art.	Side	D	h	l	Screw	Insert (not included)
SDUCR10	Dx/R	10 mm	9 mm	140 mm	KV250	DCMT0702...
SDUCL10	Sx/L	10 mm	9 mm	140 mm	KV250	DCMT0702...
SDUCR12	Dx/R	12 mm	11 mm	160 mm	KV250	DCMT0702...
SDUCL12	Sx/L	12 mm	11 mm	160 mm	KV250	DCMT0702...
SDUCR16	Dx/R	16 mm	15 mm	180 mm	KV250	DCMT0702...
SDUCL16	Sx/L	16 mm	15 mm	180 mm	KV250	DCMT0702...
SDUCR20	Dx/R	20 mm	18 mm	200 mm	KV350	DCMT11T3...
SDUCL20	Sx/L	20 mm	18 mm	200 mm	KV350	DCMT11T3...
SDUCR25	Dx/R	25 mm	23 mm	250 mm	KV350	DCMT11T3...
SDUCL25	Sx/L	25 mm	23 mm	250 mm	KV350	DCMT11T3...
SDUCR32	Dx/R	32 mm	30 mm	300 mm	KV350	DCMT11T3...
SDUCL32	Sx/L	32 mm	30 mm	300 mm	KV350	DCMT11T3...

MCLNX
95° SOLID BORING BAR


Art.	Side	D	h	l	Bracket	Base	Insert (not included)
MCLNR16	Dx/R	16 mm	15 mm	210 mm	CTMTMC16/20	-----	CNMG1204...
MCLNL16	Sx/L	16 mm	15 mm	210 mm	CTMTMC16/20	-----	CNMG1204...
MCLNR20	Dx/R	20 mm	18 mm	255 mm	CTMTMC16/20	-----	CNMG1204...
MCLNL20	Sx/L	20 mm	18 mm	255 mm	CTMTMC16/20	-----	CNMG1204...
MCLNR25	Dx/R	25 mm	23 mm	300 mm	CTMTMC25/32	MCLNBASE25/32	CNMG1204...
MCLNL25	Sx/L	25 mm	23 mm	300 mm	CTMTMC25/32	MCLNBASE25/32	CNMG1204...
MCLNR32	Dx/R	32 mm	30 mm	355 mm	CTMTMC25/32	MCLNBASE25/32	CNMG1204...
MCLNL32	Sx/L	32 mm	30 mm	355 mm	CTMTMC25/32	MCLNBASE25/32	CNMG1204...

MTFNX
90° SOLID BORING BAR


Art.	Side	D	h	l	Bracket	Base	Insert (not included)
MTFNR16	Dx/R	16 mm	15 mm	210 mm	CTMTMC16/20	-----	TNMG1604...
MTFNL16	Sx/L	16 mm	15 mm	210 mm	CTMTMC16/20	-----	TNMG1604...
MTFNR20	Dx/R	20 mm	18 mm	255 mm	CTMTMC16/20	-----	TNMG1604...
MTFNL20	Sx/L	20 mm	18 mm	255 mm	CTMTMC16/20	-----	TNMG1604...
MTFNR25	Dx/R	25 mm	23 mm	300 mm	CTMTMC25/32	MTFNBASE25/32	TNMG1604...
MTFNL25	Sx/L	25 mm	23 mm	300 mm	CTMTMC25/32	MTFNBASE25/32	TNMG1604...
MTFNR32	Dx/R	32 mm	30 mm	355 mm	CTMTMC25/32	MTFNBASE25/32	TNMG1604...
MTFNL32	Sx/L	32 mm	30 mm	355 mm	CTMTMC25/32	MTFNBASE25/32	TNMG1604...

CTFPX
90° SOLID BORING BAR


Art.	Side	D	h	l	Bracket	Base	Insert (not included)
CTFPR12	Dx/R	12 mm	11 mm	150 mm	CTFP10/12	-----	TPMR1103...
CTFPL12	Sx/L	12 mm	11 mm	150 mm	CTFP10/12	-----	TPMR1103...
CTFPR16	Dx/R	16 mm	15 mm	210 mm	CTMTMC16/20	-----	TPMR1103...
CTFPL16	Sx/L	16 mm	15 mm	210 mm	CTMTMC16/20	-----	TPMR1103...
CTFPR20	Dx/R	20 mm	18 mm	255 mm	CTMTMC16/20	-----	TPMR1603...
CTFPL20	Sx/L	20 mm	18 mm	255 mm	CTMTMC16/20	-----	TPMR1603...
CTFPR25	Dx/R	25 mm	23 mm	300 mm	CTMTMC25/32	CTFPBASE25/32	TPMR1603...
CTFPL25	Sx/L	25 mm	23 mm	300 mm	CTMTMC25/32	CTFPBASE25/32	TPMR1603...
CTFPR32	Dx/R	32 mm	30 mm	355 mm	CTMTMC25/32	CTFPBASE25/32	TPMR1603...
CTFPL32	Sx/L	32 mm	30 mm	355 mm	CTMTMC25/32	CTFPBASE25/32	TPMR1603...

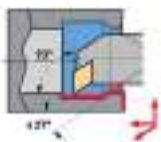
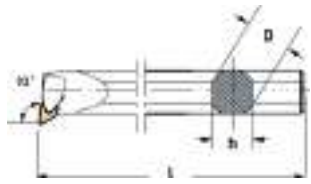


CKUNR

93° SOLID BORING BAR






Art.	Side	D	h	l	Bracket	Screw	Base	Insert (not included)
CKUNR25	Dx/R	25 mm	23 mm	300 mm	STAFCKJNR	VITECKJN	BASECKJNR	KNUX1604...
CKUNR32	Dx/R	32 mm	30 mm	350 mm	STAFCKJNR	VITECKJN	BASECKJNR	KNUX1604...
CKUNR40	Dx/R	40 mm	37 mm	400 mm	STAFCKJNR	VITECKJN	BASECKJNR	KNUX1604...

KISER

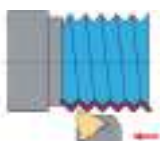
EXTERNAL THREAD TOOL HOLDER

Consisting of external threading tool (1 Pc), M3.5 X 12mm spare screw (1 Pc), 2.5mm hex wrench (1 Pc), T15 torx wrench (1 Pc) and assorted inserts: AG55 - AG60; - ISO 0.8 - 1.00 - 1.25 - 1.50 - 1.75 - 2.00 - 2.50 - 3.00mm (1 Pc each).










Art.	Ext. tool holder	Insert	Torx key	Screw	b	l	h
KISER	SER20	16ER...	T15	M3,5 x 12 mm	20 mm	20 mm	125 mm
KISER25	SER25	16ER...	T15	M3,5 x 12 mm	25 mm	25 mm	150 mm

KISNR

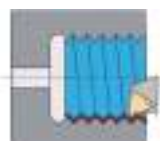
INTERNAL THREAD TOOL HOLDER

Consisting of internal threading tool (1 Pc), spare M3.5 X 12mm screw (1 Pc), 2.5mm hex wrench (1 Pc), T15 torx wrench (1 Pc) and assorted inserts: AG55 - AG60; - ISO 0.8 - 1.00 - 1.25 - 1.50 - 1.75 - 2.00 - 2.50 - 3.00mm (1 Pc each).










Art.	Int. tool holder	Insert	Torx key	Screw	D	h	l
KISNR	SNR20	16IR...	T15	M3.5 x 12 mm	20 mm	18 mm	200 mm
KISNR25	SNR25	16IR...	T15	M3.5 x 12 mm	25 mm	23 mm	200 mm

KICAN

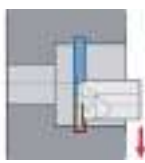
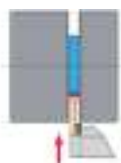
INTERNAL AND EXTERNAL GROOVING TOOL HOLDER SET

Consisting of the tool for external grooves: 20 x 20 mm (1 Pc), the tool for internal grooves: ø 20mm (1 Pc), spare screw M3.5 x 8mm (2 Pcs), torx wrench: T15 (1 Pc) and inserts for 16mm groove TIN coated: 165110134 (2 Pcs), 165130134 (2 Pcs), 165160134 (2 Pcs), 165185134 (1 Pc), 165215134 (1 Pc), 165265134 (1 Pc), 165315134 (1 Pc).








SERX
EXTERNAL THREADING TOOL WITH SCREW CLAMPING

Art.	b	h	l	Base	Bushing	Screw	Insert (not included)
SER16	16 mm	16 mm	100 mm	-----	-----	KV350	16ER..
SER20	20 mm	20 mm	125 mm	BSER16	BU3550	KV350	16ER...
SER25	25 mm	25 mm	150 mm	BSER16	BU3550	KV350	16ER...

SNRX
INTERNAL THREADING TOOL WITH SCREW CLAMPING

Art.	D	h	l	Base	Screw	Bushing	Insert (not included)
SNR12	12 mm	11 mm	150 mm	-----	KV250	-----	11IR...
SNR16	16 mm	15 mm	170 mm	-----	KV350	-----	16IR...
SNR20	20 mm	18 mm	200 mm	BSNR16	KV350	BU3550	16IR...
SNR25	25 mm	23 mm	300 mm	BSNR16	KV350	BU3550	16IR...

KITT09X
CUTTING TOOL HOLDER WITH INSERTS

Art.	Contents	S	h	l	Bits
KITT090	1 Pc SGIH32/3 - 1 Pc SGIH32/4 1 Pc SGIH32/5 - 1 Pc SGTBK25	3 - 4 - 5 mm	31,75 mm	150/160 mm	GCMX3N134 - GCMX4N134 GCMX5N134
KITT091	1 Pc SGIH26/2 - 1 Pc SGIH26/3 1 Pcs SGTBK20	2 - 3 mm	25,75 mm	109 mm	GCMX3N134 GCMX4N134

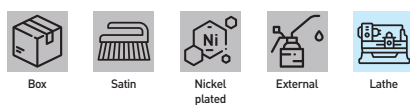
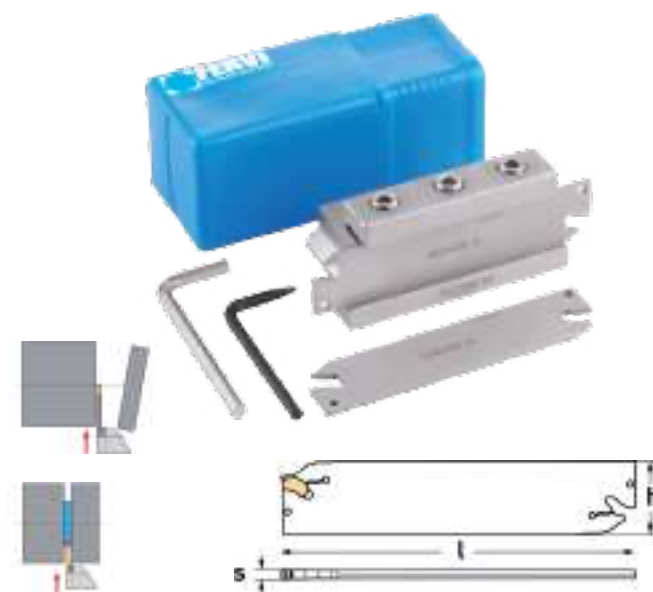
T09X
TOOL CUTTING SET

Art.	Set composition	S	h	l	Insert (not included)
T090	1 Pc SGIH32/3 - 1 Pc SGIH32/4 1 Pc SGIH32/5 - 1 Pc SGTBK25	3 - 4 - 5 mm	31,75 mm	150/160 mm	GCMX3N - GCMX4N GCMX5N
T091	1 Pc SGIH26/2 - 1 Pc SGIH26/3 1 Pc SGTBK20	2 - 3 mm	25,75 mm	109 mm	GCMX2N - GCMX3N



T088

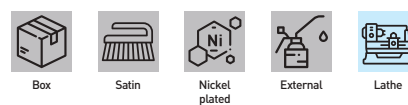
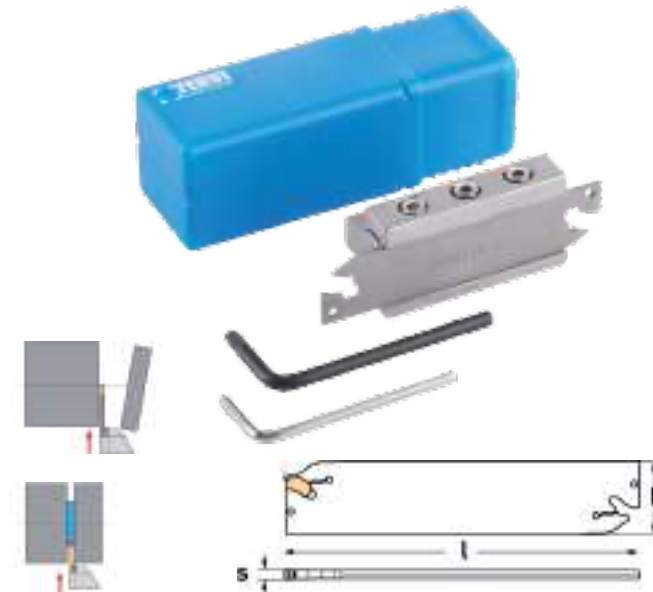
TOOL CUTTING SET



Set composition	1 Pcs SGTBK16 - 1 Pcs SGIH26/2 - 1 Pcs SGIH26/3
S	2 - 3 mm
h	25.75 mm
l	109 mm
Insert (not included)	GCMX2N - GCMX3N

T089

TOOL CUTTING SET



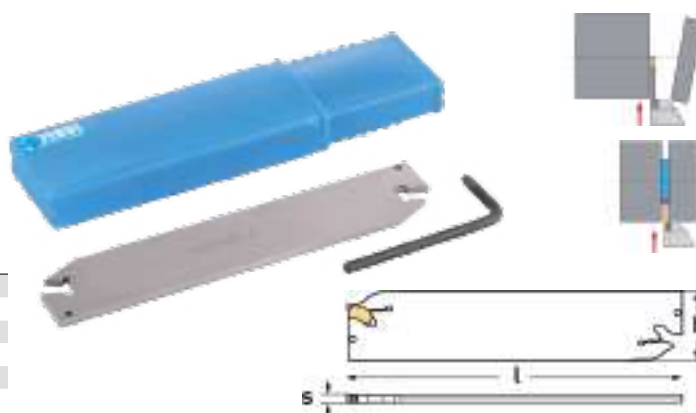
Set composition	1 Pcs SGIH19/2 - 1 Pcs SGTBK10
S	2 mm
h	19.5 mm
l	85 mm
Insert (not included)	GCMX2N

SGIH

TOOL FOR EXTERNAL CUTTING - BLADE



Art.	S	h	l	Insert (not included)
SGIH19/2	2 mm	19.5 mm	85 mm	GCMX2N...
SGIH26/2	2 mm	25.75 mm	109 mm	GCMX2N...
SGIH26/3	3 mm	25.75 mm	109 mm	GCMX3N...
SGIH32/3	3 mm	31.75 mm	150 mm	GCMX3N...
SGIH32/4	4 mm	31.75 mm	150 mm	GCMX4N...
SGIH32/5	5 mm	31.75 mm	150 mm	GCMX5N...



SGTBK

TOOL FOR EXTERNAL CUTTING - BLADE TOOL HOLDER



Art.	Tool height	Dimensions	Blade
SGTBK10	10 x 10 mm	56 x 25 x 30 mm	19 mm
SGTBK16	16 x 16 mm	87 x 38 x 33 mm	26 mm
SGTBK20	20 x 20 mm	100 x 38 x 45h mm	26 mm
SGTBK25	25 x 25 mm	110 x 49 x 48h mm	32 mm



MAIN TYPES OF MILLING

Shoulder milling


Milling that generates 2 faces at the same time obtaining a 90° shoulder

Flattening


Milling to make a rough surface flat

High feed milling


Face milling with tools that allow high feed rates (up to 4mm/tooth)

Copying


Combination of discordant and concordant milling, requires many unfavourable engagements and disengagements in cutting.

Quarry milling


Milling for the execution of a quarry or a seat

Chamfering


Milling for chamfering holes or contours.

MAIN MILLING FORMULAS

- $V_t = (D_{cap} \times n \times \pi) \div 1000$
- $n = (V_t \times 1000) \div (\pi \times D_{cap})$
- $F_z = V_f \div (n \times Z_c)$
- $V_f = F_z \times n \times Z_c$

Key

D_{cap} : Cutting diameter at effective cutting depth d_{oc} (mm)

F_z : Feed per tooth (mm/tooth)

Z_c : Number of effective milling machine teeth

V_f : Table feed (mm/min)

F_n : Feed per revolution (mm/tooth)

d_{oc} : Cutting depth (mm)

V_c : Cutting speed (m/min)

n : Spindle rotation speed (mm/min)

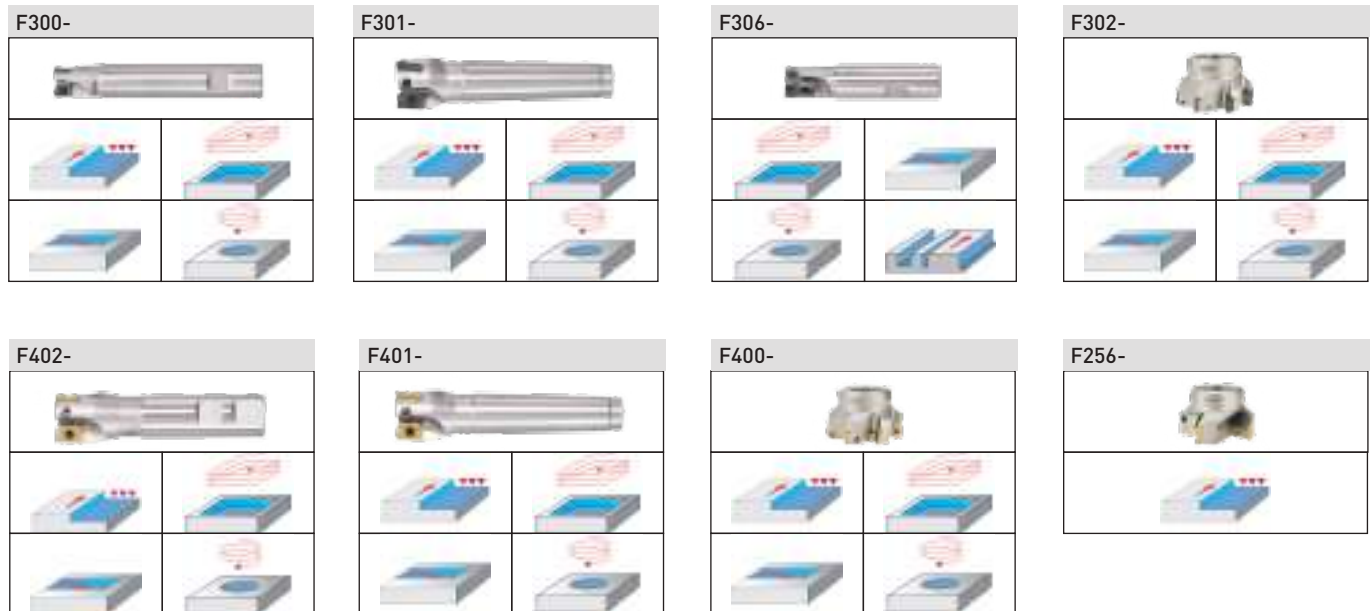
π : its value is 3.14



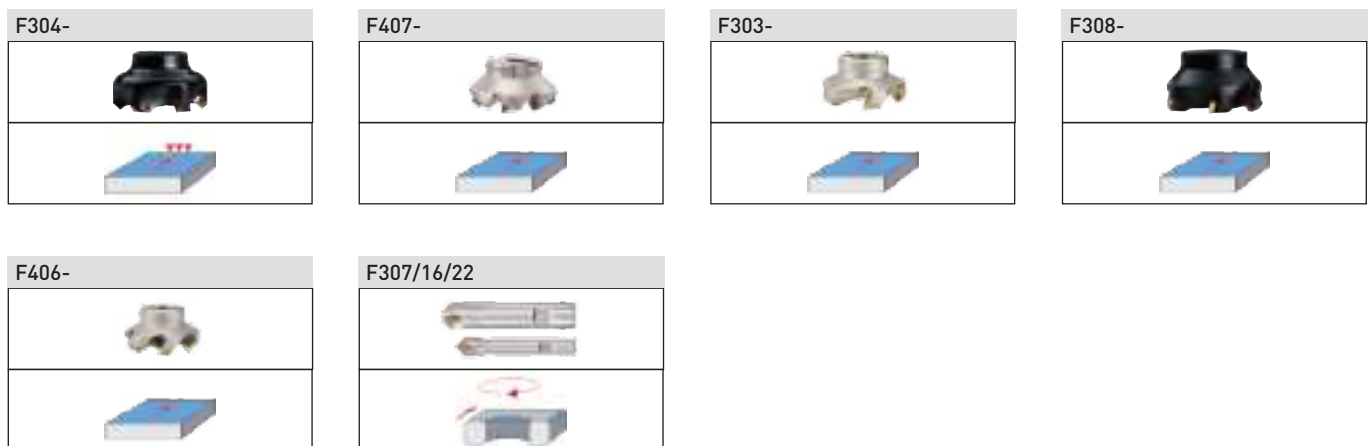


FERVI MILLING TOOLS TYPOLOGY

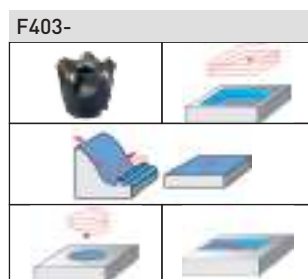
90° MILLING CUTTER



45° MILLING MACHINE



MILLING MACHINE FOR CONTOURING AND FLATTENING ROUND INSERTS

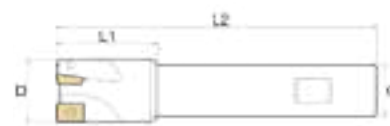


F300-
STRAIGHT SHANK FACE MILLING CUTTER

With cylindrical shank.



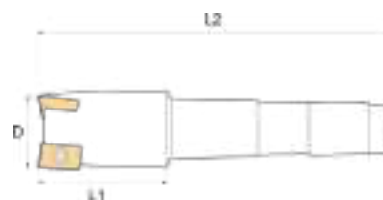
Art.	D	d	Z	L1	L2	Screw	Insert (not included)
F300/12	12 mm	12 mm	1	27 mm	120 mm	KV250	APKT1003...
F300/14	14 mm	12 mm	1	27 mm	120 mm	KV250	APKT1003...
F300/16	16 mm	16 mm	2	27 mm	120 mm	KV250	APKT1003...
F300/18	18 mm	16 mm	2	27 mm	120 mm	KV250	APKT1003...
F300/20	20 mm	20 mm	3	27 mm	120 mm	KV250	APKT1003...
F300/22	22 mm	20 mm	3	27 mm	120 mm	KV250	APKT1003...
F300/25	25 mm	20 mm	4	27 mm	120 mm	KV250	APKT1003...
F300/25/16	25 mm	20 mm	2	44 mm	120 mm	KV400	APKT1604...
F300/25/16L	25 mm	20 mm	2	44 mm	200 mm	KV400	APKT1604...
F300/32/16	32 mm	25 mm	3	50 mm	120 mm	KV400	APKT1604...
F300/32/16L	32 mm	32 mm	3	55 mm	200 mm	KV400	APKT1604...


F301-
STRAIGHT SHANK FACE MILLING CUTTER

With morse taper.



Art.	D	MT	Z	L1	L2	Screw	Insert (not included)
F301/25	25 mm	3	2	40 mm	125 mm	KV400	APKT1604...
F301/32	32 mm	3	3	40 mm	125 mm	KV400	APKT1604...
F301/40	40 mm	3	4	35 mm	125 mm	KV400	APKT1604...
F301/32CM4	32 mm	4	3	45 mm	150 mm	KV400	APKT1604...
F301/40CM4	40 mm	4	4	40 mm	150 mm	KV400	APKT1604...


F306-
FACE MILLING CUTTER

With front perforating cut for making slots, with cylindrical attachment. It allows you to make slots from solid.



Art.	D	d	Z	L1	L2	Screw	Insert (not included)
F306/20	20 mm	20 mm	3	18 mm	90 mm	KV250	APKT1003...
F306/25	25 mm	25 mm	3	18 mm	100 mm	KV250	APKT1003...


F302-
FACE MILLING CUTTER

With sleeve connection.



Art.	D	L	d	Z	Screw	Insert (not included)
F302/040	40 mm	40 mm	16 mm	4	KV400	APKT1604...
F302/050	50 mm	45 mm	22 mm	4	KV400	APKT1604...
F302/063	63 mm	50 mm	22 mm	6	KV400	APKT1604...
F302/080	80 mm	50 mm	27 mm	7	KV400	APKT1604...
F302/100	100 mm	50 mm	32 mm	8	KV400	APKT1604...





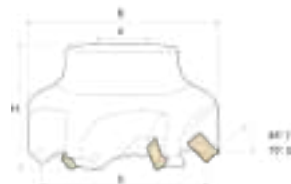
F304-

FACE MILLING CUTTER FOR BLIND SIDE'S INSERT

With sleeve connection.



Art.	D	H	B	d	Z	Screw	Insert (not included)
F304/063	63 mm	42 mm	71,2 mm	22 mm	6	KV250	APKT1003...
F304/080	80 mm	47 mm	84 mm	27 mm	5	KV400	APKT1604...



F402-

FACE MILLING CUTTER

With cylindrical shank.



Art.	D	d	Z	L1	L2	Screw	Insert (not included)
F402/25	25 mm	20 mm	2	35 mm	110 mm	KV400	ADLT1503...
F402/32	32 mm	25 mm	3	35 mm	120 mm	KV400	ADLT1503...
F402/25L	25 mm	25 mm	2	35 mm	200 mm	KV400	ADLT1503...
F402/32L	32 mm	25 mm	3	35 mm	200 mm	KV400	ADLT1503...



F401-

FACE MILLING CUTTER

With morse taper.



Art.	D	MT	Z	L1	L2	Screw	Insert (not included)
F401/25	25 mm	3	2	44 mm	130 mm	KV400	ADLT1503...
F401/32	32 mm	3	3	44 mm	130 mm	KV400	ADLT1503...
F401/40	40 mm	3	4	44 mm	130 mm	KV400	ADLT1503...
F401/40CM4	40 mm	4	4	44 mm	153 mm	KV400	ADLT1503...



F400-

FACE MILLING CUTTER

With sleeve connection, recommended for use on machines with medium power.



Art.	D	H	a	d	Z	Screw	Insert (not included)
F400/040	40 mm	40 mm	8,4 mm	16 mm	4	KV400	ADLT1503...
F400/050	50 mm	40 mm	10,4 mm	22 mm	5	KV400	ADLT1503...
F400/063	63 mm	40 mm	10,4 mm	22 mm	6	KV400	ADLT1503...
F400/080	80 mm	50 mm	12,4 mm	27 mm	7	KV400	ADLT1503...
F400/100	100 mm	50 mm	14,4 mm	32 mm	8	KV400	ADLT1503...



F256-
FACE MILLING

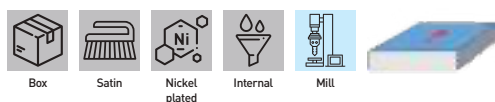
With sleeve connection, recommended for use on machines with medium power.



Art.	D	H	a	d	Z	Screw	Insert (not included)
F256/040	40 mm	40 mm	16 mm	16 mm	3	F256/644	TPKN1603...
F256/050	50 mm	40 mm	16 mm	22 mm	3	F256/644	TPKN1603...
F256/063	63 mm	40 mm	16 mm	22 mm	3	F256/644	TPKN1603...
F256/080	80 mm	50 mm	22 mm	27 mm	4	F256/648	TPKN2204...
F256/100	100 mm	50 mm	22 mm	32 mm	5	F256/648	TPKN2204...


F407-
MILLING CUTTER WITH NEGATIVE INSERTS FOR FACE MILLING

With sleeve connection, recommended for use on machines with medium/high power.



Art.	D	H	L2	d	Z	Screw	Insert (not included)
F407/050	50 mm	40 mm	63 mm	22 mm	4	KV401	ONMX1205... - SNMX1205...
F407/100	100 mm	50 mm	113 mm	32 mm	8	KV401	ONMX1205... - SNMX1205...


F303-
FACE MILLING CUTTER

With sleeve connection, recommended for use on machines with medium power.



Art.	D	H	B	d	Z	Screw	Insert (not included)
F303/040	40 mm	45 mm	53 mm	16 mm	3	KV500	SEHX1204... / SEHT1204...
F303/050	50 mm	48 mm	60 mm	22 mm	4	KV500	SEHX1204... / SEHT1204...
F303/063	63 mm	50 mm	76 mm	22 mm	5	KV500	SEHX1204... / SEHT1204...
F303/080	80 mm	50 mm	93 mm	27 mm	5	KV500	SEHX1204... / SEHT1204...
F303/100	100 mm	50 mm	113 mm	32 mm	6	KV500	SEHX1204... / SEHT1204...
F303/125	125 mm	60 mm	138 mm	40 mm	7	KV500	SEHX1204... / SEHT1204...


F308-
FACE MILLING CUTTERS

With sleeve connection, thanks to the very positive geometry, excellent machined surfaces are obtained.



Art.	D	H	L2	d	Z	Screw	Insert (not included)
F308/063	63 mm	40 mm	68 mm	22 mm	5	KV400	OFEX05T3...
F308/080	80 mm	50 mm	86 mm	27 mm	6	KV400	OFEX05T3...
F308/100	100 mm	50 mm	106 mm	32 mm	7	KV400	OFEX05T3...





F406-

FACE MILLING CUTTER

With sleeve connection, recommended for use on machines with reduced power.



Art.	D	H	a	d	Z	Screw	Insert base	Insert (not included)
F406/40	40 mm	48 mm	8,4 mm	16 mm	3	VTN00440	WSSP	SEKN1203...
F406/50	50 mm	48 mm	10,4 mm	22 mm	4	VTN00440	WSSP	SEKN1203...
F406/63	63 mm	48 mm	12,4 mm	22 mm	5	VTN00440	WSSP	SEKN1203...
F406/80	80 mm	50 mm	14,4 mm	27 mm	5	VTN00440	WSSP	SEKN1203...
F406/100	100 mm	50 mm	16,4 mm	32 mm	6	VTN00440	WSSP	SEKN1203...



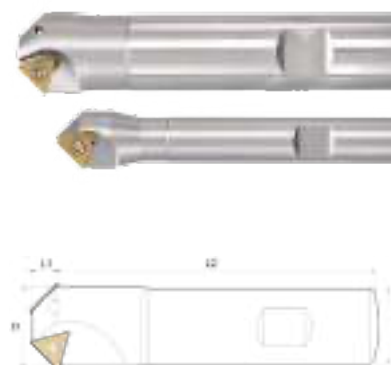
F307/16/22

INSERTS COUNTER SINKS SET

With cylindrical shank, for deburring of holes, slots and pockets, for milling plate edges.



D	16/22 mm
d	12/20 mm
L1	7 mm
L2	90/100 mm
Z	1 / 2
Screw	KV250
Insert (not included)	TCMT1102



F403-

FACE MILLING CUTTER

With sleeve connection.



Art.	D	H	a	d	Z	Screw	Insert (not included)
F403/40	40 mm	40 mm	8,4 mm	16 mm	3	KV400	RPMT1204...
F403/50	50 mm	40 mm	10,4 mm	22 mm	4	KV400	RPMT1204...
F403/63	63 mm	40 mm	10,4 mm	22 mm	5	KV400	RPMT1204...
F403/80	80 mm	50 mm	12,4 mm	27 mm	6	KV400	RPMT1204...
F403/100	100 mm	50 mm	14,4 mm	32 mm	6	KV400	RPMT1204...



BSTG16

SET 5 BASES
16MM


BU3550

5 BUSHING
SET


BSCL09

SET 5 BASES
9MM


BSCL12

SET 5 BASES
12MM


BU4560

5 BUSHING
SET


BSSS12

5 SQUARE
BASES 12MM


BSVJ16

SET 5 BASES
16MM


BSDJ11

5 RHOMBIC
BASES 11MM


BU4050

5 BUSHING
SET


RICAPCLN

BASE
BRACKET
SCREW KIT


RICAPTGN

BASE
BRACKET
SCREW KIT


RICAPSSN

BASE
BRACKET
SCREW KIT


STAFCKJNR

RIGHT TOOL
BRACKET


STAFCKJNL

LEFT TOOL
BRACKET


BASECKJNR

CARBIDE BASE
RIGHT TOOL


BASECKJNL

CARBIDE BASE
LEFT TOOL


VITECKJN

TOOL SCREW


PDJNRKIT

KIT PARTS


PWLNRRKIT

BASE
BRACKET
SCREW KIT


MCLNBASE25/32

BASE


CTMTMC16/20

TOOL
BRACKET
16 - 20


CTMTMC25/32

TOOL
BRACKET
25 - 32


MTFNBASE25/32

BASE


CTFP10/12

TOOL
BRACKET


CTFPBASE25/32

BASE
For 25 - 32.


BSER16

5 CARBIDE
BASE 16MM


BSNR16

5 CARBIDES
16 mm.


F256/648

MILL SCREW
080/125


F256/644

MILL SCREW
040/063


WSSP

BASE


KVX

SCREWS 10 PCS


VT00440

5 PCS MILL
SCREWS

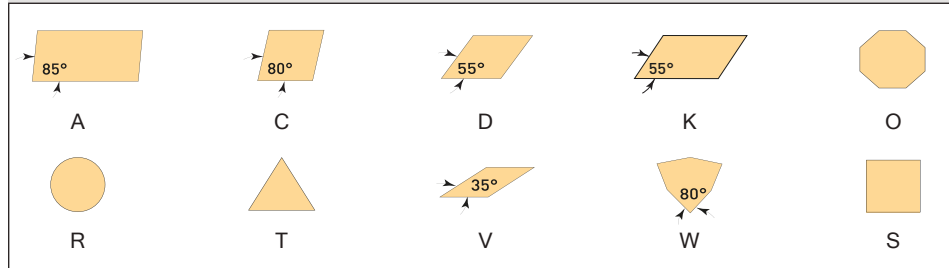


Art.	Dimensions	Machine unit dimensions	Degrees	Tee star
KV200	M2 x 4,5 mm	Ø 2,7 mm	55°	TX 6
KV250	M2,5 x 6 mm	Ø 3,7 mm	45°	TX 8
KV300	M3 x 8 mm	Ø 4 mm	60°	TX 9
KV350	M3,5 x 12 mm	Ø 5,3 mm	60°	TX 15
KV400	M4 x 12 mm	Ø 5,7 mm	60°	TX 15
KV401	M4 x 11,8 mm	Ø 6,5 mm	40°	TX 20
KV450	M4,5 x 10 mm	Ø 6,8 mm	60°	TX 15
KV500	M5 x 11 mm	Ø 6,4 mm	43°	TX 20

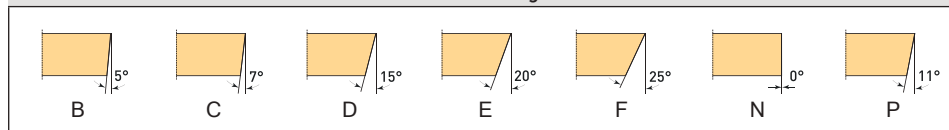
IDENTIFICATION OF TURNING AND MILLING INSERTS

C	N	M	G	12	04	08
1	2	3	4	5	6	7

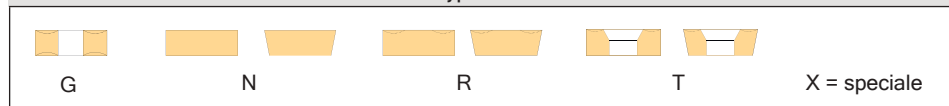
1 - Shape of insert



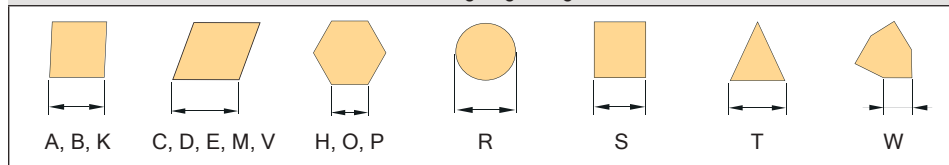
2 - Relief angle



4 - Type of insert



5 - Cutting edge length



7 - Radius

	04	r 0,4
	08	r 0,8
	12	r 1,2
	10	r 1,0

3 - Tolerance

			
	m	s	d
E	0,025	0,025	0,025
H	0,013	0,025	0,013
L	0,025	0,025	0,05 - 0,13
K	0,013	0,025	0,05 - 0,13
M	0,08	0,13	0,05 - 0,13
U	0,13 - 0,38	0,13 - 0,13	0,08 - 0,25

6 - Thickness

			
02	2,38 mm		
03	3,18 mm		
T3	3,97 mm		
04	4,76 mm		
05	5,56 mm		
06	6,35 mm		

ISO MATERIAL CLASSIFICATION

P	M	K
Lead and case-hardening steels, tempering and construction steels	Ferritic, austenitic, martensitic, duplex steels	Gray, hardened, spheroidal cast iron, CGI cast iron, sintered iron

CHARACTERISTICS OF INSERT GRADES

Grade	Coating	Work condition	Coolant	
				
N	CVD	Stable/Normal	X	
134	PVD	Stable/Normal		X
234	PVD	Stable/Normal		X
25	PVD	Stable		X
20A	PVD	Stable/Normal	X	X
F15	CVD	Stable	X	X
F25	CVD	Stable/Normal	X	X
M25	CVD	Stable/Normal	X	X
M35	CVD	Normal/Interrupted	X	X

	Description
	Coating
CVD	They are characterised by high wear resistance and excellent adhesion to carbide. In general turning they are applied in stainless steels and in the ISO P,M,K ranges.
PVD	They increase wear resistance due to their hardness. Their compressive stresses contribute to increased cutting edge toughness and resistance to comb crack formation.
	Work condition
Stable	Type of cut in which the insert has a homogeneous working condition.
Normal	Type of cut in which the insert may have an interrupted/repeated cutting condition.
Interrupted	Type of cut in which the insert will have several interruptions/restarts during processing.

IDENTIFICATION OF THREADING INSERTS

16	E	R	175	ISO	A3 - Cutting direction		A5 - Thread profile	
A1	A2	A3	A4	A5	R	Right	ISO	60° Metric Thread
					L	Left		

A1 - Cutting edge length		A2 - Threading		A4 - Thread pitch		A5 - Thread profile	
l	d						
11	6,35	E	I	mm	Threads/Inch		
16	9,525			<u>A4</u> 100 (0,5 - 3mm)	(28 - 11 TPI)		
22	12,7						

W	Thread Whitworth 55°
AG60	60° Profile (Free Thread) 0,5 - 3mm
AG55	55° Profile (Free Thread) 28 - 11 TPI

GUIDE TO CHOOSING THE INSERT

Type of insert	Materials			Field of use			Type of processing	
	P	M	K	Finish	Medium	Roughing	Turning	Milling
CCMTx	●	○	○	✓			✓	
CCMTxA	●	○	○	✓			✓	
CNMGx	●	○	○	✓	✓		✓	
CNMGxF15	●	○	○	✓			✓	
CNMGxF25	○	○	○	✓			✓	
CNMGxM25	●	○	○		✓		✓	
CNMGxM35	○	○	○		✓		✓	
DCMTx	●	○	○	✓			✓	
DCMTxA	●	●	○	✓			✓	
DNMGx	●	○	○		✓		✓	
DNMGxM25	●	○	○		✓		✓	
DNMGxM35	○	○	○		✓		✓	
KNUx	●	○	○	✓			✓	
SCMTx	●	●	○	✓			✓	
SCMTxA1	●	○	○	✓			✓	
SCMTxA2	●	●	○	✓	✓		✓	
SCMTxA3	●	●	○	✓	✓		✓	
SNMGxF15	●	○	○	✓			✓	
SNMGxF25	○	○	○	✓			✓	
SNMGxM25	●	○	○		✓		✓	
SNMGxM35	○	○	○		✓		✓	
SPMRx	●	○	○	✓			✓	
TCMTx	●	●	○	✓	✓		✓	
TCMTxA	●	○	○	✓			✓	
WNMGx	●	○	○		✓		✓	
WNMGxM25	●	○	○		✓		✓	
WNMGxM35	○	○	○		✓		✓	



Type of insert	Materials			Field of use			Type of processing	
	P	M	K	Finish	Medium	Roughing	Turning	Milling
TNMGx	●	●	○	✓			✓	
TNMGxF15	●	●	○	✓			✓	
TNMGxF25	●	●	○	✓			✓	
TNMGxM25	●	●	○		✓		✓	
TNMGxM35	○	●	○		✓		✓	
TPMRx	●	●	○	✓			✓	
VBMTx	○	●	○	✓			✓	
VBMTxA	●	●	○	✓	✓		✓	
ADLTx	●	●	○		✓	✓		✓
ADLTxA	●	●	○		✓	✓		✓
ADLTxA1	●	●	○		✓	✓		✓
APKTx	○	●	○		✓			✓
OFEXx	●	●	○	✓	✓			✓
OFEXxA	●	●	○	✓	✓			✓
ONMXxA	●	●	○	✓	✓			✓
RDHTx	●	●	○		✓	✓		✓
RPMTx	●	●	○		✓	✓		✓
SEHTx	●	●	○	✓	✓			✓
SEHTxA	○	●	○	✓	✓			✓
SEKNx	●	●	○		✓	✓		✓
SEHXx	○	●	○		✓	✓		✓
SEHXxA	●	○	○		✓	✓		✓
SNMXx	●	●	○	✓	✓			✓
SPKNx	●	○	○		✓	✓		✓
TPKNx	●	○	○		✓	✓		✓
GCMX	●	●	○				✓	
GCMXA	●	●	○				✓	

Key

- Recommended Application
- Possible Application
- ✓ Recommended field of application

CCMTX
TURNING INSERTS

Positive.



Art.	Dimensions	d	l	S	r	d1	a°	Pack
CCMT060204N	6 mm	6,35 mm	6,3 mm	2,38 mm	0,4 mm	2,8 mm	7°	10
CCMT09T304N	9 mm	9,52 mm	9,7 mm	3,97 mm	0,4 mm	4,4 mm	7°	10
CCMT09T308N	9 mm	9,52 mm	9,7 mm	3,97 mm	0,8 mm	4,4 mm	7°	10
CCMT120408N	12 mm	12,70 mm	12,9 mm	4,76 mm	0,8 mm	5,5 mm	7°	10


CCMTXA
TURNING INSERTS

Positive.



Art.	Dimensions	d	l	S	r	d1	a°	Pack
CCMT06020420A	6 mm	6,35 mm	6,3 mm	2,38 mm	0,4 mm	2,8 mm	7°	10
CCMT09T30420A	9 mm	9,52 mm	9,7 mm	3,97 mm	0,4 mm	4,4 mm	7°	10
CCMT09T30820A	9 mm	9,52 mm	9,7 mm	3,97 mm	0,8 mm	4,4 mm	7°	10
CCMT12040820A	12 mm	12,70 mm	12,9 mm	4,76 mm	0,8 mm	5,5 mm	7°	10


CNMGX
TURNING INSERTS

Negative.



Art.	Dimensions	d	l	S	r	d1	a°	Pack
CNMG120404N	12 mm	12,70 mm	12,9 mm	4,76 mm	0,4 mm	5,16 mm	-	10
CNMG120408N	12 mm	12,70 mm	12,9 mm	4,76 mm	0,8 mm	5,16 mm	-	10


CNMGXF15
TURNING INSERTS

Negative.



Art.	Dimensions	d	l	S	r	d1	a°	Pack
CNMG120404F15	12 mm	12,70 mm	12,9 mm	4,76 mm	0,4 mm	5,16 mm	-	10


CNMGXF25
TURNING INSERTS

Negative.



Art.	Dimensions	d	l	S	r	d1	a°	Pack
CNMG120404F25	12 mm	12,70 mm	12,9 mm	4,76 mm	0,4 mm	5,16 mm	-	10





CNMGXM25

TURNING INSERTS

Negative.



Art.	Dimensions	d	l	S	r	d1	a°	Pack
CNMG120408M25	12 mm	12,70 mm	12,9 mm	4,76 mm	0,8 mm	5,16 mm	-	10

CNMGXM35

TURNING INSERTS

Negative.



Art.	Dimensions	d	l	S	r	d1	a°	Pack
CNMG120408M35	12 mm	12,70 mm	12,9 mm	4,76 mm	0,8 mm	5,16 mm	-	10

DCMTX

TURNING INSERTS

Positive.



Art.	Dimensions	d	l	S	r	d1	a°	Pack
DCMT070204N	7 mm	6,35 mm	7,7 mm	2,38 mm	0,4 mm	2,8 mm	7°	10
DCMT11T304N	11 mm	9,52 mm	11,6 mm	3,97 mm	0,4 mm	2,2 mm	7°	10

DCMTXA

TURNING INSERTS

Positive.



Art.	Dimensions	d	l	S	r	d1	a°	Pack
DCMT07020420A	7 mm	6,35 mm	7,7 mm	2,38 mm	0,4 mm	2,8 mm	7°	10
DCMT11T30420A	11 mm	9,52 mm	11,6 mm	3,97 mm	0,4 mm	2,2 mm	7°	10

DNMGX

TURNING INSERTS

Negative.



Art.	Dimensions	d	l	S	r	d1	a°	Pack
DNMG150608N	15 mm	12,70 mm	15,5 mm	6,35 mm	0,8 mm	5,2 mm	-	10

DNMGXM25
TURNING INSERTS

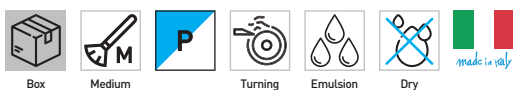
Negative.



