

NORIS Einzahn-Gewindefräser NES mit Wendepplatten

NORIS Single tooth milling cutter NES with reversible inserts

NORIS Fraise à fileter NES une dent à plaquettes a jeter

NORIS Frese a filettare NES con placchette reversibili ad una fila di denti

NES mKB



- **Für große Abmessungen ab Gewindedurchmesser 20 mm**

For large thread sizes, from thread diameter 20 mm

Pour filetages grand diamètre à partir de 20 mm

Per grandi misure da diametro di filettatura 20 mm

Kat.-Nr. / Cat. No. / N° cat. / Tipo

F501

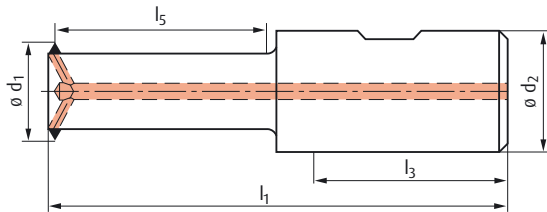
Einzahn-Gewindefräser NES mKB mit Wendepplatten

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Fraise à fileter NES mKB une dent à plaquettes à jeter

Frese a filettare NES mKB con placchette reversibili ad una fila di denti

für Innengewinde
for internal threads
pour filetage intérieur
per filettature interne

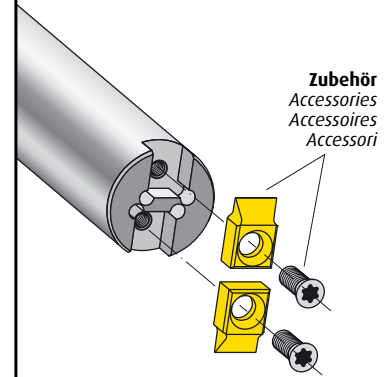


mit Zylinderschaft DIN 1835 B

with straight shank acc. DIN 1835 B

avec queue cylindrique selon DIN 1835 B

con gambo cilindrico secondo DIN 1835 B



ø D _{min.} mm	l ₅	l ₁	l ₃	ø d ₁	ø d ₂	Z _p	Plattentyp Tip type Plaquette type Placcetta tipo	Art.-Nr. Article no. Code article Articolo nr.
20 ¹⁾	60	114	50	16,5 ²⁾	20	2	F521	F501F0005

1) 24 mm bei P = 2,5 - 3,5 mm

24 mm bei P = 2,5 - 3,5 mm

24 mm bei P = 2,5 - 3,5 mm

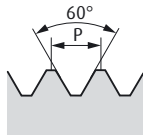
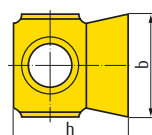
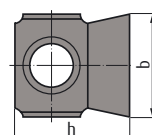
24 mm bei P = 2,5 - 3,5 mm

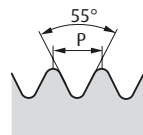
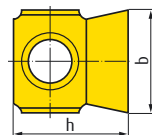
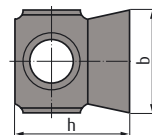
2) 18 mm bei P = 2,5 - 3,5 mm

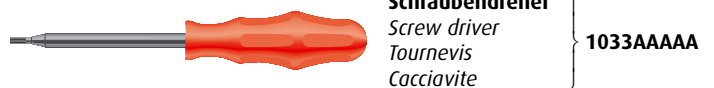
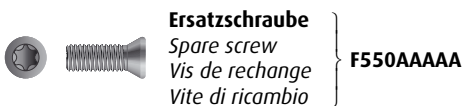
18 mm bei P = 2,5 - 3,5 mm

18 mm bei P = 2,5 - 3,5 mm

18 mm bei P = 2,5 - 3,5 mm

Kat.-Nr. / Cat. No. / N° cat. / Tipo					F521	
Gewindefräsplatte, 2 Zähne, auswechselbar <i>Thread milling insert, 2 tooth, indexable</i> <i>Plaquettes de filetage, à 2 dents, interchangeables</i> <i>Inserti filettati, con 2 denti, intercambiabili</i>						
<p style="text-align: right;">für Innengewinde <i>for internal threads</i> <i>pour filetage intérieur</i> <i>per filettatura interne</i></p> 						
Metrisches ISO-Gewinde nach DIN 13 und Unified-Gewinde nach ANSI B1.1 <i>ISO Metric thread acc. DIN 13 and Unified thread acc. ANSI B1.1</i> <i>Filetage métrique ISO selon DIN 13 et filetage américain selon ANSI B1.1</i> <i>Filettatura ISO metrica sec. DIN 13 e filettatura UN sec. ANSI B1.1</i>						
						