Art.	Dimensions	d	l	S	r	d1	a°	Pack
DNMG150608M25	15 mm	12,70 mm	15,5 mm	6,35 mm	0,8 mm	5,2 mm	-	10

DNMGXM35
TURNING INSERTS

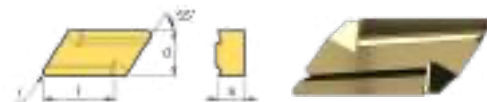
Negative.



Art.	Dimensions	d	l	S	r	d1	a°	Pack
DNMG150608M35	15 mm	12,70 mm	15,5 mm	6,35 mm	0,8 mm	5,2 mm	-	10

KNUX
TURNING INSERTS

Positive.



Art.	Dimensions	d	l	S	r	a°	Pack
KNUX160405RN	16 mm	9,52 mm	19,72 mm	4,76 mm	0,5 mm	-	10
KNUX160410RN	16 mm	9,52 mm	19,72 mm	4,76 mm	1 mm	-	10
KNUX160405LN	16 mm	9,52 mm	19,72 mm	4,76 mm	0,5 mm	-	10
KNUX160410LN	16 mm	9,52 mm	19,72 mm	4,76 mm	1 mm	-	10

SCMTX
TURNING INSERTS

Positive.



Art.	Dimensions	d	l	S	r	d1	a°	Pack
SCMT09T304N	9 mm	9,52 mm	9,52 mm	3,97 mm	0,4 mm	4,4 mm	7°	10
SCMT09T308N	9 mm	9,52 mm	9,52 mm	3,97 mm	0,8 mm	4,4 mm	7°	10
SCMT120408N	12 mm	12,70 mm	12,70 mm	4,76 mm	0,8 mm	5,5 mm	7°	10

SCMTXA1
TURNING INSERTS

Positive.



Art.	Dimensions	d	l	S	r	d1	a°	Pack
SCMT09T30420A	9 mm	9,52 mm	9,52 mm	3,97 mm	0,4 mm	4,4 mm	7°	10



SCMTXA2

TURNING INSERTS

Positive.

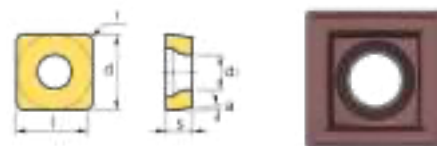


Art.	Dimensions	d	l	S	r	d1	a°	Pack
SCMT09T30820A	9 mm	9,52 mm	9,52 mm	3,97 mm	0,8 mm	4,4 mm	7°	10

SCMTXA3

TURNING INSERTS

Positive.



Art.	Dimensions	d	l	S	r	d1	a°	Pack
SCMT12040820A	12 mm	12,70 mm	12,70 mm	4,76 mm	0,8 mm	5,5 mm	7°	10

SNMGXF15

TURNING INSERTS

Negative.

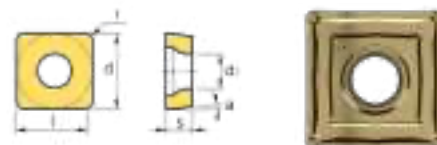


Art.	Dimensions	d	l	S	r	d1	a°	Pack
SNMG120404F15	12 mm	12,70 mm	12,70 mm	4,76 mm	0,4 mm	5,16 mm	-	10

SNMGXF25

TURNING INSERTS

Negative.

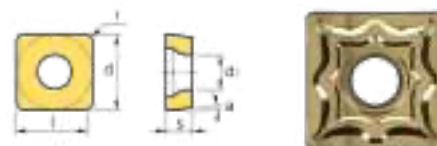


Art.	Dimensions	d	l	S	r	d1	a°	Pack
SNMG120404F25	12 mm	12,70 mm	12,70 mm	4,76 mm	0,4 mm	5,16 mm	-	10

SNMGXM25

TURNING INSERTS

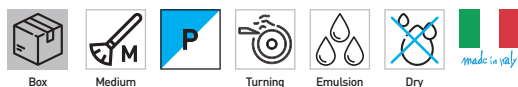
Negative.



Art.	Dimensions	d	l	S	r	d1	a°	Pack
SNMG120408M25	12 mm	12,70 mm	12,70 mm	4,76 mm	0,8 mm	5,16 mm	-	10

SNMGXM35
TURNING INSERTS

Negative.



Art.	Dimensions	d	l	S	r	d1	a°	Pack
SNMG120408M35	12 mm	12,70 mm	12,70 mm	4,76 mm	0,8 mm	5,16 mm	-	10

SPMRX
TURNING INSERTS

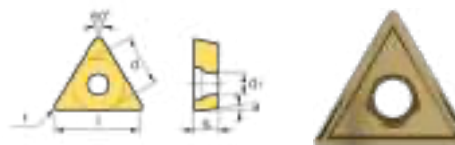
Positive.



Art.	Dimensions	d	l	S	r	a°	Pack
SPMR120304N	12 mm	12,70 mm	12,70 mm	3,18 mm	0,4 mm	11°	10
SPMR120308N	12 mm	12,70 mm	12,70 mm	3,18 mm	0,8 mm	11°	10

TCMTX
TURNING INSERTS

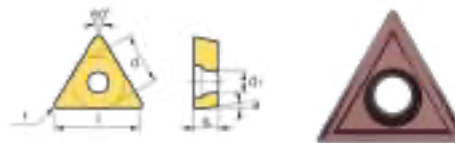
Positive.



Art.	Dimensions	d	l	S	r	d1	a°	Pack
TCMT090204N	9 mm	3,40 mm	9,63 mm	2,38 mm	0,4 mm	2,5 mm	7°	10
TCMT110204N	11 mm	6,35 mm	11 mm	2,38 mm	0,4 mm	2,8 mm	7°	10
TCMT16T304N	16 mm	9,52 mm	16,5 mm	3,97 mm	0,4 mm	4,4 mm	7°	10
TCMT16T308N	16 mm	9,52 mm	16,5 mm	3,97 mm	0,8 mm	4,4 mm	7°	10

TCMTXA
TURNING INSERTS

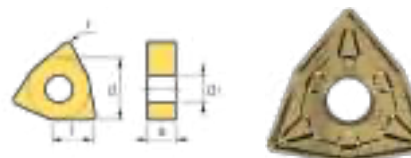
Positive.



Art.	Dimensions	d	l	S	r	d1	a°	Pack
TCMT09020420A	9 mm	3,40 mm	9,63 mm	2,38 mm	0,4 mm	2,5 mm	7°	10
TCMT11020420A	11 mm	6,35 mm	11 mm	2,38 mm	0,4 mm	2,8 mm	7°	10
TCMT16T30420A	16 mm	9,52 mm	16,5 mm	3,97 mm	0,4 mm	4,4 mm	7°	10
TCMT16T30820A	16 mm	9,52 mm	16,5 mm	3,97 mm	0,8 mm	4,4 mm	7°	10

WNMGX
TURNING INSERTS

Negative.



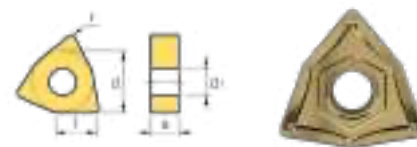
Art.	Dimensions	d	l	S	r	d1	a°	Pack
WNMG080408N	8 mm	12,70 mm	8,7 mm	4,76 mm	0,8 mm	5,1 mm	-	10



WNMGXM25

TURNING INSERTS

Negative.

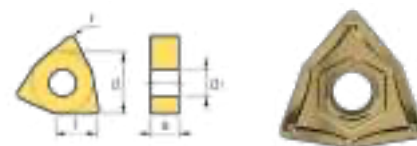


Art.	Dimensions	d	l	S	r	d1	a°	Pack
WNMG080408M25	8 mm	12,70 mm	8,7 mm	4,76 mm	0,8 mm	5,1 mm	-	10

WNMGXM35

TURNING INSERTS

Negative.

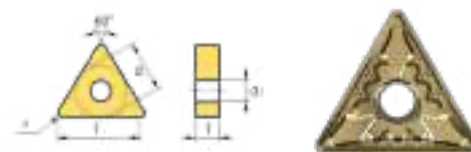


Art.	Dimensions	d	l	S	r	d1	a°	Pack
WNMG080408M35	8 mm	12,70 mm	8,7 mm	4,76 mm	0,8 mm	5,1 mm	-	10

TNMGX

TURNING INSERTS

Negative.

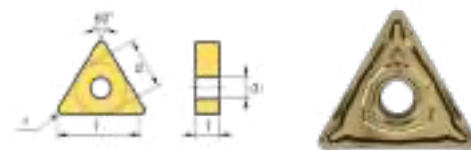


Art.	Dimensions	d	l	S	r	d1	a°	Pack
TNMG160404N	16 mm	9,52 mm	16,5 mm	4,76 mm	0,4 mm	3,81 mm	-	10
TNMG160408N	16 mm	9,52 mm	16,5 mm	4,76 mm	0,8 mm	3,81 mm	-	10
TNMG220408N	22 mm	12,70 mm	18,25 mm	4,76 mm	0,8 mm	5,16 mm	-	10

TNMGXF15

TURNING INSERTS

Negative.

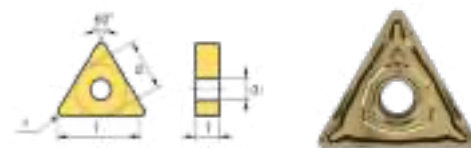


Art.	Dimensions	d	l	S	r	d1	a°	Pack
TNMG160404F15	16 mm	9,52 mm	16,5 mm	4,76 mm	0,4 mm	3,81 mm	-	10

TNMGXF25

TURNING INSERTS

Negative.



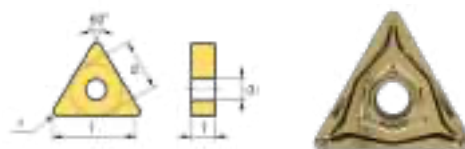
Art.	Dimensions	d	l	S	r	d1	a°	Pack
TNMG160404F25	16 mm	9,52 mm	16,5 mm	4,76 mm	0,4 mm	3,81 mm	-	10

TNMGXM25
TURNING INSERTS

Negative.



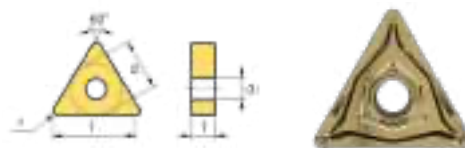
Art.	Dimensions	d	l	S	r	d1	a°	Pack
TNMG160408M25	16 mm	9,52 mm	16,5 mm	4,76 mm	0,8 mm	3,81 mm	-	10


TNMGXM35
TURNING INSERTS

Negative.



Art.	Dimensions	d	l	S	r	d1	a°	Pack
TNMG160408M35	16 mm	9,52 mm	16,5 mm	4,76 mm	0,8 mm	3,81 mm	-	10


TPMRX
TURNING INSERTS

Positive



Art.	Dimensions	d	l	S	r	a°	Pack
TPMR110304N	11 mm	5,98 mm	10,37 mm	3,18 mm	0,4 mm	11°	10
TPMR110308N	11 mm	5,98 mm	10,37 mm	3,18 mm	0,8 mm	11°	10
TPMR160304N	16 mm	9,23 mm	16 mm	3,18 mm	0,4 mm	11°	10
TPMR160308N	16 mm	9,23 mm	16 mm	3,18 mm	0,8 mm	11°	10


VBMTX
TURNING INSERTS

Positive.



Art.	Dimensions	d	l	S	r	d1	a°	Pack
VBMT160404N	16 mm	9,52 mm	16,6 mm	4,76 mm	0,4 mm	4,4 mm	5°	10


VBMTXA
TURNING INSERTS

Positive.



Art.	Dimensions	d	l	S	r	d1	a°	Pack
VBMT16040420A	16 mm	9,52 mm	16,6 mm	4,76 mm	0,4 mm	4,4 mm	5°	10

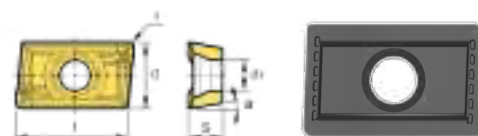




ADLTXA

MILLING INSERTS

90°.

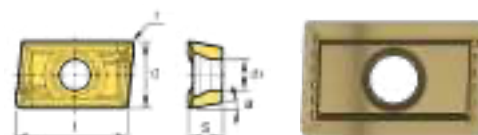


Art.	Dimensions	d	l	S	r	d1	a°	Pack
ADLT150308R20A	15 mm	9,52 mm	14,5 mm	3,18 mm	0,8 mm	4,5 mm	15°	10

ADLTX

MILLING INSERTS

90°.



Art.	Dimensions	d	l	S	r	d1	a°	Pack
ADLT1503ZZR234	15 mm	9,52 mm	14,5 mm	3,18 mm	0,8 mm	4,5 mm	15°	10

ADLTXA1

MILLING INSERTS

90°.

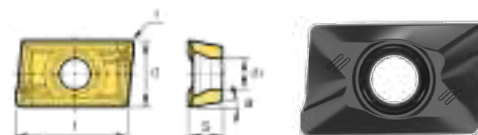


Art.	Dimensions	d	l	S	r	d1	a°	Pack
ADLT1503ZZR20A	15 mm	9,52 mm	14,5 mm	3,18 mm	0,8 mm	4,5 mm	15°	10

APKTX

MILLING INSERTS

90°.



Art.	Dimensions	d	l	S	r	d1	a°	Pack
APKT1003PDER20A	10 mm	6,70 mm	10 mm	3,18 mm	0,5 mm	3,2 mm	11°	10
APKT1604PDER20A	16 mm	9,50 mm	16,3 mm	4,76 mm	0,9 mm	4,4 mm	11°	10

OFEXX

MILLING INSERTS

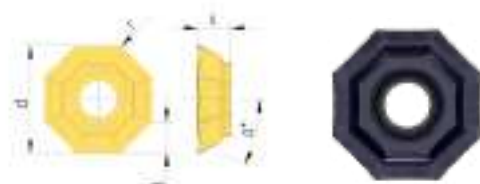
45°.



Art.	Dimensions	d	l	S	r	d1	a°	Pack
OFEX05T305234	5 mm	12,80 mm	3,70 mm	3,97 mm	0,5 mm	4,56 mm	25°	10

OFEXXA
MILLING INSERTS

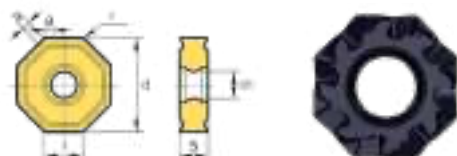
45°.



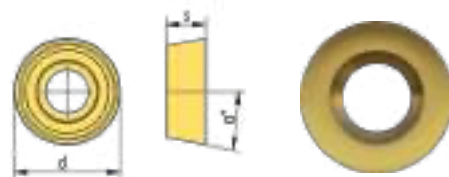
Art.	Dimensions	d	l	S	r	d1	a°	Pack
OFEX05T30520A	5 mm	12,80 mm	3,70 mm	3,97 mm	0,5 mm	4,56 mm	25°	10

ONMXXA
MILLING INSERTS

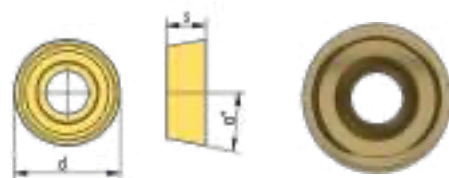
45°.



Art.	Dimensions	d	l	S	d1	a°	Pack
ONMX120520A	12 mm	12,70 mm	1,50 mm	5,56 mm	6 mm	-	10

RDHTX
MILLING INSERTS


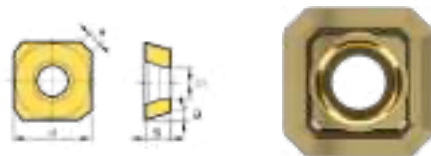
Art.	Dimensions	d	S	a°	Pack
RDHT10T3M0-N	10 mm	10 mm	3,97 mm	15°	10

RPMTX
MILLING INSERTS


Art.	Dimensions	d	S	a°	Pack
RPMT1204N	12 mm	12 mm	4,76 mm	11°	10

SEHTX
MILLING INSERTS

45°.



Art.	Dimensions	d	a	S	d1	a°	Pack
SEHT1204AFN234	12 mm	12,70 mm	1,80 mm	4,76 mm	5,5 mm	20°	10

SEHTXA
MILLING INSERTS

45°.



Art.	Dimensions	d	a	S	d1	a°	Pack
SEHT1204AFN20A	12 mm	12,70 mm	1,80 mm	4,76 mm	5,5 mm	20°	10



SEKNX

MILLING INSERTS

45°.

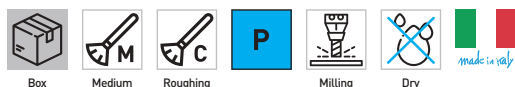


Art.	Dimensions	d	a	S	a°	Pack
SEKN1203AFN25	12 mm	12,70 mm	1.80 mm	3,18 mm	20°	10

SEHXX

MILLING INSERTS

45°.



Art.	Dimensions	d	a	S	d1	a°	Pack
SEHX1204234	12 mm	12,70 mm	1.80 mm	4,76 mm	5,5 mm	20°	10

SEHXXA

MILLING INSERTS

45°.



Art.	Dimensions	d	a	S	d1	a°	Pack
SEHX120420A	12 mm	12,70 mm	1.80 mm	4,76 mm	5,5 mm	20°	10

SNMXX

MILLING INSERTS

45°.



Art.	Dimensions	d	a	S	d1	a°	Pack
SNMX120520A	12 mm	12,70 mm	1.80 mm	5,56 mm	6 mm	-	10

SPKNX

MILLING INSERTS

45°.



Art.	Dimensions	l	a	S	a°	Pack
SPKN1203R25	12 mm	12.7 mm	1.40 mm	3,18 mm	11°	10

TPKNX

MILLING INSERTS

45°.



Art.	Dimensions	d	l	a	S	a°	Pack
TPKN1603R25	16 mm	9,52 mm	16,5 mm	1.47 mm	3,18 mm	11°	10
TPKN2204R25	22 mm	12,70 mm	22 mm	1.47 mm	4,76 mm	11°	10

16IRX
INTERNAL THREAD INSERTS

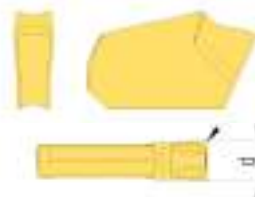

Art.	Thread	Pack
11IRA55134	Whitworth 28 - 11 TPI	10
11IRA60134	Metric 0,2 - 3 mm	10
16IR100ISO134	P. Metric 1 mm	10
16IR125ISO134	P. Metric 1,25 mm	10
16IR150ISO134	P. Metric 1,5 mm	10
16IR175ISO134	P. Metric 1,75 mm	10
16IR200ISO134	P. Metric 2 mm	10
16IR250ISO134	P. Metric 2,5 mm	10
16IR300ISO134	P. Metric 3 mm	10
16IRAG60134	Metric 0,2 - 3 mm	10
16IR14W134	Whitworth 14 TPI	10
16IR11W134	Whitworth 11 TPI	10
16IRAG55134	Whitworth 28 - 11 TPI	10

16ERX
EXTERNAL THREAD INSERTS

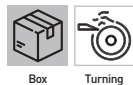

Art.	Thread	Pack
16ER100ISO134	P. Metric 1 mm	10
16ER125ISO134	P. Metric 1,25 mm	10
16ER150ISO134	P. Metric 1,50 mm	10
16ER175ISO134	P. Metric 1,75 mm	10
16ER200ISO134	P. Metric 2 mm	10
16ER250ISO134	P. Metric 2,5 mm	10
16ER300ISO134	P. Metric 3 mm	10
16ERAG60134	Metric 0,2 - 3 mm	10
16ER14W134	Whitworth 14 TPI	10
16ER11W134	Whitworth 11 TPI	10
16ERAG55134	Whitworth 28 - 11 TPI	10

GCMX
CUTTING INSERTS


Art.	d	r	Pack
GCMX2N134	2,20 mm	0,2 mm	10
GCMX3N134	3,10 mm	0,2 mm	10
GCMX4N134	4,10 mm	0,2 mm	10
GCMX5N134	5,10 mm	0,3 mm	10

GCMXA
CUTTING INSERTS


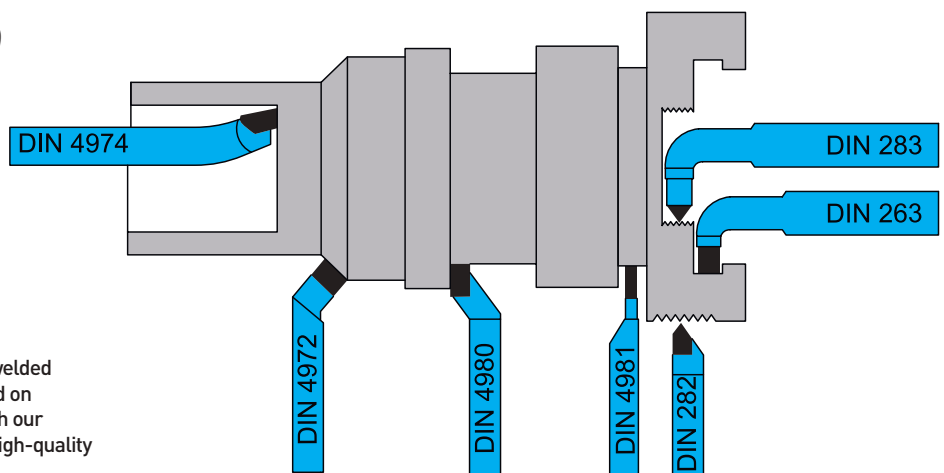
Art.	d	r	Pack
GCMX2N20A	2,20 mm	0,2 mm	10
GCMX3N20A	3,10 mm	0,2 mm	10
GCMX4N20A	4,10 mm	0,2 mm	10
GCMX5N20A	5,10 mm	0,3 mm	10

165X
GROOVE INSERTS


Art.	Thickness	Pack
165110134	1,1 mm	10
165130134	1,3 mm	10
165160134	1,6 mm	10
165185134	1,85 mm	10
165215134	2,15 mm	10
165265134	2,65 mm	10
165315134	3,15 mm	10



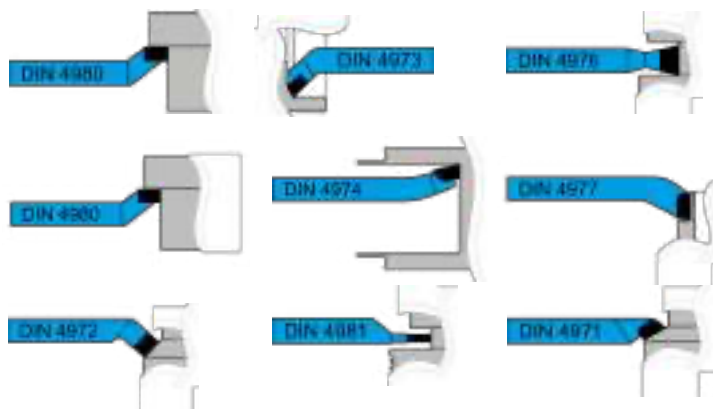
FERVI CARBIDE TIPPED LATHE IDENTIFICATION



Explore our wide selection of brazed with heat-welded inserts and select the most suitable model based on the specific processing you need to perform. With our comprehensive range, we guarantee versatile, high-quality solutions to meet your needs.

BR10-

CARBIDE TIPPED LATHE TOOL SET



10 Pcs



Box



HM
P25



P



Lathe

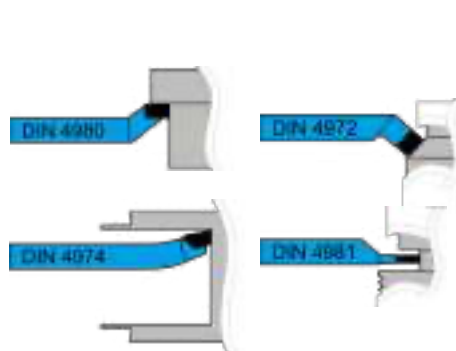
Art.

Dimensions

BR10/10	10 x 10 x L150mm (ISO 8 DIN 4973, ISO 9 DIN 4974) 10 x 10 x L90mm (ISO 1 DIN 4971, ISO 2 DIN 4972, ISO 6R DIN 4980, ISO 6L DIN 4980, ISO 7 DIN 4981) 6 x 10 x L90mm (ISO 3R DIN 4978, ISO 4 DIN 4976, ISO 5 DIN 4977)
BR10/12	12 x 12 x L180mm (ISO 8 DIN 4973, ISO 9 DIN 4974) 12 x 12 x L100mm (ISO 1 DIN 4971, ISO 2 DIN 4972, ISO 6R DIN 4980, ISO 6L DIN 4980) 8 x 12 x L100mm (ISO 3R DIN 4978, ISO 4 DIN 4976, ISO 5 DIN 4977, ISO 7 DIN 4981)

B005-

CARBIDE TIPPED LATHE TOOL SET



5 Pcs



Blister



HM
P25



P



Lathe

Art.

Kit

B005	1BRAS411108RP - 1BRAS411110RP - 1BRAS410312RP - 1BRAS410412RP - 1BRAS410912RP
B005/16	1BRAS411110RP - 1BRAS411112RP - 1BRAS410316RP - 1BRAS410416RP - 1BRAS410916RP
B005/20	1BRAS411112RP - 1BRAS411116RP - 1BRAS410320RP - 1BRAS410420RP - 1BRAS410920RP

BRFEX
CARBIDE TIPPED TOOL FOR EXTERNAL THREAD

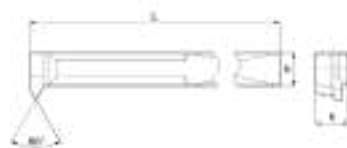
For the execution of all external 60° threads.



Art.	L	b	h
BRFE12RP	90 mm	12 mm	12 mm
BRFE16RP	100 mm	16 mm	16 mm
BRFE20RP	125 mm	20 mm	20 mm
BRFE25RP	140 mm	25 mm	25 mm

BRFIX
CARBIDE TIPPED TOOL FOR INTERNAL THREAD

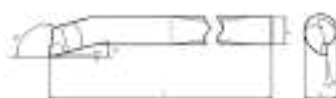
For the execution of all internal 60° threads.



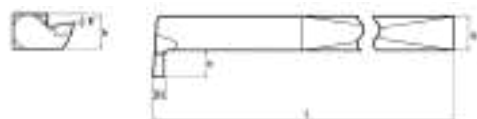
Art.	L	b	h
BRFI10RP	150 mm	10 mm	10 mm
BRFI12RP	180 mm	12 mm	12 mm
BRFI16RP	210 mm	16 mm	16 mm
BRFI20RP	250 mm	20 mm	20 mm
BRFI25RP	300 mm	25 mm	25 mm

BRAS4111X
CARBIDE TIPPED TOOL FOR BLIND HOLES

ISO 9.



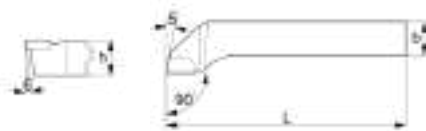
Art.	L	b	h
BRAS411108RP	125 mm	8 mm	8 mm
BRAS411110RP	150 mm	10 mm	10 mm
BRAS411112RP	180 mm	12 mm	12 mm
BRAS411116RP	210 mm	16 mm	16 mm
BRAS411120RP	250 mm	20 mm	20 mm
BRAS411125RP	300 mm	25 mm	25 mm
BRAS411132RP	355 mm	32 mm	32 mm

BRCIX
CARBIDE TIPPED TOOL FOR INTERNAL SLOTS


Art.	L	b	h	b1	N
BRCI10RP	150 mm	10 mm	10 mm	3 mm	8 mm
BRCI12RP	180 mm	12 mm	12 mm	4 mm	10 mm
BRCI16RP	210 mm	16 mm	16 mm	5 mm	12 mm
BRCI20RP	210 mm	20 mm	20 mm	6 mm	16 mm
BRCI25RP	300 mm	25 mm	25 mm	8 mm	20 mm

BRAS4104X
CARBIDE TIPPED TOOL FOR FACING

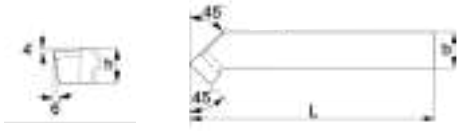
ISO 6.



Art.	Side	L	b	h
BRAS410410LP	Sx/L	90 mm	10 mm	10 mm
BRAS410410RP	Dx/R	90 mm	10 mm	10 mm
BRAS410412LP	Sx/L	100 mm	12 mm	12 mm
BRAS410412RP	Dx/R	100 mm	12 mm	12 mm
BRAS410416LP	Sx/L	110 mm	16 mm	16 mm
BRAS410416RP	Dx/R	110 mm	16 mm	16 mm
BRAS410420LP	Sx/L	125 mm	20 mm	20 mm
BRAS410420RP	Dx/R	125 mm	20 mm	20 mm
BRAS410425RP	Dx/R	140 mm	25 mm	25 mm

BRAS4103X
CARBIDE TIPPED TOOL FOR OUTSIDE ROUGHING

ISO 2.



Art.	Side	L	b	h
BRAS410310RP	Dx/R	90 mm	10 mm	10 mm
BRAS410312LP	Sx/L	100 mm	12 mm	12 mm
BRAS410312RP	Dx/R	100 mm	12 mm	12 mm
BRAS410316LP	Sx/L	110 mm	16 mm	16 mm
BRAS410316RP	Dx/R	110 mm	16 mm	16 mm
BRAS410320LP	Sx/L	125 mm	20 mm	20 mm
BRAS410320RP	Dx/R	125 mm	20 mm	20 mm
BRAS410325RP	Dx/R	140 mm	25 mm	25 mm



BRAS4109X

CARBIDE TIPPED TOOL FOR CUTTING OFF

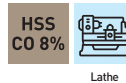
ISO 7.



Art.	L	l	b	h	b1
BRAS410912RP	100 mm	12 mm	8 mm	12 mm	3 mm
BRAS410916RP	110 mm	14 mm	10 mm	16 mm	3,5 mm
BRAS410920RP	125 mm	16 mm	12 mm	20 mm	5 mm
BRAS410925RP	140 mm	20 mm	16 mm	25 mm	6 mm

B012-

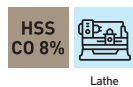
HARDENED AND GROUNDED TOOL BITS



Art.	ø	Length	Tolerance
B012/04	4 mm	200 mm	h9
B012/05	5 mm	200 mm	h9
B012/06	6 mm	200 mm	h9
B012/08	8 mm	200 mm	h9
B012/10	10 mm	200 mm	h9
B012/12	12 mm	200 mm	h9
B012/13	13 mm	135 mm	h9
B012/16	16 mm	200 mm	h9
B012/20	20 mm	200 mm	h9

B013-

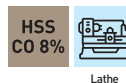
HARDENED AND GROUNDED TOOL BITS



Art.	Sides dimension	Length	Tolerance
B013/04X04	4 x 4 mm	200 mm	h13
B013/05X05	5 x 5 mm	200 mm	h13
B013/06X06	6 x 6 mm	200 mm	h13
B013/08X08	8 x 8 mm	200 mm	h13
B013/10X10	10 x 10 mm	200 mm	h13
B013/12X12	12 x 12 mm	200 mm	h13
B013/14X14	14 x 14 mm	200 mm	h13
B013/16X16	16 x 16 mm	200 mm	h13
B013/20X20	20 x 20 mm	200 mm	h13

B014-

HARDENED AND GROUNDED TOOL BITS



Art.	Sides dimension	Length	Tolerance
B014/20X04	20 x 04 mm	200 mm	h13
B014/20X05	20 x 05 mm	200 mm	h13
B014/20X06	20 x 06 mm	200 mm	h13
B014/20X08	20 x 08 mm	200 mm	h13
B014/20X10	20 x 10 mm	200 mm	h13
B014/20X12	20 x 12 mm	200 mm	h13
B014/25X06	25 x 06 mm	200 mm	h13



TYPES OF MATERIAL USED IN THE CONSTRUCTION OF HELICAL TIPS

	Type	Description	Duration	Processable metals
HSS	 ST1Ax	HSS, High Speed Steel, is the most common of all metal tool steels. A tool made of HSS has high hardness and good strength.	**	Alloy and non-alloy steels, non-ferrous metals, grey and malleable cast iron, sintered iron
	 P023-			
	 ST2Ax			
HSS-TiN	 P058-	The titanium coating, carried out to a HSS tool forms a harder and stronger alloy. This leads to a drill capable of machining the same materials as HSS but with much reduced cutting edge wear.	****	Alloy and non-alloy steels, non-ferrous metals, malleable cast iron, sintered iron
HSS-Co5%	 P065-	Cobalt, added to a steel tool such as HSS - in this case 5% - gives strength and resistance and increases the hardness of the tool itself. Cobalt retains its properties at a higher temperature than titanium, which makes it possible to drill at a higher speed and under more critical conditions.	*****	Hard and treated steels, stainless steels, chrome-nickel, cast iron and bronze
HSS-Co8%	 P064-	Cobalt, added to a steel tool such as HSS - in this case 8% - gives strength and resistance and increases the hardness of the tool itself. Cobalt retains its properties at a higher temperature than titanium, which makes it possible to drill at a higher speed and under more critical conditions.	*****	Hard and treated steels, stainless steels, chrome-nickel, cast iron and bronze

DRILLING PARAMETERS BY MATERIAL TYPE HSS, HSS-CO5% AND HSS-CO8% DRILL TIPS

Materials to be processed	Tip type	Peripheral speed Vt (m/min)	Tip diameter				Coolant
			2	5	8	12	
			Feed (mm/revolution)				
Non-alloy structural steel R<600N/mm2	HSS	20 - 25	0,05	0,12	0,20	0,25	Emulsion
	HSS-Tin	25 - 30					
Low alloy construction steel R< 700÷900N/mm2	HSS	10 - 12	0,03	0,07	0,10	0,16	Emulsion
	HSS-Tin	15 - 18					
Alloy steel R< 1100÷1300N/mm2	HSS	6 - 8	0,02	0,05	0,08	0,12	Emulsion
	HSS-Tin	8 - 10					
Stainless steel	Hss-Co5%	6 - 8	0,02	0,05	0,08	0,12	Emulsion
	Hss-Co8%	8 - 10					
Grey Cast Iron 200HB	HSS	15 - 20	0,02	0,12	0,20	0,25	No refriger.
	HSS-Tin	20 - 25					
Grey Cast Iron 350HB	HSS	5 - 10	0,03	0,07	0,10	0,16	No refriger.
	HSS-Tin	20 - 25					
Bronze	HSS	20 - 30	0,05	0,08	0,14	0,20	Emulsion or Oil
Brass	HSS	40 - 70	0,06	0,16	0,22	0,32	
Aluminium	HSS	40 - 80	0,05	0,14	0,18	0,22	Emulsion
Aluminium alloys	HSS	30 - 60	0,05	0,14	0,18	0,22	



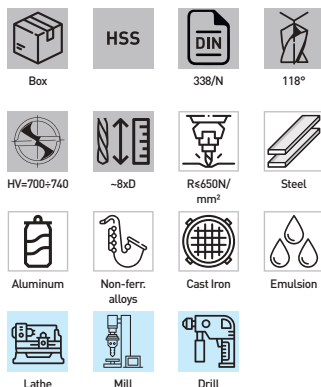
THEORETICAL NUMBER OF RPM FOR THE USE OF HELICAL TIPS ACCORDING TO THE CHOSEN V_t

Ø	Cutting speed V_c (mt/min)																	
	3	4	5	6	8	10	12	15	18	20	25	30	35	40	50	60	70	80
(mm)	Number of revolutions per minute (rpm)																	
2	478	637	796	955	1274	1592	1911	2389	2866	3185	3981	4777	5573	6369	7962	9554	11146	12739
3	318	425	531	637	849	1062	1274	1592	1911	2123	2654	3185	3715	4246	5308	6369	7431	8493
4	239	318	398	478	637	796	955	1194	1433	1592	1990	2389	2787	3185	3981	4777	5573	6369
5	191	255	318	382	510	637	764	955	1146	1274	1592	1911	2229	2548	3185	3822	4459	5096
6	159	212	265	318	425	531	637	796	955	1062	1327	1592	1858	2123	2654	3185	3715	4246
8	119	159	199	239	318	398	478	597	717	796	995	1194	1393	1592	1990	2389	2787	3185
10	96	127	159	191	255	318	382	478	573	637	796	955	1115	1274	1592	1911	2229	2548
12	80	106	133	159	212	265	318	398	478	531	663	796	929	1062	1327	1592	1858	2123



ST1AX
STRAIGHT SHANK TWIST DRILL

Right hand, black finish



Art.	ø	L	l	Pack
ST1A01	1 mm	34 mm	12 mm	10
ST1A01.25	1,25 mm	38 mm	16 mm	10
ST1A01.50	1,5 mm	40 mm	18 mm	10
ST1A01.75	1,75 mm	46 mm	22 mm	10
ST1A02	2 mm	49 mm	24 mm	10
ST1A02.25	2,25 mm	53 mm	27 mm	10
ST1A02.50	2,5 mm	57 mm	30 mm	10
ST1A02.75	2,75 mm	61 mm	33 mm	10
ST1A03	3 mm	61 mm	33 mm	10
ST1A03.25	3,25 mm	65 mm	36 mm	10
ST1A03.50	3,5 mm	70 mm	39 mm	10
ST1A03.75	3,75 mm	70 mm	39 mm	10
ST1A04	4 mm	75 mm	43 mm	10
ST1A04.25	4,25 mm	75 mm	43 mm	10
ST1A04.50	4,5 mm	80 mm	47 mm	10
ST1A04.75	4,75 mm	80 mm	47 mm	10
ST1A05	5 mm	86 mm	52 mm	10
ST1A05.25	5,25 mm	86 mm	52 mm	10
ST1A05.50	5,5 mm	93 mm	57 mm	10
ST1A05.75	5,75 mm	93 mm	57 mm	10
ST1A06	6 mm	93 mm	57 mm	10
ST1A06.25	6,25 mm	101 mm	63 mm	10
ST1A06.50	6,5 mm	101 mm	63 mm	10
ST1A06.75	6,75 mm	109 mm	69 mm	10
ST1A07	7 mm	109 mm	69 mm	10
ST1A07.25	7,25 mm	109 mm	69 mm	10
ST1A07.50	7,5 mm	109 mm	69 mm	10
ST1A07.75	7,75 mm	117 mm	75 mm	10
ST1A08	8 mm	117 mm	75 mm	10
ST1A08.25	8,25 mm	117 mm	75 mm	5
ST1A08.50	8,5 mm	117 mm	75 mm	5
ST1A08.75	8,75 mm	125 mm	81 mm	5
ST1A09	9 mm	125 mm	81 mm	5
ST1A09.25	9,25 mm	125 mm	81 mm	5
ST1A09.50	9,5 mm	125 mm	81 mm	5
ST1A09.75	9,75 mm	133 mm	87 mm	5
ST1A10	10 mm	133 mm	87 mm	5
ST1A10.25	10,25 mm	133 mm	87 mm	5
ST1A10.50	10,5 mm	133 mm	87 mm	5
ST1A10.75	10,75 mm	142 mm	94 mm	5
ST1A11	11 mm	142 mm	94 mm	5
ST1A11.25	11,25 mm	142 mm	94 mm	5
ST1A11.50	11,5 mm	142 mm	94 mm	5
ST1A11.75	11,75 mm	142 mm	94 mm	5
ST1A12	12 mm	151 mm	101 mm	5
ST1A12.25	12,25 mm	151 mm	101 mm	5
ST1A12.50	12,5 mm	151 mm	101 mm	5
ST1A12.75	12,75 mm	151 mm	101 mm	5
ST1A13	13 mm	151 mm	101 mm	5

P046
TWIST DRILL SET

Right hand, black finish.



25 Pcs

Size (step 0,5 mm)

1 + 13 mm

P045
TWIST DRILL SET

Right hand, black finish.



19 Pcs

Size (step 0,5 mm)

1+10 mm

ST1AXC
STRAIGHT SHANK TWIST DRILL

Rolled, right hand, short length, black finish.



Art.	ø	L	l	Pack
ST1A02.00C	2 mm	38 mm	12 mm	10
ST1A02.50C	2,5 mm	43 mm	14 mm	10
ST1A03.00C	3 mm	46 mm	16 mm	10
ST1A03.25C	3,25 mm	49 mm	18 mm	10
ST1A03.50C	3,5 mm	52 mm	20 mm	10
ST1A03.75C	3,75 mm	52 mm	20 mm	10
ST1A04.00C	4 mm	55 mm	22 mm	10
ST1A04.25C	4,25 mm	55 mm	22 mm	10
ST1A04.50C	4,5 mm	58 mm	24 mm	10
ST1A05.00C	5 mm	62 mm	26 mm	10
ST1A05.50C	5,5 mm	66 mm	28 mm	10
ST1A06.00C	6 mm	66 mm	28 mm	10

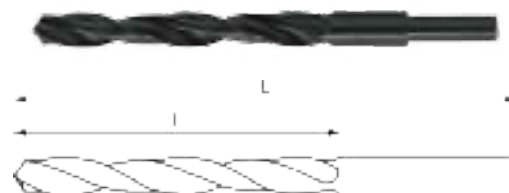




ST1AXR10

STRAIGHT SHANK TWIST DRILL

10 mm reduced shank rolled twist drill, right hand, black finish.

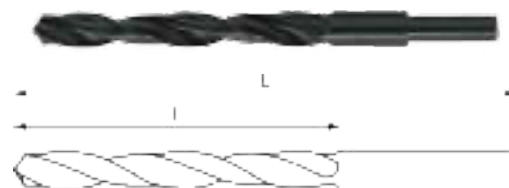


Art.	Ø	L	l	Pack
ST1A10.25R10	10,25 mm	133 mm	87 mm	5
ST1A10.50R10	10,5 mm	133 mm	87 mm	5
ST1A10.75R10	10,75 mm	142 mm	94 mm	5
ST1A11.00R10	11 mm	142 mm	94 mm	5
ST1A11.25R10	11,25 mm	142 mm	94 mm	5
ST1A11.50R10	11,5 mm	142 mm	94 mm	5
ST1A11.75R10	11,75 mm	142 mm	94 mm	5
ST1A12.00R10	12 mm	151 mm	101 mm	5
ST1A12.25R10	12,25 mm	151 mm	101 mm	5
ST1A12.50R10	12,5 mm	151 mm	101 mm	5
ST1A12.75R10	12,75 mm	151 mm	101 mm	5
ST1A13.00R10	13 mm	151 mm	101 mm	5
ST1A13.25R10	13,25 mm	160 mm	108 mm	5
ST1A13.50R10	13,5 mm	160 mm	108 mm	5
ST1A13.75R10	13,75 mm	160 mm	108 mm	5
ST1A14.00R10	14 mm	160 mm	108 mm	5
ST1A14.25R10	14,25 mm	169 mm	114 mm	5
ST1A14.50R10	14,5 mm	169 mm	114 mm	5
ST1A14.75R10	14,75 mm	169 mm	114 mm	5
ST1A15.00R10	15 mm	169 mm	114 mm	5
ST1A15.25R10	15,25 mm	178 mm	120 mm	5
ST1A15.50R10	15,5 mm	178 mm	120 mm	5
ST1A15.75R10	15,75 mm	178 mm	120 mm	5
ST1A16.00R10	16 mm	178 mm	120 mm	5

ST1AXR13

STRAIGHT SHANK TWIST DRILL

13 mm reduced shank rolled twist drill, right hand, black finish.



Art.	Ø	L	l	Pack
ST1A13.25R13	13,25 mm	160 mm	108 mm	5
ST1A13.50R13	13,5 mm	160 mm	108 mm	5
ST1A13.75R13	13,75 mm	160 mm	108 mm	5
ST1A14.00R13	14 mm	160 mm	108 mm	5
ST1A14.25R13	14,25 mm	169 mm	114 mm	5
ST1A14.50R13	14,5 mm	169 mm	114 mm	5
ST1A14.75R13	14,75 mm	169 mm	114 mm	5
ST1A15.00R13	15 mm	169 mm	114 mm	5
ST1A15.25R13	15,25 mm	178 mm	120 mm	5
ST1A15.50R13	15,5 mm	178 mm	120 mm	5
ST1A15.75R13	15,75 mm	178 mm	120 mm	5
ST1A16.00R13	16 mm	178 mm	120 mm	5

P023-

STRAIGHT SHANK TWIST DRILL

Right hand, rectified



Box



HSS



Grounded



338/N



135°



HV=770-830



~8xD



R<800N/mm²



Steel



Aluminum



Non-ferr. alloys



Cast iron



Emulsion



Lathe



Mill



Drill



Art.	Ø	L	l	Pack
P023/00.30	0,3 mm	19 mm	3 mm	10
P023/00.35	0,35 mm	19 mm	4 mm	10
P023/00.40	0,4 mm	20 mm	5 mm	10
P023/00.45	0,45 mm	20 mm	5 mm	10
P023/00.50	0,5 mm	22 mm	6 mm	10
P023/00.55	0,55 mm	24 mm	7 mm	10
P023/00.60	0,6 mm	24 mm	7 mm	10
P023/00.65	0,65 mm	26 mm	8 mm	10
P023/00.70	0,7 mm	28 mm	9 mm	10
P023/00.75	0,75 mm	28 mm	9 mm	10
P023/00.80	0,8 mm	30 mm	10 mm	10
P023/00.85	0,85 mm	30 mm	10 mm	10
P023/00.90	0,9 mm	32 mm	11 mm	10
P023/00.95	0,95 mm	32 mm	11 mm	10
P023/01.00	1 mm	34 mm	12 mm	10
P023/01.10	1,1 mm	36 mm	14 mm	10
P023/01.20	1,2 mm	38 mm	16 mm	10
P023/01.25	1,25 mm	38 mm	16 mm	10
P023/01.30	1,3 mm	38 mm	16 mm	10
P023/01.40	1,4 mm	40 mm	18 mm	10
P023/01.50	1,5 mm	40 mm	18 mm	10
P023/01.60	1,6 mm	43 mm	20 mm	10
P023/01.70	1,7 mm	43 mm	20 mm	10
P023/01.75	1,75 mm	46 mm	22 mm	10
P023/01.80	1,8 mm	46 mm	22 mm	10
P023/01.90	1,9 mm	46 mm	22 mm	10
P023/02.00	2 mm	49 mm	24 mm	10
P023/02.10	2,1 mm	49 mm	24 mm	10
P023/02.20	2,2 mm	53 mm	27 mm	10
P023/02.25	2,25 mm	53 mm	27 mm	10
P023/02.30	2,3 mm	53 mm	27 mm	10
P023/02.40	2,4 mm	57 mm	30 mm	10
P023/02.50	2,5 mm	57 mm	30 mm	10
P023/02.60	2,6 mm	57 mm	30 mm	10
P023/02.70	2,7 mm	61 mm	33 mm	10
P023/02.75	2,75 mm	61 mm	33 mm	10
P023/02.80	2,8 mm	61 mm	33 mm	10
P023/02.90	2,9 mm	61 mm	33 mm	10
P023/03.00	3 mm	61 mm	33 mm	10
P023/03.10	3,1 mm	65 mm	36 mm	10
P023/03.20	3,2 mm	65 mm	36 mm	10
P023/03.25	3,25 mm	65 mm	36 mm	10
P023/03.30	3,3 mm	65 mm	36 mm	10
P023/03.40	3,4 mm	70 mm	39 mm	10
P023/03.50	3,5 mm	70 mm	39 mm	10
P023/03.60	3,6 mm	70 mm	39 mm	10
P023/03.70	3,7 mm	70 mm	39 mm	10
P023/03.75	3,75 mm	70 mm	39 mm	10

Art.	Ø	L	l	Pack
P023/03.80	3,8 mm	75 mm	43 mm	10
P023/03.90	3,9 mm	75 mm	43 mm	10
P023/04.00	4 mm	75 mm	43 mm	10
P023/04.10	4,1 mm	75 mm	43 mm	10
P023/04.20	4,2 mm	75 mm	43 mm	10
P023/04.25	4,25 mm	75 mm	43 mm	10
P023/04.30	4,3 mm	80 mm	47 mm	10
P023/04.40	4,4 mm	80 mm	47 mm	10
P023/04.50	4,5 mm	80 mm	47 mm	10
P023/04.60	4,6 mm	80 mm	47 mm	10
P023/04.70	4,7 mm	80 mm	47 mm	10
P023/04.75	4,75 mm	80 mm	47 mm	10
P023/04.80	4,8 mm	86 mm	52 mm	10
P023/04.90	4,9 mm	86 mm	52 mm	10
P023/05.00	5 mm	86 mm	52 mm	10
P023/05.10	5,1 mm	86 mm	52 mm	10
P023/05.20	5,2 mm	86 mm	52 mm	10
P023/05.25	5,25 mm	86 mm	52 mm	10
P023/05.30	5,3 mm	86 mm	52 mm	10
P023/05.40	5,4 mm	93 mm	57 mm	10
P023/05.50	5,5 mm	93 mm	57 mm	10
P023/05.60	5,6 mm	93 mm	57 mm	10
P023/05.70	5,7 mm	93 mm	57 mm	10
P023/05.75	5,75 mm	93 mm	57 mm	10
P023/05.80	5,8 mm	93 mm	57 mm	10
P023/05.90	5,9 mm	93 mm	57 mm	10
P023/06.00	6 mm	93 mm	57 mm	10
P023/06.10	6,1 mm	101 mm	63 mm	10
P023/06.20	6,2 mm	101 mm	63 mm	10
P023/06.25	6,25 mm	101 mm	63 mm	10
P023/06.30	6,3 mm	101 mm	63 mm	10
P023/06.40	6,4 mm	101 mm	63 mm	10
P023/06.50	6,5 mm	101 mm	63 mm	10
P023/06.60	6,6 mm	101 mm	63 mm	10
P023/06.70	6,7 mm	101 mm	63 mm	10
P023/06.75	6,75 mm	109 mm	69 mm	10
P023/06.80	6,8 mm	109 mm	69 mm	10
P023/06.90	6,9 mm	109 mm	69 mm	10
P023/07.00	7 mm	109 mm	69 mm	10
P023/07.10	7,1 mm	109 mm	69 mm	10
P023/07.20	7,2 mm	109 mm	69 mm	10
P023/07.25	7,25 mm	109 mm	69 mm	10
P023/07.30	7,3 mm	109 mm	69 mm	10
P023/07.40	7,4 mm	109 mm	69 mm	10
P023/07.50	7,5 mm	109 mm	69 mm	10
P023/07.60	7,6 mm	117 mm	75 mm	10
P023/07.70	7,7 mm	117 mm	75 mm	10
P023/07.75	7,75 mm	117 mm	75 mm	10

Art.	Ø	L	l	Pack
P023/07.80	7,8 mm	117 mm	75 mm	10
P023/07.90	7,9 mm	117 mm	75 mm	10
P023/08.00	8 mm	117 mm	75 mm	5
P023/08.10	8,1 mm	117 mm	75 mm	5
P023/08.20	8,2 mm	117 mm	75 mm	5
P023/08.25	8,25 mm	117 mm	75 mm	5
P023/08.30	8,3 mm	117 mm	75 mm	5
P023/08.40	8,4 mm	117 mm	75 mm	5
P023/08.50	8,5 mm	117 mm	75 mm	5
P023/08.60	8,6 mm	125 mm	81 mm	5
P023/08.70	8,7 mm	125 mm	81 mm	5
P023/08.75	8,75 mm	125 mm	81 mm	5
P023/08.80	8,8 mm	125 mm	81 mm	5
P023/08.90	8,9 mm	125 mm	81 mm	5
P023/09.00	9 mm	125 mm	81 mm	5
P023/09.10	9,1 mm	125 mm	81 mm	5
P023/09.20	9,2 mm	125 mm	81 mm	5
P023/09.25	9,25 mm	125 mm	81 mm	5
P023/09.30	9,3 mm	125 mm	81 mm	5
P023/09.40	9,4 mm	125 mm	81 mm	5
P023/09.50	9,5 mm	125 mm	81 mm	5
P023/09.60	9,6 mm	133 mm	87 mm	5
P023/09.70	9,7 mm	133 mm	87 mm	5
P023/09.75	9,75 mm	133 mm	87 mm	5
P023/09.80	9,8 mm	133 mm	87 mm	5
P023/09.90	9,9 mm	133 mm	87 mm	5
P023/10.00	10 mm	133 mm	87 mm	5
P023/10.25	10,25 mm	133 mm	87 mm	5
P023/10.30	10,3 mm	133 mm	87 mm	5
P023/10.40	10,4 mm	133 mm	87 mm	5
P023/10.50	10,5 mm	133 mm	87 mm	5
P023/10.75	10,75 mm	142 mm	94 mm	5
P023/11.00	11 mm	142 mm	94 mm	5
P023/11.25	11,25 mm	142 mm	94 mm	5
P023/11.40	11,4 mm	142 mm	94 mm	5
P023/11.50	11,5 mm	142 mm	94 mm	5
P023/11.75	11,75 mm	142 mm	94 mm	5
P023/12.00	12 mm	151 mm	101 mm	5
P023/12.25	12,25 mm	151 mm	101 mm	5
P023/12.30	12,3 mm	151 mm	101 mm	5
P023/12.40	12,4 mm	151 mm	101 mm	5
P023/12.50	12,5 mm	151 mm	101 mm	5
P023/12.75	12,75 mm	151 mm	101 mm	5
P023/13.00	13 mm	151 mm	101 mm	5
P023/14.30	14,3 mm	165 mm	115 mm	5
P023/14.40	14,4 mm	165 mm	115 mm	5
P023/16.40	16,4 mm	170 mm	115 mm	5

P023/19

STRAIGHT SHANK TWIST DRILL SET

Right hand, rectified.



19 Pcs

Size (step 0,5 mm)

1 ÷ 10 mm



P023/25

STRAIGHT SHANK TWIST DRILL SET

Right hand, rectified.



25 Pcs

Size (step 0,5 mm)

1 ÷ 13 mm





P023-XC

DRILL BIT CYLINDRICAL SHORT SERIES

Right hand, rectified.



Art.	ø	L	l	Pack
P023/03.00C	3 mm	46 mm	16 mm	10
P023/03.25C	3,25 mm	49 mm	18 mm	10
P023/03.50C	3,5 mm	52 mm	20 mm	10
P023/03.75C	3,75 mm	52 mm	20 mm	10
P023/04.00C	4 mm	55 mm	22 mm	10

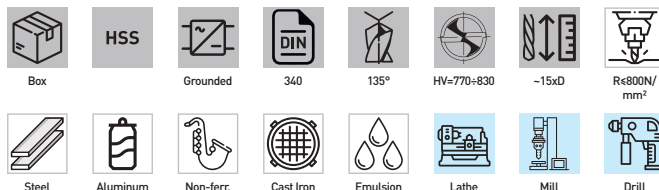
Art.	ø	L	l	Pack
P023/04.25C	4,25 mm	55 mm	22 mm	10
P023/04.50C	4,5 mm	58 mm	24 mm	10
P023/05.00C	5 mm	62 mm	26 mm	10
P023/05.50C	5,5 mm	66 mm	28 mm	10
P023/06.00C	6 mm	66 mm	28 mm	10



P023-XL

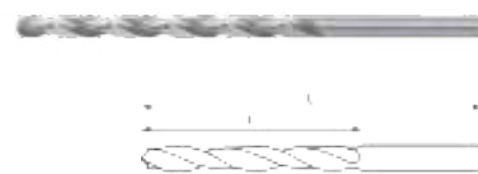
LONG TYPE STRAIGHT SHANK TWIST DRILL

Right hand, rectified.



Art.	ø	L	l	Pack
P023/01.00L	1 mm	56 mm	33 mm	10
P023/01.25L	1,25 mm	65 mm	40 mm	10
P023/01.50L	1,5 mm	70 mm	45 mm	10
P023/01.75L	1,75 mm	80 mm	53 mm	10
P023/02.00L	2 mm	85 mm	56 mm	10
P023/02.25L	2,25 mm	90 mm	59 mm	10
P023/02.50L	2,5 mm	95 mm	62 mm	10
P023/02.75L	2,75 mm	100 mm	66 mm	10
P023/03.00L	3 mm	100 mm	66 mm	10
P023/03.25L	3,25 mm	106 mm	69 mm	10
P023/03.50L	3,5 mm	112 mm	73 mm	10
P023/03.75L	3,75 mm	112 mm	73 mm	10
P023/04.00L	4,00 mm	119 mm	78 mm	10
P023/04.25L	4,25 mm	119 mm	78 mm	10
P023/04.50L	4,5 mm	126 mm	82 mm	10
P023/04.75L	4,75 mm	126 mm	82 mm	10
P023/05.00L	5 mm	132 mm	87 mm	10
P023/05.25L	5,25 mm	132 mm	87 mm	10
P023/05.50L	5,5 mm	139 mm	91 mm	10
P023/05.75L	5,75 mm	139 mm	91 mm	10
P023/06.00L	6 mm	139 mm	91 mm	10
P023/06.25L	6,25 mm	148 mm	97 mm	10

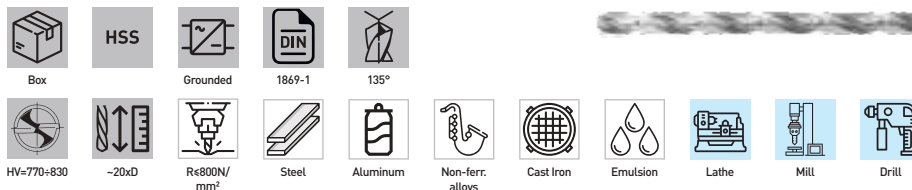
Art.	ø	L	l	Pack
P023/06.50L	6,5 mm	148 mm	97 mm	10
P023/06.75L	6,75 mm	148 mm	97 mm	10
P023/07.00L	7 mm	156 mm	102 mm	10
P023/07.25L	7,25 mm	156 mm	102 mm	10
P023/07.50L	7,5 mm	156 mm	102 mm	10
P023/07.75L	7,75 mm	165 mm	109 mm	10
P023/08.00L	8 mm	165 mm	109 mm	5
P023/08.25L	8,25 mm	165 mm	109 mm	5
P023/08.50L	8,5 mm	165 mm	109 mm	5
P023/08.75L	8,75 mm	175 mm	115 mm	5
P023/09.00L	9 mm	175 mm	115 mm	5
P023/09.25L	9,25 mm	175 mm	115 mm	5
P023/09.50L	9,5 mm	175 mm	115 mm	5
P023/09.75L	9,75 mm	184 mm	121 mm	5
P023/10.00L	10 mm	184 mm	121 mm	5
P023/10.25L	10,25 mm	184 mm	121 mm	5
P023/10.50L	10,5 mm	184 mm	121 mm	5
P023/11.00L	11 mm	195 mm	128 mm	5
P023/11.50L	11,5 mm	195 mm	128 mm	5
P023/12.00L	12 mm	205 mm	134 mm	5
P023/12.50L	12,5 mm	205 mm	134 mm	5
P023/13.00L	13 mm	205 mm	134 mm	5



P023-XL1

EXTRA LONG SERIES CYLINDRICAL DRILL BIT

Right hand, rectified.



Art.	ø	L	l
P023/02.00L1	2 mm	125 mm	85 mm
P023/02.50L1	2,5 mm	140 mm	95 mm
P023/03.00L1	3 mm	150 mm	100 mm
P023/03.50L1	3,5 mm	165 mm	115 mm
P023/04.00L1	4,00 mm	175 mm	120 mm
P023/04.50L1	4,5 mm	185 mm	125 mm
P023/05.00L1	5 mm	195 mm	135 mm
P023/05.50L1	5,5 mm	205 mm	140 mm
P023/06.00L1	6 mm	205 mm	140 mm
P023/06.50L1	6,5 mm	215 mm	150 mm
P023/07.00L1	7 mm	225 mm	155 mm
P023/07.50L1	7,5 mm	225 mm	155 mm

Art.	ø	L	l
P023/08.00L1	8 mm	240 mm	165 mm
P023/08.50L1	8,5 mm	240 mm	165 mm
P023/09.00L1	9 mm	250 mm	175 mm
P023/09.50L1	9,5 mm	250 mm	175 mm
P023/10.00L1	10 mm	265 mm	185 mm
P023/10.50L1	10,5 mm	265 mm	185 mm
P023/11.00L1	11 mm	280 mm	195 mm
P023/11.50L1	11,5 mm	280 mm	195 mm
P023/12.00L1	12 mm	295 mm	205 mm
P023/12.50L1	12,5 mm	295 mm	205 mm
P023/13.00L1	13 mm	295 mm	205 mm



P023-XL2
EXTRA LONG SERIES CYLINDRICAL DRILL BIT

Right hand, rectified.



Art.	Ø	L	l
P023/02.00L2	2 mm	160 mm	110 mm
P023/02.50L2	2,5 mm	180 mm	120 mm
P023/03.00L2	3 mm	190 mm	130 mm
P023/03.50L2	3,5 mm	210 mm	145 mm
P023/04.00L2	4,00 mm	220 mm	150 mm
P023/04.50L2	4,5 mm	235 mm	160 mm
P023/05.00L2	5 mm	245 mm	170 mm
P023/05.50L2	5,5 mm	260 mm	180 mm
P023/06.00L2	6 mm	260 mm	180 mm
P023/06.50L2	6,5 mm	275 mm	190 mm
P023/07.00L2	7 mm	290 mm	200 mm
P023/07.50L2	7,5 mm	290 mm	200 mm
P023/08.00L2	8 mm	305 mm	210 mm
P023/08.50L2	8,5 mm	305 mm	210 mm
P023/09.00L2	9 mm	320 mm	220 mm
P023/09.50L2	9,5 mm	320 mm	220 mm
P023/10.00L2	10 mm	340 mm	235 mm
P023/10.50L2	10,5 mm	340 mm	235 mm
P023/11.00L2	11 mm	365 mm	250 mm
P023/11.50L2	11,5 mm	365 mm	250 mm
P023/12.00L2	12 mm	375 mm	260 mm
P023/12.50L2	12,5 mm	375 mm	260 mm
P023/13.00L2	13 mm	375 mm	260 mm

P023-XL3
EXTRA LONG SERIES CYLINDRICAL DRILL BIT

Right hand, rectified.



Art.	Ø	L	l
P023/02.00L3	2 mm	200 mm	135 mm
P023/02.50L3	2,5 mm	225 mm	150 mm
P023/03.00L3	3 mm	240 mm	160 mm
P023/03.50L3	3,5 mm	265 mm	180 mm
P023/04.00L3	4,00 mm	280 mm	190 mm
P023/04.50L3	4,5 mm	295 mm	200 mm
P023/05.00L3	5 mm	315 mm	210 mm
P023/05.50L3	5,5 mm	330 mm	225 mm
P023/06.00L3	6 mm	330 mm	225 mm
P023/06.50L3	6,5 mm	350 mm	235 mm
P023/07.00L3	7 mm	370 mm	250 mm
P023/07.50L3	7,5 mm	370 mm	250 mm
P023/08.00L3	8 mm	390 mm	265 mm
P023/08.50L3	8,5 mm	390 mm	265 mm
P023/09.00L3	9 mm	410 mm	280 mm
P023/09.50L3	9,5 mm	410 mm	280 mm
P023/10.00L3	10 mm	430 mm	295 mm
P023/10.50L3	10,5 mm	430 mm	295 mm
P023/11.00L3	11 mm	455 mm	310 mm
P023/11.50L3	11,5 mm	455 mm	310 mm
P023/12.00L3	12 mm	480 mm	330 mm
P023/12.50L3	12,5 mm	480 mm	330 mm
P023/13.00L3	13 mm	480 mm	330 mm



P058-

STRAIGHT SHANK TWIST DRILL

Right hand, long durability thanks to the titanium coating.



Box

HSS



Grounded

TiN



338/N



135°



HV=740-780



~8xD



Rc700N/mm²



Steel



Aluminum



Non-ferr. alloys



Cast Iron



Emulsion



Lathe



Mill

Art.	Ø	L	l	Pack
P058/01.00	1 mm	34 mm	12 mm	10
P058/01.25	1,25 mm	38 mm	16 mm	10
P058/01.50	1,5 mm	40 mm	18 mm	10
P058/01.75	1,75 mm	46 mm	22 mm	10
P058/02.00	2 mm	49 mm	24 mm	10
P058/02.25	2,25 mm	53 mm	27 mm	10
P058/02.50	2,5 mm	57 mm	30 mm	10
P058/02.75	2,75 mm	61 mm	33 mm	10
P058/03.00	3 mm	61 mm	33 mm	10
P058/03.25	3,25 mm	65 mm	36 mm	10
P058/03.50	3,5 mm	70 mm	39 mm	10
P058/03.75	3,75 mm	70 mm	39 mm	10
P058/04.00	4 mm	75 mm	43 mm	10
P058/04.25	4,25 mm	75 mm	43 mm	10
P058/04.50	4,5 mm	80 mm	47 mm	10
P058/04.75	4,75 mm	80 mm	47 mm	10
P058/05.00	5 mm	86 mm	52 mm	10
P058/05.25	5,25 mm	86 mm	52 mm	10
P058/05.50	5,5 mm	93 mm	57 mm	10
P058/05.75	5,75 mm	93 mm	57 mm	10
P058/06.00	6 mm	93 mm	57 mm	10
P058/06.25	6,25 mm	101 mm	63 mm	10
P058/06.50	6,5 mm	101 mm	63 mm	10
P058/06.75	6,75 mm	109 mm	69 mm	10
P058/07.00	7 mm	109 mm	69 mm	10
P058/07.25	7,25 mm	109 mm	69 mm	10
P058/07.50	7,5 mm	109 mm	69 mm	10
P058/07.75	7,75 mm	117 mm	75 mm	10
P058/08.00	8 mm	117 mm	75 mm	10
P058/08.25	8,25 mm	117 mm	75 mm	10
P058/08.50	8,5 mm	117 mm	75 mm	10
P058/08.75	8,75 mm	125 mm	81 mm	5
P058/09.00	9 mm	125 mm	81 mm	5
P058/09.25	9,25 mm	125 mm	81 mm	5
P058/09.50	9,5 mm	125 mm	81 mm	5
P058/09.75	9,75 mm	133 mm	87 mm	5
P058/10.00	10 mm	133 mm	87 mm	5
P058/10.25	10,25 mm	133 mm	87 mm	5
P058/10.50	10,5 mm	133 mm	87 mm	5
P058/10.75	10,75 mm	142 mm	94 mm	5
P058/11.00	11 mm	142 mm	94 mm	5
P058/11.25	11,25 mm	142 mm	94 mm	5
P058/11.50	11,5 mm	142 mm	94 mm	5
P058/11.75	11,75 mm	142 mm	94 mm	5
P058/12.00	12 mm	151 mm	101 mm	5
P058/12.25	12,25 mm	151 mm	101 mm	5
P058/12.50	12,5 mm	151 mm	101 mm	5
P058/12.75	12,75 mm	151 mm	101 mm	5
P058/13.00	13 mm	151 mm	101 mm	5

P058/170

TWIST DRILL SET

Right hand, long durability thanks to the titanium coating.



170 Pcs



150 (10x) Pcs (step 0,5 mm)

Ø 1 ÷ 8 mm

20 (5x) Pcs (step 0,5 mm)

Ø 8,5 ÷ 10 mm

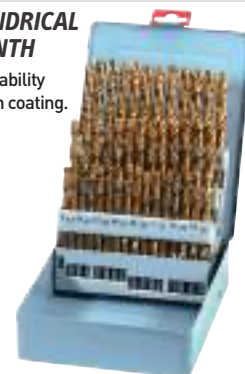
P010/51

SERIES OF CYLINDRICAL TIPS TO THE TENTH

Right hand, long durability thanks to the titanium coating.



51 Pcs



Size (step 0,1 mm)

1 ÷ 6 mm

P010/41

SERIES OF CYLINDRICAL TIPS TO THE TENTH

Right hand, long durability thanks to the titanium coating.



41 Pcs



Size (step 0,1 mm)

6 ÷ 10 mm

P062

TWIST DRILL SET

Right hand, long durability thanks to the titanium coating.



25 Pcs



Size (step 0,5 mm)

1 ÷ 13 mm

P061

STRAIGHT SHANK TWIST DRILL SET

Right hand, long durability thanks to the titanium coating.



19 Pcs



Size (step 0,5 mm)

1 ÷ 10 mm

P068

TWIST DRILL SET

Right hand, long durability thanks to the titanium coating.



20 Pcs



Sizes x 1 Pc

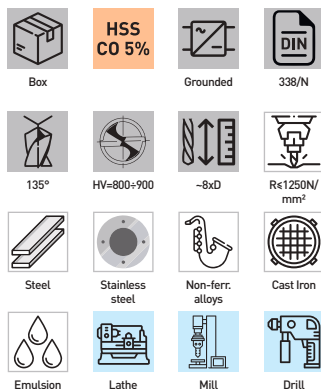
0,25 - 0,3 - 0,35 - 0,4 - 0,45 - 0,55 - 0,65 - 0,7 - 0,75 - 0,85 - 0,9 - 0,95 mm

Sizes x Pcs

0,5 - 0,6 - 0,8 - 1 mm

P065-
COBALT CYLINDRICAL TWIST DRILL

Self-centering, right, with great thermal resistance.



Art.	ø	Total length	Flute length	Pack
P065/01.00	1 mm	34 mm	12 mm	10
P065/01.25	1,25 mm	38 mm	16 mm	10
P065/01.50	1,5 mm	40 mm	18 mm	10
P065/01.75	1,75 mm	46 mm	22 mm	10
P065/02.00	2 mm	49 mm	24 mm	10
P065/02.25	2,25 mm	53 mm	27 mm	10
P065/02.50	2,5 mm	57 mm	30 mm	10
P065/02.75	2,75 mm	61 mm	33 mm	10
P065/03.00	3 mm	61 mm	33 mm	10
P065/03.25	3,25 mm	69 mm	39 mm	10
P065/03.50	3,5 mm	70 mm	39 mm	10
P065/03.75	3,75 mm	70 mm	39 mm	10
P065/04.00	4 mm	75 mm	43 mm	10
P065/04.25	4,25 mm	75 mm	43 mm	10
P065/04.50	4,5 mm	80 mm	47 mm	10
P065/04.75	4,75 mm	80 mm	47 mm	10
P065/05.00	5 mm	86 mm	52 mm	10
P065/05.25	5,25 mm	86 mm	52 mm	10
P065/05.50	5,5 mm	93 mm	57 mm	10
P065/05.75	5,75 mm	93 mm	57 mm	10
P065/06.00	6 mm	93 mm	57 mm	10
P065/06.25	6,25 mm	101 mm	63 mm	10
P065/06.50	6,5 mm	101 mm	63 mm	10
P065/06.75	6,75 mm	109 mm	69 mm	10
P065/07.00	7 mm	109 mm	69 mm	10
P065/07.25	7,25 mm	109 mm	69 mm	10
P065/07.50	7,5 mm	109 mm	69 mm	10
P065/07.75	7,75 mm	117 mm	75 mm	10
P065/08.00	8 mm	117 mm	75 mm	10
P065/08.25	8,25 mm	117 mm	75 mm	5
P065/08.50	8,5 mm	117 mm	75 mm	5
P065/08.75	8,75 mm	125 mm	81 mm	5
P065/09.00	9 mm	125 mm	81 mm	5
P065/09.25	9,25 mm	125 mm	81 mm	5
P065/09.50	9,5 mm	125 mm	81 mm	5
P065/09.75	9,75 mm	133 mm	87 mm	5
P065/10.00	10 mm	133 mm	87 mm	5
P065/10.25	10,25 mm	133 mm	87 mm	5
P065/10.50	10,5 mm	133 mm	87 mm	5
P065/10.75	10,75 mm	142 mm	94 mm	5
P065/11.00	11 mm	142 mm	94 mm	5
P065/11.25	11,25 mm	142 mm	94 mm	5
P065/11.50	11,5 mm	142 mm	94 mm	5
P065/11.75	11,75 mm	142 mm	94 mm	5
P065/12.00	12 mm	151 mm	101 mm	5
P065/12.25	12,25 mm	151 mm	101 mm	5
P065/12.50	12,5 mm	151 mm	101 mm	5
P065/12.75	12,75 mm	151 mm	101 mm	5
P065/13.00	13 mm	151 mm	101 mm	5

P067
COBALT TWIST DRILL SET

Self-centering, right, with great thermal resistance.



19 Pcs

Size (step 0,5 mm)

1 ÷ 10 mm

P069
COBALT TWIST DRILL SET

Self-centering, right, with great thermal resistance.



25 Pcs

Size (step 0,5 mm)

1 ÷ 13 mm

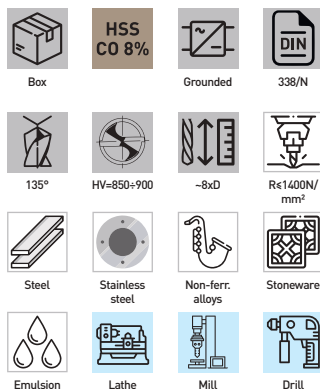




P064-

FULLY GROUND FROM THE SOLID TWIST DRILL

Self-centering, right, with great thermal resistance.



Art.	ø	L	l	Pack
P064/01.00	1 mm	34 mm	12 mm	10
P064/01.25	1,25 mm	38 mm	16 mm	10
P064/01.50	1,5 mm	40 mm	18 mm	10
P064/01.75	1,75 mm	46 mm	22 mm	10
P064/02.00	2 mm	49 mm	24 mm	10
P064/02.25	2,25 mm	53 mm	27 mm	10
P064/02.50	2,5 mm	57 mm	30 mm	10
P064/02.75	2,75 mm	61 mm	33 mm	10
P064/03.00	3 mm	61 mm	33 mm	10
P064/03.25	3,25 mm	69 mm	39 mm	10
P064/03.50	3,5 mm	70 mm	39 mm	10
P064/03.75	3,75 mm	70 mm	39 mm	10
P064/04.00	4 mm	75 mm	43 mm	10
P064/04.25	4,25 mm	75 mm	43 mm	10
P064/04.50	4,5 mm	80 mm	47 mm	10
P064/04.75	4,75 mm	80 mm	47 mm	10
P064/05.00	5 mm	86 mm	52 mm	10
P064/05.25	5,25 mm	86 mm	52 mm	10
P064/05.50	5,5 mm	93 mm	57 mm	10
P064/05.75	5,75 mm	93 mm	57 mm	10
P064/06.00	6 mm	93 mm	57 mm	10
P064/06.25	6,25 mm	101 mm	63 mm	10
P064/06.50	6,5 mm	101 mm	63 mm	10
P064/06.75	6,75 mm	109 mm	69 mm	10
P064/07.00	7 mm	109 mm	69 mm	10
P064/07.25	7,25 mm	109 mm	69 mm	10
P064/07.50	7,5 mm	109 mm	69 mm	10
P064/07.75	7,75 mm	117 mm	75 mm	10
P064/08.00	8 mm	117 mm	75 mm	5
P064/08.25	8,25 mm	117 mm	75 mm	5
P064/08.50	8,5 mm	117 mm	75 mm	5
P064/08.75	8,75 mm	125 mm	81 mm	5
P064/09.00	9 mm	125 mm	81 mm	5
P064/09.25	9,25 mm	125 mm	81 mm	5
P064/09.50	9,5 mm	125 mm	81 mm	5
P064/09.75	9,75 mm	133 mm	87 mm	5
P064/10.00	10 mm	133 mm	87 mm	5
P064/10.25	10,25 mm	133 mm	87 mm	5
P064/10.50	10,5 mm	133 mm	87 mm	5
P064/10.75	10,75 mm	142 mm	94 mm	5
P064/11.00	11 mm	142 mm	94 mm	5
P064/11.25	11,25 mm	142 mm	94 mm	5
P064/11.50	11,5 mm	142 mm	94 mm	5
P064/11.75	11,75 mm	142 mm	94 mm	5
P064/12.00	12 mm	151 mm	101 mm	5
P064/12.25	12,25 mm	151 mm	101 mm	5
P064/12.50	12,5 mm	151 mm	101 mm	5
P064/12.75	12,75 mm	151 mm	101 mm	5
P064/13.00	13 mm	151 mm	101 mm	5

P064/19A

COBALT TWIST DRILL SET

Self-centering, right, with great thermal resistance.



19 Pcs

Size (step 0,5 mm)

1 ÷ 10 mm

P064/25A

COBALT TWIST DRILL SET

Self-centering, right, with great thermal resistance.



25 Pcs

Size (step 0,5 mm)

1 ÷ 13 mm



ST2AX
TWIST DRILL WITH CONICAL SHANK

Right hand.



Box



HSS



118°



HV=700-740



~8xD



Rε650N/mm²



Steel



Aluminum



Non-ferr. alloys



Cast Iron



Emulsion



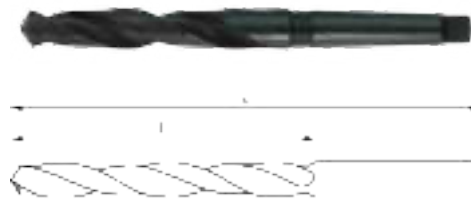
Lathe



Mill



Drill press



Art.	ø	MT	L	l
ST2A05.75	5,75 mm	1	138 mm	57 mm
ST2A06	6 mm	1	138 mm	57 mm
ST2A06.25	6,25 mm	1	144 mm	63 mm
ST2A06.50	6,5 mm	1	144 mm	63 mm
ST2A06.75	6,75 mm	1	150 mm	69 mm
ST2A07	7 mm	1	150 mm	69 mm
ST2A07.25	7,25 mm	1	150 mm	69 mm
ST2A07.50	7,5 mm	1	150 mm	69 mm
ST2A07.75	7,75 mm	1	156 mm	75 mm
ST2A08	8 mm	1	156 mm	75 mm
ST2A08.25	8,25 mm	1	156 mm	75 mm
ST2A08.50	8,5 mm	1	156 mm	75 mm
ST2A08.75	8,75 mm	1	156 mm	75 mm
ST2A09	9 mm	1	162 mm	81 mm
ST2A09.25	9,25 mm	1	162 mm	81 mm
ST2A09.50	9,5 mm	1	162 mm	81 mm
ST2A09.75	9,75 mm	1	162 mm	81 mm
ST2A10	10 mm	1	168 mm	81 mm
ST2A10.25	10,25 mm	1	168 mm	87 mm
ST2A10.50	10,5 mm	1	168 mm	87 mm
ST2A10.75	10,75 mm	1	175 mm	87 mm
ST2A11	11 mm	1	175 mm	94 mm
ST2A11.25	11,25 mm	1	175 mm	94 mm
ST2A11.50	11,5 mm	1	175 mm	94 mm
ST2A11.75	11,75 mm	1	175 mm	94 mm
ST2A12	12 mm	1	182 mm	94 mm
ST2A12.25	12,25 mm	1	182 mm	101 mm
ST2A12.50	12,5 mm	1	182 mm	101 mm
ST2A12.75	12,75 mm	1	182 mm	101 mm
ST2A13	13 mm	1	182 mm	101 mm
ST2A13.25	13,25 mm	1	182 mm	101 mm
ST2A13.50	13,5 mm	1	189 mm	108 mm
ST2A13.75	13,75 mm	1	189 mm	108 mm
ST2A14	14 mm	1	189 mm	108 mm
ST2A14.25	14,25 mm	2	212 mm	114 mm
ST2A14.50	14,5 mm	2	212 mm	114 mm
ST2A14.75	14,75 mm	2	212 mm	114 mm
ST2A15	15 mm	2	212 mm	114 mm
ST2A15.25	15,25 mm	2	218 mm	120 mm
ST2A15.50	15,5 mm	2	218 mm	120 mm
ST2A15.75	15,75 mm	2	218 mm	120 mm
ST2A16	16 mm	2	218 mm	120 mm
ST2A16.25	16,25 mm	2	223 mm	125 mm
ST2A16.50	16,5 mm	2	223 mm	125 mm
ST2A16.75	16,75 mm	2	223 mm	125 mm
ST2A17	17 mm	2	223 mm	125 mm
ST2A17.25	17,25 mm	2	228 mm	130 mm
ST2A17.50	17,5 mm	2	228 mm	130 mm
ST2A17.75	17,75 mm	2	228 mm	130 mm
ST2A18	18 mm	2	228 mm	130 mm
ST2A18.25	18,25 mm	2	233 mm	135 mm
ST2A18.50	18,5 mm	2	233 mm	135 mm
ST2A18.75	18,75 mm	2	233 mm	135 mm
ST2A19	19 mm	2	233 mm	135 mm
ST2A19.25	19,25 mm	2	238 mm	140 mm
ST2A19.50	19,5 mm	2	238 mm	130 mm
ST2A19.75	19,75 mm	2	238 mm	140 mm
ST2A20	20 mm	2	238 mm	140 mm
ST2A20.25	20,25 mm	2	243 mm	145 mm
ST2A20.50	20,5 mm	2	243 mm	145 mm
ST2A20.75	20,75 mm	2	243 mm	145 mm
ST2A21	21 mm	2	243 mm	145 mm
ST2A21.25	21,25 mm	2	248 mm	150 mm
ST2A21.50	21,5 mm	2	248 mm	150 mm
ST2A21.75	21,75 mm	2	248 mm	150 mm
ST2A22	22 mm	2	248 mm	150 mm
ST2A22.25	22,25 mm	2	248 mm	150 mm

Art.	ø	MT	L	l
ST2A22.50	22,5 mm	2	253 mm	155 mm
ST2A22.75	22,75 mm	2	253 mm	155 mm
ST2A23	23 mm	2	253 mm	155 mm
ST2A23.25	23,25 mm	3	276 mm	155 mm
ST2A23.50	23,5 mm	3	276 mm	155 mm
ST2A23.75	23,75 mm	3	281 mm	160 mm
ST2A24	24 mm	3	281 mm	160 mm
ST2A24.25	24,25 mm	3	281 mm	160 mm
ST2A24.50	24,5 mm	3	281 mm	160 mm
ST2A24.75	24,75 mm	3	281 mm	160 mm
ST2A25	25 mm	3	281 mm	160 mm
ST2A25.25	25,25 mm	3	281 mm	160 mm
ST2A25.50	25,5 mm	3	281 mm	160 mm
ST2A25.75	25,75 mm	3	281 mm	160 mm
ST2A26	26 mm	3	286 mm	165 mm
ST2A26.25	26,25 mm	3	286 mm	165 mm
ST2A26.50	26,5 mm	3	286 mm	165 mm
ST2A26.75	26,75 mm	3	291 mm	170 mm
ST2A27	27 mm	3	291 mm	170 mm
ST2A27.25	27,25 mm	3	291 mm	170 mm
ST2A27.50	27,5 mm	3	291 mm	170 mm
ST2A27.75	27,75 mm	3	291 mm	170 mm
ST2A28	28 mm	3	291 mm	170 mm
ST2A28.25	28,25 mm	3	296 mm	175 mm
ST2A28.50	28,5 mm	3	296 mm	175 mm
ST2A28.75	28,75 mm	3	296 mm	175 mm
ST2A29	29 mm	3	296 mm	175 mm
ST2A29.25	29,25 mm	3	296 mm	175 mm
ST2A29.50	29,5 mm	3	296 mm	175 mm
ST2A29.75	29,75 mm	3	296 mm	175 mm
ST2A30	30 mm	3	296 mm	175 mm
ST2A30.25	30,25 mm	3	301 mm	180 mm
ST2A30.50	30,5 mm	3	301 mm	180 mm
ST2A30.75	30,75 mm	3	301 mm	180 mm
ST2A31	31 mm	3	301 mm	180 mm
ST2A31.25	31,25 mm	3	301 mm	180 mm
ST2A31.50	31,5 mm	3	301 mm	180 mm
ST2A31.75	31,75 mm	4	306 mm	185 mm
ST2A32	32 mm	4	334 mm	185 mm
ST2A32.50	32,5 mm	4	334 mm	185 mm
ST2A33	33 mm	4	334 mm	185 mm
ST2A33.50	33,5 mm	4	334 mm	185 mm
ST2A34	34 mm	4	339 mm	190 mm
ST2A34.50	34,5 mm	4	339 mm	190 mm
ST2A35	35 mm	4	339 mm	190 mm
ST2A35.50	35,5 mm	4	339 mm	190 mm
ST2A36	36 mm	4	344 mm	195 mm
ST2A36.50	36,5 mm	4	344 mm	195 mm
ST2A37	37 mm	4	344 mm	195 mm
ST2A37.50	37,5 mm	4	344 mm	195 mm
ST2A38	38 mm	4	349 mm	200 mm
ST2A38.50	38,5 mm	4	349 mm	200 mm
ST2A39	39 mm	4	349 mm	200 mm
ST2A39.50	39,5 mm	4	349 mm	200 mm
ST2A40	40 mm	4	349 mm	200 mm
ST2A40.50	40,5 mm	4	354 mm	205 mm
ST2A41	41 mm	4	354 mm	205 mm
ST2A41.50	41,5 mm	4	354 mm	205 mm
ST2A42	42 mm	4	354 mm	205 mm
ST2A42.50	42,5 mm	4	354 mm	205 mm
ST2A43	43 mm	4	359 mm	210 mm
ST2A43.50	43,5 mm	4	359 mm	210 mm
ST2A44	44 mm	4	359 mm	210 mm
ST2A44.50	44,5 mm	4	359 mm	210 mm
ST2A45	45 mm	4	359 mm	210 mm
ST2A45.50	45,5 mm	4	364 mm	215 mm
ST2A46	46 mm	4	364 mm	215 mm

Art.	ø	MT	L	l
ST2A46.50	46,5 mm	4	364 mm	215 mm
ST2A47	47 mm	4	364 mm	215 mm
ST2A47.50	47,5 mm	4	364 mm	215 mm
ST2A48	48 mm	4	369 mm	220 mm
ST2A48.50	48,5 mm	4	369 mm	220 mm
ST2A49	49 mm	4	369 mm	220 mm
ST2A49.50	49,5 mm	4	369 mm	220 mm
ST2A50	50 mm	4	369 mm	220 mm
ST2A50.50	50,5 mm	4	374 mm	225 mm
ST2A51	51 mm	5	412 mm	225 mm
ST2A51.50	51,5 mm	5	412 mm	225 mm
ST2A52	52 mm	5	412 mm	225 mm
ST2A53	53 mm	5	412 mm	225 mm
ST2A54	54 mm	5	417 mm	230 mm
ST2A55	55 mm	5	417 mm	230 mm
ST2A56	56 mm	5	417 mm	230 mm
ST2A57	57 mm	5	422 mm	235 mm
ST2A58	58 mm	5	422 mm	235 mm
ST2A59	59 mm	5	422 mm	235 mm
ST2A60	60 mm	5	422 mm	235 mm
ST2A61	61 mm	5	427 mm	240 mm
ST2A62	62 mm	5	427 mm	240 mm
ST2A63	63 mm	5	427 mm	240 mm
ST2A65	65 mm	5	432 mm	245 mm
ST2A66	66 mm	5	432 mm	245 mm
ST2A67	67 mm	5	432 mm	245 mm
ST2A68	68 mm	5	437 mm	250 mm
ST2A69	69 mm	5	437 mm	250 mm
ST2A70	70 mm	5	437 mm	250 mm
ST2A71	71 mm	5	437 mm	250 mm
ST2A72	72 mm	5	442 mm	255 mm
ST2A73	73 mm	5	442 mm	255 mm
ST2A74	74 mm	5	442 mm	255 mm
ST2A75	75 mm	5	442 mm	255 mm
ST2A77	77 mm	6	514 mm	260 mm
ST2A78	78 mm	6	514 mm	260 mm
ST2A79	79 mm	6	514 mm	260 mm

P057
SET OF TWIST DRILLS WITH CONICAL SHANK

Right hand.



10 Pcs

Sizes CM1: 14 mm

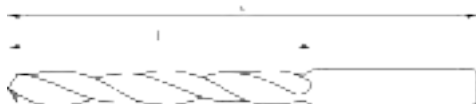
MT 14 mm

Sizes CM2: 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22 - 23 mm



P081-

NC SPOTTING DRILL

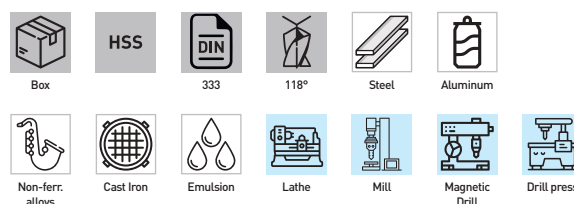


Art.	Diameter	l	L
P081/03	3 mm	17 mm	46 mm
P081/04	4 mm	20 mm	55 mm
P081/05	5 mm	25 mm	60 mm
P081/06	6 mm	27 mm	66 mm
P081/08	8 mm	30 mm	79 mm
P081/10	10 mm	35 mm	89 mm
P081/12	12 mm	30 mm	102 mm
P081/16	16 mm	35 mm	115 mm
P081/20	20 mm	40 mm	131 mm

P056-

CENTER DRILL

Ground, with vaporized grooves. Taper angle 60°.



Art.	Ø	Stem	Length
P056/1	1 mm	Ø 3 mm	30,5 mm
P056/1.6	1,6 mm	Ø 4 mm	35,5 mm
P056/2	2 mm	Ø 5 mm	40 mm
P056/2.5	2,5 mm	Ø 6,3 mm	45 mm
P056/3.15	3,15 mm	Ø 8 mm	50 mm
P056/4	4 mm	Ø 10 mm	56 mm
P056/5	5 mm	Ø 12,5 mm	63 mm

P056/10S

CENTER DRILL SET

Ground, with vaporized grooves. Taper angle 60°.



Sizes	0,75 - 1,00 - 1,5 - 1,6 - 2,0 - 2,5 - 3,0 - 3,15 - 4,0 - 5,0 mm
Type	A
Tolerance	K12



CORE SAWS

Tools designed for drilling and processing metal materials. These are cylindrical tips with a toothed circular section. They are mounted on the spindle of special tools such as drilling machines, magnetic base drills, and column drills. Unlike cup milling machines, which have a crown that holds the material to be removed inside, these milling machines process the material by chip removal through the side cutters of the tool.



THEORETICAL RPM FOR CORE SAWS DEPENDING ON THE MATERIAL TO BE PROCESSED

Materials to be processed	Saw Type	Saw diameter							Coolant
		12 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 49	50 - 60	
		no. of revolutions (rpm)							
Low alloy construction steel R< 700÷900N/mm2	HSS	700	530	420	340	290	240	170	Emulsion
	HSS-Co5%	875	663	525	425	363	300	213	Emulsion
Alloy steel R< 1100÷1300N/mm2	HSS	470	350	270	230	190	160	120	Emulsion
	HSS-Co5%	588	438	338	288	238	200	150	Emulsion
Stainless steel	HSS	470	350	270	230	190	160	120	Emulsion
	HSS-Co5%	588	438	338	288	238	200	150	Emulsion
Cast iron	HSS	240	180	140	120	100	80	60	No refriger.
Light Alloys	HSS	700	530	420	340	290	240	170	No refriger.
Plastic	HSS	830	620	480	400	340	280	200	No refriger.

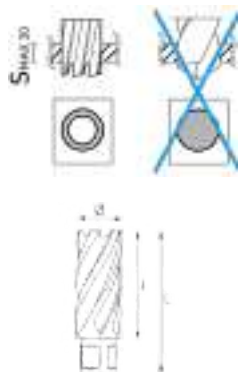




F011-

CORE DRILL WITH WELDON SHANK

Allows a very fast cut, does not require pre-drilling and does not create any burr formation thanks to the lower effort of the cutting edge during processing.