						
					TiN	
					TiAlN	
Plattentyp <i>Tip type</i> <i>Plaquette type</i> <i>Placchetta tipo</i>	P mm	P Gg/1"	b	h	Art.-Nr. <i>Article no.</i> <i>Code article</i> <i>Articolo nr.</i>	Art.-Nr. <i>Article no.</i> <i>Code article</i> <i>Articolo nr.</i>
F521	1,5 - 2,5	16 - 10	5	7	F521F0002	F521F0004
F521	2,5 - 3,5	10 - 7	5	7,8	F521F0001	F521F0003

Kat.-Nr. / Cat. No. / N° cat. / Tipo					F521	
Gewindefräsplatte, 2 Zähne, auswechselbar <i>Thread milling insert, 2 tooth, indexable</i> <i>Plaquettes de filetage, à 2 dents, interchangeables</i> <i>Inserti filettati, con 2 denti, intercambiabili</i>						
<p style="text-align: right;">für Innen- und Außengewinde <i>for internal and external threads</i> <i>pour filetage intérieur et extérieur</i> <i>per filettature interne ed esterne</i></p> 						
Whitworth-Gewinde BS 84 und Whitworth-Rohrgewinde DIN EN ISO 228 <i>Whitworth thread BS 84 and Whitworth pipe thread DIN EN ISO 228</i> <i>Filetage Whitworth BS 84 et filetage Whitworth pas du gaz DIN EN ISO 228</i> <i>Filettatura Whitworth BS 84 e filettatura gas Whitworth DIN EN ISO 228</i>						
						
						
					TiN	
					TiAlN	
Plattentyp <i>Tip type</i> <i>Plaquette type</i> <i>Placchetta tipo</i>	P Gg/1"	b	h		Art.-Nr. <i>Article no.</i> <i>Code article</i> <i>Articolo nr.</i>	Art.-Nr. <i>Article no.</i> <i>Code article</i> <i>Articolo nr.</i>
F521	14	5	7		F521F0005	F521F0008



Kat.-Nr. / Cat. No. / N° cat. / Tipo

F501

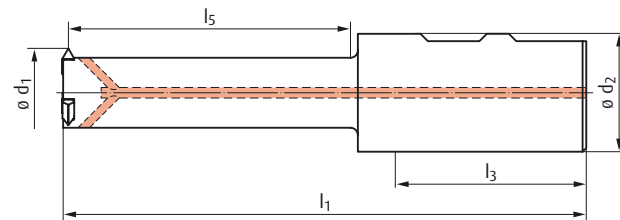
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Frese a filettare NES mKB con placchette reversibili ad una fila di denti

für Innengewinde
for internal threads
pour filetage intérieur
per filettature interne

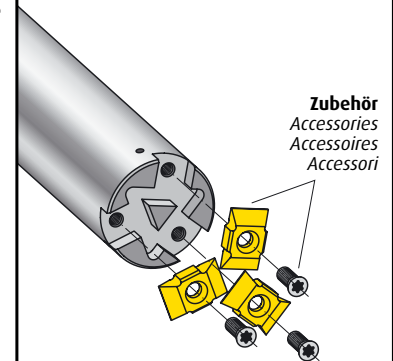


mit Zylinderschaft DIN 1835 B

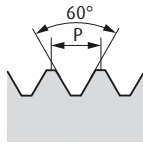
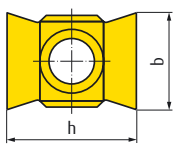
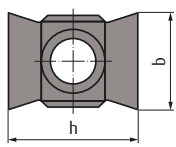
with straight shank acc. DIN 1835 B

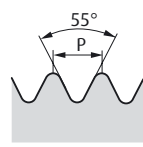
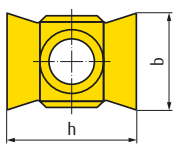
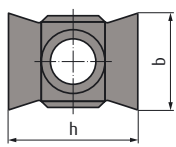
avec queue cylindrique selon DIN 1835 B

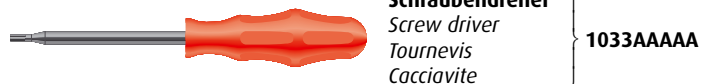
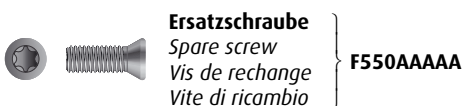
con gambo cilindrico secondo DIN 1835 B