Hangable

HSS



R<850N/mm²



Steel



Aluminum



Non-ferr. alloys



Cast Iron



Emulsion



Mill



Magnetic Drill



Drill press

Art.	Cutting capacity	Ø	Total length
F011/12	30 mm	12 mm	62 mm
F011/13	30 mm	13 mm	62 mm
F011/14	30 mm	14 mm	62 mm
F011/15	30 mm	15 mm	62 mm
F011/16	30 mm	16 mm	62 mm
F011/17	30 mm	17 mm	62 mm
F011/18	30 mm	18 mm	62 mm
F011/19	30 mm	19 mm	62 mm
F011/20	30 mm	20 mm	62 mm
F011/21	30 mm	21 mm	62 mm
F011/22	30 mm	22 mm	62 mm
F011/23	30 mm	23 mm	62 mm
F011/24	30 mm	24 mm	62 mm
F011/25	30 mm	25 mm	62 mm
F011/26	30 mm	26 mm	62 mm
F011/27	30 mm	27 mm	62 mm
F011/28	30 mm	28 mm	62 mm
F011/29	30 mm	29 mm	62 mm
F011/30	30 mm	30 mm	62 mm
F011/31	30 mm	31 mm	62 mm
F011/32	30 mm	32 mm	62 mm
F011/33	30 mm	33 mm	62 mm
F011/34	30 mm	34 mm	62 mm
F011/35	30 mm	35 mm	62 mm
F011/36	30 mm	36 mm	62 mm
F011/37	30 mm	37 mm	62 mm
F011/38	30 mm	38 mm	62 mm
F011/39	30 mm	39 mm	62 mm
F011/40	30 mm	40 mm	62 mm
F011/41	30 mm	41 mm	62 mm
F011/42	30 mm	42 mm	62 mm
F011/43	30 mm	43 mm	62 mm
F011/44	30 mm	44 mm	62 mm
F011/45	30 mm	45 mm	62 mm
F011/46	30 mm	46 mm	62 mm
F011/47	30 mm	47 mm	62 mm
F011/48	30 mm	48 mm	62 mm
F011/49	30 mm	49 mm	62 mm
F011/50	30 mm	50 mm	62 mm
F011/51	30 mm	51 mm	62 mm
F011/52	30 mm	52 mm	62 mm
F011/53	30 mm	53 mm	62 mm
F011/54	30 mm	54 mm	62 mm
F011/55	30 mm	55 mm	62 mm
F011/60	30 mm	60 mm	62 mm

F011/6

WELDON SHANK CORE DRILL SET

Allows a very fast cut, does not require pre-drilling and does not create any burr formation thanks to the lower effort of the cutting edge during processing.



7 Pcs



Box



HSS



R<850N/mm²

Sizes	12 x 62 - 14 x 62 - 16 x 62 - 18 x 62 - 20 x 62 - 22 x 62 mm
Cutting capacity	30 mm
Shank	Weldon 19,05 mm

F011-XP

TWIST DRILLS WELDON SHANK



Hangable

HSS



135°



R<850N/mm²



Steel



Aluminum



Non-ferr. alloys



Cast Iron



Emulsion



Mill



Magnetic Drill

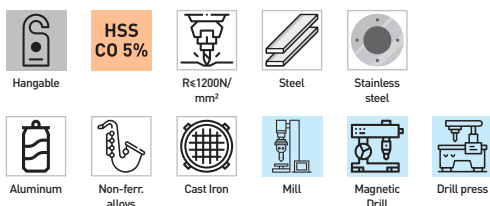
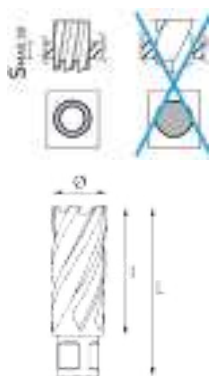


Drill press

Art.	Ø	l	L
F011/006P	6 mm	30 mm	62 mm
F011/007P	7 mm	30 mm	62 mm
F011/008P	8 mm	30 mm	62 mm
F011/009P	9 mm	30 mm	62 mm
F011/010P	10 mm	30 mm	62 mm
F011/011P	11 mm	30 mm	62 mm

F002-
CORE DRILL WITH WELDON SHANK

Allows a very fast cut, does not require pre-drilling and does not create any burr formation thanks to the lower effort of the cutting edge during processing.



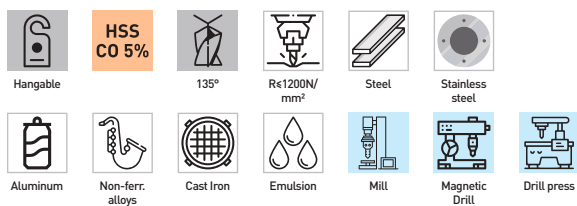
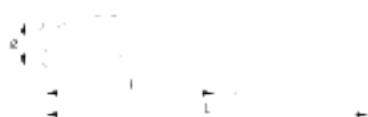
Art.	Ø	Cutting capacity	Total length
F002/12	12 mm	30 mm	62 mm
F002/13	13 mm	30 mm	62 mm
F002/14	14 mm	30 mm	62 mm
F002/15	15 mm	30 mm	62 mm
F002/16	16 mm	30 mm	62 mm
F002/17	17 mm	30 mm	62 mm
F002/18	18 mm	30 mm	62 mm
F002/19	19 mm	30 mm	62 mm
F002/20	20 mm	30 mm	62 mm
F002/21	21 mm	30 mm	62 mm
F002/22	22 mm	30 mm	62 mm
F002/23	23 mm	30 mm	62 mm
F002/24	24 mm	30 mm	62 mm
F002/25	25 mm	30 mm	62 mm
F002/26	26 mm	30 mm	62 mm
F002/27	27 mm	30 mm	62 mm
F002/28	28 mm	30 mm	62 mm
F002/29	29 mm	30 mm	62 mm
F002/30	30 mm	30 mm	62 mm
F002/31	31 mm	30 mm	62 mm
F002/32	32 mm	30 mm	62 mm
F002/33	33 mm	30 mm	62 mm
F002/34	34 mm	30 mm	62 mm
F002/35	35 mm	30 mm	62 mm
F002/36	36 mm	30 mm	62 mm
F002/37	37 mm	30 mm	62 mm
F002/38	38 mm	30 mm	62 mm
F002/39	39 mm	30 mm	62 mm
F002/40	40 mm	30 mm	62 mm
F002/41	41 mm	30 mm	62 mm
F002/42	42 mm	30 mm	62 mm
F002/43	43 mm	30 mm	62 mm
F002/44	44 mm	30 mm	62 mm
F002/45	45 mm	30 mm	62 mm
F002/46	46 mm	30 mm	62 mm
F002/47	47 mm	30 mm	62 mm
F002/48	48 mm	30 mm	62 mm
F002/49	49 mm	30 mm	62 mm
F002/50	50 mm	30 mm	62 mm
F002/55	55 mm	30 mm	62 mm
F002/60	60 mm	30 mm	62 mm

F002/6
WELDON SHANK CORE DRILL SET

Allows a very fast cut, does not require pre-drilling and does not create any burr formation thanks to the lower effort of the cutting edge during processing.



Sizes	12 x 62 - 14 x 62 - 16 x 62 - 18 x 62 - 20 x 62 - 22 x 62 mm
Shank	Weldon 19,05 mm

F002-XP
TWIST DRILLS WELDON SHANK


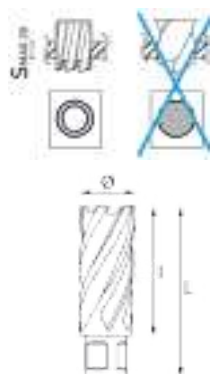
Art.	Ø	l	L
F002/006P	6 mm	30 mm	62,5 mm
F002/007P	7 mm	30 mm	62,5 mm
F002/008P	8 mm	30 mm	62,5 mm
F002/009P	9 mm	30 mm	62,5 mm
F002/010P	10 mm	30 mm	62,5 mm
F002/011P	11 mm	30 mm	62,5 mm



F002-XL

LONG TYPE CORE DRILL WITH WELDON SHANK

Allows a very fast cut, does not require pre-drilling and does not create any burr formation thanks to the lower effort of the cutting edge during processing.



Hangable

HSS
CO 5%



Re1200N/mm²



Steel



Stainless steel



Aluminum



Non-ferr. alloys



Cast Iron



Mill



Magnetic Drill



Drill press

Art.	Ø	Cutting capacity	Total length
F002/12L	12 mm	50 mm	85 mm
F002/13L	13 mm	50 mm	85 mm
F002/14L	14 mm	50 mm	85 mm
F002/15L	15 mm	50 mm	85 mm
F002/16L	16 mm	50 mm	85 mm
F002/17L	17 mm	50 mm	85 mm
F002/18L	18 mm	50 mm	85 mm
F002/19L	19 mm	50 mm	85 mm
F002/20L	20 mm	50 mm	85 mm
F002/21L	21 mm	50 mm	85 mm
F002/22L	22 mm	50 mm	85 mm
F002/23L	23 mm	50 mm	85 mm
F002/24L	24 mm	50 mm	85 mm
F002/25L	25 mm	50 mm	85 mm
F002/26L	26 mm	50 mm	85 mm
F002/27L	27 mm	50 mm	85 mm
F002/28L	28 mm	50 mm	85 mm
F002/29L	29 mm	50 mm	85 mm
F002/30L	30 mm	50 mm	85 mm
F002/31L	31 mm	50 mm	85 mm
F002/32L	32 mm	50 mm	85 mm
F002/33L	33 mm	50 mm	85 mm
F002/34L	34 mm	50 mm	85 mm
F002/35L	35 mm	50 mm	85 mm
F002/36L	36 mm	50 mm	85 mm
F002/37L	37 mm	50 mm	85 mm
F002/38L	38 mm	50 mm	85 mm
F002/39L	39 mm	50 mm	85 mm
F002/40L	40 mm	50 mm	85 mm
F002/41L	41 mm	50 mm	85 mm
F002/42L	42 mm	50 mm	85 mm
F002/43L	43 mm	50 mm	85 mm
F002/44L	44 mm	50 mm	85 mm
F002/45L	45 mm	50 mm	85 mm
F002/46L	46 mm	50 mm	85 mm
F002/47L	47 mm	50 mm	85 mm
F002/48L	48 mm	50 mm	85 mm
F002/49L	49 mm	50 mm	85 mm
F002/50L	50 mm	50 mm	85 mm
F002/55L	55 mm	50 mm	85 mm
F002/60L	60 mm	50 mm	85 mm

F002-XPL

LONG TWIST DRILLS WELDON SHANK



Hangable

HSS
CO 5%



135°



Re1200N/mm²



Steel



Stainless steel



Aluminum



Non-ferr. alloys



Cast Iron



Mill



Magnetic Drill



Drill press

Art.	Ø	L	L
F002/006PL	6 mm	55 mm	62,5 mm
F002/007PL	7 mm	55 mm	86,5 mm
F002/008PL	8 mm	55 mm	86,5 mm
F002/009PL	9 mm	55 mm	86,5 mm
F002/010PL	10 mm	55 mm	86,5 mm
F002/011PL	11 mm	55 mm	86,5 mm

F002/P

PILOT PIN

For weldon shank core drills.



Box



Mill



Magnetic Drill



Drill press

Dimensions	6,35 x 77 mm
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F002/PL

PILOT PIN

For weldon shank long type core drills.



Box



Mill



Magnetic Drill



Drill press

Dimensions	6,35 x 102 mm
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CUP SAWS WITH HARD METAL INSERTS

The variable hard metal tooth geometry enables cutting of pipes, profiles and sheets made of stainless steel, high-alloy steel. Max cut thickness: 5 mm



THEORETICAL RPM FOR CUP SAWS WITH HARD METAL INSERTS DEPENDING ON THE MATERIAL TO BE PROCESSED

Materials to be processed	Saw diameter							Coolant
	15 - 20	21 - 25	26 - 30	31 - 40	41 - 50	51 - 70	71 -100	
	no. of revolutions (rpm)							
Alloy steel R< 1100÷1300N/mm2	530	420	340	270	210	160	100	Emulsion
Stainless steel	530	420	340	270	210	160	100	Emulsion
Aluminium	880	690	570	450	350	270	190	Emulsion

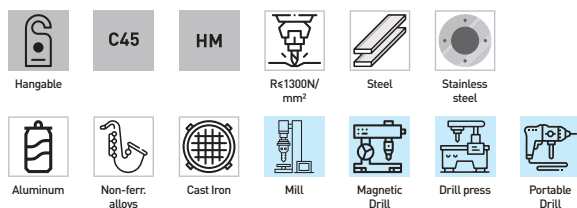
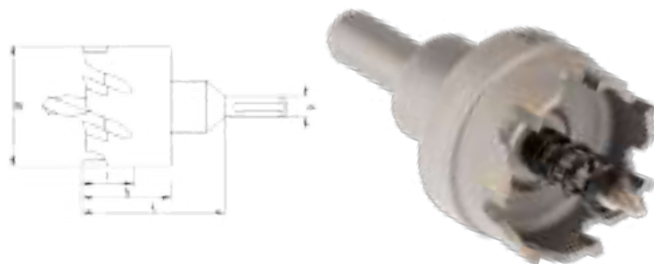




F019-

TCT CORE DRILL

With lateral chip and center drill. Maximum cutting depth 5mm.

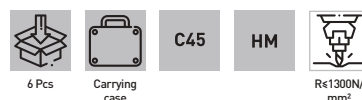


Art.	ø	h	d	L	Thread
F019/015	15 mm	28 mm	10 mm	50 mm	-
F019/016	16 mm	28 mm	10 mm	50 mm	-
F019/017	17 mm	28 mm	10 mm	50 mm	-
F019/018	18 mm	28 mm	10 mm	50 mm	-
F019/019	19 mm	28 mm	10 mm	50 mm	-
F019/020	20 mm	28 mm	10 mm	50 mm	-
F019/021	21 mm	28 mm	10 mm	50 mm	-
F019/022	22 mm	28 mm	10 mm	50 mm	M12 x 1,25
F019/023	23 mm	28 mm	10 mm	50 mm	M12 x 1,25
F019/024	24 mm	28 mm	10 mm	50 mm	M12 x 1,25
F019/025	25 mm	28 mm	10 mm	50 mm	M12 x 1,25
F019/026	26 mm	28 mm	10 mm	50 mm	M12 x 1,25
F019/027	27 mm	28 mm	10 mm	50 mm	M12 x 1,25
F019/028	28 mm	28 mm	10 mm	50 mm	M12 x 1,25
F019/029	29 mm	28 mm	10 mm	50 mm	M12 x 1,25
F019/030	30 mm	28 mm	10 mm	50 mm	M12 x 1,25
F019/031	31 mm	28 mm	10 mm	50 mm	M12 x 1,25
F019/032	32 mm	28 mm	10 mm	50 mm	M12 x 1,25
F019/033	33 mm	28 mm	10 mm	50 mm	M12 x 1,25
F019/034	34 mm	28 mm	10 mm	50 mm	M12 x 1,25
F019/035	35 mm	28 mm	10 mm	50 mm	M14 x 1,5
F019/036	36 mm	35 mm	10 mm	55 mm	M14 x 1,5
F019/037	37 mm	28 mm	10 mm	50 mm	M14 x 1,5
F019/038	38 mm	28 mm	10 mm	50 mm	M14 x 1,5
F019/039	39 mm	28 mm	10 mm	50 mm	M14 x 1,5
F019/040	40 mm	28 mm	10 mm	50 mm	M14 x 1,5
F019/041	41 mm	28 mm	10 mm	50 mm	M14 x 1,5
F019/042	42 mm	28 mm	10 mm	50 mm	M14 x 1,5
F019/043	43 mm	28 mm	10 mm	50 mm	M14 x 1,5
F019/044	44 mm	28 mm	10 mm	50 mm	M14 x 1,5
F019/045	45 mm	28 mm	10 mm	50 mm	M14 x 1,5
F019/046	46 mm	28 mm	10 mm	50 mm	M14 x 1,5
F019/047	47 mm	28 mm	10 mm	50 mm	M14 x 1,5
F019/048	48 mm	28 mm	10 mm	50 mm	M14 x 1,5
F019/049	49 mm	28 mm	10 mm	50 mm	M14 x 1,5
F019/050	50 mm	28 mm	10 mm	50 mm	M14 x 1,5
F019/051	51 mm	28 mm	12 mm	50 mm	M16 x 1,5
F019/052	52 mm	28 mm	12 mm	50 mm	M16 x 1,5
F019/053	53 mm	28 mm	12 mm	50 mm	M16 x 1,5
F019/054	54 mm	28 mm	12 mm	50 mm	M16 x 1,5
F019/055	55 mm	28 mm	12 mm	50 mm	M16 x 1,5
F019/056	56 mm	28 mm	12 mm	50 mm	M16 x 1,5
F019/057	57 mm	28 mm	12 mm	50 mm	M16 x 1,5
F019/058	58 mm	28 mm	12 mm	50 mm	M16 x 1,5
F019/059	59 mm	28 mm	12 mm	50 mm	M16 x 1,5
F019/060	60 mm	35 mm	10 mm	55 mm	M16 x 1,5
F019/065	65 mm	28 mm	10 mm	50 mm	M16 x 1,5
F019/070	70 mm	28 mm	12 mm	50 mm	M16 x 1,5
F019/075	75 mm	28 mm	12 mm	50 mm	M16 x 1,5
F019/080	80 mm	28 mm	12 mm	50 mm	M16 x 1,5
F019/085	85 mm	28 mm	12 mm	50 mm	M16 x 1,5
F019/090	90 mm	28 mm	12 mm	50 mm	M16 x 1,5
F019/095	95 mm	28 mm	12 mm	50 mm	M16 x 1,5
F019/100	100 mm	28 mm	12 mm	50 mm	M16 x 1,5

F019/006

TCT CORE DRILL SET

With lateral chip and center drill.

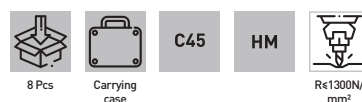


Sizes 16 mm, 18 mm, 20 mm, 22 mm, 25 mm, 30 mm
Cutting Depth 5 mm

F019/008

TCT CORE DRILL SET

With lateral chip and center drill.

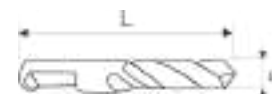


Sizes 16 mm, 18 mm, 20 mm, 22 mm, 25 mm, 30 mm, 32 mm, 35 mm
Cutting Depth 5 mm

F019/005

CENTER DRILL

For item F019-.



ø 6 mm
L 50 mm

F019/007

SPRING

For item F019-.



HSS CUP SAWS

Equipped with chip breaker side cut. Precision drilling of steel sheets, light alloys and metal materials in general. Drilling depth up to 5 mm.



THEORETICAL RPM FOR CORE SAWS DEPENDING ON THE MATERIAL TO BE PROCESSED

Materials to be processed	Saw diameter												Coolant
	12-17	18-24	25-32	33-38	39-44	45-51	52-57	58-64	65-70	71-80	81-90	91-100	
	no. of revolutions (rpm)												
Low alloy construction steel R< 700÷900N/mm2	550	380	300	240	200	170	150	130	120	110	100	90	Emulsion
Alloy steel R< 1100÷1300N/mm2	230	160	130	100	80	70	60	60	50	50	40	40	Emulsion
Stainless steel	230	160	130	100	80	70	60	60	50	50	40	40	Emulsion
Cast iron	280	190	150	120	100	90	80	70	60	60	50	40	No refriger.
Light Alloys	870	590	470	370	310	270	240	210	190	170	150	140	Emulsion
Aluminium	870	590	470	370	310	270	240	210	190	170	150	140	Emulsion
Plastic	660	450	350	280	240	210	180	160	150	130	120	100	Water No refrigeration

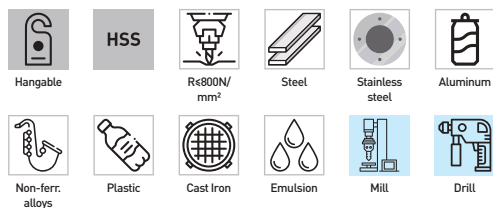
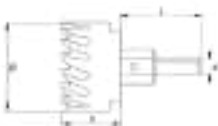




F015-

DRILL BIT HOLE SAW

With lateral chip and center drill.



Art.	ø	h	d	L	Thread
F015/012	12 mm	23 mm	8 mm	46 mm	M10 x 1,25
F015/013	13 mm	23 mm	8 mm	46 mm	M10 x 1,25
F015/014	14 mm	23 mm	8 mm	46 mm	M10 x 1,25
F015/015	15 mm	23 mm	10 mm	46 mm	M12 x 1,25
F015/016	16 mm	23 mm	10 mm	46 mm	M12 x 1,25
F015/017	17 mm	23 mm	10 mm	46 mm	M12 x 1,25
F015/018	18 mm	23 mm	10 mm	46 mm	M12 x 1,25
F015/019	19 mm	23 mm	10 mm	46 mm	M12 x 1,25
F015/020	20 mm	23 mm	10 mm	46 mm	M12 x 1,25
F015/021	21 mm	23 mm	10 mm	46 mm	M12 x 1,25
F015/022	22 mm	23 mm	10 mm	46 mm	M12 x 1,25
F015/023	23 mm	23 mm	10 mm	46 mm	M12 x 1,25
F015/024	24 mm	23 mm	10 mm	46 mm	M12 x 1,25
F015/025	25 mm	23 mm	10 mm	46 mm	M12 x 1,25
F015/026	26 mm	23 mm	10 mm	46 mm	M12 x 1,25
F015/027	27 mm	23 mm	10 mm	46 mm	M12 x 1,25
F015/028	28 mm	23 mm	10 mm	46 mm	M12 x 1,25
F015/029	29 mm	23 mm	10 mm	46 mm	M12 x 1,25
F015/030	30 mm	23 mm	10 mm	46 mm	M12 x 1,25
F015/031	31 mm	23 mm	10 mm	46 mm	M12 x 1,25
F015/032	32 mm	23 mm	10 mm	46 mm	M12 x 1,25
F015/033	33 mm	23 mm	10 mm	46 mm	M12 x 1,25
F015/034	34 mm	23 mm	10 mm	46 mm	M12 x 1,25
F015/035	35 mm	23 mm	10 mm	46 mm	M14 x 1,5
F015/036	36 mm	23 mm	10 mm	46 mm	M14 x 1,5
F015/037	37 mm	23 mm	10 mm	46 mm	M14 x 1,5
F015/038	38 mm	23 mm	10 mm	46 mm	M14 x 1,5
F015/039	39 mm	23 mm	10 mm	46 mm	M14 x 1,5
F015/040	40 mm	23 mm	10 mm	46 mm	M14 x 1,5
F015/041	41 mm	23 mm	10 mm	46 mm	M14 x 1,5
F015/042	42 mm	23 mm	10 mm	46 mm	M14 x 1,5
F015/043	43 mm	23 mm	10 mm	46 mm	M14 x 1,5
F015/044	44 mm	23 mm	10 mm	46 mm	M14 x 1,5
F015/045	45 mm	23 mm	10 mm	46 mm	M14 x 1,5
F015/046	46 mm	23 mm	10 mm	46 mm	M14 x 1,5
F015/047	47 mm	23 mm	10 mm	46 mm	M14 x 1,5
F015/048	48 mm	23 mm	10 mm	46 mm	M14 x 1,5
F015/049	49 mm	23 mm	10 mm	46 mm	M14 x 1,5
F015/050	50 mm	23 mm	10 mm	46 mm	M14 x 1,5
F015/051	51 mm	23 mm	12 mm	46 mm	M16 x 1,5
F015/052	52 mm	23 mm	12 mm	46 mm	M16 x 1,5
F015/053	53 mm	23 mm	12 mm	46 mm	M16 x 1,5
F015/054	54 mm	23 mm	12 mm	46 mm	M16 x 1,5
F015/055	55 mm	23 mm	12 mm	46 mm	M16 x 1,5
F015/056	56 mm	23 mm	12 mm	46 mm	M16 x 1,5
F015/057	57 mm	23 mm	12 mm	46 mm	M16 x 1,5
F015/058	58 mm	23 mm	12 mm	46 mm	M16 x 1,5
F015/059	59 mm	23 mm	12 mm	46 mm	M16 x 1,5
F015/060	60 mm	23 mm	12 mm	46 mm	M16 x 1,5
F015/065	65 mm	23 mm	12 mm	46 mm	M16 x 1,5
F015/070	70 mm	23 mm	12 mm	46 mm	M16 x 1,5
F015/075	75 mm	23 mm	12 mm	46 mm	M16 x 1,5
F015/080	80 mm	23 mm	12 mm	46 mm	M16 x 1,5
F015/085	85 mm	23 mm	12 mm	46 mm	M16 x 1,5
F015/090	90 mm	23 mm	12 mm	46 mm	M16 x 1,5
F015/095	95 mm	23 mm	12 mm	46 mm	M16 x 1,5
F015/100	100 mm	23 mm	12 mm	46 mm	M16 x 1,5

F015/006S

DRILL BIT HOLE SAW SET

With lateral chip and center drill.

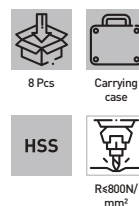


Sizes 16 mm, 18 mm, 20 mm, 22 mm, 25 mm, 30 mm

F015/008S

DRILL BIT HOLE SAW SET

With lateral chip and center drill.

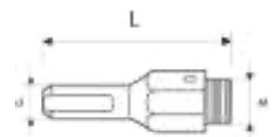


Sizes 16 mm, 18 mm, 20 mm, 22 mm, 25 mm, 30 mm, 32 mm, 35 mm

F015-A

DRILL BIT HOLE SAW ARBOR

For item F015-.



Art.	ø	d	L	M
F015/001	12 - 14 mm	8 mm	56 mm	M10 x 1,25
F015/002	15 - 34 mm	10 mm	56 mm	M12 x 1,25
F015/003	35 - 50 mm	10 mm	56 mm	M14 x 1,5
F015/004	51 - 100 mm	12 mm	60 mm	M16 x 1,5

F015/005

CENTER DRILL

For item F015-.

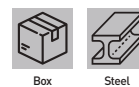


ø 6 mm
L 50 mm

F015/007

SPRING

For item F015-.



BI-METAL CUP SAW

Equipped with variable toothing for cutting thin material such as steel, cast iron, aluminium, copper, bronze, brass, wood, plastic, fibreglass and plasterboard.



THEORETICAL RPM FOR CORE SAWS DEPENDING ON THE MATERIAL TO BE PROCESSED

Materials to be processed	Saw diameter																Coolant
	14 - 17	19 - 24	25 - 32	33 - 38	40 - 44	46 - 51	52 - 57	59 - 64	65 - 70	73 - 79	83 - 89	92 - 98	102 - 108	111 - 121	127 - 140	146 - 152	
	no. of revolutions (rpm)																
Low alloy construction steel R< 700÷900N/mm2	530	360	280	230	190	170	140	130	120	110	90	80	80	70	60	50	Emulsion
Alloy steel R< 1100÷1300N/mm2	210	140	110	90	80	70	60	50	50	40	40	30	30	30	20	20	Emulsion
Stainless steel	210	140	110	90	80	70	60	50	50	40	40	30	30	30	20	20	Emulsion
Cast iron	250	180	170	140	110	90	70	60	60	50	40	40	40	30	30	30	No refriger.
Brass	740	510	400	320	270	230	200	180	170	150	130	120	110	100	80	70	"Emulsion Oil"
Aluminium and light alloys	850	580	450	360	300	270	230	210	190	170	150	130	120	110	100	80	Emulsion
Wood	960	650	510	410	340	300	260	230	210	190	170	150	140	120	110	100	No refriger.
Plastic	640	430	340	270	230	200	170	150	140	130	110	100	90	80	70	60	No refriger.
Plasterboard	960	650	510	410	340	300	260	230	210	190	170	150	140	120	110	100	No refriger.





0278-

BIMETAL HOLE SAWS WITH VARIABLE TEETH

Thanks to the geometry of the variable toothing, it is possible to perform rapid and precise cuts as well as greater heat dispersion during cutting for less wear of the teeth. Furthermore, there is a considerable reduction of seizure.



Steel - HSS CO 8% 401142



Box



HSS CO 8%



Steel



Stainless steel



Aluminum



Non-ferr. alloys



Plastic



Plexiglass



Wood



Multilayer



Chipboard



Drywall



Cast Iron



Emulsion



Dry



Mill

Art.	Ø	Ø inch
0278/014	14 mm	9/16
0278/016	16 mm	5/8
0278/017	17 mm	11/16
0278/019	19 mm	3/4
0278/020	20 mm	25/32
0278/021	21 mm	13/16
0278/022	22 mm	7/8
0278/024	24 mm	15/16
0278/025	25 mm	1
0278/027	27 mm	1-1/16
0278/029	29 mm	1-1/8
0278/030	30 mm	1-3/16
0278/032	32 mm	1-1/4
0278/033	33 mm	1-5/16
0278/035	35 mm	1-3/8
0278/037	37 mm	1-7/16
0278/038	38 mm	1-1/2
0278/040	40 mm	1-9/16
0278/041	41 mm	1-5/8
0278/043	43 mm	1-11/16
0278/044	44 mm	1-3/4
0278/046	46 mm	1-13/16
0278/048	48 mm	1-7/8
0278/051	51 mm	2
0278/052	52 mm	2-1/16
0278/054	54 mm	2-1/8
0278/057	57 mm	2-1/4
0278/059	59 mm	2-5/16
0278/060	60 mm	2-3/8
0278/064	64 mm	2-1/2
0278/065	65 mm	2-9/16
0278/067	67 mm	2-5/8
0278/068	68 mm	2-11/16
0278/070	70 mm	2-3/4
0278/073	73 mm	2-7/8
0278/076	76 mm	3
0278/079	79 mm	3-1/8
0278/083	83 mm	3-1/4
0278/085	85 mm	3-3/8
0278/089	89 mm	3-1/2
0278/092	92 mm	3-5/8
0278/095	95 mm	3-3/4
0278/098	98 mm	3-7/8
0278/102	102 mm	4
0278/105	105 mm	4-1/8
0278/108	108 mm	4-1/4
0278/111	111 mm	4-3/8
0278/114	114 mm	4-1/2
0278/121	121 mm	4-3/4
0278/127	127 mm	5
0278/140	140 mm	5-1/2
0278/152	152 mm	6

0278/002S

HOLE SAW SET

Electrician kit.



9 Pcs



Carrying case

HSS CO 8%



Hole saw	22 - 29 mm
Corresponding arbors, adapter, bits	0712/600
Hole saw	35 - 44 mm
Corresponding arbors, adapter, bits	0712/800
Hole saw	51 - 64 mm
Corresponding arbors, adapter, bits	0712/900

0278/005S

HOLE SAW SET

Repairman set.



7 Pcs



Carrying case

HSS CO 8%



Hole saw	22 - 25 - 29 mm
Corresponding arbors, adapter, bits	0712/600
Hole saw	32 - 38 mm
Corresponding arbors, adapter, bits	0712/900

0278/008S

HOLE SAW SET

Plumber set.



9 Pcs



Carrying case

HSS CO 8%



Hole saw	19 - 22 - 29 mm
Corresponding arbors, adapter, bits	0712/600
Hole saw	38 - 44 - 57 mm
Corresponding arbors, adapter, bits	0712/800 - 0712/900

0278/009S

HOLE SAW SET

Installer set.



13 Pcs



Carrying case

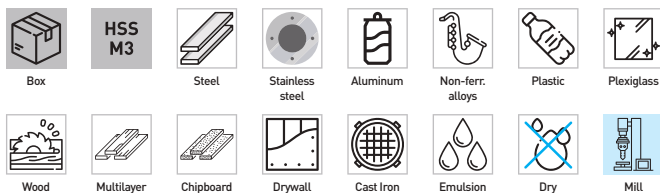
HSS CO 8%



Hole saw	19 - 22 - 29 mm
Corresponding arbors, adapter, bits	0712/600 - 0712/900 - 0712/300
Hole saw	35 - 38 - 44 - 51 - 57 - 64 mm
Corresponding arbors, adapter, bits	0712/800

0712-
BIMETAL HOLE SAWS WITH VARIABLE TEETH

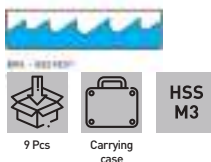
Thanks to the geometry of the variable toothting, it is possible to perform rapid and precise cuts as well as greater heat dispersion during cutting for less wear of the teeth. Furthermore, there is a considerable reduction of seizure.



Art.	Ø	Ø inch
0712/014	14 mm	9/16
0712/016	16 mm	5/8
0712/017	17 mm	11/16
0712/019	19 mm	3/4
0712/020	20 mm	25/32
0712/021	21 mm	13/16
0712/022	22 mm	7/8
0712/024	24 mm	15/16
0712/025	25 mm	1
0712/027	27 mm	1-1/16
0712/029	29 mm	1-1/8
0712/030	30 mm	1-3/16
0712/032	32 mm	1-1/4
0712/033	33 mm	1-5/16
0712/035	35 mm	1-3/8
0712/037	37 mm	1-7/16
0712/038	38 mm	1-1/2
0712/040	40 mm	1-9/16
0712/041	41 mm	1-5/8
0712/043	43 mm	1-11/16
0712/044	44 mm	1-3/4
0712/046	46 mm	1-13/16
0712/048	48 mm	1-7/8
0712/051	51 mm	2
0712/052	52 mm	2-1/16
0712/054	54 mm	2-1/8
0712/057	57 mm	2-1/4
0712/059	59 mm	2-5/16
0712/060	60 mm	2-3/8
0712/064	64 mm	2-1/2
0712/065	65 mm	2-9/16
0712/067	67 mm	2-5/8
0712/068	68 mm	2-11/16
0712/070	70 mm	2-3/4
0712/073	73 mm	2-7/8
0712/076	76 mm	3
0712/079	79 mm	3-1/8
0712/083	83 mm	3-1/4
0712/085	85 mm	3-3/8
0712/089	89 mm	3-1/2
0712/092	92 mm	3-5/8
0712/095	95 mm	3-3/4
0712/098	98 mm	3-7/8
0712/102	102 mm	4
0712/105	105 mm	4-1/8
0712/108	108 mm	4-1/4
0712/111	111 mm	4-3/8
0712/114	114 mm	4-1/2
0712/121	121 mm	4-3/4
0712/127	127 mm	5
0712/140	140 mm	5-1/2
0712/152	152 mm	6

0712/002
HOLE SAW SET

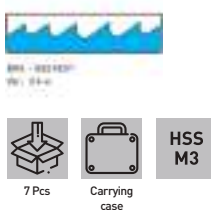
Electrician kit.



Hole saw	22 - 29 mm
Corresponding arbors, adapter, bits	0712/600
Hole saw	35 - 44 mm
Corresponding arbors, adapter, bits	0712/800
Hole saw	51 - 64 mm
Corresponding arbors, adapter, bits	0712/900

0712/005
HOLE SAW SET

Repairman set.



Hole saw	22 - 25 - 29 mm
Corresponding arbors, adapter, bits	0712/600
Hole saw	32 - 38 mm
Corresponding arbors, adapter, bits	0712/900

0712/008
HOLE SAW SET

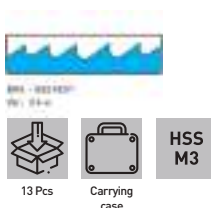
Plumber set.



Hole saw	19 - 22 - 29 mm
Corresponding arbors, adapter, bits	0712/600
Hole saw	38 - 44 - 57 mm
Corresponding arbors, adapter, bits	0712/800 - 0712/900

0712/009
HOLE SAW SET

Installer set.



Hole saw	19 - 22 - 29 mm
Corresponding arbors, adapter, bits	0712/600 - 0712/900 - 0712/300
Hole saw	35 - 38 - 44 - 51 - 57 - 64 mm
Corresponding arbors, adapter, bits	0712/800



0712/010

HOLE SAW SET

Industry kit.



21 Pcs



Carrying case

HSS
M3



Hole saw	19 - 22 - 29 mm
Corresponding arbors, adapter, bits	0712/600
Hole saw	35 - 38 - 44 - 51 - 57 - 64 - 76 - 83 - 92 - 95 - 105 - 114 mm
Corresponding arbors, adapter, bits	0712/600 - 0712/900 - 0712/300
Extension	300 mm

0712/900

ARBOR ADAPTER FOR HOLE SAWS



Box

Gear Reduction ratio	1/2" - 5/8"
For shafts	0712/600 - 0712/700

0712-X00

DRILL BIT

Suitable for all brands.



Box

HSS

Art.	Stem	For shafts	Length	Pack
0712/300	Ø 6,35 mm	0712/600	105 mm	10
0712/200	Ø 6,35 mm	0712/700 - 800	75 mm	10

0712-X0

HOLE SAW ARBOR WITH DRILL BIT

Hexagonal connection, suitable for all brands.



Box

HSS

Art.	Shank	Stem	Hole saw	Thread
0712/600	Shank Round	Ø 6,35 mm	Ø 14÷30 mm	1/2"
0712/700	Shank Hexagonal	Ø 9,5 mm	Ø 14÷30 mm	1/2"
0712/800	Shank Hexagonal	Ø 11 mm	Ø 32÷152 mm	5/8"



A208B-
MACHINE REAMER

Ground for H7 couplings. Right-hand cut, left-hand helical cutting edges, morse taper attachment. They can be used mainly for through holes but thanks to the short mouth it is also possible to bore blind holes.



Box

HSS



208/B



External



Steel



Aluminum


Non-ferr.
alloys


Cast Iron



Oil



Lathe



Mill



Drill press

Art.	ØH7	L	I	MT
A208B/05	5 mm	133 mm	23 mm	1
A208B/06	6 mm	138 mm	26 mm	1
A208B/07	7 mm	150 mm	31 mm	1
A208B/08	8 mm	156 mm	33 mm	1
A208B/09	9 mm	162 mm	36 mm	1
A208B/10	10 mm	168 mm	38 mm	1
A208B/11	11 mm	175 mm	41 mm	1
A208B/12	12 mm	182 mm	44 mm	1
A208B/13	13 mm	182 mm	44 mm	1
A208B/14	14 mm	189 mm	47 mm	1
A208B/15	15 mm	204 mm	50 mm	2
A208B/16	16 mm	210 mm	52 mm	2
A208B/17	17 mm	214 mm	54 mm	2
A208B/18	18 mm	219 mm	56 mm	2
A208B/19	19 mm	223 mm	58 mm	2
A208B/20	20 mm	228 mm	60 mm	2
A208B/21	21 mm	232 mm	62 mm	2
A208B/22	22 mm	237 mm	64 mm	2
A208B/23	23 mm	241 mm	66 mm	2
A208B/24	24 mm	268 mm	68 mm	3
A208B/25	25 mm	268 mm	68 mm	3
A208B/26	26 mm	273 mm	70 mm	3
A208B/27	27 mm	277 mm	71 mm	3
A208B/28	28 mm	277 mm	71 mm	3
A208B/29	29 mm	281 mm	73 mm	3
A208B/30	30 mm	281 mm	73 mm	3
A208B/31	31 mm	285 mm	75 mm	3
A208B/32	32 mm	317 mm	77 mm	4
A208B/34	34 mm	321 mm	78 mm	4
A208B/35	35 mm	321 mm	78 mm	4
A208B/36	36 mm	325 mm	79 mm	4
A208B/38	38 mm	329 mm	81 mm	4
A208B/40	40 mm	329 mm	81 mm	4

A212-
MACHINE REAMER

Ground for H7 couplings. Right-hand cut, left-hand helical cutting edges, cylindrical attachment. They can be used mainly for through holes but thanks to the short mouth it is also possible to bore blind holes.



Box

HSS



212/B



External



Steel



Aluminum


Non-ferr.
alloys


Cast Iron



Oil



Lathe

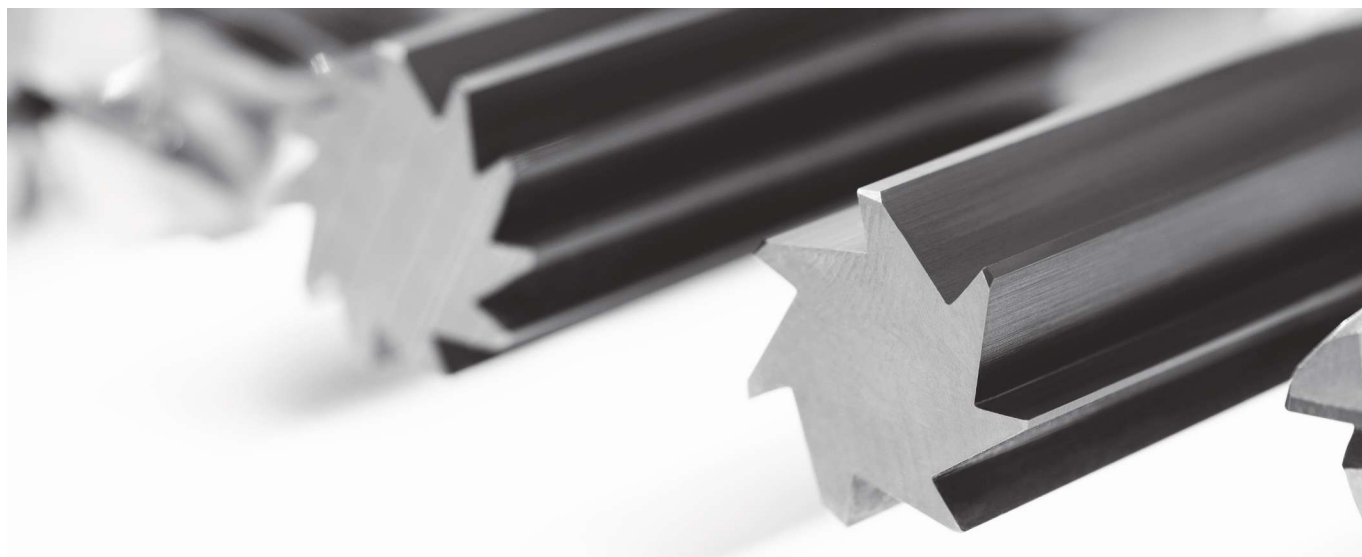


Mill



Drill press

Art.	ØH7	L	I	d h9	Z
A212/02.00	2 mm	49 mm	11 mm	2 mm	4
A212/02.50	2,5 mm	57 mm	14 mm	2,5 mm	4
A212/03.00	3 mm	61 mm	15 mm	3 mm	4
A212/03.50	3,5 mm	70 mm	18 mm	3,5 mm	6
A212/04.00	4 mm	75 mm	19 mm	4 mm	6
A212/04.50	4,5 mm	80 mm	21 mm	4,5 mm	6
A212/05.00	5 mm	86 mm	23 mm	5 mm	6
A212/05.50	5,5 mm	93 mm	26 mm	5,5 mm	6
A212/06.00	6 mm	93 mm	26 mm	6 mm	6
A212/06.50	6,5 mm	101 mm	28 mm	6,5 mm	6
A212/07.00	7 mm	109 mm	31 mm	7 mm	6
A212/07.50	7,5 mm	109 mm	31 mm	7 mm	6
A212/08.00	8 mm	117 mm	33 mm	8 mm	6
A212/08.50	8,5 mm	117 mm	33 mm	8 mm	6
A212/09.00	9 mm	125 mm	36 mm	9 mm	6
A212/09.50	9,5 mm	125 mm	36 mm	9 mm	6
A212/10.00	10 mm	133 mm	38 mm	10 mm	6
A212/11.00	11 mm	142 mm	41 mm	10 mm	6
A212/12.00	12 mm	151 mm	44 mm	10 mm	6
A212/13.00	13 mm	151 mm	44 mm	10 mm	6
A212/14.00	14 mm	160 mm	47 mm	12 mm	6
A212/15.00	15 mm	162 mm	50 mm	12 mm	8
A212/16.00	16 mm	170 mm	52 mm	12 mm	8





L018-

SOLID CAP SCREW COUNTER BORE BEFORE THREAD GRADE

For pre-drilled threads.



Art.	Screw	D	d1	d2	L1	L2	L
L018/03	M3	6 mm	2,5 mm	5 mm	4 mm	14 mm	71 mm
L018/04	M4	8 mm	3,3 mm	5 mm	5 mm	14 mm	71 mm
L018/05	M5	10 mm	4,2 mm	8 mm	6 mm	18 mm	80 mm
L018/06	M6	11 mm	5,0 mm	8 mm	7 mm	18 mm	80 mm
L018/08	M8	15 mm	6,8 mm	12,5 mm	9 mm	22 mm	100 mm
L018/10	M10	18 mm	8,5 mm	12,5 mm	14 mm	22 mm	100 mm
L018/12	M12	20 mm	10,2 mm	12,5 mm	14 mm	22 mm	100 mm

L019-

SOLID CAP SCREW COUNTER BORE FINE GRADE

For through holes for the execution of precision screws or bolts.



Art.	Screw	D	d1	d2	L1	L2	L
L019/03	M3	6 mm	3,2 mm	5 mm	4 mm	14 mm	71 mm
L019/04	M4	8 mm	4,3 mm	5 mm	5 mm	14 mm	71 mm
L019/05	M5	10 mm	5,3 mm	8 mm	6 mm	18 mm	80 mm
L019/06	M6	11 mm	6,4 mm	8 mm	7 mm	18 mm	80 mm
L019/08	M8	15 mm	8,4 mm	12,5 mm	9 mm	22 mm	100 mm
L019/10	M10	18 mm	10,5 mm	12,5 mm	14 mm	22 mm	100 mm
L019/12	M12	20 mm	13 mm	12,5 mm	14 mm	22 mm	100 mm

L020-

COUNTERBORER WITH SOLID PILOT STRAIGHT SHANK MEDIUM TYPE

For through holes.

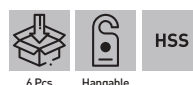


Art.	Screw	D	d1	d2	L1	L2	L
L020/03	M3	6 mm	3,4 mm	5 mm	4 mm	14 mm	71 mm
L020/04	M4	8 mm	4,5 mm	5 mm	5 mm	14 mm	71 mm
L020/05	M5	10 mm	5,5 mm	8 mm	6 mm	18 mm	80 mm
L020/06	M6	11 mm	6,6 mm	8 mm	7 mm	18 mm	80 mm
L020/08	M8	15 mm	9 mm	12,5 mm	9 mm	22 mm	100 mm
L020/10	M10	18 mm	11 mm	12,5 mm	14 mm	22 mm	100 mm
L020/12	M12	20 mm	13,5 mm	12,5 mm	14 mm	22 mm	100 mm

L018S

SOLID CAP SCREW COUNTER BORE SET BEFORE THREAD

For pre-drilled threads.

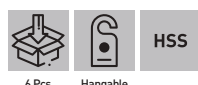


For screws M3, M4, M5, M6, M8, M10

L019S

SOLID CAP SCREW COUNTER BORE SET FINE GRADE

For through holes for the execution of precision screws or bolts.



For screws M3, M4, M5, M6, M8, M10

L020S

SOLID CAP SCREW COUNTER BORE SET MEDIUM GRADE

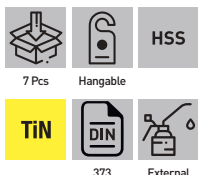
For through holes.



For screws M3, M4, M5, M6, M8, M10

L020
7 PCS COUNTERBORER WITH SOLID PILOT STRAIGHT SHANK

For through holes.



For screws

M3, M4, M5, M6, M8, M10, M12

S0X
90° THREE FLUTES COUNTERSINK

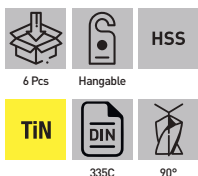
With ground edges and grooves machined from solid, to perform conical countersinks without vibrations.



Art.	ø max	Screws M	Stem
S006	6,3 mm	3	Ø 5 mm
S006/A	6 mm	3 - DIN 74 AF	Ø 5 mm
S008	8 mm	4 - DIN 74 AF	Ø 6 mm
S010	10,4 mm	5	Ø 6 mm
S010/A	10 mm	5- DIN 74 AF	Ø 6 mm
S012	12,4 mm	6	Ø 8 mm
S016	16,5 mm	8	Ø 10 mm
S020	20,5 mm	10	Ø 10 mm
S025	25 mm	12	Ø 10 mm
S028	28 mm	14	Ø 12 mm
S031	31 mm	16	Ø 12 mm
S040	40 mm	--	Ø 15 mm

S001
90° THREE FLUTES COUNTERSINK SET

With ground edges and grooves machined from solid, to perform conical countersinks without vibrations.

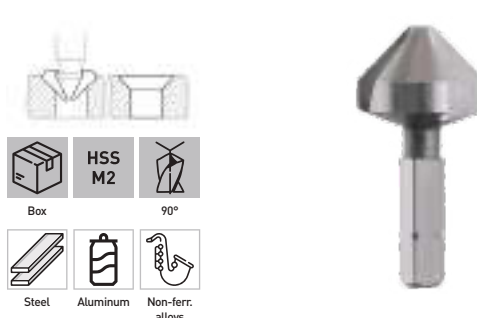


ø max

6 - 8 - 10 - 12,4 - 16,5 - 20,5 mm

S026-
COUNTERSINK WITH HEX SHANK

To perform conical countersinks without vibrations.



Art.	ø	Total length	Shank dimensions
S026/06	6,3 mm	31 mm	1/4" HEX x 25 mm
S026/08	8,3 mm	31 mm	1/4" HEX x 25 mm
S026/10	10,4 mm	34 mm	1/4" HEX x 25 mm
S026/12	12,4 mm	35 mm	1/4" HEX x 25 mm
S026/16	16,5 mm	40 mm	1/4" HEX x 25 mm
S026/20	20,5 mm	41 mm	1/4" HEX x 25 mm

S026/06-20S
COUNTERSINK SET WITH HEX SHANK

To perform conical countersinks without vibrations.



Sizes

6,3 - 8,3 - 10,4 - 12,4 - 16,5 - 20,5 mm

Shank dimensions

1/4" HEX x 25 mm

S026/06-20SM
COUNTERSINK SET WITH HEX SHANK

To perform conical countersinks without vibrations. With handle and magnetic extension.



Sizes

6,3 - 8,3 - 10,4 - 12,4 - 16,5 - 20,5 mm

Shank dimensions

1/4" HEX x 25 mm



S1-

60° THREE FLUTES COUNTERSINK

With ground edges and grooves machined from solid, to perform conical countersinks without vibrations.



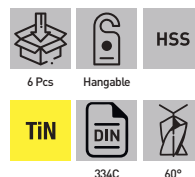
Art.	ø max	Length	Stem
S1/06	6,3 mm	45 mm	5 mm
S1/08	8 mm	50 mm	6 mm
S1/10	10 mm	53 mm	6 mm
S1/12	12,5 mm	56 mm	8 mm
S1/16	16 mm	63 mm	10 mm
S1/20	20 mm	67 mm	10 mm
S1/25	25 mm	71 mm	10 mm



S001/60

60° THREE FLUTES COUNTERSINK SET

With ground edges and grooves machined from solid, to perform conical countersinks without vibrations.



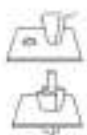
ø max 6-8-10-12,5-16-20mm



A014-

TAPER DRILL

With cilindrical shank.



Art.	ø	Total length
A014/03-14	3 - 14 mm	58 mm
A014/03-22	6 - 20 mm	63 mm
A014/03-31	16 - 30,5 mm	72 mm
A014/06-20	26 - 40 mm	86 mm
A014/16-30	36 - 50 mm	89 mm
A014/26-40	40 - 61 mm	94 mm
A014/36-50	3 - 31 mm	104 mm
A014/40-61	3 - 22,5 mm	76 mm



A014/03-30S

TAPER DRILLS SET

With cilindrical shank.



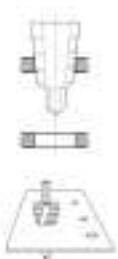
Sizes 3 ÷ 14 - 6 ÷ 20 - 16 ÷ 30,5 mm



F639

STEP DRILL BITS

For creating and enlarging holes in sheet metal.



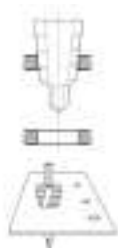
Stem 10 mm
ø 6 ÷ 39 (6-9-12-15-18-21-24-27-30-33-36-39) mm



F430

STEP DRILL BITS SET

For creating and enlarging holes in sheet metal.



Stem 6 - 8 - 10 mm
ø 4 ÷ 12 - 6 ÷ 20 - 6 ÷ 30 mm



F23X
STEP DRILL BITS

For creating and enlarging holes in sheet metal, with interchangeable point.



Art.	Stem	Ø
F232	10 mm	2,5 ÷ 32 [2,5-6,3-11,2-14,5-18,2-22,3-27,9-32] mm
F238	10 mm	2,5 ÷ 38 [2,5-6,3-13-16-19-21-23-26-29-32-35-38] mm

F025
SPARE PART POINT

Suitable with F232 F238.



Stem	4 mm
Spare part point	Ø 2,5 mm

P037-
MILLING DRILLS

For drilling and milling of thin materials.



Art.	Ø	Stem	Total length
P037/6	6 mm	6 mm	90 mm
P037/8	8 mm	8 mm	90 mm

P036-
SPOT DRILLS

To remove welding spots and to drill metal sheets in general.



Art.	Ø	Total length
P036/06	6 mm	66 mm
P036/07	7 mm	74 mm
P036/08	8 mm	79 mm
P036/10	10 mm	89 mm

F001/10
SET FRONTAL ROUGHING END MILLS

Regular length, center cutting, weldon shank.



Mill	Ø 6 - 8 - 10 - 12 - 14 - 16 - 18 - 20 - 22 - 25 mm
Stem	Ø 6 - 10 - 10 - 12 - 12 - 16 - 16 - 20 - 20 - 25 mm

F001/20
SET END MILLS

Two and four flute, regular length, weldon shank, center cutting.



2 Flute mill	Ø 3 - 4 - 5 - 6 - 8 - 10 - 12 - 14 - 18 - 20 mm
Stem	Ø 6 - 6 - 6 - 6 - 10 - 10 - 12 - 12 - 16 - 20 mm
4 Flute mill	Ø 3 - 4 - 5 - 6 - 8 - 10 - 12 - 14 - 18 - 20 mm
Stem	Ø 6 - 6 - 6 - 6 - 10 - 10 - 12 - 12 - 16 - 20 mm



F005-

2 FLUTE STRAIGHT SHANK END MILL

For finish, cylindrical shank, weldon connection, normal series.

Art.	D	d	l	Z	L
F005/03	3 mm	6 mm	5 mm	2	49 mm
F005/04	4 mm	6 mm	7 mm	2	51 mm
F005/05	5 mm	6 mm	8 mm	2	52 mm
F005/06	6 mm	6 mm	8 mm	2	52 mm
F005/08	8 mm	10 mm	11 mm	2	61 mm
F005/10	10 mm	10 mm	13 mm	2	63 mm
F005/12	12 mm	12 mm	16 mm	2	73 mm
F005/14	14 mm	12 mm	16 mm	2	73 mm
F005/16	16 mm	16 mm	19 mm	2	79 mm
F005/18	18 mm	16 mm	19 mm	2	79 mm
F005/20	20 mm	20 mm	22 mm	2	88 mm
F005/22	22 mm	20 mm	22 mm	2	88 mm
F005/24	24 mm	20 mm	26 mm	2	92 mm
F005/25	25 mm	20 mm	26 mm	2	92 mm



Box

HSS

TiN



327/D



External



Steel



Aluminum



Non-ferr.
alloys



Cast Iron

F006-

4 FLUTE STRAIGHT SHANK END MILL

For finish, cylindrical shank, weldon connection, normal series.

Art.	D	d	l	Z	L
F006/03	3 mm	6 mm	8 mm	4	52 mm
F006/04	4 mm	6 mm	11 mm	4	55 mm
F006/05	5 mm	6 mm	13 mm	4	57 mm
F006/06	6 mm	6 mm	13 mm	4	57 mm
F006/08	8 mm	10 mm	19 mm	4	69 mm
F006/10	10 mm	10 mm	22 mm	4	72 mm
F006/12	12 mm	12 mm	26 mm	4	83 mm
F006/14	14 mm	12 mm	26 mm	4	83 mm
F006/16	16 mm	16 mm	32 mm	4	92 mm
F006/18	18 mm	16 mm	32 mm	4	92 mm
F006/20	20 mm	20 mm	38 mm	4	104 mm



Box

HSS

TiN



844



External



Steel



Aluminum



Non-ferr.
alloys



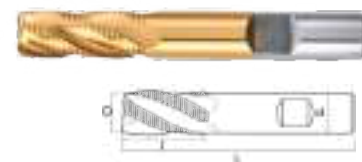
Cast Iron

F007-

4 FLUTE STRAIGHT SHANK ROUGHING END MILL

Regular length weldon shank center cutting.

Art.	D	d	l	Z	L
F007/06	6 mm	6 mm	13 mm	4	57 mm
F007/07	7 mm	10 mm	16 mm	4	66 mm
F007/08	8 mm	10 mm	19 mm	4	69 mm
F007/09	9 mm	10 mm	19 mm	4	69 mm
F007/10	10 mm	10 mm	22 mm	4	72 mm
F007/11	11 mm	12 mm	22 mm	4	76 mm
F007/12	12 mm	12 mm	26 mm	4	83 mm
F007/13	13 mm	12 mm	26 mm	4	83 mm
F007/14	14 mm	12 mm	26 mm	4	83 mm
F007/15	15 mm	12 mm	26 mm	4	83 mm
F007/16	16 mm	16 mm	32 mm	4	92 mm
F007/18	18 mm	16 mm	32 mm	4	92 mm
F007/20	20 mm	20 mm	38 mm	4	104 mm
F007/22	22 mm	20 mm	38 mm	4	104 mm
F007/25	25 mm	25 mm	45 mm	4	121 mm



Box

HSS

TiN



844/B



External



Steel



Aluminum



Non-ferr.
alloys



Cast Iron



HARD METAL ROTARY MILLING MACHINES

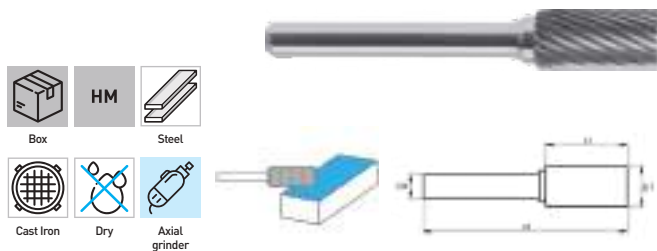
Cut type	Representation	Description
Standard Cut		Suitable for cutting steel, hardened steel, cast iron, weld seams and metal materials in general.
Cross cut		Suitable for treated steel, stainless steel, metal materials in general. Thanks to this type of cut, vibrations are considerably reduced.
Aluminium cutting		Suitable for aluminium, magnesium, plastics and hard rubber.

TYOLOGIES OF SHAPES AND THEIR USE

Cylindrical without frontal cut 	Cylindrical with frontal cut 	Spoked head cylinder 	Spherical
Oval 	Ogive with rounded tip 	Ogive 	With spoked lance
Spoked tip conical 	Conical pointed 	Conical Trunk 	90° conical
60° conical 			

AXSC

CYLINDRICAL ROTARY CUTTERS WITHOUT FACE CUT

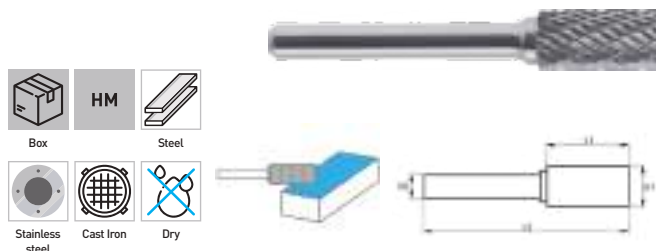


Art.	D1	L1	D2	L2
A02SC3	Ø 2 mm	10 mm	3 mm	38 mm
A06SC6	Ø 6 mm	16 mm	6 mm	61 mm
A08SC6	Ø 8 mm	20 mm	6 mm	65 mm
A10SC6	Ø 10 mm	20 mm	6 mm	65 mm
A12SC6	Ø 12 mm	25 mm	6 mm	70 mm
A16SC6	Ø 16 mm	25 mm	6 mm	70 mm

AXDC

ROTARY BURRS

Diamond cut



Art.	D1	L1	D2	L2
A02DC3	Ø 2 mm	10 mm	3 mm	38 mm
A06DC6	Ø 6 mm	16 mm	6 mm	61 mm
A08DC6	Ø 8 mm	20 mm	6 mm	65 mm
A10DC6	Ø 10 mm	20 mm	6 mm	65 mm
A12DC6	Ø 12 mm	25 mm	6 mm	70 mm
A16DC6	Ø 16 mm	25 mm	6 mm	70 mm



A12AL6

ROTARY BURRS FOR ALUMINIUM




Box


HM


Aluminum


Non-ferr.
alloys


Plastic


Plexiglass

D1	Ø 12 mm	D2	6 mm
L1	25 mm	L2	70 mm

BXDC

DIAMOND CUT ROTARY BURRS




Box


HM


Steel


Stainless
steel


Cast Iron


Dry

Art.	D1	L1	D2	L2
B02DC3	Ø 2 mm	10 mm	3 mm	38 mm
B03DC3	Ø 3 mm	13 mm	3 mm	38 mm
B04DC3	Ø 4 mm	13 mm	3 mm	41 mm
B04DC6	Ø 4 mm	13 mm	6 mm	58 mm
B06DC6	Ø 6 mm	16 mm	6 mm	61 mm
B08DC6	Ø 8 mm	20 mm	6 mm	65 mm
B10DC6	Ø 10 mm	20 mm	6 mm	65 mm
B12DC6	Ø 12 mm	25 mm	6 mm	70 mm
B16DC6	Ø 16 mm	25 mm	6 mm	70 mm
B19DC6	Ø 19 mm	25 mm	6 mm	70 mm
B22DC6	Ø 22 mm	25 mm	6 mm	70 mm
B25DC6	Ø 25 mm	25 mm	6 mm	70 mm

BXSCXL

SINGLE CUT LONG ROTARY BURRS




Box


HM


Steel


Cast Iron


Dry


Axial
grinder

Art.	D1	L1	D2	L2
B02SC3L	Ø 2 mm	10 mm	3 mm	65 mm
B03SC3L	Ø 3 mm	13 mm	3 mm	65 mm
B08SC6L	Ø 8 mm	20 mm	6 mm	120 mm
B10SC6L	Ø 10 mm	20 mm	6 mm	120 mm
B12SC6L	Ø 12 mm	25 mm	6 mm	120 mm

BXSC

SINGLE CUT ROTARY BURRS




Box


HM


Steel


Stainless
steel


Cast Iron


Dry

Art.	D1	L1	D2	L2
B02SC3	Ø 2 mm	10 mm	3 mm	38 mm
B03SC3	Ø 3 mm	13 mm	3 mm	38 mm
B04SC3	Ø 4 mm	13 mm	3 mm	41 mm
B04SC6	Ø 4 mm	13 mm	6 mm	58 mm
B06SC6	Ø 6 mm	16 mm	6 mm	61 mm
B08SC6	Ø 8 mm	20 mm	6 mm	65 mm
B10SC6	Ø 10 mm	20 mm	6 mm	65 mm
B12SC6	Ø 12 mm	25 mm	6 mm	70 mm
B16SC6	Ø 16 mm	25 mm	6 mm	70 mm

BXAL

ROTARY BURRS FOR ALUMINIUM




Box


HM


Aluminum


Non-ferr.
alloys


Plastic


Plexiglass

Art.	D1	L1	D2	L2
B06AL6	Ø 6 mm	16 mm	6 mm	61 mm
B08AL6	Ø 8 mm	20 mm	6 mm	65 mm
B10AL6	Ø 10 mm	20 mm	6 mm	65 mm
B12AL6	Ø 12 mm	25 mm	6 mm	70 mm

BXDCXL

CARBIDE ROTARY BURRS




Box


HM

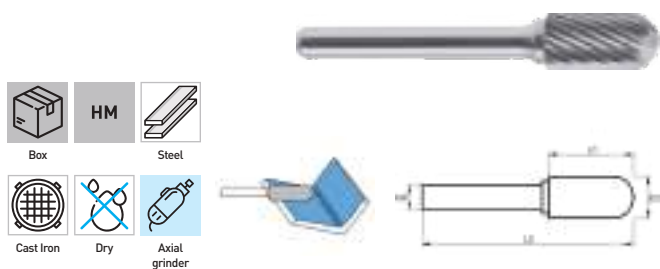

Steel


Stainless
steel

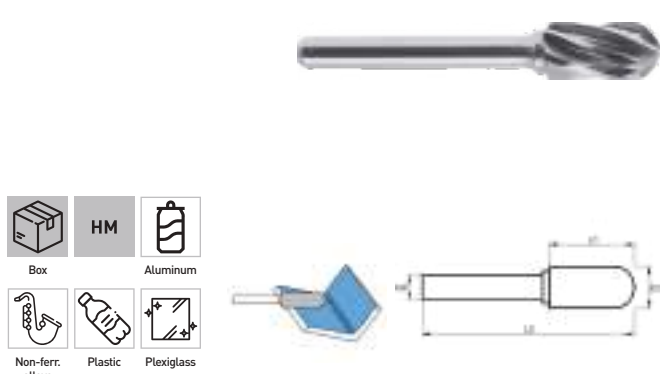

Cast Iron


Dry

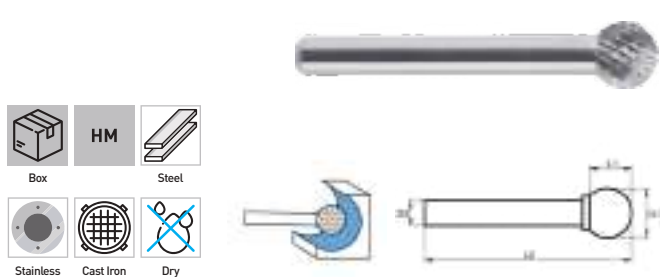
Art.	D1	L1	D2	L2
B02DC3L	Ø 2 mm	10 mm	3 mm	65 mm
B03DC3L	Ø 3 mm	13 mm	3 mm	65 mm
B08DC6L	Ø 8 mm	20 mm	6 mm	120 mm
B10DC6L	Ø 10 mm	20 mm	6 mm	120 mm
B12DC6L	Ø 12 mm	25 mm	6 mm	120 mm

CXSC
SINGLE CUT ROTARY BURRS


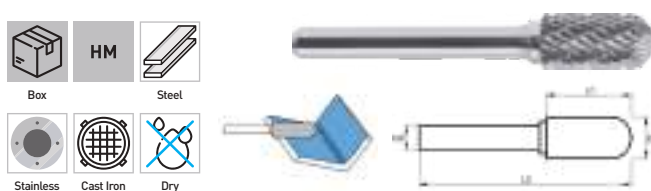
Art.	D1	L1	D2	L2
C02SC3	Ø 2 mm	10 mm	3 mm	38 mm
C03SC3	Ø 3 mm	13 mm	3 mm	38 mm
C04SC3	Ø 4 mm	13 mm	3 mm	58 mm
C04SC6	Ø 4 mm	13 mm	6 mm	58 mm
C06SC6	Ø 6 mm	16 mm	6 mm	61 mm
C08SC6	Ø 8 mm	20 mm	6 mm	65 mm
C10SC6	Ø 10 mm	20 mm	6 mm	65 mm
C12SC6	Ø 12 mm	25 mm	6 mm	70 mm
C16SC6	Ø 16 mm	25 mm	6 mm	70 mm

CXAL
ROTARY BURRS FOR ALUMINIUM


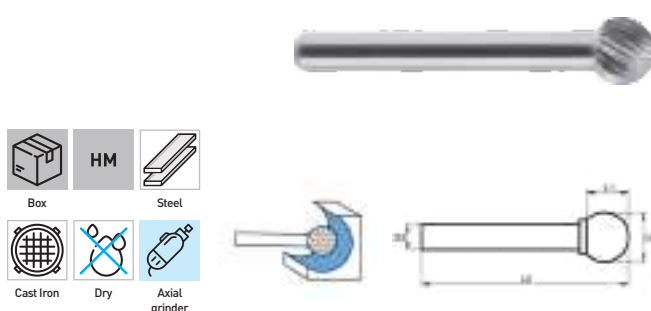
Art.	D1	L1	D2	L2
C06AL6	Ø 6 mm	16 mm	6 mm	61 mm
C08AL6	Ø 8 mm	20 mm	6 mm	65 mm
C10AL6	Ø 10 mm	20 mm	6 mm	65 mm
C12AL6	Ø 12 mm	25 mm	6 mm	70 mm

DXDC
DIAMOND CUT ROTARY BURRS


Art.	D1	L1	D2	L2
D03DC3	Ø 3 mm	2,7 mm	3 mm	38 mm
D04DC6	Ø 4 mm	3,6 mm	6 mm	38 mm
D06DC6	Ø 6 mm	5,4 mm	6 mm	50 mm
D08DC6	Ø 8 mm	7,2 mm	6 mm	52 mm
D10DC6	Ø 10 mm	9 mm	6 mm	54 mm
D12DC6	Ø 12 mm	10,8 mm	6 mm	56 mm
D16DC6	Ø 16 mm	14,4 mm	6 mm	60 mm
D19DC6	Ø 19 mm	17,4 mm	6 mm	64 mm

CXDC
DIAMOND CUT ROTARY BURRS


Art.	D1	L1	D2	L2
C02DC3	Ø 2 mm	10 mm	3 mm	38 mm
C03DC3	Ø 3 mm	13 mm	3 mm	38 mm
C04DC3	Ø 4 mm	13 mm	3 mm	38 mm
C04DC6	Ø 4 mm	13 mm	6 mm	38 mm
C06DC6	Ø 6 mm	16 mm	6 mm	61 mm
C08DC6	Ø 8 mm	20 mm	6 mm	65 mm
C10DC6	Ø 10 mm	20 mm	6 mm	65 mm
C12DC6	Ø 12 mm	25 mm	6 mm	70 mm
C16DC6	Ø 16 mm	25 mm	6 mm	70 mm
C19DC6	Ø 19 mm	25 mm	6 mm	70 mm
C22DC6	Ø 22 mm	25 mm	6 mm	70 mm
C25DC6	Ø 25 mm	25 mm	6 mm	70 mm

DXSC
SINGLE CUT ROTARY BURRS


Art.	D1	L1	D2	L2
D03SC3	Ø 3 mm	2,7 mm	3 mm	38 mm
D04SC6	Ø 4 mm	3,6 mm	6 mm	38 mm
D06SC6	Ø 6 mm	5,4 mm	6 mm	50 mm
D08SC6	Ø 8 mm	7,2 mm	6 mm	52 mm
D10SC6	Ø 10 mm	9 mm	6 mm	54 mm
D12SC6	Ø 12 mm	10,8 mm	6 mm	56 mm
D16SC6	Ø 16 mm	14,4 mm	6 mm	60 mm

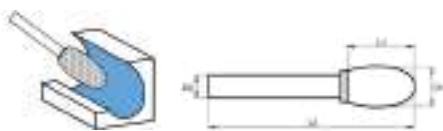
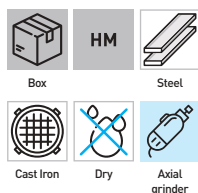
DXAL
ROTARY BURRS FOR ALUMINIUM


Art.	D1	L1	D2	L2
D06AL6	Ø 6 mm	5,4 mm	6 mm	50 mm
D08AL6	Ø 8 mm	7,2 mm	6 mm	52 mm
D10AL6	Ø 10 mm	9 mm	6 mm	54 mm



EXSC

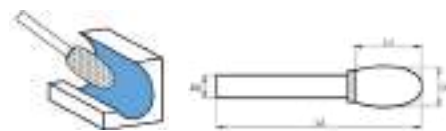
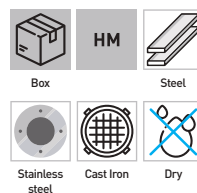
SINGLE CUT ROTARY BURRS



Art.	D1	L1	D2	L2
E08SC6	Ø 8 mm	13 mm	6 mm	58 mm
E10SC6	Ø 10 mm	16 mm	6 mm	61 mm
E12SC6	Ø 12 mm	20 mm	6 mm	65 mm
E16SC6	Ø 16 mm	25 mm	6 mm	70 mm

EXDC

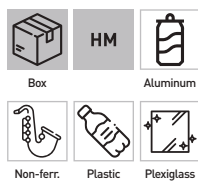
DIAMOND CUT ROTARY BURRS



Art.	D1	L1	D2	L2
E08DC6	Ø 8 mm	13 mm	6 mm	58 mm
E10DC6	Ø 10 mm	16 mm	6 mm	61 mm
E12DC6	Ø 12 mm	20 mm	6 mm	65 mm
E16DC6	Ø 16 mm	25 mm	6 mm	70 mm

EXAL

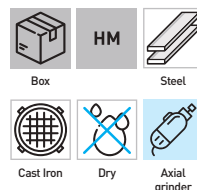
ROTARY BURRS FOR ALUMINIUM



Art.	D1	L1	D2	L2
E10AL6	10 mm	16 mm	6 mm	61 mm
E12AL6	12 mm	20 mm	6 mm	65 mm

FXSC

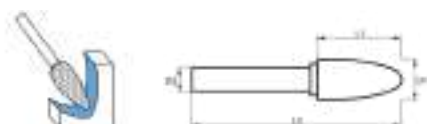
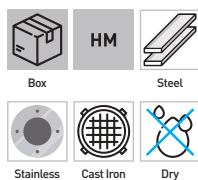
SINGLE CUT ROTARY BURRS



Art.	D1	D2	L1	L2
F03SC3	Ø 3 mm	13 mm	3 mm	38 mm
F06SC6	Ø 6 mm	18 mm	6 mm	63 mm
F08SC6	Ø 8 mm	20 mm	6 mm	65 mm
F10SC6	Ø 10 mm	20 mm	6 mm	65 mm
F12SC6	Ø 12 mm	25 mm	6 mm	70 mm

FXDC

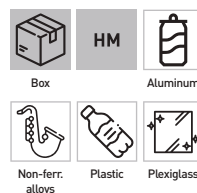
DIAMOND CUT ROTARY BURRS



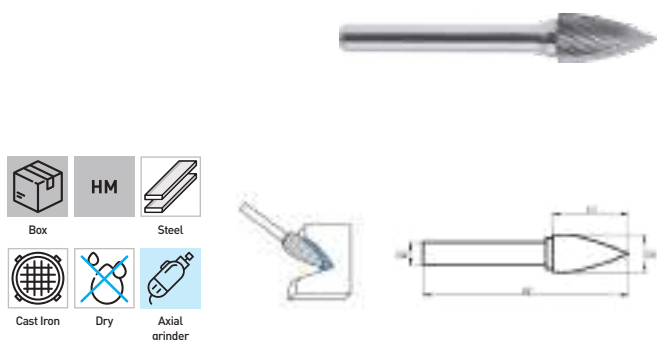
Art.	D1	D2	L1	L2
F03DC3	Ø 3 mm	13 mm	3 mm	38 mm
F06DC6	Ø 6 mm	18 mm	6 mm	63 mm
F08DC6	Ø 8 mm	20 mm	6 mm	65 mm
F10DC6	Ø 10 mm	20 mm	6 mm	65 mm
F12DC6	Ø 12 mm	25 mm	6 mm	70 mm
F16DC6	Ø 16 mm	25 mm	6 mm	70 mm
F19DC6	Ø 19 mm	25 mm	6 mm	70 mm

FXAL

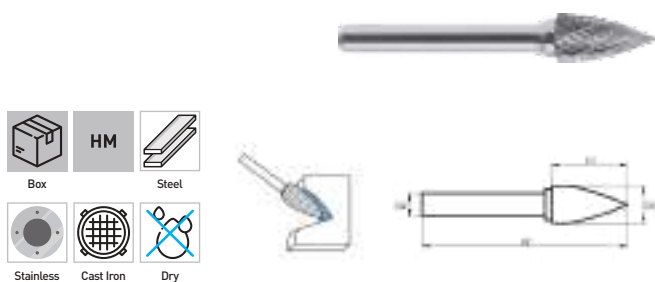
ROTARY BURRS FOR ALUMINIUM



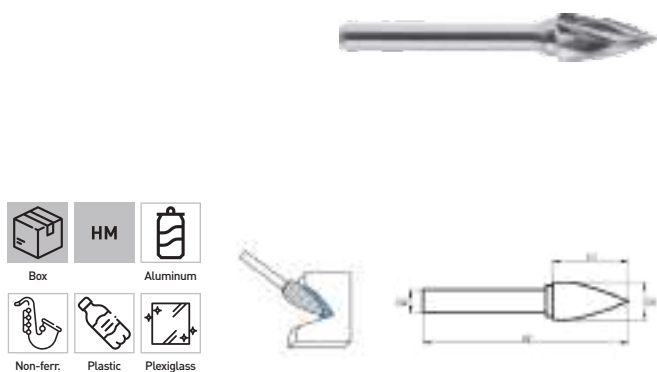
Art.	D1	L1	D2	L2
F10AL6	Ø 10 mm	20 mm	6 mm	65 mm
F12AL6	Ø 12 mm	25 mm	6 mm	70 mm

GXSC
SINGLE CUT ROTARY BURRS


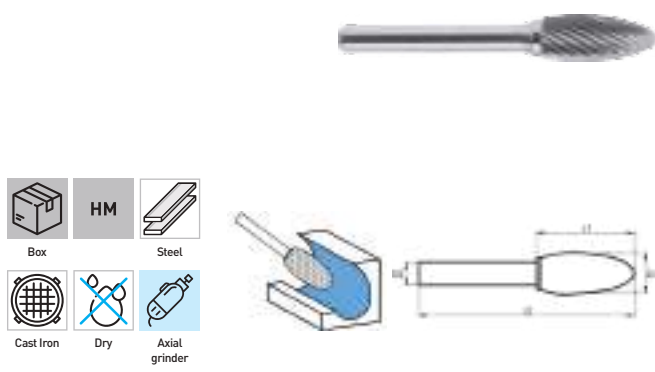
Art.	D1	L1	D2	L2
G03SC3	Ø 3 mm	13 mm	3 mm	38 mm
G06SC6	Ø 6 mm	18 mm	6 mm	65 mm
G10SC6	Ø 10 mm	20 mm	6 mm	65 mm
G12SC6	Ø 12 mm	25 mm	6 mm	70 mm

GXDC
DIAMOND CUT ROTARY BURRS


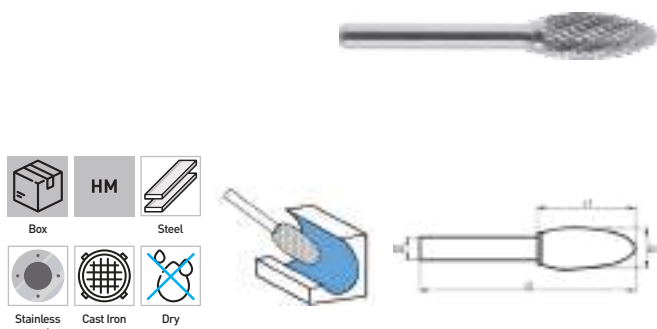
Art.	D1	L1	D2	L2
G03DC3	Ø 3 mm	13 mm	3 mm	38 mm
G06DC6	Ø 6 mm	18 mm	6 mm	65 mm
G10DC6	Ø 10 mm	20 mm	6 mm	65 mm
G12DC6	Ø 12 mm	25 mm	6 mm	70 mm
G16DC6	Ø 16 mm	25 mm	6 mm	70 mm
G19DC6	Ø 19 mm	25 mm	6 mm	70 mm

GXAL
ROTARY BURRS FOR ALUMINIUM


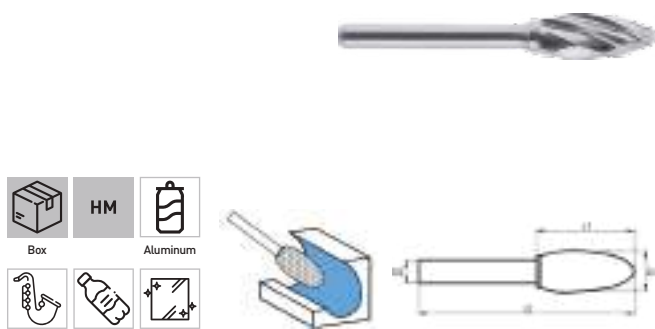
Art.	D1	L1	D2	L2
G10AL6	Ø 10 mm	20 mm	6 mm	65 mm
G12AL6	Ø 12 mm	25 mm	6 mm	70 mm

HXSC
SINGLE CUT ROTARY BURRS


Art.	D1	L1	D2	L2
H08SC6	Ø 8 mm	20 mm	6 mm	65 mm
H10SC6	Ø 10 mm	25 mm	6 mm	70 mm
H12SC6	Ø 12 mm	32 mm	6 mm	77 mm

HXDC
DIAMOND CUT ROTARY BURRS


Art.	D1	D2	L1	L2
H06DC6	Ø 6 mm	6 mm	16 mm	61 mm
H08DC6	Ø 8 mm	6 mm	20 mm	65 mm
H10DC6	Ø 10 mm	6 mm	25 mm	70 mm
H12DC6	Ø 12 mm	6 mm	32 mm	77 mm

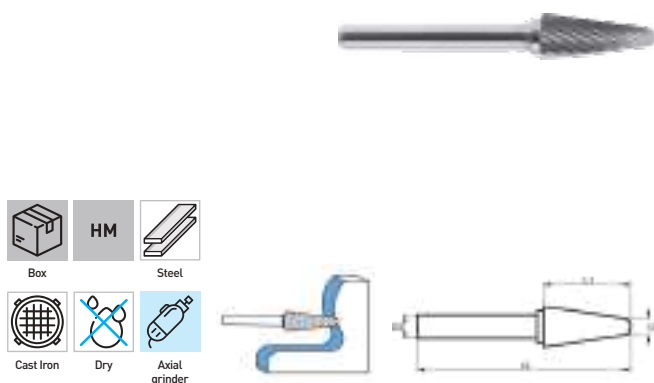
HXAL
ROTARY BURRS FOR ALUMINIUM


Art.	D1	D2	L1	L2
H08AL6	Ø 8 mm	6 mm	20 mm	65 mm
H10AL6	Ø 10 mm	6 mm	25 mm	70 mm
H12AL6	Ø 12 mm	6 mm	32 mm	77 mm



LXSC

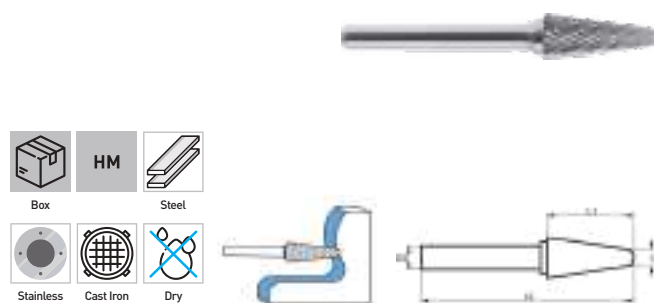
SINGLE CUT ROTARY BURRS



Art.	D1	L1	D2	L2
L03SC3	Ø 3 mm	13 mm	3 mm	38 mm
L06SC6	Ø 6 mm	16 mm	6 mm	61 mm

LXDC

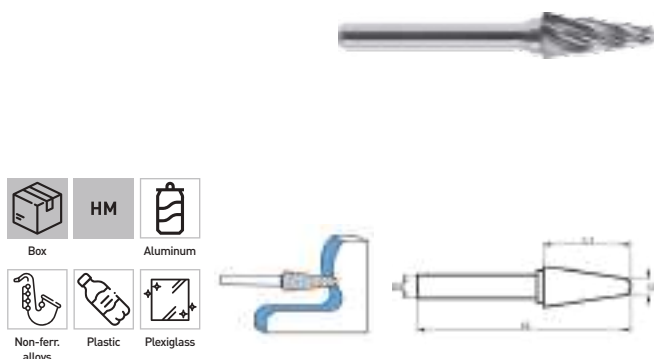
DIAMOND CUT ROTARY BURRS



Art.	D1	L1	D2	L2
L03DC3	Ø 3 mm	13 mm	3 mm	38 mm
L06DC6	Ø 6 mm	16 mm	6 mm	61 mm
L08DC6	Ø 8 mm	22 mm	6 mm	65 mm
L10DC6	Ø 10 mm	25 mm	6 mm	70 mm
L12DC6	Ø 12 mm	25 mm	6 mm	70 mm

L10AL6

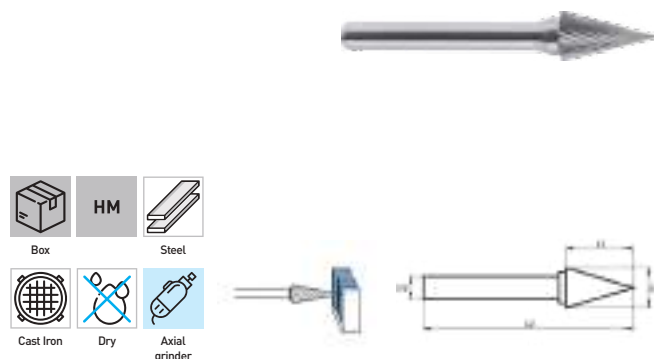
ROTARY BURRS FOR ALUMINIUM



D1	Ø 10 mm
L1	25 mm
D2	6 mm
L2	70 mm

MXSC

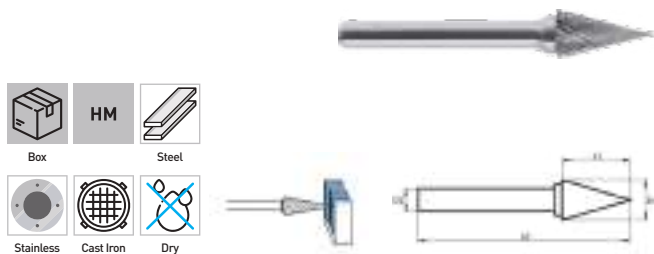
SINGLE CUT ROTARY BURRS



Art.	D1	L1	D2	L2
M08SC6	Ø 8 mm	20 mm	6 mm	65 mm
M10SC6	Ø 10 mm	20 mm	6 mm	65 mm
M12SC6	Ø 12 mm	25 mm	6 mm	70 mm

MXDC

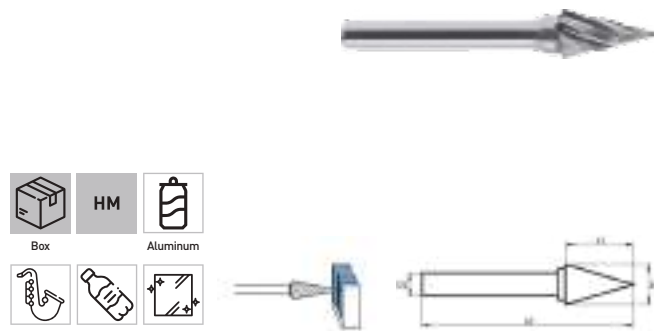
DIAMOND CUT ROTARY BURRS



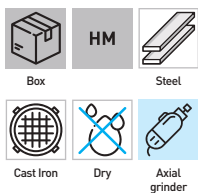
Art.	D1	L1	D2	L2
M03DC3	Ø 3 mm	11 mm	3 mm	38 mm
M03DC6	Ø 3 mm	11 mm	6 mm	38 mm
M06DC6	Ø 6 mm	18 mm	6 mm	60 mm
M08DC6	Ø 8 mm	20 mm	6 mm	65 mm
M10DC6	Ø 10 mm	20 mm	6 mm	65 mm
M12DC6	Ø 12 mm	25 mm	6 mm	70 mm
M16DC6	Ø 16 mm	25 mm	6 mm	70 mm

M10AL6

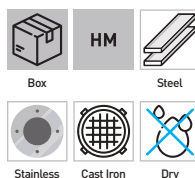
ROTARY BURRS FOR ALUMINIUM



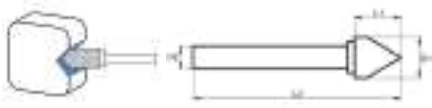
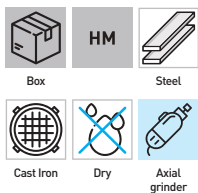
D1	Ø 10 mm
L1	20 mm
D2	6 mm
L2	65 mm

NXSC
SINGLE CUT ROTARY BURRS


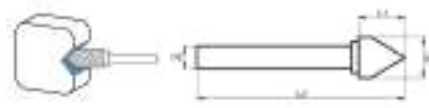
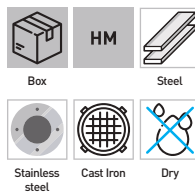
Art.	D1	L1	D2	L2
N12SC6	Ø 12 mm	13 mm	6 mm	58 mm
N16SC6	Ø 16 mm	16 mm	6 mm	58 mm

N12DC6
DIAMOND CUT ROTARY BURRS


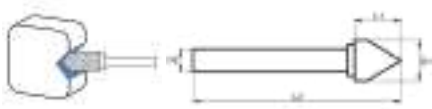
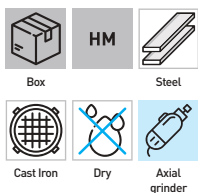
D1	Ø 12 mm	D2	6 mm
L1	13 mm	L2	58 mm

JXSC
SINGLE CUT ROTARY BURRS


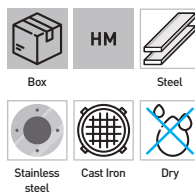
Art.	D1	L1	D2	L2
J03SC3	Ø 3 mm	2,5 mm	3 mm	38 mm
J06SC6	Ø 6 mm	5,2 mm	6 mm	54 mm
J10SC6	Ø 10 mm	8 mm	6 mm	58 mm
J16SC6	Ø 16 mm	13 mm	6 mm	62 mm

JXDC
DIAMOND CUT ROTARY BURRS


Art.	D1	L1	D2	L2
J03DC3	Ø 3 mm	2,5 mm	3 mm	38 mm
J06DC6	Ø 6 mm	5,2 mm	6 mm	54 mm
J10DC6	Ø 10 mm	8 mm	6 mm	58 mm
J16DC6	Ø 16 mm	13 mm	6 mm	62 mm

KXSC
SINGLE CUT ROTARY BURRS


Art.	D1	L1	D2	L2
K10SC6	Ø 10 mm	5 mm	6 mm	54 mm
K16SC6	Ø 16 mm	8 mm	6 mm	58 mm

KXDC
DIAMOND CUT ROTARY BURRS


Art.	D1	L1	D2	L2
K10DC6	Ø 10 mm	5 mm	6 mm	54 mm
K16DC6	Ø 16 mm	8 mm	6 mm	58 mm



F008DC

HARD METAL ROTARY BURR SET

With diamond cut.



5 Pcs



Box



HM



Sizes	10 x 20 mm
Type	B, C, D, G, M
Stem	6 mm

F008SC

HARD METAL ROTARY BURR SET

With single cut.



5 Pcs



Box



HM



Sizes	10 x 20 mm
Type	B, C, D, G, M
Stem	6 mm

F008-

CARBIDE ROTARY FILE SET

Cross cut.



8 Pcs



Box



HM



Steel



Stainless
steel



Cast Iron



Dry

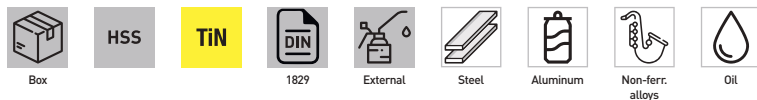


Axial
grinder

Art.	Stem
F008/3	Ø 3 mm
F008/6	Ø 6 mm

C003-
DISC TYPE GEAR SHAPER CUTTER

Nominal ϕ 100 mm hole 44,45 mm 20° angle pressure class A.



Art.	Module	ϕ max	ϕ d0	Height b1	Teeth
C003/1	1,00	102 mm	100 mm	16 mm	100
C003/1.25	1,25	105 mm	100 mm	16 mm	80
C003/1.50	1,50	107 mm	102 mm	18 mm	68
C003/1.75	1,75	107,4 mm	101,5 mm	20 mm	58
C003/2	2,00	107,31 mm	100 mm	20 mm	50
C003/2.25	2,25	109,29 mm	101,25 mm	20 mm	45
C003/2.50	2,50	108,46 mm	100 mm	20 mm	40
C003/2.75	2,75	108,36 mm	99 mm	24 mm	36
C003/3	3,00	111,82 mm	99 mm	24 mm	33
C003/3.25	3,25	110,99 mm	99 mm	24 mm	31
C003/3.50	3,50	108,72 mm	101,5 mm	24 mm	29
C003/3.75	3,75	112,35 mm	101,5 mm	24 mm	27
C003/4	4,00	111,75 mm	100 mm	24 mm	25
C003/4.25	4,25	114,12 mm	102 mm	24 mm	24
C003/4.50	4,50	111,65 mm	99 mm	24 mm	22
C003/5	5,00	114,05 mm	100 mm	24 mm	20
C003/5.50	5,50	119,96 mm	99 mm	24 mm	18
C003/6	6,00	118,86 mm	102 mm	24 mm	17
C003/6.50	6,50	122,5 mm	112 mm	24 mm	16
C003/7	7,00	127 mm	105 mm	24 mm	15
C003/8	8,00	135 mm	112 mm	24 mm	14
C003/10	10,00	168 mm	140 mm	24 mm	14

C001-
GEAR HOB 20° PRESSURE ANGLE

Ground profile class A.



Art.	Module	Diameter ϕ	Length	Hole
C001/1	1,00	50 mm	31 mm	22 mm
C001/1.25	1,25	50 mm	31 mm	22 mm
C001/1.50	1,50	53 mm	50 mm	22 mm
C001/1.75	1,75	56 mm	38 mm	22 mm
C001/2	2,00	63 mm	46 mm	27 mm
C001/2.25	2,25	70 mm	56 mm	27 mm
C001/2.50	2,50	71 mm	63 mm	27 mm
C001/2.75	2,75	70 mm	56 mm	27 mm
C001/3	3,00	80 mm	71 mm	32 mm
C001/3.25	3,25	80 mm	69 mm	32 mm
C001/3.50	3,50	80 mm	71 mm	32 mm
C001/3.75	3,75	90 mm	78 mm	32 mm
C001/4	4,00	90 mm	78 mm	32 mm
C001/4.25	4,25	90 mm	78 mm	32 mm
C001/4.50	4,50	90 mm	78 mm	32 mm
C001/5	5,00	100 mm	88 mm	32 mm
C001/5.50	5,50	100 mm	88 mm	32 mm
C001/6	6,00	110 mm	108 mm	40 mm
C001/6.50	6,50	110 mm	109 mm	40 mm
C001/7	7,00	110 mm	110 mm	40 mm
C001/8	8,00	125 mm	130 mm	40 mm
C001/9	9,00	125 mm	140 mm	40 mm
C001/10	10,00	140 mm	160 mm	40 mm
C001/12	12,00	170 mm	195 mm	50 mm
C001/13	13,00	180 mm	210 mm	50 mm

P049-

MASONRY DRILL

Short series, cylindrical attachment, carbide tipped for masonry drill.



C45

HM



Art.	Ø	L	l	Stem	Pack
P049/03	3 mm	70 mm	40 mm	Ø 2,5 mm	10
P049/04	4 mm	75 mm	40 mm	Ø 3,5 mm	10
P049/05	5 mm	85 mm	40 mm	Ø 4,5 mm	10
P049/06	6 mm	100 mm	55 mm	Ø 4,5 mm	10
P049/07	7 mm	100 mm	55 mm	Ø 6,5 mm	10
P049/08	8 mm	120 mm	70 mm	Ø 6,5 mm	10
P049/09	9 mm	120 mm	70 mm	Ø 6,5 mm	10
P049/10	10 mm	120 mm	70 mm	Ø 7 mm	10
P049/11	11 mm	150 mm	90 mm	Ø 7 mm	10
P049/12	12 mm	150 mm	90 mm	Ø 9 mm	10
P049/13	13 mm	150 mm	90 mm	Ø 9 mm	5
P049/14	14 mm	150 mm	90 mm	Ø 11 mm	5
P049/15	15 mm	150 mm	90 mm	Ø 12 mm	5
P049/16	16 mm	150 mm	90 mm	Ø 12 mm	5
P049/18	18 mm	160 mm	100 mm	Ø 13 mm	5
P049/22	22 mm	160 mm	100 mm	Ø 13 mm	5
P049/24	24 mm	160 mm	100 mm	Ø 13 mm	5

P050-

MASONRY DRILL

Long series, cylindrical attachment, carbide tipped for masonry drill.



C45

HM



Art.	Ø	L	l	Stem	Pack
P050/06	6 mm	400 mm	240 mm	Ø 4,5 mm	5
P050/08	8 mm	400 mm	240 mm	Ø 7 mm	5
P050/09	9 mm	400 mm	240 mm	Ø 7 mm	5
P050/10	10 mm	400 mm	240 mm	Ø 7 mm	5
P050/12	12 mm	400 mm	240 mm	Ø 9 mm	5
P050/14	14 mm	400 mm	240 mm	Ø 10 mm	5
P050/16	16 mm	400 mm	240 mm	Ø 12 mm	5
P050/18	18 mm	400 mm	240 mm	Ø 12,5 mm	5
P050/20	20 mm	400 mm	240 mm	Ø 12,5 mm	5

P051-

CARBIDE DRILL FOR GRANITE AND MARBLE

Cylindrical attachment, specific for drilling marble and granite with hard metal insert for rotary percussion.



C45

HM



Art.	Ø	L	l	Stem	Pack
P051/03	3 mm	70 mm	40 mm	Ø 2,5 mm	10
P051/04	4 mm	75 mm	40 mm	Ø 3,5 mm	10
P051/05	5 mm	85 mm	40 mm	Ø 4,5 mm	10
P051/06	6 mm	100 mm	55 mm	Ø 5,5 mm	10
P051/07	7 mm	100 mm	55 mm	Ø 5,5 mm	10
P051/08	8 mm	120 mm	70 mm	Ø 6,5 mm	5
P051/09	9 mm	120 mm	70 mm	Ø 8 mm	5
P051/10	10 mm	120 mm	70 mm	Ø 9 mm	5
P051/12	12 mm	150 mm	90 mm	Ø 10 mm	5
P051/14	14 mm	150 mm	90 mm	Ø 12 mm	5
P051/16	16 mm	150 mm	90 mm	Ø 12 mm	5

P063-

CARBIDE TIPPED SDS PLUS SHANK TYPE HAMMER TWIST DRILL

2 edges, with attack SDS-Plus, double helix to facilitate the release of debris, with hard metal insert.



HM

40 Cr



Art.	Size	Pack
P063/5110	5 x 110 mm	10
P063/6110	6 x 110 mm	10
P063/6160	6 x 160 mm	10
P063/8110	8 x 110 mm	10
P063/8160	8 x 160 mm	10
P063/9160	9 x 160 mm	10
P063/10160	10 x 160 mm	10
P063/12160	12 x 160 mm	10
P063/12300	12 x 300 mm	10
P063/14160	14 x 160 mm	10
P063/14300	14 x 300 mm	10
P063/15160	15 x 160 mm	10
P063/16160	16 x 160 mm	10
P063/16300	16 x 300 mm	10
P063/16450	16 x 450 mm	5
P063/18160	18 x 160 mm	5
P063/18300	18 x 300 mm	5
P063/18450	18 x 450 mm	5
P063/20160	20 x 160 mm	5
P063/20450	20 x 450 mm	5
P063/22450	22 x 450 mm	5
P063/24450	24 x 450 mm	5

0332
CARBIDE TIPPED HAMMER TWIST DRILL AND CHISEL SET

With attack SDS-Plus, consisting of 9 twist drills: Ø4 x 110mm Ø5 x 110mm Ø6 x 110mm Ø5 x 160mm Ø6 x 160mm Ø8 x 160mm Ø10 x 160mm Ø12 x 160mm, 1 bit holder, 1 flat chisel and 1 point chisel.



12 Pcs



Carrying case



C45



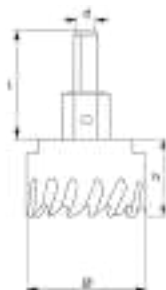
HM



SDS PLUS


P076-
CARBIDE TIPPED MASONRY CORE DRILL BIT HOLE SAW

For drilling medium and large holes in the wall.



HSS



HM



Bricks



Concrete



Ceramic



No Percussion



Portable Drill

Art.	Ø	d	Thread	Z	L	Boring bit
P076/016	16 mm	10 mm	M12 x 1,25	2	46 mm	Ø 6 x 69 mm
P076/022	22 mm	10 mm	M12 x 1,25	3	46 mm	Ø 6 x 69 mm
P076/025	25 mm	10 mm	M12 x 1,25	3	46 mm	Ø 6 x 69 mm
P076/027	27 mm	10 mm	M12 x 1,25	4	46 mm	Ø 6 x 69 mm
P076/030	30 mm	10 mm	M12 x 1,25	4	46 mm	Ø 6 x 69 mm
P076/035	35 mm	10 mm	M12 x 1,25	4	46 mm	Ø 6 x 69 mm
P076/038	38 mm	10 mm	M12 x 1,25	4	46 mm	Ø 6 x 69 mm
P076/040	40 mm	10 mm	M12 x 1,25	5	46 mm	Ø 6 x 69 mm
P076/045	45 mm	10 mm	M12 x 1,25	5	46 mm	Ø 6 x 69 mm
P076/050	50 mm	10 mm	M12 x 1,25	6	46 mm	Ø 6 x 69 mm
P076/055	55 mm	12 mm	M16 x 1,5	6	46 mm	Ø 8 x 69 mm
P076/060	60 mm	12 mm	M16 x 1,5	7	46 mm	Ø 8 x 69 mm
P076/065	65 mm	12 mm	M16 x 1,5	7	46 mm	Ø 8 x 69 mm
P076/070	70 mm	12 mm	M16 x 1,5	8	46 mm	Ø 8 x 69 mm
P076/080	80 mm	12 mm	M16 x 1,5	8	46 mm	Ø 8 x 69 mm
P076/085	85 mm	12 mm	M16 x 1,5	9	46 mm	Ø 8 x 69 mm
P076/090	90 mm	12 mm	M16 x 1,5	9	46 mm	Ø 8 x 69 mm
P076/095	95 mm	12 mm	M16 x 1,5	10	46 mm	Ø 8 x 69 mm
P076/100	100 mm	12 mm	M16 x 1,5	11	46 mm	Ø 8 x 69 mm
P076/110	110 mm	12 mm	M16 x 1,5	11	46 mm	Ø 8 x 69 mm
P076/125	125 mm	12 mm	M16 x 1,5	12	46 mm	Ø 8 x 69 mm
P076/150	150 mm	12 mm	M16 x 1,5	15	46 mm	Ø 8 x 69 mm

P076/006S
CARBIDE TIPPED MASONRY CORE DRILL BIT HOLE SAW SET

For drilling medium and large holes in the wall.



6 Pcs



Carrying case



HSS



HM


Sizes

16 mm - 22 mm - 25 mm - 27 mm - 30 mm - 35 mm

P076/008S
CARBIDE TIPPED MASONRY CORE DRILL BIT HOLE SAW SET

For drilling medium and large holes in the wall.



8 Pcs



Carrying case



HSS



HM


Sizes

16 mm - 22 mm - 25 mm - 27 mm - 30 mm - 35 mm - 40 mm - 45 mm

P076-GX
ARBOR FOR CARBIDE TIPPED MASONRY CORE DRILLS BIT HOLE SAW

For item P076-.



Hangable



Art.	d	L	Thread	Sizes
P076/G12	10 mm	46 mm	M12 x 1,25	16-50
P076/G16	12 mm	46 mm	M16 x 1,5	55-150

P076-PX
CARBIDE TIPPED PILOT DRILL FOR HOLE CUTTERS FOR MASONRY

For item P076-.



Box



HSS



HM



Art.	Ø	Total length	Sizes	Pack
P076/P12	6 mm	69 mm	16-50	10
P076/P16	8 mm	69 mm	55-150	10


P031/06P
PILOT TIP

For item P031-



HSS

HM

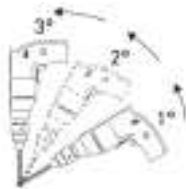


Hangable

Diameter	Ø 6 mm	Stem	Ø 5 mm
Length	100 mm	Pack	10

P031-
DIAMOND DRILL BITS AND CORE DRILLS WITH CONTINUOUS EDGE

The thin-wall diamond core guarantees burr-free cuts. This feature facilitates drilling work on hard laid tiles, where it is necessary to make a clean hole, without chipping the tile. Longer useful life cycle.



Hangable



Ceramic



Granite



Marble



Stoneware


 No
Percussion


Water


 Portable
Drill

Art.	Size	Hex drive	Total length	Diamond height	Grit
P031/05	Ø 5 mm	8,5 mm	56 mm	2 mm	50/60
P031/06	Ø 6 mm	8,5 mm	56 mm	2 mm	50/60
P031/07	Ø 7 mm	8,5 mm	56 mm	2 mm	50/60
P031/08	Ø 8 mm	8,5 mm	56 mm	2 mm	50/60
P031/10	Ø 10 mm	8,5 mm	56 mm	2 mm	50/60
P031/12	Ø 12 mm	8,5 mm	56 mm	2 mm	50/60
P031/14	Ø 14 mm	8,5 mm	56 mm	2 mm	50/60
P031/16	Ø 16 mm	11 mm	90 mm	5 mm	35/40
P031/18	Ø 18 mm	11 mm	90 mm	5 mm	35/40
P031/20	Ø 20 mm	11 mm	90 mm	5 mm	35/40
P031/22	Ø 22 mm	11 mm	90 mm	5 mm	35/40
P031/25	Ø 25 mm	11 mm	90 mm	5 mm	35/40
P031/28	Ø 28 mm	11 mm	90 mm	5 mm	35/40
P031/30	Ø 30 mm	11 mm	90 mm	5 mm	35/40
P031/32	Ø 32 mm	11 mm	90 mm	5 mm	35/40
P031/35	Ø 35 mm	11 mm	90 mm	5 mm	35/40
P031/40	Ø 40 mm	11 mm	90 mm	5 mm	35/40
P031/45	Ø 45 mm	11 mm	90 mm	5 mm	35/40
P031/50	Ø 50 mm	11 mm	90 mm	5 mm	35/40
P031/60	Ø 60 mm	11 mm	90 mm	5 mm	35/40
P031/65	Ø 65 mm	11 mm	90 mm	5 mm	35/40
P031/67	Ø 67 mm	11 mm	90 mm	5 mm	35/40
P031/70	Ø 70 mm	11 mm	90 mm	5 mm	35/40
P031/80	Ø 80 mm	11 mm	90 mm	5 mm	35/40

P031/03S
DIAMOND DRILL BIT AND CORE DRILL WITH CONTINUOUS EDGE SET

The thin-wall diamond core guarantees burr-free cuts. This feature facilitates drilling work on hard laid tiles, where it is necessary to make a clean hole, without chipping the tile. Longer useful life cycle.



3 Pcs



Hangable

Sizes	Ø 6 mm - 8 mm - 10 mm
Hex drive	9,5 mm
Total length	56 mm
Diamond height	2 mm
Grit	50/60

P031/05S
DIAMOND DRILL BIT AND CORE DRILL WITH CONTINUOUS EDGE SET

The thin-wall diamond core guarantees burr-free cuts. This feature facilitates drilling work on hard laid tiles, where it is necessary to make a clean hole, without chipping the tile. Longer useful life cycle.



5 Pcs



Hangable

Sizes	Ø 5 mm - 6 mm - 8 mm - 10 mm - 12 mm
Hex drive	8,5 mm
Total length	56 mm
Diamond height	2 mm
Grit	50/60

P031/06S
DIAMOND DRILL BIT AND CORE DRILL WITH CONTINUOUS EDGE SET

The thin-wall diamond core guarantees burr-free cuts. This feature facilitates drilling work on hard laid tiles, where it is necessary to make a clean hole, without chipping the tile. Longer useful life cycle.



6 Pcs


 Carrying
case

Sizes	Ø 16 mm - 22 mm - 25 mm - 28 mm - 30 mm - 35 mm
Hex drive	11 mm
Total length	90 mm
Diamond height	5 mm
Grit	50/60

P033-
DIAMOND DRILL BITS WITH CONTINUOUS EDGE

Optimal operation on vertical walls, do not remove the core, which acts as a measuring cap for the coolant. Use with water cooling extends the useful life of the tool. The thin-walled diamond ring guarantees burr-free cuts. This feature facilitates drilling work on hard tiles in place, where it is necessary to make a clean hole.



Art.	Size	Hex drive	Total length	Diamond height	Grit
P033/05	Ø 5 mm	9,5 mm	80 mm	10 mm	40
P033/06	Ø 6 mm	9,5 mm	80 mm	10 mm	40
P033/08	Ø 8 mm	9,5 mm	80 mm	10 mm	40
P033/10	Ø 10 mm	9,5 mm	80 mm	10 mm	40
P033/12	Ø 12 mm	9,5 mm	80 mm	10 mm	40
P033/14	Ø 14 mm	12,5 mm	80 mm	10 mm	40
P033/16	Ø 16 mm	12,5 mm	80 mm	10 mm	40
P033/18	Ø 18 mm	12,5 mm	80 mm	10 mm	40
P033/20	Ø 20 mm	12,5 mm	80 mm	10 mm	40
P033/22	Ø 22 mm	12,5 mm	80 mm	10 mm	40
P033/25	Ø 25 mm	12,5 mm	80 mm	10 mm	40

P033/03S
DIAMOND DRILL BIT AND CORE DRILL WITH CONTINUOUS EDGE SET

Optimal operation on vertical walls, do not remove the core, which acts as a measuring cap for the coolant. Use with water cooling extends the useful life of the tool. The thin-walled diamond ring guarantees burr-free cuts. This feature facilitates drilling work on hard tiles in place, where it is necessary to make a clean hole.

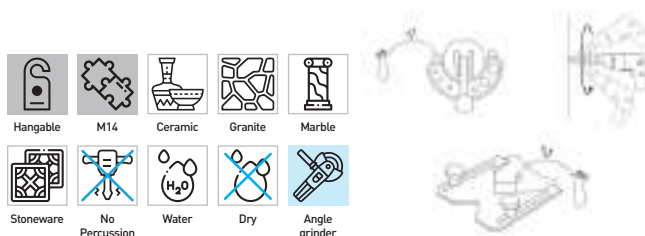


Sizes	Ø 6 mm - 8 mm - 10 mm
Hex drive	9,5 mm
Total length	80 mm

Diamond height	10 mm
Grit	40


P034-
M14 DIAMOND DRILL BITS AND CORE DRILLS WITH CONTINUOUS EDGE

The thin-wall diamond core guarantees burr-free cuts. This feature facilitates drilling work on hard laid tiles, where it is necessary to make a clean hole, without chipping the tile. Longer useful life cycle.



Art.	Size	Total length	Diamond height	Grit
P034/006	Ø 6 mm	62 mm	10 mm	30/50
P034/008	Ø 8 mm	62 mm	10 mm	30/50
P034/010	Ø 10 mm	62 mm	10 mm	30/50
P034/012	Ø 12 mm	62 mm	10 mm	30/50
P034/014	Ø 14 mm	62 mm	10 mm	30/50
P034/016	Ø 16 mm	62 mm	15 mm	30/50
P034/018	Ø 18 mm	62 mm	15 mm	30/50
P034/020	Ø 20 mm	60 mm	15 mm	30/50
P034/022	Ø 22 mm	60 mm	15 mm	30/50
P034/025	Ø 25 mm	60 mm	10 mm	30/50
P034/028	Ø 28 mm	60 mm	15 mm	30/50
P034/030	Ø 30 mm	60 mm	15 mm	30/50
P034/032	Ø 32 mm	60 mm	15 mm	30/50
P034/035	Ø 35 mm	60 mm	15 mm	30/50
P034/040	Ø 40 mm	60 mm	15 mm	30/50
P034/045	Ø 45 mm	60 mm	15 mm	30/50
P034/050	Ø 50 mm	60 mm	15 mm	30/50
P034/055	Ø 55 mm	60 mm	15 mm	30/50
P034/060	Ø 60 mm	60 mm	15 mm	30/50
P034/065	Ø 65 mm	60 mm	15 mm	30/50
P034/067	Ø 67 mm	60 mm	15 mm	30/50
P034/070	Ø 70 mm	60 mm	15 mm	30/50
P034/080	Ø 80 mm	60 mm	15 mm	30/50
P034/090	Ø 90 mm	60 mm	15 mm	30/50
P034/100	Ø 100 mm	60 mm	15 mm	30/50

P034/05S
M14 DIAMOND DRILL BIT AND CORE DRILL WITH CONTINUOUS EDGE SET

The thin-wall diamond core guarantees burr-free cuts. This feature facilitates drilling work on hard laid tiles, where it is necessary to make a clean hole, without chipping the tile. Longer useful life cycle.



Sizes	Ø 6 mm - 8 mm - 10 mm - 12 mm - 14 mm
Total length	62 mm

Diamond height	10 mm
Grit	30/50


P034/06S
M14 DIAMOND DRILL BIT AND CORE DRILL WITH CONTINUOUS EDGE SET

The thin-wall diamond core guarantees burr-free cuts. This feature facilitates drilling work on hard laid tiles, where it is necessary to make a clean hole, without chipping the tile. Longer useful life cycle.



Sizes	Ø 22 mm - 35 mm - 40 mm - 45 mm - 50 mm - 67 mm
Total length	60 mm

Diamond height	15 mm
Grit	30/50





P035-

DIAMOND DRILL BITS WITH CONTINUOUS EDGE

The thin-wall diamond core guarantees burr-free cuts. This feature facilitates drilling work on hard laid tiles, where it is necessary to make a clean hole, without chipping the tile. Longer useful life cycle.



Art.	Size	Stem	Total length	Diamond height	Grit
P035/05	Ø 5 mm	Ø 6 mm	65 mm	5 mm	60/80
P035/06	Ø 6 mm	Ø 6 mm	65 mm	5 mm	60/80
P035/08	Ø 8 mm	Ø 6 mm	65 mm	5 mm	60/80
P035/10	Ø 10 mm	Ø 6 mm	65 mm	5 mm	60/80
P035/12	Ø 12 mm	Ø 6 mm	65 mm	5 mm	60/80
P035/14	Ø 14 mm	Ø 6 mm	65 mm	5 mm	60/80

P035/04S

DIAMOND DRILL BIT SET WITH CONTINUOUS EDGE

The thin-wall diamond core guarantees burr-free cuts. This feature facilitates drilling work on hard laid tiles, where it is necessary to make a clean hole, without chipping the tile. Longer useful life cycle.



Sizes	Ø 5 mm - 6 mm 8 mm - 10 mm	Total length	65 mm
Stem	Ø 6 mm	Diamond height	5 mm
		Grit	60/80

0529

DIAMOND CORE DRILL BIT SET

The thin-wall diamond core guarantees burr-free cuts. This feature facilitates drilling work on hard laid tiles, where it is necessary to make a clean hole, without chipping the tile. Longer useful life cycle.



Drills	Ø 5 - 6 - 8 - 10 - 12 mm	Diamond height	3 mm
Total length	60 mm	Grit	70/80
Cutting Depth	30 mm		

D009/5-12

DRILL SUCTION CUP WITH GUIDING HOLES

Allows easy centering and cutting safety of the diamond tip in the various workable materials. To be used in conjunction with a nebulizer for water processing.



Holes	4 mm - 5 mm - 6 mm - 7 mm - 8 mm - 10 mm - 12 mm
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D009/5-85

DRILL SUCTION CUP WITH ADJUSTABLE HOLE FRAME

Allows easy centering and cutting safety of the diamond tip in the various workable materials. To be used in conjunction with a nebulizer for water processing.



Holes	5 - 85 mm
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D020

DIAMOND MOUNTED POINT SET

Suitable for engraving, writing or finishing thanks to the various geometries available.

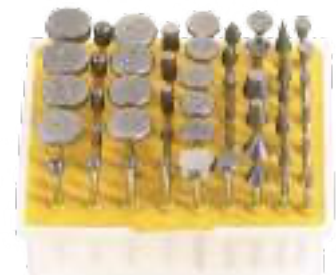


Stem	Ø 3 mm
Length	45 mm

D050

DIAMOND MOUNTED POINT AND DISC SET

Suitable for engraving, writing or finishing thanks to the various geometries available.



Stem	Ø 3 mm
Length	45 mm

P052-
BRAD POINT WOODWORKING DRILLS

Double helix, with centering tip allows exact positioning of the hole.



Art.	Ø	Total length	Flute length	Pack
P052/03	3 mm	61 mm	33 mm	5
P052/04	4 mm	75 mm	43 mm	5
P052/05	5 mm	86 mm	52 mm	5
P052/06	6 mm	93 mm	57 mm	5
P052/07	7 mm	109 mm	69 mm	5
P052/08	8 mm	117 mm	75 mm	5
P052/09	9 mm	125 mm	81 mm	1
P052/10	10 mm	133 mm	87 mm	1
P052/11	11 mm	142 mm	94 mm	1
P052/12	12 mm	151 mm	101 mm	1
P052/13	13 mm	151 mm	101 mm	1
P052/14	14 mm	160 mm	108 mm	1
P052/15	15 mm	169 mm	114 mm	1
P052/16	16 mm	178 mm	120 mm	1
P052/17	17 mm	184 mm	125 mm	1
P052/18	18 mm	191 mm	130 mm	1
P052/19	19 mm	198 mm	135 mm	1
P052/20	20 mm	205 mm	140 mm	1

P052/08S
BRAD POINT WOODWORKING DRILLS SET

Double helix, with centering tip allows exact positioning of the hole.



Size 3 ÷ 10 mm

0238
HOLE SAW SET FOR WOOD


Sizes Ø 22 - 29 - 32 - 38 - 44 - 51 - 57 - 67 mm

0463
TWIST DRILL SET WITH COUNTERSINK FOR WOOD

For countersinking the wood.



Sizes 2 - 2,5 - 3 - 3,5 mm

0799-
MORTISING DRILL SET


Art.	Sizes	Revolution	Stem
0799/SXC	Ø 6 - 8 - 10 - 12 - 14 - 16 mm	L	Ø 16 x 50 mm
0799/DXC	Ø 6 - 8 - 10 - 12 - 14 - 16 mm	R	Ø 16 x 50 mm

0087
UNIVERSAL CYLINDER CARBIDE TIPPED BORING BIT


Drills Ø 15 - 20 - 26 - 30 - 35 mm

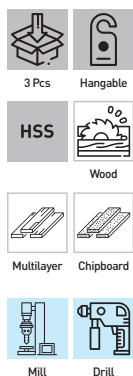
0087/35
UNIVERSAL CYLINDER CARBIDE TIPPED BORING BIT


Boring bit Ø 35 mm
Stem Ø 8 mm

0526

TWIST DRILL AND COUNTERSINK SET WITH 1/4" HEX SHANK

1/4" hex shank with countersink for wood.



Drills 2,75 - 3,25 - 3,5 mm
Shank 1/4"

0524

1/4" DR. DRILL BIT HOLDER SET

To speed up the work by replacing the tips quickly.

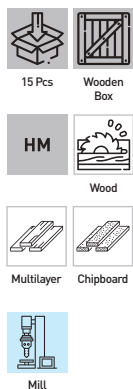


Sizes 3-3,5-4-4,5-5-5,5-6-6,5-8-10 mm
Shank 1/4"

0835/15

CARBIDE TIPPED ROUTER BIT SET

For professional woodworking such as edges, trimmings, grooves.

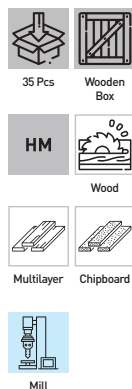


Stem Ø 6 mm

0830

CARBIDE TIPPED ROUTER BIT SET

For professional woodworking such as edges, trimmings, grooves.



Stem Ø 6 mm



M015S

SPIRAL POINT TAP AND DRILL SET

With adjustable tap holder.



Taps	M3 x 0,5 - M4 x 0,7 - M5 x 0,8 - M6 x 1 - M8 x 1,2 - M10 x 1,5 - M12 x 1,75
Drills	Ø 2,5 - Ø 3,3 - Ø 4,2 - Ø 5 - Ø 6,8 - Ø 8,5 - Ø 10,2

M312/P

MACHINE TAP SET FOR THROUGH HOLES WITH REINFORCED SHANK

With adjustable tap holder.

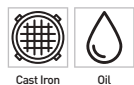


Size	M3 x 0,50 - M4 x 0,70 - M5 x 0,80 - M6 x 1 - M8 x 1,25 - M10 x 1,50 - M12 x 1,75
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M312/C

MACHINE TAP SET FOR BLIND HOLES 35° WITH REINFORCED SHANK

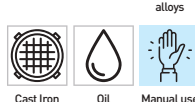
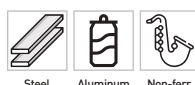
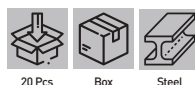
With adjustable tap holder.



Size	M3 x 0,50 - M4 x 0,70 - M5 x 0,80 - M6 x 1 - M8 x 1,25 - M10 x 1,50 - M12 x 1,75
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M020

TAP AND DIE SET

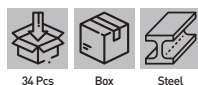


Tap holder	M3 - M12
Round die-stock	25 x 9 mm
Taps	M3x0,5 - M4x0,7 - M5x0,8 - M6x1 - M7x1 - M8x1,25 M10x1,5 - M12x1,75 - 1/8" NPT27
Dies	M3x0,5 - M4x0,7 - M5x0,8 - M6x1 - M7x1 - M8x1,25 M10x1,5 - M12x1,75 - 1/8" NPT27

M036

TAP AND DIE SET

With twist drills and screw pitch gauge.

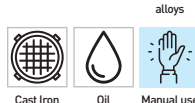
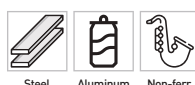


Tap holder	M3 - M12
Round die-stock	25 x 9 mm
Taps	M3x0,5 - M4x0,7 - M5x0,8 - M6x1 - M7x1 - M8x1,25 - M10x1,5 - M12
Dies	M3x0,5 - M4x0,7 - M5x0,8 - M6x1 - M7x1 - M8x1,25 - M10x1,5 - M12
Drills	2,5 - 3,3 - 4,2 - 5 - 6 - 6,8 - 8,5 - 10,3 mm
Screwdriver	6,5 x 50 mm

M032

TAP AND DIE METRIC SET

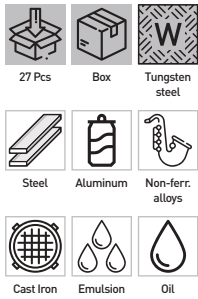
With round die-stock, adjustable tap holder and screw pitch gauge.



Taps	M3x0,5 M4x0,7 M5x0,8 M6x1 M8x1,25 M10x1,5 M12x1,75
Dies	M3x0,5 M4x0,7 M5x0,8 M6x1 M8x1,25 M10x1,5 M12x1,75
Screwdriver	3,5 x 50 mm

**M029****TAP AND DIE SET**

With twist drills and ratchet tap-die holder.



Ratchet handle	200 mm
Socket	Maschi 5 - 7,5 mm Filiere 25 x 9 mm
Taps	M3x0,5 - M4x0,7 - M5x0,8 - M6x1 - M8x1,25 - M10x1,5 - M12x1,75
Dies	M3x0,5 - M4x0,7 - M5x0,8 - M6x1 - M8x1,25 - M10x1,5 - M12x1,75
Drills	2,5 - 3,3 - 4,2 - 5 - 6,8 - 8,5 - 10,3 mm
Screwdriver	6,5 x 50 mm
Screwdriver	3 x 50 mm

M101**TAPS AND DIE METRIC SET**

Hand tap and die: M3x0,5 - UNC 1/4 20 - UNF 4 40 - Metric M4x0,7 - UNC 1/4 28 - UNF 6 32 - Metric M5x0,8 - UNC 5/16 18 - UNF 8 32 - Metric M6x1 - UNC 5/16 24 - UNF 10 32 - Metric M7x1 - UNC 3/8 16 - UNF 10 24 - Metric M8x1,25 - UNC 3/8 24 - UNF 12 24 - Metric M9x1,25 - UNC 7/16 14 - Metric M10x1,5 - UNC 7/16 20 - Metric M10x1 - UNC 1/2 13 - Metric M12x1,75 - UNC 1/2 20 - NPT 1/8 27. Complete with round die-stock and adjustable tap holder.

**M030****TAP AND DIE SET**

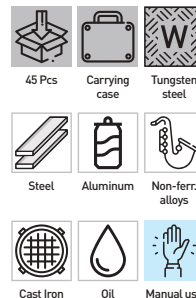
From M1 to M2.5, with die turner and adapters to convert it into tap wrenches.



Size M1 - M1,1 - M1,2 - M1,4 - M1,6 - M1,8 - M2,0 - M2,2 - M2,5

M100**TAP AND DIE METRIC SET**

With round die-stock and adjustable tap holder. M6x0,75 - M6x1 - M8x1 - M8x1,25 - M10x1,25 - M10x1,5 - M12x1,5 - M12x1,75 - M14x1,5 - M14x2 - M16x1,5 - M16x2 - M18x1,5 - M18x2,5 - M20x1,5 - M20x2,5 - M22x1,5 - M22x2,5 - M24x1,5 - M24x3.

**M218****TAP AND DIE METRIC SET**

2 pcs hand tap set and die: M2 x 0,40 - M3 x 0,50 - M4 x 0,70 - M5 x 0,80 - M6 x 0,75 - M6 x 1 - M7 x 0,75 - M7 x 1 - M8 x 0,75 - M8 x 1 - M8 x 1,25 - M9 x 0,75 - M9 x 1 - M9 x 1,25 - M10 x 0,75 - M10 x 1 - M10 x 1,25 - M10 x 1,5 - M11 x 0,75 - M11 x 1 - M11 x 1,25 - M11 x 1,5 - M12 x 0,75 - M12 x 1 - M12 x 1,25 - M12 x 1,5 - M12 x 1,75 - M14 x 1 - M14 x 1,25 - M14 x 1,5 - M14 x 2 - M16 x 1 - M16 x 1,5 - M16 x 2 - M18 x 1,5. Complete with 2 tap holders and 2 round die-stocks.



TAPPING

TYPE OF GROOVES

STRAIGHT GROOVES CORRECT INLET

The correction of the inlet is given by a strong inclination of the helix combined with an accentuated angle of cut in the initial part of the tap. This design ensures the evacuation of chips in the direction of the feed. Therefore, when tapping through holes in materials that produce continuous chips, the risk of clogging and breakage is almost eliminated.



35° HIGH-TWIST HELICAL GROOVES

Inclined helical grooves facilitate chip extraction in the opposite direction to the tap feed. The strong inclination of the helix also ensures the extraction of chips from blind and deep holes reducing the risk of clogging and breakage.



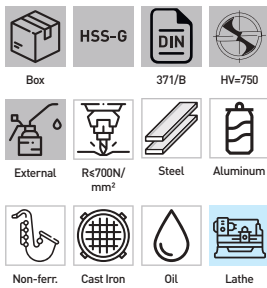
CHOICE OF THEORETICAL CUTTING SPEEDS OF MACHINE TAPS, ACCORDING TO THE MATERIAL TO BE THREADED

Material to work	Cutting speed (m / min)	Refrigerant
Low alloy construction steel R< 700÷900N/mm2	10 - 20	Oil
Tool steel	4 - 8	Oil
Alloy steel R< 1100÷1300N/mm2	2 - 5	Oil
Stainless steel	5 - 10	Oil
Spheroidal cast iron	6 - 20	No Lubrication.
Copper alloys	10 - 15	Oil
Brass	20 - 30	Oil
Bronze	6 - 15	Oil
Aluminium Short chip	15 - 30	Oil
Aluminium Long chip	10 - 20	Oil
Titanium	3 - 4	Oil
Plastics and thermoplastics	5 - 15	Water
Thermosetting Materials	5 - 10	No Lubrication



**M001-X****MACHINE TAPS STRAIGHT FLUTE, SPIRAL POINTED FOR THROUGH HOLES**

Isometric thread coarse pitch - reinforced shank.



Art.	B	L2	L1	D2	C
M001/3	M3 x 0,50	13 mm	56 mm	3,5 mm	2,7 mm
M001/4	M4 x 0,70	13 mm	66 mm	4,5 mm	3,4 mm
M001/5	M5 x 0,80	16 mm	70 mm	6 mm	4,9 mm
M001/6	M6 x 1	22 mm	85 mm	6 mm	4,9 mm
M001/8	M8 x 1,25	22 mm	90 mm	8 mm	6,2 mm
M001/10	M10 x 1,5	24 mm	100 mm	10 mm	8 mm

M001-XV**MACHINE TAPS STRAIGHT FLUTE, SPIRAL POINTED FOR THROUGH HOLES**

Isometric thread coarse pitch - reinforced shank, the vaporization treatment increases the surface hardness and wear resistance by reducing the possibility of chip sticking.



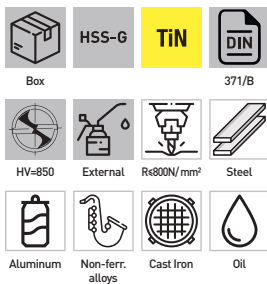
Art.	B	L2	L1	D2	C
M001/03V	M3 x 0,50	11 mm	56 mm	3,5 mm	2,7 mm
M001/04V	M4 x 0,70	13 mm	63 mm	4,5 mm	3,4 mm
M001/05V	M5 x 0,80	16 mm	70 mm	6 mm	4,9 mm
M001/06V	M6 x 1	19 mm	80 mm	6 mm	4,9 mm
M001/08V	M8 x 1,25	22 mm	90 mm	8 mm	6,2 mm
M001/10V	M10 x 1,5	24 mm	100 mm	10 mm	8 mm

M001-XTIN

NEW

MACHINE TAPS FOR THROUGH-HOLES, CORRECTED BORE

Metric coarse pitch (MA) threading with reinforced shank: titanium nitride coating reduces friction and, consequently, the amount of energy required for chip removal and tool temperature. This results in longer tool life, reduced machining time and lower motor energy consumption for the same production.



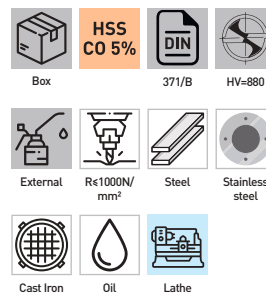
Art.	B	L2	L1	D2	C
M001/03TIN	M3 x 0,50	11 mm	56 mm	3,5 mm	2,7 mm
M001/04TIN	M4 x 0,70	13 mm	63 mm	4,5 mm	3,4 mm
M001/05TIN	M5 x 0,80	16 mm	70 mm	6 mm	4,9 mm
M001/06TIN	M6 x 1	19 mm	80 mm	6 mm	4,9 mm
M001/08TIN	M8 x 1,25	22 mm	90 mm	8 mm	6,2 mm
M001/10TIN	M10 x 1,5	24 mm	100 mm	10 mm	8 mm

M001-XTICN

NEW

MACHINE TAPS FOR THROUGH-HOLES, CORRECTED BORE

Metric coarse pitch (MA) threading with reinforced shank: Titanium carbonitride coating combined with cobalt steel further reduces friction compared to titanium nitride coating, thereby decreasing the amount of energy required for chip removal and tool temperature. This results in longer tool life, reduced machining time and lower motor energy consumption for the same production.

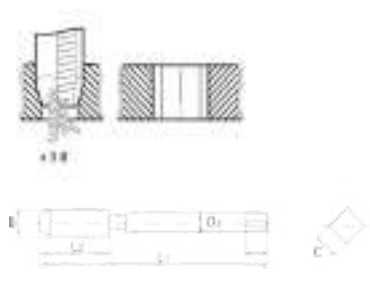
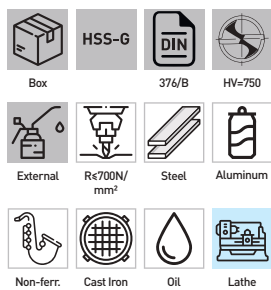


Art.	B	L2	L1	D2	C
M001/03TICN	M3 x 0,50	11 mm	56 mm	3,5 mm	2,7 mm
M001/04TICN	M4 x 0,70	13 mm	63 mm	4,5 mm	3,4 mm
M001/05TICN	M5 x 0,80	16 mm	70 mm	6 mm	4,9 mm
M001/06TICN	M6 x 1	19 mm	80 mm	6 mm	4,9 mm
M001/08TICN	M8 x 1,25	22 mm	90 mm	8 mm	6,2 mm
M001/10TICN	M10 x 1,5	24 mm	100 mm	10 mm	8 mm

M002-

MACHINE TAPS STRAIGHT FLUTE SPIRAL POINTED FOR THROUGH HOLES

Isometric thread coarse pitch.

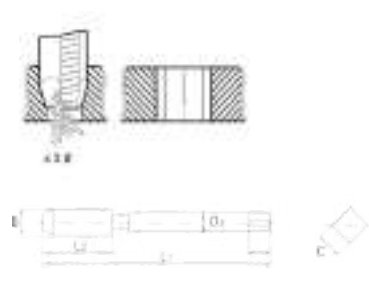
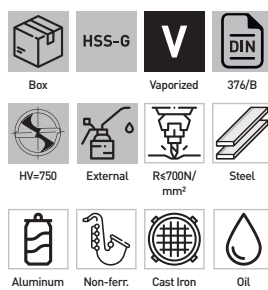


Art.	B	L2	L1	D2	C
M002/12	M12 x 1,75	29 mm	110 mm	9 mm	7 mm
M002/14	M14 x 2	30 mm	110 mm	11 mm	9 mm
M002/16	M16 x 2	32 mm	110 mm	12 mm	9 mm
M002/18	M18 x 2,5	34 mm	125 mm	14 mm	11 mm
M002/20	M20 x 2,5	34 mm	140 mm	16 mm	12 mm
M002/22	M22 x 2,5	34 mm	140 mm	18 mm	14,5 mm
M002/24	M24 x 3	38 mm	160 mm	18 mm	14,5 mm
M002/27	M27 x 3	38 mm	160 mm	20 mm	16 mm
M002/30	M30 x 3,5	45 mm	180 mm	22 mm	18 mm

M002-XV

MACHINE TAPS STRAIGHT FLUTE SPIRAL POINTED FOR THROUGH HOLES

Isometric thread coarse pitch. The vaporization treatment increases the surface hardness and wear resistance by reducing the possibility of chip sticking.



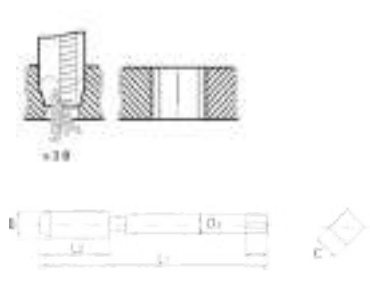
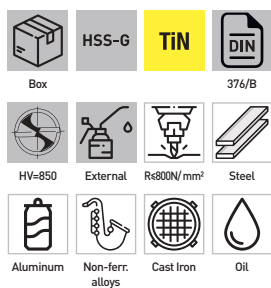
Art.	B	L2	L1	D2	C
M002/12V	M12 x 1,75	29 mm	110 mm	9 mm	7 mm
M002/14V	M14 x 2	30 mm	110 mm	11 mm	9 mm
M002/16V	M16 x 2	32 mm	110 mm	12 mm	9 mm
M002/18V	M18 x 2,5	34 mm	125 mm	14 mm	11 mm
M002/20V	M20 x 2,5	34 mm	140 mm	16 mm	12 mm
M002/22V	M22 x 2,5	34 mm	140 mm	18 mm	14,5 mm
M002/24V	M24 x 3	38 mm	160 mm	18 mm	14,5 mm

M002-XTIN

NEW

MACHINE TAPS FOR THROUGH-HOLES, CORRECTED BORE

Metric coarse pitch (MA), titanium nitride coating reduces friction and, consequently, the amount of energy required for chip removal and tool temperature. This results in longer tool life, reduced machining time and lower motor energy consumption for the same production.



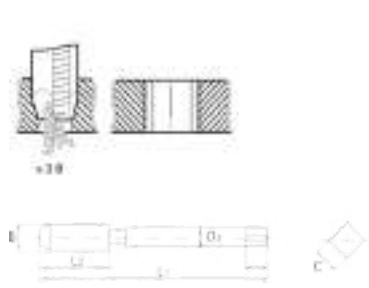
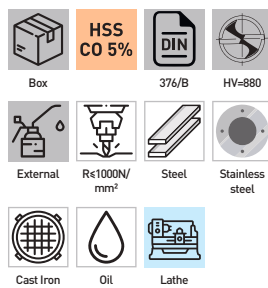
Art.	B	L2	L1	D2	C
M002/12TIN	M12 x 1,75	29 mm	110 mm	9 mm	7 mm
M002/14TIN	M14 x 2	30 mm	110 mm	11 mm	9 mm
M002/16TIN	M16 x 2	32 mm	110 mm	12 mm	9 mm
M002/18TIN	M18 x 2,5	34 mm	125 mm	14 mm	11 mm
M002/20TIN	M20 x 2,5	34 mm	140 mm	16 mm	12 mm
M002/22TIN	M22 x 2,5	34 mm	140 mm	18 mm	14,5 mm
M002/24TIN	M24 x 3	38 mm	160 mm	18 mm	14,5 mm

M002-XTICN

NEW

MACHINE TAPS FOR THROUGH-HOLES, CORRECTED BORE

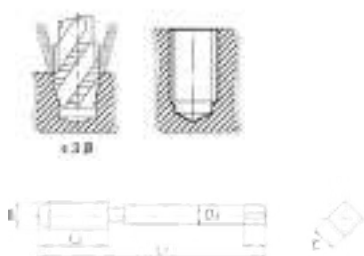
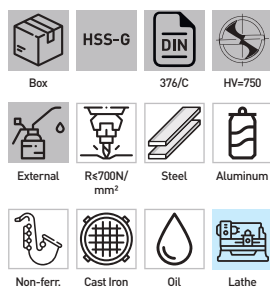
Metric coarse pitch (MA), Titanium carbonitride coating combined with cobalt steel further reduces friction compared to titanium nitride coating, thereby decreasing the amount of energy required for chip removal and tool temperature. This results in longer tool life, reduced machining time and lower motor energy consumption for the same production, especially on tough and highly abrasive materials.



Art.	B	L2	L1	D2	C
M002/12TICN	M12 x 1,75	29 mm	110 mm	9 mm	7 mm
M002/14TICN	M14 x 2	30 mm	110 mm	11 mm	9 mm
M002/16TICN	M16 x 2	32 mm	110 mm	12 mm	9 mm
M002/18TICN	M18 x 2,5	34 mm	125 mm	14 mm	11 mm
M002/20TICN	M20 x 2,5	34 mm	140 mm	16 mm	12 mm
M002/22TICN	M22 x 2,5	34 mm	140 mm	18 mm	14,5 mm
M002/24TICN	M24 x 3	38 mm	160 mm	18 mm	14,5 mm

**M003-****MACHINE TAPS SPIRAL FLUTE FOR BLIND HOLES 35°**

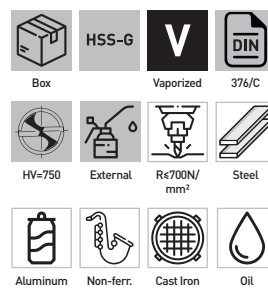
Isometric thread coarse pitch - reinforced shank.



Art.	B	L2	L1	D2	C
M003/3	M3 x 0,50	11 mm	59 mm	3,5 mm	2,7 mm
M003/4	M4 x 0,70	13 mm	63 mm	4,5 mm	3,4 mm
M003/5	M5 x 0,80	18 mm	74 mm	6 mm	4,9 mm
M003/6	M6 x 1	22 mm	80 mm	6 mm	4,9 mm
M003/8	M8 x 1,25	22 mm	90 mm	8 mm	6,2 mm
M003/10	M10 x 1,5	24 mm	100 mm	10 mm	8 mm

M003-XV**MACHINE TAPS SPIRAL FLUTE FOR BLIND HOLES 35°**

Isometric thread coarse pitch - reinforced shank, the vaporization treatment increases the surface hardness and wear resistance by reducing the possibility of chip sticking.



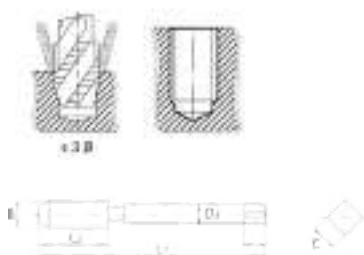
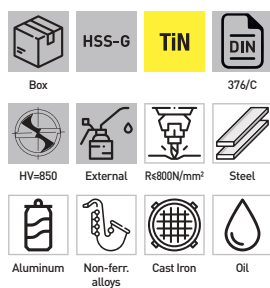
Art.	B	L2	L1	D2	C
M003/03V	M3 x 0,50	11 mm	56 mm	3,5 mm	2,7 mm
M003/04V	M4 x 0,70	13 mm	63 mm	4,5 mm	3,4 mm
M003/05V	M5 x 0,80	16 mm	75 mm	6 mm	4,9 mm
M003/06V	M6 x 1	22 mm	86 mm	6 mm	4,9 mm
M003/08V	M8 x 1,25	22 mm	90 mm	8 mm	6,2 mm
M003/10V	M10 x 1,5	24 mm	100 mm	10 mm	8 mm

M003-XTIN

NEW

MACHINE TAPS FOR HIGH-TWIST BLIND HOLES 35°

Metric coarse pitch (MA) threading with reinforced shank: Titanium carbonitride coating combined with cobalt steel further reduces friction compared to titanium nitride coating, thereby decreasing the amount of energy required for chip removal and tool temperature. This results in longer tool life, reduced machining time and lower motor energy consumption for the same production.



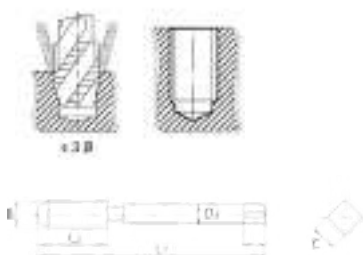
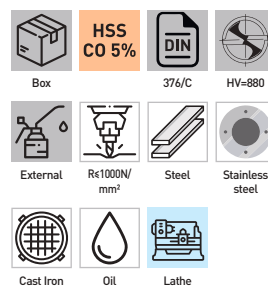
Art.	B	L2	L1	D2	C
M003/03TIN	M3 x 0,50	11 mm	56 mm	3,5 mm	2,7 mm
M003/04TIN	M4 x 0,70	13 mm	63 mm	4,5 mm	3,4 mm
M003/05TIN	M5 x 0,80	16 mm	70 mm	6 mm	4,9 mm
M003/06TIN	M6 x 1	19 mm	80 mm	6 mm	4,9 mm
M003/08TIN	M8 x 1,25	22 mm	90 mm	8 mm	6,2 mm
M003/10TIN	M10 x 1,5	24 mm	100 mm	10 mm	8 mm

M003-XTICN

NEW

MACHINE TAPS FOR HIGH-TWIST BLIND HOLES 35°

Metric coarse pitch (MA) threading with reinforced shank: Titanium carbonitride coating combined with cobalt steel further reduces friction compared to titanium nitride coating, thereby decreasing the amount of energy required for chip removal and tool temperature. This results in longer tool life, reduced machining time and lower motor energy consumption for the same production.

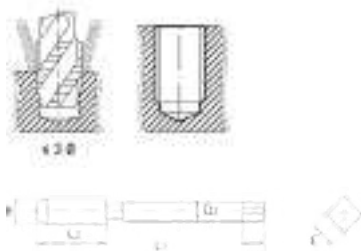
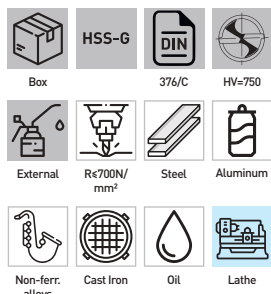


Art.	B	L2	L1	D2	C
M003/03TICN	M3 x 0,50	11 mm	56 mm	3,5 mm	2,7 mm
M003/04TICN	M4 x 0,70	13 mm	63 mm	4,5 mm	3,4 mm
M003/05TICN	M5 x 0,80	16 mm	70 mm	6 mm	4,9 mm
M003/06TICN	M6 x 1	19 mm	80 mm	6 mm	4,9 mm
M003/08TICN	M8 x 1,25	22 mm	90 mm	8 mm	6,2 mm
M003/10TICN	M10 x 1,5	24 mm	100 mm	10 mm	8 mm

M003-XXX

MACHINE TAPS SPIRAL FLUTE FOR BLIND HOLES 35°

Isometric thread coarse pitch.

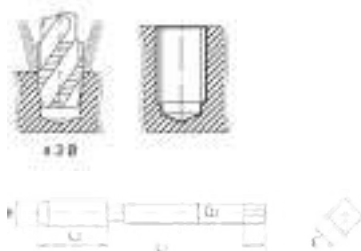


Art.	B	L2	L1	D2	C
M003/12	M12 x 1,75	29 mm	110 mm	9 mm	7 mm
M003/14	M14 x 2	30 mm	110 mm	11 mm	9 mm
M003/16	M16 x 2	32 mm	110 mm	12 mm	9 mm
M003/18	M18 x 2,5	34 mm	125 mm	14 mm	11 mm
M003/20	M20 x 2,5	34 mm	140 mm	16 mm	12 mm
M003/22	M22 x 2,5	34 mm	140 mm	18 mm	14,5 mm
M003/24	M24 x 3	38 mm	160 mm	18 mm	14,5 mm
M003/27	M27 x 3	38 mm	160 mm	20 mm	16 mm
M003/30	M30 x 3,5	45 mm	180 mm	22 mm	18 mm

M003-XXV

MACHINE TAPS SPIRAL FLUTE FOR BLIND HOLES 35°

Isometric thread coarse pitch - reinforced shank, the vaporization treatment increases the surface hardness and wear resistance by reducing the possibility of chip sticking.



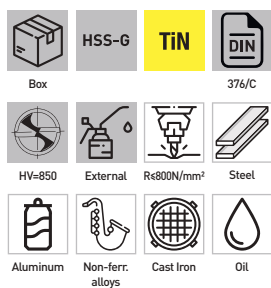
Art.	B	L2	L1	D2	C
M003/12V	M12 x 1,75	29 mm	110 mm	9 mm	7 mm
M003/14V	M14 x 2	30 mm	110 mm	11 mm	9 mm
M003/16V	M16 x 2	32 mm	110 mm	12 mm	9 mm
M003/18V	M18 x 2,5	34 mm	125 mm	14 mm	11 mm
M003/20V	M20 x 2,5	34 mm	140 mm	16 mm	12 mm
M003/22V	M22 x 2,5	34 mm	140 mm	18 mm	14,5 mm
M003/24V	M24 x 3	38 mm	160 mm	18 mm	14,5 mm

M003-XTIN

NEW

MACHINE TAPS FOR HIGH-TWIST BLIND HOLES 35°

Metric coarse pitch (MA), titanium nitride coating reduces friction and, consequently, the amount of energy required for chip removal and tool temperature. This results in longer tool life, reduced machining time and lower motor energy consumption for the same production.



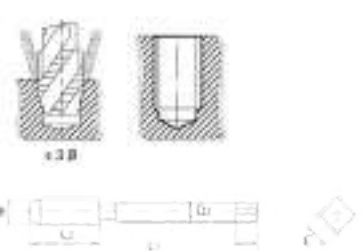
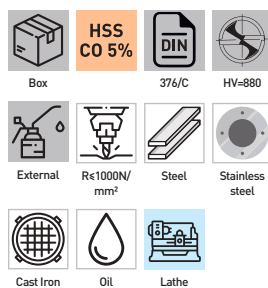
Art.	B	L2	L1	D2	C
M003/12TIN	M12 x 1,75	28 mm	110 mm	9 mm	7 mm
M003/14TIN	M14 x 2	30 mm	110 mm	11 mm	9 mm
M003/16TIN	M16 x 2	32 mm	110 mm	12 mm	9 mm
M003/18TIN	M18 x 2,5	34 mm	125 mm	14 mm	11 mm
M003/20TIN	M20 x 2,5	34 mm	140 mm	16 mm	12 mm
M003/22TIN	M22 x 2,5	34 mm	140 mm	18 mm	14,5 mm
M003/24TIN	M24 x 3	38 mm	160 mm	18 mm	14,5 mm

M003-XTICN

NEW

MACHINE TAPS FOR HIGH-TWIST BLIND HOLES 35°

Metric coarse pitch (MA), Titanium carbonitride coating combined with cobalt steel further reduces friction compared to titanium nitride coating, thereby decreasing the amount of energy required for chip removal and tool temperature. This results in longer tool life, reduced machining time and lower motor energy consumption for the same production.



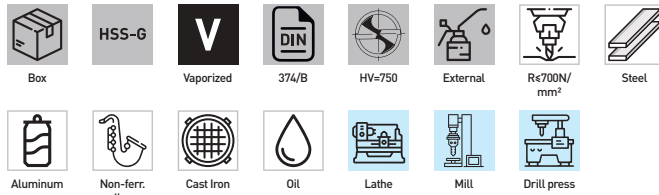
Art.	B	L2	L1	D2	C
M003/12TICN	M12 x 1,75	28 mm	110 mm	9 mm	7 mm
M003/14TICN	M14 x 2	30 mm	110 mm	11 mm	9 mm
M003/16TICN	M16 x 2	32 mm	110 mm	12 mm	9 mm
M003/18TICN	M18 x 2,5	34 mm	125 mm	14 mm	11 mm
M003/20TICN	M20 x 2,5	34 mm	140 mm	16 mm	12 mm
M003/22TICN	M22 x 2,5	34 mm	140 mm	18 mm	14,5 mm
M003/24TICN	M24 x 3	38 mm	160 mm	18 mm	14,5 mm

**M002-MXMFV**

NEW

MACHINE TAPS FOR THROUGH-HOLES, CORRECTED BORE, FINE PITCH

Metric fine pitch (MF) thread, steaming treatment increases surface hardness and wear resistance by reducing the possibility of chip sticking.



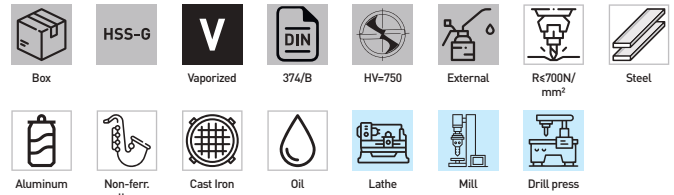
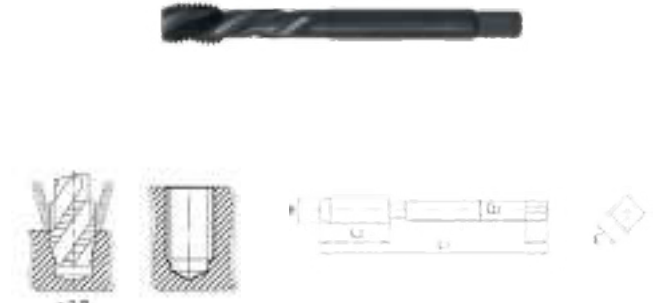
Art.	B	L2	L1	D2	C
M002/M05X050MFV	M5 x 0,50	12 mm	70 mm	3,5 mm	2,7 mm
M002/M06X075MFV	M6 x 0,75	14 mm	80 mm	4,5 mm	3,4 mm
M002/M08X075MFV	M8 x 0,75	19 mm	80 mm	6 mm	4,9 mm
M002/M08X100MFV	M8 x 1,00	22 mm	90 mm	6 mm	4,9 mm
M002/M10X100MFV	M10 x 1,00	20 mm	90 mm	7 mm	5,5 mm
M002/M10X125MFV	M10 x 1,25	24 mm	100 mm	7 mm	5,5 mm
M002/M12X100MFV	M12 x 1,00	22 mm	100 mm	9 mm	7 mm
M002/M12X125MFV	M12 x 1,25	22 mm	100 mm	9 mm	7 mm
M002/M12X150MFV	M12 x 1,50	22 mm	100 mm	9 mm	7 mm
M002/M14X150MFV	M14 x 1,50	22 mm	100 mm	11 mm	9 mm
M002/M16X150MFV	M16 x 1,50	22 mm	100 mm	12 mm	9 mm
M002/M18X150MFV	M18 x 1,50	25 mm	110 mm	14 mm	11 mm
M002/M20X150MFV	M20 x 1,50	25 mm	125 mm	16 mm	12 mm
M002/M22X150MFV	M22 x 1,50	25 mm	125 mm	18 mm	14,5 mm
M002/M24X150MFV	M24 x 1,50	28 mm	140 mm	18 mm	14,5 mm
M002/M30X150MFV	M30 x 1,50	28 mm	150 mm	22 mm	18 mm

M003-MXMFV

NEW

MACHINE TAPS FOR HIGH-TWIST BLIND HOLES 35°, FINE PITCH

Metric fine pitch (MF) thread, steaming treatment increases surface hardness and wear resistance by reducing the possibility of chip sticking.



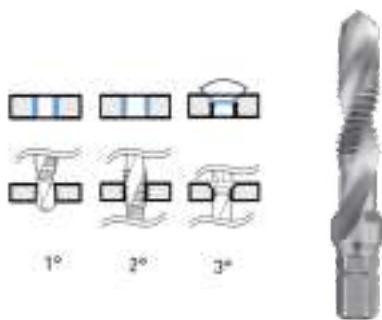
Art.	B	L2	L1	D2	C
M003/M05X050MFV	M5 x 0,50	8 mm	70 mm	3,5 mm	2,7 mm
M003/M06X075MFV	M6 x 0,75	8 mm	80 mm	4,5 mm	3,4 mm
M003/M08X075MFV	M8 x 0,75	8 mm	80 mm	6 mm	4,9 mm
M003/M08X100MFV	M8 x 1	10 mm	90 mm	6 mm	4,9 mm
M003/M10X100MFV	M10 x 1	10 mm	90 mm	7 mm	5,5 mm
M003/M10X125MFV	M10 x 1,25	16 mm	100 mm	7 mm	5,5 mm
M003/M12X100MFV	M12 x 1	11 mm	100 mm	9 mm	7 mm
M003/M12X125MFV	M12 x 1,25	15 mm	100 mm	9 mm	7 mm
M003/M12X150MFV	M12 x 1,50	15 mm	100 mm	9 mm	7 mm
M003/M14X150MFV	M14 x 1,50	15 mm	100 mm	11 mm	9 mm
M003/M16X150MFV	M16 x 1,50	15 mm	100 mm	12 mm	9 mm
M003/M18X150MFV	M18 x 1,50	17 mm	110 mm	14 mm	11 mm
M003/M20X150MFV	M20 x 1,50	17 mm	125 mm	16 mm	12 mm
M003/M22X150MFV	M22 x 1,50	20 mm	125 mm	18 mm	14,5 mm
M003/M24X150MFV	M24 x 1,50	15 mm	140 mm	18 mm	14,5 mm
M003/M30X150MFV	M30 x 1,50	22 mm	150 mm	22 mm	18 mm



0890-

3 IN 1 DRILLING-TAPPING-DEBURRING TOOL

Thanks to the particular geometry in a single operation it is able to drill, thread and countersink.

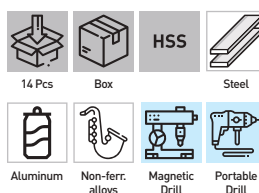


Art.	Taps	Shank	Dimensions
0890/M3	M3 x 0,5	1/4"	52 mm
0890/M4	M4 x 0,7	1/4"	52 mm
0890/M5	M5 x 0,8	1/4"	54 mm
0890/M6	M6 x 1	1/4"	56 mm
0890/M8	M8 x 1,25	1/4"	58 mm
0890/M10	M10 x 1,5	1/4"	60 mm

0890

3 IN 1 DRILLING-TAPING-DEBURRING TOOL AND BIT SET

Thanks to the particular geometry in a single operation it is able to drill, thread and countersink. With quick change holder.

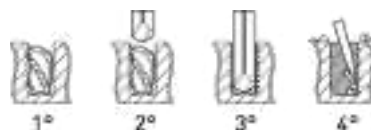


Taps	M3 x 0,5 - M4 x 0,7 - M5 x 0,8 - M6 x 1 - M8 x 1,25 - M10 x 1,5
Shank	1/4"
Phillips	1 - 2
Pozi-driv	1 - 2
Slotted	4 - 5 mm

0897-

HARD METAL TAP CRUSHER TOOL

For removing broken taps inside holes. Cylindrical shank with hexagon for housing in the spindle, and self-centering cutting edge.



Art.	L	l	Taps	Stem
0897/M3	38 mm	10 mm	M3	3 mm
0897/M4	46 mm	15 mm	M4	4 mm
0897/M5	50 mm	19 mm	M5	5 mm
0897/M6	50 mm	23 mm	M6	6 mm
0897/M8	60 mm	23 mm	M8	7 mm
0897/M10	100 mm	25 mm	M10	9 mm
0897/M12	100 mm	35 mm	M12	12 mm

G002-

ADJUSTABLE TAP HOLDER

With hardened jaws, a handle that can be unscrewed to carry out jobs with tight dimensions.



Art.	Taps	Square
G002/1	M1 ÷ M10	1,75 ÷ 5,5
G002/2	M4 ÷ M12	2,4 ÷ 8 mm
G002/3	M5 ÷ M20	2,7 ÷ 12

G003-

RATCHET TAP HOLDER

In right-hand, left-hand or fixed position. Equipped with a level on the head to facilitate correct alignment of the tap with the bore.



Art.	Length	Taps	Square
G003/1	85 mm	M3 ÷ M8	1,75 ÷ 5,5 mm
G003/2	100 mm	M5 ÷ M12	4 ÷ 8 mm
G003/3	250 mm	M3 ÷ M8	2,7 ÷ 5 mm
G003/4	300 mm	M5 ÷ M12	4,9 ÷ 8 mm

G011-

TAP HOLDER WITH PILOT SPINDLE

Equipped with a centring guide pin, which allows it to be fixed on machine tool spindles in order to maintain the straightness of the tap with respect to the previously drilled pre-drilled hole.



Art.	Taps	Square	Cylindric shank
G011/1	M2 ÷ M6	3 ÷ 5 mm	Ø 6,25 mm
G011/2	M6 ÷ M12	5 ÷ 12 mm	Ø 7,60 mm

**F123****ROUND DIE SET**

From M3 to M12, complete with round die-stock.



Size	M3 - M4 - M5 - M6 - M8 - M10 - M12
Round die-stock	25 x 9 mm

G001-**ROUND DIE-STOCK**

With 3 die fixing screws, 1 unscrewable handle to carry out jobs with tight dimensions.



Art.	Die dimensions	For dies
G001/20	20 x 7 mm	M4,5 ÷ M6
G001/25	25 x 9 mm	M7 ÷ M9
G001/30	30 x 11 mm	M10 ÷ M11
G001/38	38 x 14 mm	M12 ÷ M14
G001/45	45 x 18 mm	M16 ÷ M20
G001/55	55 x 22 mm	M22 ÷ M24

F121-**METRIC DIE FOR COARSE PITCH**

With correct entry on both sides to facilitate the execution of the thread and correctly evacuate the shavings in the cutting direction.



Art.	Pitch	Dimensions
F121/03	3 x 0,5 mm	Ø 20 x 5 mm
F121/04	4 x 0,7 mm	Ø 20 x 5 mm
F121/05	5 x 0,8 mm	Ø 20 x 7 mm
F121/06	6 x 1 mm	Ø 20 x 7 mm
F121/08	8 x 1,25 mm	Ø 25 x 9 mm
F121/10	10 x 1,5 mm	Ø 30 x 11 mm
F121/12	12 x 1,75 mm	Ø 38 x 14 mm
F121/14	14 x 2 mm	Ø 38 x 14 mm
F121/16	16 x 2 mm	Ø 45 x 18 mm
F121/18	18 x 2,5 mm	Ø 45 x 18 mm
F121/20	20 x 2,5 mm	Ø 45 x 18 mm

F122-**DIE GAS THREAD**

With correct entry on both sides to facilitate the execution of the thread and correctly evacuate the shavings in the cutting direction.



Art.	Pitch	Dimensions
F122/1/8	G1/8-28	Ø 30 x 11 mm
F122/1/4	G1/4-19	Ø 38 x 10 mm
F122/3/8	G3/8-19	Ø 45 x 14 mm
F122/1/2	G1/2-14	Ø 45 x 14 mm
F122/5/8	G5/8-14	Ø 55 x 16 mm
F122/3/4	G3/4-14	Ø 55 x 16 mm
F122/7/8	G7/8-14	Ø 65 x 18 mm
F122/1	G1-11	Ø 65 x 18 mm

F-COIL THREAD RESTORER RANGE

It is essential for reinforcing threads in materials with reduced resistance (aluminium, aluminium alloys or magnesium). The industrial sectors where it is most used are: mechanical and building development, automotive industry, medical and electronic equipment, as well as aerospace and aeronautical construction. Tapping reinforcement eliminates wear on the tapping itself, allowing frequent use of the thread. It is essential for the economical and lasting restoration of worn or discarded threads during manufacture.

RESTORATION AND LAYING PROCEDURE

1st operation Knowing the type of damaged thread

Knowledge of the type of damaged thread so that the appropriate kit can be purchased to restore it.



2nd operation Drilling execution with specific drill tip

Drilling for removal of the damaged thread and thread preparation for the new F-Coil thread insert



3rd operation Tapping execution for preparation of F-Coil thread housing

Execution of the tapping operation with the specific tap for creating the housing for the F-Coil thread insert.



4th operation Screw in the Coil insert with the appropriate tool

Screw in the F-Coil insert with the F-Coil mounting tool to the required depth. If one helix is not enough, you can add more helix up to the necessary depth. The application of thread-locking glue is recommended to avoid possible disassembly of the F-Coil



5th operation Breaking of the driving notch with a special cutter

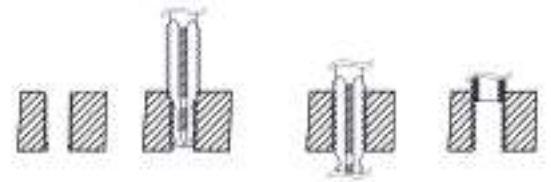
Once the thread-insert has been installed, break off the retention stud bolt. In order to break it, the specific breaking tool must be used. From a thread size of M14 onwards, it is possible to perform this operation with the use of a clamp where the pitch size permits.



REPAIR THREADS FOR SPARK PLUG SEATS

To restore damaged spark plug seats the procedure is different: Threading is carried out directly on the damaged thread with the special tap supplied with the KIT. The F-COIL thread bushing is then inserted and must be screwed in completely up to the stop.

The application of thread-locking adhesive is recommended.



COMPOSITION OF THE THREAD REPAIR KIT

1	Stainless steel threaded inserts to be inserted in the tapping performed by recreating the previously damaged thread (Available in 1xØ, 1.5xØ, 2xØ, 2.5xØ and 3xØ lengths		
2	Helical HSS bit for making the pre-hole for the tap		
3	Specific tap for tapping for the application of the threaded insert		
4	Tool for mounting F-Coil threaded inserts	For threaded inserts up to M24	
		For M26 inserts	
5	Specific tool for breaking the F-Coil tang		



E010

METRIC THREAD REPAIR F-COIL SET

Suitable for thread regeneration or to obtain very resistant tapping in soft materials.



Sizes	M5 - M12
STI Taps	M5 x 0,8 - M6 x 1 - M8 x 1,25 - M10 x 1,5 - M12 x 1,75
Drills	5,2 mm - 6,3 mm - 8,3 mm - 10,4 mm - 12,4 mm
Wire-thread inserts	M5=25 M6=25 M8=25 M10=25 M12=10
Inserting tool	5 Pcs
Tang break tool	5 Pcs

E010B

METRIC THREAD REPAIR F-COIL SET

Suitable for thread regeneration or to obtain very resistant tapping in soft materials.



Sizes	M6 - M14
STI Taps	M6 x 1 - M8 x 1,25 - M10 x 1,5 - M12 x 1,75 - M14 x 1,25
Drills	6,3 mm - 8,3 mm - 10,4 mm - 12,4 mm
Wire-thread inserts	M6=25 M8=25 M10=20 M12=15 M14=25
Inserting tool	5 Pcs
Tang break tool	5 Pcs

E010E

METRIC THREAD REPAIR F-COIL SET

Suitable for thread regeneration or to obtain very resistant tapping in soft materials.



Sizes	M5 - M12
STI Taps	M5 x 0,8 - M6 x 1 - M8 x 1,25 - M10 x 1,5 - M12 x 1,75
Drills	5,2 mm - 6,3 mm - 8,3 mm - 10,4 mm - 12,4 mm
Wire-thread inserts	M5=25 M6=25 M8=25 M10=25 M12=10
Inserting tool	5 Pcs
Tang break tool	5 Pcs

E010-

THREAD REPAIR INSERT SET

Suitable for thread regeneration or to obtain very resistant tapping in soft materials.



Art.	Thread insert	Boring bit	Taps	Handle
E010/M05	M5	5,2 mm	x M5	2
E010/M06	M6	6,3 mm	x M6	2
E010/M08	M8	8,3 mm	x M8	2
E010/M10	M10	10,4 mm	x M10	2
E010/M12	M12	12,4 mm	x M12	2
E010/M14	M14 x 1,25	14,4 mm	x M14 x 1,25	2

E011A

METRIC THREAD REPAIR F-COIL SET

Suitable for thread regeneration or to obtain very resistant tapping in soft materials.



HSS

INOX

130 Pcs

Carrying case

Sizes	M5 - M12
STI Taps	M5 x 0,8 - M6 x 1 - M8 x 1,25 - M10 x 1,5 - M12 x 1,75
Drills	5,2 mm - 6,3 mm - 8,3 mm - 10,4 mm - 12,4 mm
Wire-thread inserts	M5=25 M6=25 M8=25 M10=25 M12=10
Inserting tool	5 Pcs
Tang break tool	5 Pcs

E011B

METRIC THREAD REPAIR F-COIL SET

Suitable for thread regeneration or to obtain very resistant tapping in soft materials.



HSS

INOX

113 Pcs

Carrying case

Sizes	M6 - M14
STI Taps	M6 x 1 - M8 x 1,25 - M10 x 1,5 - M12 x 1,75 - M14 x 1,25
Drills	6,3 mm - 8,3 mm - 10,4 mm - 12,4 mm
Wire-thread inserts	M6=25 M8=25 M10=25 M12=10 M14=10
Inserting tool	5 Pcs
Tang break tool	4 Pcs

E011C

METRIC THREAD REPAIR F-COIL SET

Suitable for thread regeneration or to obtain very resistant tapping in soft materials.



HSS

INOX

87 Pcs

Hangable

Sizes	M6 - M10
STI Taps	M6 x 1 - M8 x 1,25 - M10 x 1,5
Drills	6,3 mm - 8,3 mm - 10,4 mm
Wire-thread inserts	M6/25 Pcs - M8/25 Pcs - M10/25 Pcs
Inserting tool	3 Pcs
Tang break tool	3 Pcs

E011D

METRIC THREAD REPAIR F-COIL SET

Suitable for thread regeneration or to obtain very resistant tapping in soft materials.
14mm size specific for car spark plugs.



HSS

INOX

113 Pcs

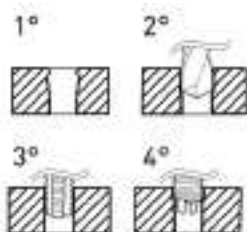
Carrying case

Sizes	M6 - M14
STI Taps	M6 x 1 - M8 x 1,25 - M10 x 1,5 - M12 x 1,75 - M14 x 1,25
Drills	6,3 mm - 8,3 mm - 10,4 mm - 12,4 mm
Wire-thread inserts	M6/25 Pcs - M8/25 Pcs - M10/25 Pcs - M12/10 Pcs - M14/10 Pcs
Inserting tool	5 Pcs
Tang break tool	4 Pcs

E011-MX1

METRIC THREAD REPAIR F-COIL SET

Suitable for thread regeneration or to obtain very resistant tapping in soft materials.

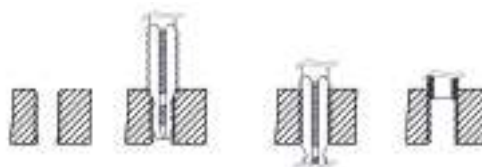


Art.	Dimensions	Boring bit	STI Taps	Inserting tool	Tang break tool	Inserts quantity
E011/M020X040	M 2 x 0,4	Ø 2,1 mm	E011/M020X040M	E011/U02	E011/A02	20
E011/M025X045	M 2,5 x 0,45	Ø 2,6 mm	E011/M025X045M	E011/U03	E011/A03	20
E011/M030X050	M 3 x 0,5	Ø 3,2 mm	E011/M030X050M	E011/U04	E011/A04	20
E011/M035X060	M 3,5 x 0,6	Ø 3,7 mm	E011/M035X060M	E011/U05	E011/A05	20
E011/M040X070	M 4 x 0,7	Ø 4,2 mm	E011/M040X070M	E011/U06	E011/A06	20
E011/M050X080	M 5 x 0,8	Ø 5,2 mm	E011/M050X080M	E011/U08	E011/A08	20
E011/M060X100	M 6 x 1,0	Ø 6,3 mm	E011/M060X100M	E011/U09	E011/A09	20
E011/M070X100	M 7 x 1,0	Ø 7,3 mm	E011/M070X100M	E011/U10	E011/A11	20
E011/M080X100	M 8 x 1,0	Ø 8,3 mm	E011/M080X100M	E011/U11	E011/A11	20
E011/M080X125	M 8 x 1,25	Ø 8,3 mm	E011/M080X125M	E011/U11	E011/A11	20
E011/M090X100	M 9 x 1,0	Ø 9,3 mm	E011/M090X100M	E011/U12	E011/A12	10
E011/M090X125	M 9 x 1,25	Ø 9,3 mm	E011/M090X125M	E011/U12	E011/A12	15
E011/M100X100	M 10 x 1,0	Ø 10,3 mm	E011/M100X100M	E011/U13	E011/A13	15
E011/M100X125	M 10 x 1,25	Ø 10,3 mm	E011/M100X125M	E011/U13	E011/A13	15
E011/M100X150	M 10 x 1,5	Ø 10,4 mm	E011/M100X150M	E011/U13	E011/A13	15
E011/M110X150	M 11 x 1,5	Ø 11,4 mm	E011/M110X150M	E011/U14	E011/A14	10
E011/M120X100	M 12 x 1,0	Ø 12,3 mm	E011/M120X100M	E011/U15	E011/A15	10
E011/M120X125	M 12 x 1,25	Ø 12,3 mm	E011/M120X125M	E011/U15	E011/A15	10
E011/M120X150	M 12 x 1,5	Ø 12,4 mm	E011/M120X150M	E011/U15	E011/A15	10
E011/M120X175	M 12 x 1,75	Ø 12,4 mm	E011/M120X175M	E011/U15	E011/A15	10
E011/M140X100	M 14 x 1,0	-	E011/M140X100M	E011/U16	-	10
E011/M140X125	M 14 x 1,25	-	E011/M140X125M	E011/U16	-	10
E011/M140X150	M 14 x 1,5	-	E011/M140X150M	E011/U17	-	10
E011/M140X200	M 14 x 2,0	-	E011/M140X200M	E011/U17	-	10
E011/M160X150	M 16 x 1,5	-	E011/M160X150M	E011/U18	-	10
E011/M160X200	M 16 x 2,0	-	E011/M160X200M	E011/U18	-	10
E011/M180X150	M 18 x 1,5	-	E011/M180X150M	E011/U20	-	5
E011/M180X200	M 18 x 2,0	-	E011/M180X200M	E011/U20	-	5
E011/M180X250	M 18 x 2,5	-	E011/M180X250M	E011/U20	-	5
E011/M200X150	M 20 x 1,5	-	E011/M200X150M	E011/U21	-	5
E011/M200X200	M 20 x 2,0	-	E011/M200X200M	E011/U21	-	5
E011/M200X250	M 20 x 2,5	-	E011/M200X250M	E011/U21	-	5
E011/M220X150	M 22 x 1,5	-	E011/M220X150M	E011/U22	-	5
E011/M220X200	M 22 x 2,0	-	E011/M220X200M	E011/U22	-	5
E011/M220X250	M 22 x 2,5	-	E011/M220X250M	E011/U22	-	5
E011/M240X150	M 24 x 1,5	-	E011/M240X150M	E011/U23	-	5
E011/M240X200	M 24 x 2,0	-	E011/M240X200M	E011/U23	-	5
E011/M240X300	M 24 x 2,0	-	E011/M240X300M	E011/U23	-	5

E011/M140X125B

METRIC SPARK PLUG SOLID THREAD REPAIR SET

Specific for repairs or reinforcement of spark plug seats.

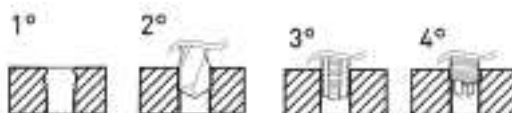


STI Taps	E011/M140X125MCB
Wire-thread inserts	4 x H 9,5 mm - 4 x H 11,2 mm - 4 x H 12,7 mm - 4 x H 17,5 mm

E011-MXC

SPARK PLUG METRIC THREAD REPAIR F-COIL SET

Specific for repairs or reinforcement of spark plug seats.



Art.	Size	Inserting tool	STI Taps	Wire-thread inserts
E011/M060X100C	M 6 x 1,0	E011/U09	E011/M060X100M	10
E011/M080X125C	M 8 x 1,25	E011/U11	E011/M080X125M	10
E011/M100X100C	M 10 x 1,0	E011/U13	E011/M100X100M	10
E011/M100X125C	M 10 x 1,25	E011/U13	E011/M100X125M	10
E011/M100X150C	M 10 x 1,5	E011/U13	E011/M100X150M	10
E011/M120X125C	M 12 x 1,25	E011/U15	E011/M120X125M	10
E011/M140X125C	M 14 x 1,25	E011/U17	E011/M140X125M	5 x E010/M140X125E084 - 5 x E010/M140X125E124 - 5 x E010/M140X125E164

E010-MXEXC

STAINLESS STEEL THREAD REPAIR INSERT

Specific for repairs or reinforcement of spark plug seats. With rhomboidal section, with spring shape, which creates two perfectly concentric threads; an external one that mates with the threaded hole previously made and an internal one that receives the screw.



HSS

INOX



Art.	Dimensions	H	Pack
E010/M140X125E084	M14 x 1,25	8,4 mm	10
E010/M140X125E124	M14 x 1,25	12,4 mm	10
E010/M140X125E164	M14 x 1,25	16,4 mm	10

E011-M140X125EX

SOLID THREAD INSERT SPARK PLUG SET

Specific for repairs or reinforcement of spark plug seats.



HSS

INOX



Art.	Size	H	Pack
E011/M140X125E095	M14 x 1,25	9,5 mm	10
E011/M140X125E112	M14 x 1,25	11,2 mm	10
E011/M140X125E127	M14 x 1,25	12,7 mm	10
E011/M140X125E175	M14 x 1,25	17,5 mm	10

E011/M140X125MCB

METRIC COMBINED TAP FOR SOLID INSERT

Specific for the creation of reset threads on spark plug seats.

HSS

INOX



Size	M16 x 1,25
Hexagon	18 mm
L	70 mm
l	32mm

E011/MC

METRIC GLOW PLUG SOLID THREAD REPAIR SET

Specific for repairs or reinforcement of glow plug seats.



Box

HSS

INOX



Sizes	8 mm - 10 mm - 12 mm
STI Taps	M8 x 1 - M10 x 1 - M10 x 1,25 - M12 x 1 - M12 x 1,25 - M14 x 1,25

E011/BSW

1/4-1/2 BSW THREAD REPAIR F-COIL SET

Suitable for thread regeneration or to obtain very resistant tapping in soft materials.



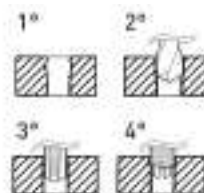
115 Pcs

Carrying case

HSS

INOX

Sizes	BSW 1/4" - 1/2"
STI Taps	1/4"x20-5/16"x18-3/8"x16-7/16"x14-1/2"x12
Drills	6,6 mm - 8,3 mm - 9,9 mm - 11,5 mm - 13 mm
Wire-thread inserts	1/4"=25 5/16"=25 3/8"=25 7/16"=10 1/2"=10
Inserting tool	5 Pcs
Tang break tool	5 Pcs



E011-BSWX

BSW THREAD REPAIR F-COIL SET

Suitable for thread regeneration or to obtain very resistant tapping in soft materials.



HSS

INOX



Art.	Thread	Boring bit	STI Taps	Inserting tool	Tang break tool	Wire-thread inserts	Inserts quantity
E011/BSW1/8	1/8" x 40	Ø 3,4 mm	E011/BSW1/8M	E011/U04	E011/A4	E010/BSW1/8E15	20
E011/BSW3/16	3/16" x 24	Ø 5 mm	E011/BSW3/16M	E011/U08	E011/A8	E010/BSW3/16E15	20
E011/BSW1/4	1/4" x 20	Ø 6,7 mm	E011/BSW1/4M	E011/U09	E011/A9	E010/BSW1/4E15	20
E011/BSW5/16	5/16" x 18	Ø 8,3 mm	E011/BSW5/16M	E011/U10	E011/A11	E010/BSW5/16E15	20
E011/BSW7/16	7/16" x 14	Ø 11,5 mm	E011/BSW7/16M	E011/U14	E011/A14	E010/BSW7/16E15	10
E011/BSW1/2	1/2" x 12	Ø 13 mm	E011/BSW1/2M	E011/U15	E011/A15	E010/BSW1/2E15	10
E011/BSW9/16	9/16" x 12	-	E011/BSW9/16M	E011/U16	-	E010/BSW9/16E15	10
E011/BSW5/8	5/8" x 11	-	E011/BSW5/8M	E011/U18	-	E010/BSW5/8E15	10
E011/BSW3/4	3/4" x 10	-	E011/BSW3/4M	E011/U20	-	E010/BSW3/4E15	5
E011/BSW7/8	7/8" x 9	-	E011/BSW7/8M	E011/U22	-	E010/BSW7/8E15	5
E011/BSW1	1" x 8	-	E011/BSW1M	E011/U23	-	E010/BSW1E15	4



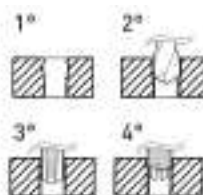
E011/BSF

1/4-1/2 BSF THREAD REPAIR F-COIL SET

Suitable for thread regeneration or to obtain very resistant tapping in soft materials.



Sizes	BSF 1/4" - 1/2"
STI Taps	1/4"x26 - 5/16"x22 - 3/8"x20 - 7/16"x18 - 1/2"x16
Drills	6,6 mm - 8,3 mm - 9,9 mm - 11,5 mm - 13 mm
Wire-thread inserts	1/4"=25 - 5/16"=25 - 3/8"=25 - 7/16"=10 - 1/2"=10
Inserting tool	5 Pcs
Tang break tool	5 Pcs



E011-BSFX

BSF THREAD REPAIR F-COIL SET

Suitable for thread regeneration or to obtain very resistant tapping in soft materials.



Art.	Thread	Boring bit	STI Taps	Inserting tool	Tang break tool	Wire-thread inserts	Inserts quantity
E011/BSF3/16	3/16" x 32	Ø 5 mm	E011/BSF3/16M	E011/U07	E011/A06	E010/BSF3/16E15	20
E011/BSF1/4	1/4" x 26	Ø 6,6 mm	E011/BSF1/4M	E011/U09	E011/A09	E010/BSF1/4E15	20
E011/BSF5/16	5/16" x 22	Ø 8,3 mm	E011/BSF5/16M	E011/U11	E011/A11	E010/BSF5/16E15	20
E011/BSF3/8	3/8" x 20	Ø 9,9 mm	E011/BSF3/8M	E011/U13	E011/A13	E010/BSF3/8E15	15
E011/BSF7/16	7/16" x 18	Ø 11,5 mm	E011/BSF7/16M	E011/U14	E011/A14	E010/BSF7/16E15	10
E011/BSF1/2	1/2" x 16	Ø 13 mm	E011/BSF1/2M	E011/U15	E011/A15	E010/BSF1/2E15	10
E011/BSF9/16	9/16" x 16	-	E011/BSF9/16M	E011/U16	-	E010/BSF9/16E15	10
E011/BSF5/8	5/8" x 14	-	E011/BSF5/8M	E011/U18	-	E010/BSF5/8E15	10
E011/BSF3/4	3/4" x 12	-	E011/BSF3/4M	E011/U20	-	E010/BSF3/4E15	5
E011/BSF7/8	7/8" x 11	-	E011/BSF7/8M	E011/U22	-	E010/BSF7/8E15	5
E011/BSF1	1" x 10	-	E011/BSF1M	E011/U23	-	E010/BSF1E15	4



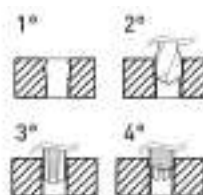
E011/UNC

1/4-1/2 UNC THREAD REPAIR F-COIL SET

Suitable for thread regeneration or to obtain very resistant tapping in soft materials.



Sizes	UNC 1/4" - 1/2"
STI Taps	1/4"x20 - 5/16"x18 - 3/8"x16 - 7/16"x14 - 1/2"x13
Drills	6,7 mm - 8,3 mm - 9,8 mm - 11,5 mm - 13 mm
Wire-thread inserts	1/4"=25 - 5/16"=25 - 3/8"=25 - 7/16"=10 - 1/2"=10
Inserting tool	5 Pcs
Tang break tool	5 Pcs



E011-UNCX

UNC THREAD REPAIR F-COIL SET

Suitable for thread regeneration or to obtain very resistant tapping in soft materials.



Art.	Thread	Drills	STI Taps	Inserting tool	Tang break tool	Wire-thread inserts	Inserts quantity
E011/UNC1/4	1/4" x 20	Ø 6,7 mm	E011/UNC1/4M	E011/U09	E011/A09	E010/UNC1/4E15	20
E011/UNC5/16	5/16" x 18	Ø 8,3 mm	E011/UNC5/16M	E011/U10	E011/A11	E010/UNC5/16E15	20
E011/UNC3/8	3/8" x 16	Ø 9,9 mm	E011/UNC3/8M	E011/U06	E011/A06	E010/UNC3/8E15	20
E011/UNC7/16	7/16" x 14	Ø 11,6 mm	E011/UNC7/16M	E011/U14	E011/A14	E010/UNC7/16E15	10
E011/UNC1/2	1/2" x 13	Ø 13 mm	E011/UNC1/2M	E011/U15	E011/A15	E010/UNC1/2E15	10
E011/UNC9/16	9/16" x 12	-	E011/UNC9/16M	E011/U16	-	E010/UNC9/16E15	10
E011/UNC5/8	5/8" x 1	-	E011/UNC5/8M	E011/U18	-	E010/UNC5/8E15	10
E011/UNC3/4	3/4" x 10	-	E011/UNC3/4M	E011/U20	-	E010/UNC3/4E15	5
E011/UNC7/8	7/8" x 9	-	E011/UNC7/8M	E011/U22	-	E010/UNC7/8E15	5



E011/UNF

1/4-1/2 UNF THREAD REPAIR F-COIL SET

Suitable for thread regeneration or to obtain very resistant tapping in soft materials.



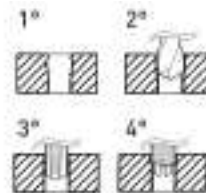
115 Pcs



Carrying case

HSS

Sizes	UNF 1/4" - 1/2"
STI Taps	1/4"x28 - 5/16"x24 - 3/8"x24 - 7/16"x20 - 1/2"x20
Drills	6,7 mm - 8,3 mm - 9,8 mm - 11,5 mm - 13 mm
Wire-thread inserts	1/4"=25 - 5/16"=25 - 3/8"=25 - 7/16"=10 - 1/2"=10
Inserting tool	5 Pcs
Tang break tool	5 Pcs



E011-UNFX

UNF THREAD REPAIR F-COIL SET

Suitable for thread regeneration or to obtain very resistant tapping in soft materials.



Hangable

HSS

INOX



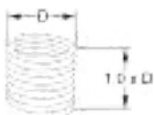
Art.	Thread	Drills	STI Taps	Inserting tool	Tang break tool	Wire-thread inserts	Inserts quantity
E011/UNFN10	No. 10 x 32	Ø 5,1 mm	E011/UNFN10M	E011/U08	E011/A08	E010/UNFN10E15	20
E011/UNF1/4	1/4" x 28	Ø 6,7 mm	E011/UNF1/4M	E011/U09	E011/A09	E010/UNF1/4E15	20
E011/UNF5/16	5/16" x 24	Ø 8,3 mm	E011/UNF5/16M	E011/U11	E011/A11	E010/UNF5/16E15	20
E011/UNF3/8	3/8" x 24	Ø 9,8 mm	E011/UNF3/8M	E011/U13	E011/A13	E010/UNF3/8E15	15
E011/UNF1/2	1/2" x 20	Ø 13 mm	E011/UNF1/2M	E011/U15	E011/A15	E010/UNF1/2E15	10
E011/UNF9/16	9/16" x 18	-	E011/UNF9/16M	E011/U16	-	E010/UNF9/16E15	10
E011/UNF5/8	5/8" x 18	-	E011/UNF5/8M	E011/U18	-	E010/UNF5/8E15	10
E011/UNF3/4	3/4" x 16	-	E011/UNF3/4M	E011/U21	-	E010/UNF3/4E15	5
E011/UNF7/8	7/8" x 14	-	E011/UNF7/8M	E011/U22	-	E010/UNF7/8E15	5
E011/UNF1	1" x 12	-	E011/UNF112M	E011/U23	-	E010/UNF1E15	4



E010-MXE1

STAINLESS STEEL THREAD REPAIR INSERT H=1XD

Rhomboid section, with spring shape, which creates two perfectly concentric threads; an external one that is coupled with the previously threaded hole with the appropriate male and an internal one where the fixing screw will be screwed.



Hangable

INOX



Art.	D	Pack
E010/M020X040E1	M2 x 0,4	25
E010/M022X045E1	M2,2 x 0,45	25
E010/M025X045E1	M2,5 x 0,45	25
E010/M030X050E1	M3 x 0,5	25
E010/M035X060E1	M3,5 x 0,6	25
E010/M040X070E1	M4 x 0,7	25
E010/M050X080E1	M5 x 0,8	25
E010/M060X100E1	M6 x 1	25
E010/M070X100E1	M7 x 1	25
E010/M080X100E1	M8 x 1	25
E010/M080X125E1	M8 x 1,25	25
E010/M090X125E1	M9 x 1,25	25
E010/M100X100E1	M10 x 1	25
E010/M100X125E1	M10 x 1,25	25
E010/M100X150E1	M10 x 1,5	25
E010/M110X150E1	M11 x 1,5	10
E010/M120X100E1	M12 x 1,0	10
E010/M120X125E1	M12 x 1,25	10
E010/M120X150E1	M12 x 1,5	10

Art.	D	Pack
E010/M120X175E1	M12 x 1,75	10
E010/M140X100E1	M14 x 1	10
E010/M140X125E1	M14 x 1,25	10
E010/M140X150E1	M14 x 1,5	10
E010/M140X200E1	M14 x 2	10
E010/M160X150E1	M16 x 1,5	10
E010/M160X200E1	M16 x 2	10
E010/M180X150E1	M18 x 1,5	10
E010/M180X200E1	M18 x 2	10
E010/M180X250E1	M18 x 2,5	10
E010/M200X150E1	M20 x 1,5	10
E010/M200X200E1	M20 x 2	10
E010/M200X250E1	M20 x 2,5	10
E010/M220X150E1	M22 x 1,5	5
E010/M220X200E1	M22 x 2	5
E010/M220X250E1	M22 x 2,5	5
E010/M240X150E1	M24 x 1,5	5
E010/M240X200E1	M24 x 2	5
E010/M240X300E1	M24 x 3	5

E010-MXE15

STAINLESS STEEL THREAD REPAIR INSERT H=1.5XD

Rhomboid section, with spring shape, which creates two perfectly concentric threads; an external one that is coupled with the previously threaded hole with the appropriate male and an internal one where the fixing screw will be screwed.



INOX

Hangable

Art.	D	Pack
E010/M020X040E15	M2 x 0,4	25
E010/M022X045E15	M2,2 x 0,45	25
E010/M025X045E15	M2,5 x 0,45	25
E010/M030X050E15	M3 x 0,5	25
E010/M035X060E15	M3,5 x 0,6	25
E010/M040X070E15	M4 x 0,7	25
E010/M050X080E15	M5 x 0,8	25
E010/M060X100E15	M6 x 1	25
E010/M070X100E15	M7 x 1	25
E010/M080X100E15	M8 x 1	25
E010/M080X125E15	M8 x 1,25	25
E010/M090X100E15	M9 x 1	25
E010/M090X125E15	M9 x 1,25	25
E010/M100X100E15	M10 x 1	25
E010/M100X125E15	M10 x 1,25	25
E010/M100X150E15	M10 x 1,5	25
E010/M110X150E15	M11 x 1,5	10
E010/M120X100E15	M12 x 1,0	10
E010/M120X125E15	M12 x 1,25	10
E010/M120X150E15	M12 x 1,5	10
E010/M120X175E15	M12 x 1,75	10
E010/M140X100E15	M14 x 1	10
E010/M140X125E15	M14 x 1,25	10
E010/M140X150E15	M14 x 1,5	10
E010/M140X200E15	M14 x 2	10
E010/M160X150E15	M16 x 1,5	10
E010/M160X200E15	M16 x 2	10
E010/M180X150E15	M18 x 1,5	10
E010/M180X200E15	M18 x 2	10
E010/M180X250E15	M18 x 2,5	10
E010/M200X150E15	M20 x 1,5	10
E010/M200X200E15	M20 x 2	10
E010/M200X250E15	M20 x 2,5	10
E010/M220X150E15	M22 x 1,5	5
E010/M220X200E15	M22 x 2	5
E010/M220X250E15	M22 x 2,5	5
E010/M240X150E15	M24 x 1,5	5
E010/M240X200E15	M24 x 2	5
E010/M240X300E15	M24 x 3	5
E010/M260X150E15	M26 x 1,5	5
E010/M270X150E15	M27 x 1,5	5
E010/M270X200E15	M27 x 2	5
E010/M270X300E15	M27 x 3	5
E010/M280X150E15	M28 x 1,5	5
E010/M300X150E15	M30 x 1,5	5
E010/M300X200E15	M30 x 2	5
E010/M300X350E15	M30 x 3,5	5
E010/M330X200E15	M33 x 2	5
E010/M330X350E15	M33 x 3,5	5
E010/M360X150E15	M36 x 1,5	5
E010/M360X200E15	M36 x 2	5
E010/M360X300E15	M36 x 3	5
E010/M360X400E15	M36 x 4	5
E010/M390X300E15	M39 x 3	5
E010/M390X400E15	M39 x 4	5
E010/M400X300E15	M40 x 3	5
E010/M420X300E15	M42 x 3	5
E010/M450X300E15	M45 x 3	5

E010-MXE2

STAINLESS STEEL THREAD REPAIR INSERT H=2XD

Rhomboid section, with spring shape, which creates two perfectly concentric threads; an external one that is coupled with the previously threaded hole with the appropriate male and an internal one where the fixing screw will be screwed.



INOX

Hangable

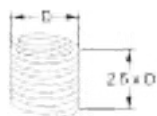
Art.	D	Pack
E010/M020X040E2	M2 x 0,4	25
E010/M022X045E2	M2,2 x 0,45	25
E010/M025X045E2	M2,5 x 0,45	25
E010/M030X050E2	M3 x 0,5	25
E010/M035X060E2	M3,5 x 0,6	25
E010/M040X070E2	M4 x 0,7	25
E010/M050X080E2	M5 x 0,8	25
E010/M060X100E2	M6 x 1	25
E010/M070X100E2	M7 x 1	25
E010/M080X100E2	M8 x 1	25
E010/M080X125E2	M8 x 1,25	25
E010/M090X125E2	M9 x 1,25	25
E010/M100X100E2	M10 x 1	25
E010/M100X125E2	M10 x 1,25	25
E010/M100X150E2	M10 x 1,5	25
E010/M110X150E2	M11 x 1,5	10
E010/M120X100E2	M12 x 1	10
E010/M120X125E2	M12 x 1,25	10
E010/M120X150E2	M12 x 1,5	10
E010/M120X175E2	M12 x 1,75	10
E010/M140X100E2	M14 x 1	10
E010/M140X125E2	M14 x 1,25	10
E010/M140X150E2	M14 x 1,5	10
E010/M140X200E2	M14 x 2	10
E010/M160X150E2	M16 x 1,5	10
E010/M160X200E2	M16 x 2	10
E010/M180X150E2	M18 x 1,5	10
E010/M180X200E2	M18 x 2	10
E010/M180X250E2	M18 x 2,5	10
E010/M200X150E2	M20 x 1,5	10
E010/M200X200E2	M20 x 2	10
E010/M200X250E2	M20 x 2,5	10
E010/M220X150E2	M22 x 1,5	5
E010/M220X200E2	M22 x 2	5
E010/M220X250E2	M22 x 2,5	5
E010/M240X150E2	M24 x 1,5	5
E010/M240X200E2	M24 x 2	5
E010/M240X300E2	M24 x 3	5



E010-MXE25

STAINLESS STEEL THREAD REPAIR INSERT H=2.5XD

Rhomboid section, with spring shape, which creates two perfectly concentric threads; an external one that is coupled with the previously threaded hole with the appropriate male and an internal one where the fixing screw will be screwed.



Hangable

INOX

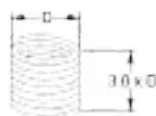


Art.	D	Pack
E010/M020X040E25	M2 x 0,4	25
E010/M022X045E25	M2,2 x 0,45	25
E010/M025X045E25	M2,5 x 0,45	25
E010/M030X050E25	M3 x 0,5	25
E010/M035X060E25	M3,5 x 0,6	25
E010/M040X070E25	M4 x 0,7	25
E010/M050X080E25	M5 x 0,8	25
E010/M060X100E25	M6 x 1	25
E010/M070X100E25	M7 x 1	25
E010/M080X100E25	M8 x 1	25
E010/M080X125E25	M8 x 1,25	25
E010/M090X125E25	M9 x 1,25	25
E010/M100X100E25	M10 x 1	25
E010/M100X125E25	M10 x 1,25	25
E010/M100X150E25	M10 x 1,5	25
E010/M110X150E25	M11 x 1,5	10
E010/M120X100E25	M12 x 1	10
E010/M120X125E25	M12 x 1,25	10
E010/M120X150E25	M12 x 1,5	10
E010/M120X175E25	M12 x 1,75	10
E010/M140X100E25	M14 x 1	10
E010/M140X125E25	M14 x 1,25	10
E010/M140X150E25	M14 x 1,5	10
E010/M140X200E25	M14 x 2	10
E010/M160X150E25	M16 x 1,5	10
E010/M160X200E25	M16 x 2	10
E010/M180X150E25	M18 x 1,5	10
E010/M180X200E25	M18 x 2	10
E010/M180X250E25	M18 x 2,5	10
E010/M200X150E25	M20 x 1,5	10
E010/M200X200E25	M20 x 2	10
E010/M200X250E25	M20 x 2,5	10
E010/M220X150E25	M22 x 1,5	5
E010/M220X200E25	M22 x 2	5
E010/M220X250E25	M22 x 2,5	5
E010/M240X150E25	M24 x 1,5	5
E010/M240X200E25	M24 x 2	5
E010/M240X300E25	M24 x 3	5

E010-MXE3

STAINLESS STEEL THREAD REPAIR INSERT H=3XD

Rhomboid section, with spring shape, which creates two perfectly concentric threads; an external one that is coupled with the previously threaded hole with the appropriate male and an internal one where the fixing screw will be screwed.



Hangable

INOX



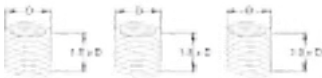
Art.	D	Pack
E010/M020X040E3	M2 x 0,4	25
E010/M022X045E3	M2,2 x 0,45	25
E010/M025X045E3	M2,5 x 0,45	25
E010/M030X050E3	M3 x 0,5	25
E010/M035X060E3	M3,5 x 0,6	25
E010/M040X070E3	M4 x 0,7	25
E010/M050X080E3	M5 x 0,8	25
E010/M060X100E3	M6 x 1	25
E010/M070X100E3	M7 x 1	25
E010/M080X100E3	M8 x 1	25
E010/M080X125E3	M8 x 1,25	25
E010/M090X125E3	M9 x 1,25	25
E010/M100X100E3	M10 x 1	25
E010/M100X125E3	M10 x 1,25	25
E010/M100X150E3	M10 x 1,5	25
E010/M110X150E3	M11 x 1,5	10
E010/M120X100E3	M12 x 1	10
E010/M120X125E3	M12 x 1,25	10
E010/M120X150E3	M12 x 1,5	10
E010/M120X175E3	M12 x 1,75	10
E010/M140X100E3	M14 x 1	10
E010/M140X125E3	M14 x 1,25	10
E010/M140X150E3	M14 x 1,5	10
E010/M140X200E3	M14 x 2	10
E010/M160X150E3	M16 x 1,5	10
E010/M160X200E3	M16 x 2	10
E010/M180X150E3	M18 x 1,5	10
E010/M180X200E3	M18 x 2	10
E010/M180X250E3	M18 x 2,5	10
E010/M200X150E3	M20 x 1,5	10
E010/M200X200E3	M20 x 2	10
E010/M200X250E3	M20 x 2,5	10
E010/M220X150E3	M22 x 1,5	5
E010/M220X200E3	M22 x 2	5
E010/M220X250E3	M22 x 2,5	5
E010/M240X150E3	M24 x 1,5	5
E010/M240X200E3	M24 x 2	5
E010/M240X300E3	M24 x 3	5



E010-MXEXA

SELF-LOCK STAINLESS STEEL THREAD REPAIR INSERT

Rhomboid section, with spring shape, which creates two perfectly concentric threads; an external one that is coupled with the previously threaded hole with the appropriate male and an internal one where the fixing screw will be screwed.



INOX

Hangable



Art.	D	Height	Pack
E010/M030X050E1A	M3 x 0,5	1,0 D	25
E010/M040X070E1A	M4 x 0,7	1,0 D	25
E010/M050X080E1A	M5 x 0,8	1,0 D	25
E010/M060X100E1A	M6 x 1	1,0 D	25
E010/M080X125E1A	M8 x 1,25	1,0 D	25
E010/M100X150E1A	M10 x 1,5	1,0 D	25
E010/M120X175E1A	M12 x 1,75	1,0 D	10
E010/M140X200E1A	M14 x 2	1,0 D	10
E010/M160X200E1A	M16 x 2	1,0 D	10
E010/M030X050E15A	M3 x 0,5	1,5 D	25
E010/M040X070E15A	M4 x 0,7	1,5 D	25
E010/M050X080E15A	M5 x 0,8	1,5 D	25
E010/M060X100E15A	M6 x 1	1,5 D	25
E010/M080X125E15A	M8 x 1,25	1,5 D	25
E010/M100X150E15A	M10 x 1,5	1,5 D	25
E010/M120X175E15A	M12 x 1,75	1,5 D	10
E010/M140X200E15A	M14 x 2	1,5 D	10
E010/M160X200E15A	M16 x 2	1,5 D	10
E010/M030X050E2A	M3 x 0,5	2,0 D	25
E010/M040X070E2A	M4 x 0,7	2,0 D	25
E010/M050X080E2A	M5 x 0,8	2,0 D	25
E010/M060X100E2A	M6 x 1	2,0 D	25
E010/M080X125E2A	M8 x 1,25	2,0 D	25
E010/M100X150E2A	M10 x 1,5	2,0 D	25
E010/M120X175E2A	M12 x 1,75	2,0 D	10
E010/M140X200E2A	M14 x 2	2,0 D	10
E010/M160X200E2A	M16 x 2	2,0 D	10

E010-BSWXEX

STAINLESS STEEL THREAD REPAIR INSERT BSW H=1.5XD

Rhomboid section, with spring shape, which creates two perfectly concentric threads; an external one that is coupled with the previously threaded hole with the appropriate male and an internal one where the fixing screw will be screwed.



INOX

Hangable



Art.	D	Pack
E010/BSW1/8E15	1/8" x 40	10
E010/BSW3/16E15	3/16" x 24	10
E010/BSW1/4E15	1/4" x 20	10
E010/BSW5/16E15	5/16" x 18	10
E010/BSW3/8E15	3/8" x 16	10
E010/BSW7/16E15	7/16" x 14	10
E010/BSW1/2E15	1/2" x 12	10
E010/BSW9/16E15	9/16" x 12	5
E010/BSW5/8E15	5/8" x 11	5
E010/BSW3/4E15	3/4" x 10	5
E010/BSW7/8E15	7/8" x 9	5
E010/BSW1E15	1" x 8	5

E010-BSFXEX

STAINLESS STEEL THREAD REPAIR INSERT BSF H=1.5XD

Rhomboid section, with spring shape, which creates two perfectly concentric threads; an external one that is coupled with the previously threaded hole with the appropriate male and an internal one where the fixing screw will be screwed.



INOX

Hangable



Art.	D	Pack
E010/BSF3/16E15	3/16" x 32	10
E010/BSF1/4E15	1/4" x 26	10
E010/BSF5/16E15	5/16" x 22	10
E010/BSF3/8E15	3/8" x 20	10
E010/BSF7/16E15	7/16" x 18	10
E010/BSF1/2E15	1/2" x 16	10
E010/BSF9/16E15	9/16" x 16	5
E010/BSF5/8E15	5/8" x 14	5
E010/BSF3/4E15	3/4" x 12	5
E010/BSF7/8E15	7/8" x 11	5
E010/BSF1E15	1" x 10	5

E010-UNCXEX

STAINLESS STEEL THREAD REPAIR INSERT UNC H=1.5XD

Rhomboid section, with spring shape, which creates two perfectly concentric threads; an external one that is coupled with the previously threaded hole with the appropriate male and an internal one where the fixing screw will be screwed.



INOX

Hangable

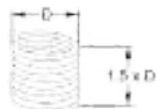


Art.	D	Pack
E010/UNC1/4E15	1/4" x 20	10
E010/UNC5/16E15	5/16" x 18	10
E010/UNC3/8E15	3/8" x 16	10
E010/UNC7/16E15	7/16" x 14	10
E010/UNC1/2E15	1/2" x 13	10
E010/UNC9/16E15	9/16" x 12	5
E010/UNC5/8E15	5/8" x 11	5
E010/UNC3/4E15	3/4" x 10	5
E010/UNC7/8E15	7/8" x 9	5

E010-UNFXEX

STAINLESS STEEL THREAD REPAIR INSERT UNF H=1.5XD

Rhomboid section, with spring shape, which creates two perfectly concentric threads; an external one that is coupled with the previously threaded hole with the appropriate male and an internal one where the fixing screw will be screwed.



Art.	D	Pack
E010/UNFN04E15	No. 4 x 48	10
E010/UNFN10E15	No. 10 x 32	10
E010/UNF1/4E15	1/4" x 28	10
E010/UNF5/16E15	5/16" x 24	10
E010/UNF3/8E15	3/8" x 24	10
E010/UNF7/16E15	7/16" x 20	10
E010/UNF1/2E15	1/2" x 20	10
E010/UNF9/16E15	9/16" x 18	5
E010/UNF5/8E15	5/8" x 18	5
E010/UNF3/4E15	3/4" x 16	5
E010/UNF7/8E15	7/8" x 14	5
E010/UNF1E15	1" x 12	5



E011-MXM

METRIC F-COIL STI TAP

Special type for creating the threaded insert housing seat.



HSS-G



Steel



Aluminum



Non-ferrous alloys



Cast Iron



Oil



Lathe



Mill



Manual use



Art.	Size	B	L1	L2	D2	C
E011/M020X040M	M2 x 0,4	2,5 mm	44,5 mm	9,5 mm	2,8 mm	2,24 mm
E011/M025X045M	M2,5 x 0,45	3,1 mm	48 mm	11 mm	3,15 mm	2,5 mm
E011/M030X050M	M3 x 0,5	3,6 mm	53 mm	13 mm	4 mm	3,15 mm
E011/M035X060M	M3,5 x 0,6	4,3 mm	53 mm	13 mm	4,5 mm	3,55 mm
E011/M040X070M	M4 x 0,7	4,9 mm	58 mm	16 mm	5 mm	4 mm
E011/M050X080M	M5 x 0,8	6 mm	66 mm	19 mm	6,3 mm	5 mm
E011/M060X100M	M6 x 1	7,3 mm	72 mm	22 mm	8 mm	6,3 mm
E011/M070X100M	M7 x 1	8,3 mm	72 mm	22 mm	9 mm	7,1 mm
E011/M080X100M	M8 x 1	9,3 mm	80 mm	24 mm	10 mm	8 mm
E011/M080X125M	M8 x 1,25	9,6 mm	80 mm	24 mm	8 mm	8 mm
E011/M090X100M	M9 x 1	10,6 mm	85 mm	25 mm	8 mm	6,3 mm
E011/M090X125M	M9 x 1,25	10,6 mm	85 mm	25 mm	8 mm	6,3 mm
E011/M100X100M	M10 x 1	11,3 mm	85 mm	25 mm	8 mm	6,3 mm
E011/M100X125M	M10 x 1,25	11,6 mm	85 mm	25 mm	8 mm	6,3 mm
E011/M100X150M	M10 x 1,5	11,9 mm	89 mm	29 mm	9 mm	7,1 mm
E011/M110X150M	M11 x 1,5	12,9 mm	89 mm	29 mm	9 mm	7,1 mm
E011/M120X100M	M12 x 1	13,3 mm	95 mm	30 mm	11,2 mm	9 mm
E011/M120X125M	M12 x 1,25	13,6 mm	95 mm	30 mm	11,2 mm	9 mm
E011/M120X150M	M12 x 1,5	14 mm	95 mm	30 mm	11,2 mm	9 mm

Art.	Size	B	L1	L2	D2	C
E011/M120X175M	M12 x 1,75	14,3 mm	95 mm	30 mm	11,2 mm	9 mm
E011/M140X100M	M14 x 1	15,3 mm	102 mm	32 mm	12,5 mm	10 mm
E011/M140X125M	M14 x 1,25	15,6 mm	102 mm	32 mm	12,5 mm	10 mm
E011/M140X150M	M14 x 1,5	16 mm	102 mm	32 mm	12,5 mm	10 mm
E011/M140X200M	M14 x 2	16,6 mm	102 mm	32 mm	12,5 mm	10 mm
E011/M160X150M	M16 x 1,5	18 mm	104 mm	29 mm	14 mm	11,2 mm
E011/M160X200M	M16 x 2	18,6 mm	112 mm	37 mm	14 mm	11,2 mm
E011/M180X150M	M18 x 1,5	20 mm	104 mm	29 mm	14 mm	11,2 mm
E011/M180X200M	M18 x 2	20,6 mm	104 mm	29 mm	14 mm	11,2 mm
E011/M180X250M	M18 x 2,5	21,3 mm	118 mm	38 mm	16 mm	12,5 mm
E011/M200X150M	M20 x 1,5	22 mm	113 mm	33 mm	16 mm	12,5 mm
E011/M200X200M	M20 x 2	22,6 mm	113 mm	33 mm	16 mm	12,5 mm
E011/M200X250M	M20 x 2,5	23,3 mm	118 mm	38 mm	16 mm	12,5 mm
E011/M220X150M	M22 x 1,5	24 mm	120 mm	35 mm	18 mm	14 mm
E011/M220X200M	M22 x 2	24,6 mm	120 mm	35 mm	18 mm	14 mm
E011/M220X250M	M22 x 2,5	25,3 mm	130 mm	45 mm	18 mm	14 mm
E011/M240X150M	M24 x 1,5	26 mm	120 mm	35 mm	18 mm	14 mm
E011/M240X200M	M24 x 2	26,6 mm	127 mm	37 mm	20 mm	16 mm
E011/M240X300M	M24 x 3	27,9 mm	138 mm	48 mm	20 mm	16 mm

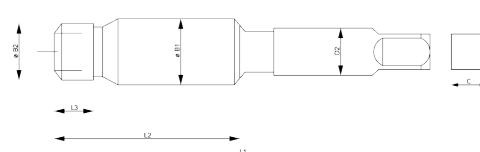
E011-MXMC

METRIC F-COIL STI COMBINED TAP

Special type for creating the threaded insert housing seat.



Art.	Size	B1	B2	L3	L2	L1	D2	C
E011/M060X100MC	M6 x 1,0	7,3 mm	6 mm	7 mm	28 mm	70 mm	8 mm	6,3 mm
E011/M080X125MC	M8 x 1,25	9,6 mm	8 mm	9 mm	32 mm	75 mm	8 mm	6,3 mm
E011/M100X100MC	M10 x 1,0	11,3 mm	10 mm	8 mm	30 mm	74 mm	8 mm	6,3 mm
E011/M100X125MC	M10 x 1,25	11,6 mm	10 mm	8 mm	30 mm	74 mm	8 mm	6,3 mm
E011/M100X150MC	M10 x 1,5	11,9 mm	10 mm	9 mm	37 mm	80 mm	9 mm	7,1 mm
E011/M120X125MC	M12 x 1,25	13,6 mm	12 mm	9 mm	32 mm	75 mm	9 mm	7,1 mm
E011/M140X125MC	M14 x 1,25	15,6 mm	14 mm	10 mm	45 mm	90 mm	12 mm	9,2 mm
E011/M180X150MC	M18 x 1,25	20,0 mm	18 mm	10 mm	47 mm	116 mm	16 mm	12,5 mm



E011-BSWXM

BSW F-COIL STI TAP

Special type for creating the threaded insert housing seat.



Art.	Size	B	L1	L2	D2	C
E011/BSW1/8M	1/8" x 40	3,9 mm	53 mm	13 mm	4 mm	3,15 mm
E011/BSW3/16M	3/16" x 24	6 mm	56 mm	19 mm	6,3 mm	5 mm
E011/BSW1/4M	1/4" x 20	7,8 mm	72 mm	22 mm	8 mm	6,3 mm
E011/BSW5/16M	5/16" x 18	9,6 mm	80 mm	24 mm	10 mm	8 mm
E011/BSW3/8M	3/8" x 16	11,4 mm	85 mm	25 mm	8 mm	6,3 mm
E011/BSW7/16M	7/16" x 14	13,2 mm	95 mm	30 mm	11,2 mm	9 mm
E011/BSW1/2M	1/2" x 12	15,2 mm	102 mm	32 mm	12,5 mm	10 mm
E011/BSW9/16M	9/16" x 12	16,8 mm	102 mm	32 mm	12,5 mm	10 mm
E011/BSW5/8M	5/8" x 11	18,6 mm	112 mm	37 mm	14 mm	11,2 mm
E011/BSW3/4M	3/4" x 10	22 mm	118 mm	38 mm	16 mm	12,5 mm
E011/BSW7/8M	7/8" x 9	25,5 mm	130 mm	45 mm	18 mm	14 mm
E011/BSW1M	1" x 8	29,1 mm	138 mm	48 mm	20 mm	16 mm



E011-BSFXM

BSF F-COIL STI TAP

Special type for creating the threaded insert housing seat.



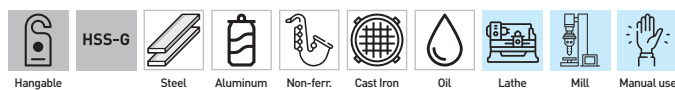
Art.	Size	B	L1	L2	D2	C
E011/BSF3/16M	3/16" x 32	5,7 mm	66 mm	19 mm	6,3 mm	5 mm
E011/BSF1/4M	1/4" x 26	7,5 mm	72 mm	22 mm	8 mm	6,3 mm
E011/BSF5/16M	5/16" x 22	9,3 mm	80 mm	24 mm	10 mm	8 mm
E011/BSF3/8M	3/8" x 20	11 mm	85 mm	25 mm	8 mm	6,3 mm
E011/BSF7/16M	7/16" x 18	12,8 mm	89 mm	29 mm	9 mm	7,1 mm
E011/BSF1/2M	1/2" x 16	14,6 mm	95 mm	30 mm	11,2 mm	9 mm
E011/BSF9/16M	9/16" x 16	16,2 mm	102 mm	32 mm	12,5 mm	10 mm
E011/BSF5/8M	5/8" x 14	18 mm	112 mm	37 mm	14 mm	11,2 mm
E011/BSF3/4M	3/4" x 12	21,5 mm	118 mm	38 mm	16 mm	12,5 mm
E011/BSF7/8M	7/8" x 11	24,9 mm	130 mm	45 mm	18 mm	14 mm
E011/BSF1M	1" x 10	28,4 mm	138 mm	48 mm	20 mm	16 mm



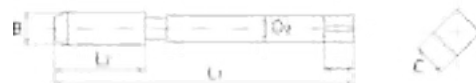
E011-UNCXM

UNC F-COIL STI TAP

Special type for creating the threaded insert housing seat.



Art.	Size	B	L1	L2	D2	C
E011/UNC1/4M	1/4" x 20	8 mm	72 mm	22 mm	8 mm	6,3 mm
E011/UNC5/16M	5/16" x 18	9,8 mm	80 mm	24 mm	10 mm	8 mm
E011/UNC3/8M	3/8" x 16	11,6 mm	85 mm	25 mm	8 mm	6,3 mm
E011/UNC7/16M	7/16" x 14	13,5 mm	95 mm	30 mm	11,2 mm	10 mm
E011/UNC1/2M	1/2" x 13	15,2 mm	102 mm	32 mm	12,5 mm	10 mm
E011/UNC9/16M	9/16" x 12	17 mm	112 mm	37 mm	14 mm	11,2 mm
E011/UNC5/8M	5/8" x 11	18,9 mm	112 mm	37 mm	14 mm	11,2 mm
E011/UNC3/4M	3/4" x 10	22,4 mm	118 mm	38 mm	16 mm	12,5 mm
E011/UNC7/8M	7/8" x 9	25,9 mm	130 mm	45 mm	18 mm	14 mm



E011-UNFXM

UNF F-COIL STI TAP

Special type for creating the threaded insert housing seat.



Art.	Size	B	L1	L2	D2	C
E011/UNFN04M	No. 4 x 48	3,5 mm	53 mm	13 mm	4 mm	3,15 mm
E011/UNFN10M	No. 10 x 32	5,9 mm	66 mm	19 mm	6,3 mm	5 mm
E011/UNF1/4M	1/4" x 28	7,5 mm	69 mm	19 mm	8 mm	6,3 mm
E011/UNF5/16M	5/16" x 24	9,3 mm	76 mm	20 mm	10 mm	8 mm
E011/UNF3/8M	3/8" x 24	10,9 mm	82 mm	22 mm	8 mm	6,3 mm
E011/UNF7/16M	7/16" x 20	12,8 mm	84 mm	24 mm	9 mm	7,1 mm
E011/UNF1/2M	1/2" x 20	14,4 mm	90 mm	25 mm	11,2 mm	9 mm
E011/UNF9/16M	9/16" x 18	16,1 mm	104 mm	29 mm	12,5 mm	10 mm
E011/UNF5/8M	5/8" x 18	17,7 mm	104 mm	29 mm	14 mm	11,2 mm
E011/UNF3/4M	3/4" x 16	21,1 mm	104 mm	29 mm	14 mm	11,2 mm
E011/UNF7/8M	7/8" x 14	24,6 mm	120 mm	35 mm	18 mm	14 mm
E011/UNF112M	1" x 12	28,2 mm	127 mm	37 mm	20 mm	16 mm



E011-UMX

F-COIL MOUNTING TOOL HEXAGONAL DRIVE

Art.	Diameter	Hex drive
E011/UM260X150	M26 x 1,5	1/2"
E011/UM270X150	M27 x 1,5	1/2"
E011/UM270X200	M27 x 2	1/2"
E011/UM270X300	M27 x 3	1/2"
E011/UM280X150	M28 x 1,5	1/2"
E011/UM300X150	M30 x 1,5	1/2"
E011/UM300X200	M30 x 2	1/2"
E011/UM300X350	M30 x 3,5	1/2"
E011/UM330X200	M33 x 2	1/2"
E011/UM330X350	M33 x 3,5	1/2"
E011/UM360X150	M36 x 1,5	1/2"
E011/UM360X200	M36 x 2	1/2"
E011/UM360X300	M36 x 3	1/2"
E011/UM360X400	M36 x 4	1/2"



E011-UX

F-COIL MOUNTING TOOL

Art.	Metric	Inch
E011/U02	M2 x 0,4 - M2,2 x 0,45	UNC N02
E011/U03	M2,5 x 0,45	-
E011/U04	M3 x 0,5	UNC N05 - UNC/UNF N04 - BSW 1/8"
E011/U05	M3,5 x 0,6	UNC/UNF N06
E011/U06	M4 x 0,7	UNC/UNF N08
E011/U08	M5 x 0,8	UNF N10 - UNC N12 - BSF 3/16"
E011/U09	M6 x 1	UNC/UNF 1/4" - BSW/BSF 1/4"
E011/U10	M7 x 1	UNC/BSW 5/16"
E011/U11	M8 x 1,25 - M8 x 1	UNF/BSF 5/16"
E011/U12	M9 x 1,25 - M9 x 1	UNC/BSW 3/8"
E011/U13	M10 x 1,5 - M10 x 1 - M10 x 1,25	UNF/BSF 3/8"
E011/U14	M11 x 1,5	UNC/UNF 7/16" - BSW-BSF 7/16"
E011/U15	M12 x 1,75 - M12 x 1,5 - M12 x 1,25 - M12 x 1	UNC/UNF 1/2" - BSW-BSF 1/2"
E011/U16	M14 x 2 - M14 x 1,5	UNC/UNF 9/16" - BSW-BSF 9/16"
E011/U17	M14 x 1,25 - M14 x 1	-
E011/U18	M16 x 2 - M16 x 1,5	UNC/UNF 5/8" - BSW-BSF 5/8"
E011/U20	M18 x 2,5 - M18 x 2 - M18 x 1,5	UNC 3/4" - BSW-BSF 3/4"
E011/U21	M20 x 2,5 - M20 x 2 - M20 x 1,5	UNF 3/4"
E011/U22	M22 x 2,5 - M22 x 2 - M22 x 1,5	UNC/UNF 7/8" - BSW-BSF 7/8"
E011/U23	M24 x 3 - M24 x 2 - M24 x 1,5	UNC/UNF 1" - BSW-BSF 1"



E011-EX

F-COIL PULLER

Art.	Metric	Inch
E011/E2	M3 - M10	3/16" - 3/8"
E011/E3	M11 - M25	3/8" - 1"



E011-AX

F-COIL TANG BREAKING TOOL

Art.	Metric	Inch
E011/A02	M2 x 0,4 - M2,2 x 0,45	UNC N02
E011/A03	M2,5 x 0,45	-
E011/A04	M3 x 0,5	UNC/UNF N04
E011/A05	M3,5 x 0,6	UNC/UNF N06
E011/A06	M4 x 0,7	UNC N10 - UNC/UNF N08 - BSF 3/16"
E011/A08	M5 x 0,8	UNF N10 - UNC N12 - BSF 3/16"
E011/A09	M6 x 1	UNC/UNF 1/4" - BSW/BSF 1/4"
E011/A11	M7 x 1 - M8 x 1 - M8 x 1,25	UNC/UNF 5/16" - BSW/BSF 5/16"
E011/A12	M9 x 1 - M9 x 1,25	UNC 3/8" - BSW/BSF 3/8"
E011/A13	M10 x 1,5 - M10 x 1 - M10 x 1,25	UNF 3/8"
E011/A14	M11 x 1,5	UNC/UNF 7/16" - BSW/BSF 7/16"
E011/A15	M12 x 1,5 - M12 x 1 - M12 x 1,25 - M12 x 1,75	UNC/UNF 1/2" - BSW/BSF 1/2"





LBX

BI-METAL BANDSAW BLADE FOR METAL

Welded in standard length.



Art.	Sizes	Specifications	Pitch
LB01/1140	1140 x 13 x 0,65 mm	T 8 / 12 Bi-Metal	Variable
LB01/1325	1325 x 13 x 0,65 mm	T 8 / 12 Bi-Metal	Variable
LB01/1335	1335 x 13 x 0,65 mm	T 8 / 12 Bi-Metal	Variable
LB01/1435	1435 x 13 x 0,65 mm	T 8 / 12 Bi-Metal	Variable
LB01/1440	1440 x 13 x 0,65 mm	T 8 / 12 Bi-Metal	Variable
LB01/1638	1638 x 13 x 0,65 mm	T 8 / 12 Bi-Metal	Variable
LB01/1735	1735 x 13 x 0,65 mm	T 8 / 12 Bi-Metal	Variable
LB02/1140	1140 x 13 x 0,65 mm	T 6 Bi-Metal	Fix
LB02/1435	1435 x 13 x 0,65 mm	T 6 Bi-Metal	Fix
LB05/1735	1735 x 13 x 0,9 mm	T 8 / 12 Bi-Metal	Variable
LB07/2000	2000 x 20 x 0,9 mm	T 8 / 12 Bi-Metal	Variable
LB07/2080	2080 x 20 x 0,9 mm	T 8 / 12 Bi-Metal	Variable
LB07/2100	2100 x 20 x 0,9 mm	T 8 / 12 Bi-Metal	Variable
LB07/2140	2140 x 20 x 0,9 mm	T 8 / 12 Bi-Metal	Variable
LB07/2160	2160 x 20 x 0,9 mm	T 8 / 12 Bi-Metal	Variable
LB08/2000	2000 x 20 x 0,9 mm	T 5 / 7 Bi-Metal	Variable
LB08/2080	2080 x 20 x 0,9 mm	T 5 / 7 Bi-Metal	Variable
LB08/2100	2100 x 20 x 0,9 mm	T 5 / 7 Bi-Metal	Variable
LB08/2140	2140 x 20 x 0,9 mm	T 5 / 7 Bi-Metal	Variable
LB08/2160	2160 x 20 x 0,9 mm	T 5 / 7 Bi-Metal	Variable
LB09/2375	2375 x 27 x 0,9 mm	T 8 / 11 Bi-Metal	Variable
LB09/2450	2450 x 27 x 0,9 mm	T 8 / 11 Bi-Metal	Variable
LB09/2500	2500 x 27 x 0,9 mm	T 8 / 11 Bi-Metal	Variable

Art.	Sizes	Specifications	Pitch
LB09/2720	2720 x 27 x 0,9 mm	T 8 / 11 Bi-Metal	Variable
LB09/2750	2750 x 27 x 0,9 mm	T 8 / 11 Bi-Metal	Variable
LB09/2825	2825 x 27 x 0,9 mm	T 8 / 11 Bi-Metal	Variable
LB09/2845	2845 x 27 x 0,9 mm	T 8 / 11 Bi-Metal	Variable
LB09/2945	2945 x 27 x 0,9 mm	T 8 / 11 Bi-Metal	Variable
LB09/2950	2950 x 27 x 0,9 mm	T 8 / 11 Bi-Metal	Variable
LB09/3010	3010 x 27 x 0,9 mm	T 8 / 11 Bi-Metal	Variable
LB09/3100	3100 x 27 x 0,9 mm	T 8 / 11 Bi-Metal	Variable
LB09/3120	3120 x 27 x 0,9 mm	T 8 / 11 Bi-Metal	Variable
LB09/3150	3150 x 27 x 0,9 mm	T 8 / 11 Bi-Metal	Variable
LB10/2375	2375 x 27 x 0,9 mm	T 5 / 7 Bi-Metal	Variable
LB10/2450	2450 x 27 x 0,9 mm	T 5 / 7 Bi-Metal	Variable
LB10/2500	2500 x 27 x 0,9 mm	T 5 / 7 Bi-Metal	Variable
LB11/2720	2720 x 27 x 0,9 mm	T 5 / 7 Bi-Metal	Variable
LB10/2750	2750 x 27 x 0,9 mm	T 5 / 7 Bi-Metal	Variable
LB10/2825	2825 x 27 x 0,9 mm	T 5 / 7 Bi-Metal	Variable
LB10/2845	2845 x 27 x 0,9 mm	T 5 / 7 Bi-Metal	Variable
LB10/2945	2945 x 27 x 0,9 mm	T 5 / 7 Bi-Metal	Variable
LB10/2950	2950 x 27 x 0,9 mm	T 5 / 7 Bi-Metal	Variable
LB10/3010	3010 x 27 x 0,9 mm	T 5 / 7 Bi-Metal	Variable
LB10/3100	3100 x 27 x 0,9 mm	T 5 / 7 Bi-Metal	Variable
LB10/3120	3120 x 27 x 0,9 mm	T 5 / 7 Bi-Metal	Variable
LB10/3150	3150 x 27 x 0,9 mm	T 5 / 7 Bi-Metal	Variable

N7X

BLADE FOR WOOD

Blade for shaped cutting of thin wood.



Art.	Sizes	Specifications
N194	1400 x 6 x 0,36 mm	T6
N717/N	1430 x 6 x 0,36 mm	T6
N188	1790 x 6 x 0,36 mm	T10
N190	1826 x 6 x 0,36 mm	T10
N855/N2	2240 x 13 x 0,65 mm	T8
N186	2400 x 13 x 0,65 mm	T8
N192	2560 x 13 x 0,65 mm	T8
N764/N2	2950 x 13 x 0,65 mm	T6
N764/455/N2	3430 x 16 x 0,65 mm	T6

N7X1

BLADES FOR WOOD

Blade for straight cut of thick wood.



Art.	Sizes	Specifications
N195	1400 x 10 x 0,36 mm	T6
N717/N1	1430 x 10 x 0,36 mm	T6
N189	1790 x 10 x 0,36 mm	T6
N191	1826 x 10 x 0,36 mm	T6
N855/N	2240 x 16 x 0,65 mm	T4
N187	2400 x 16 x 0,65 mm	T4
N193	2560 x 16 x 0,65 mm	T4
N764/N	2950 x 16 x 0,65 mm	T4
N764/455/N	3430 x 20 x 0,65 mm	T4



LSL76-20

JIGSAW BLADE SET

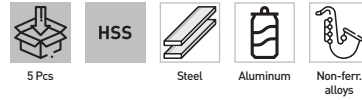


Length	76 mm
Cutting Depth	51 mm
Thickness	2 mm



LSM76-12

JIGSAW BLADE SET



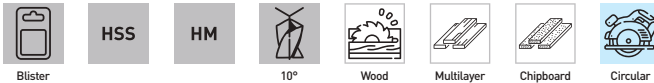
Length	76 mm
Cutting Depth	51 mm
Thickness	1,2 mm



07X

WOOD CARBIDE TIPPED SAW BLADES

With alternate universal teeth.

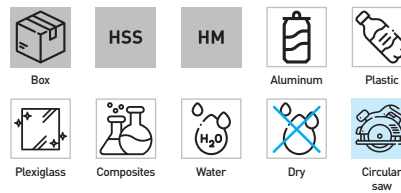


Art.	Ø	Teeth Z	Hole	Cut thickness	Blade thickness	rpm max
0735	190 mm	24	Ø 20 mm	2,2 mm	1,5 mm	8000
0736	190 mm	48	Ø 20 mm	2,2 mm	1,5 mm	8000
0685	250 mm	24	Ø 30 mm	2,8 mm	2 mm	6300
0702	250 mm	60	Ø 30 mm	3,2 mm	2,2 mm	7000
0703	250 mm	80	Ø 30 mm	3,2 mm	2,2 mm	7000
0704	300 mm	72	Ø 30 mm	3,2 mm	2,2 mm	6000
0705	300 mm	96	Ø 30 mm	3,2 mm	2,2 mm	6000
0899	315 mm	25	Ø 30 mm	2,8 mm	1,8 mm	6000
0745	350 mm	54	Ø 30 mm	3,5 mm	2,5 mm	5000
0707	400 mm	48	Ø 30 mm	3,5 mm	2,5 mm	4500
0746	450 mm	60	Ø 30 mm	4 mm	3,0 mm	4000

0762-

ALUMINIUM AND PLASTIC CARBIDE TIPPED SAW BLADE

Trapezoidal flat toothing with alternating sharpening.



Art.	Ø	Teeth Z	Hole	Cut thickness	Blade thickness	rpm max
0762/190	190 mm	48	Ø 20 mm	2,2 mm	1,5 mm	8000
0762/250	250 mm	60	Ø 32 mm	3,2 mm	2,8 mm	7000
0762/300	300 mm	72	Ø 32 mm	3,2 mm	2,8 mm	6000