$\emptyset D_{\min.}$ mm	l_5	l_1	l_3	$\emptyset d_1$	$\emptyset d_2$	Z_p	Plattentyp Tip type Plaquette type Placcetta tipo	Art.-Nr. Article no. Code article Articolo nr.
30	60	124	60	23,85	32	3	F510	F501AANAA
30	80	140	56	23,85	25	3	F510	F501F0011
30	80	144	60	23,85	32	3	F510	F501AARAA
30	90	154	60	23,85	32	3	F510	F501AA8AA
36	95	159	60	29,27	32	3	F510	F501E0841

Kat.-Nr. / Cat. No. / N° cat. / Tipo					F510	
Gewindefräsplatte, 4 Zähne, auswechselbar <i>Thread milling insert, 4 tooth, indexable</i> <i>Plaquettes de filetage, à 4 dents, interchangeables</i> <i>Inserti filettati, con 4 denti, intercambiabili</i>						
<p style="text-align: right;">für Innengewinde <i>for internal threads</i> <i>pour filetage intérieur</i> <i>per filettatura interne</i></p> 						
Metrisches ISO-Gewinde nach DIN 13 und Unified-Gewinde nach ANSI B1.1 <i>ISO Metric thread acc. DIN 13 and Unified thread acc. ANSI B1.1</i> <i>Filetage métrique ISO selon DIN 13 et filetage américain selon ANSI B1.1</i> <i>Filettatura ISO metrica sec. DIN 13 e filettatura UN sec. ANSI B1.1</i>						
					 TiN	 TiAlN
Plattentyp <i>Tip type</i> <i>Plaquette type</i> <i>Placcetta tipo</i>	P mm	P Gg/1"	b	h	Art.-Nr. <i>Article no.</i> <i>Code article</i> <i>Articolo nr.</i>	Art.-Nr. <i>Article no.</i> <i>Code article</i> <i>Articolo nr.</i>
F510	1,0 - 2,5	24 - 10	6,35	9,52	-	F510F0012
F510	1,5 - 2,5	16 - 10	6,35	9,52	F510AAAA	F510F0003
F510	2,5 - 4	10 - 6	6,35	9,52	F510AABAA	F510F0004

Kat.-Nr. / Cat. No. / N° cat. / Tipo					F510	
Gewindefräsplatte, 4 Zähne, auswechselbar <i>Thread milling insert, 4 tooth, indexable</i> <i>Plaquettes de filetage, à 4 dents, interchangeables</i> <i>Inserti filettati, con 4 denti, intercambiabili</i>						
<p style="text-align: right;">für Innen- und Außengewinde <i>for internal and external threads</i> <i>pour filetage intérieur et extérieur</i> <i>per filettatura interne ed esterne</i></p> 						
Whitworth-Gewinde BS 84 und Whitworth-Rohrgewinde DIN EN ISO 228 <i>Whitworth thread BS 84 and Whitworth pipe thread DIN EN ISO 228</i> <i>Filetage Whitworth BS 84 et filetage Whitworth pas du gaz DIN EN ISO 228</i> <i>Filettatura Whitworth BS 84 e filettatura gas Whitworth DIN EN ISO 228</i>						
					 TiN	 TiAlN
Plattentyp <i>Tip type</i> <i>Plaquette type</i> <i>Placcetta tipo</i>	P Gg/1"	b	h	Art.-Nr. <i>Article no.</i> <i>Code article</i> <i>Articolo nr.</i>	Art.-Nr. <i>Article no.</i> <i>Code article</i> <i>Articolo nr.</i>	
F510	11	6,35	9,52	F510AACAA	F510F0005	



Kat.-Nr. / Cat. No. / N° cat. / Tipo

F501

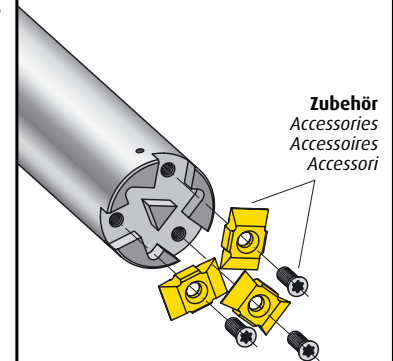
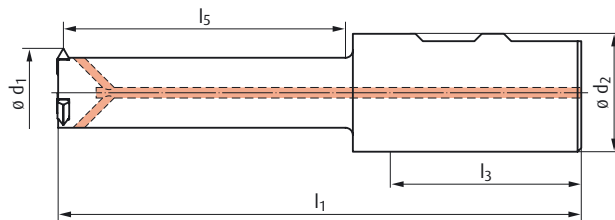
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Frese a filettare NES mKB con placchette reversibili ad una fila di denti

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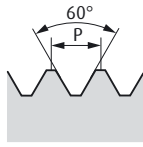
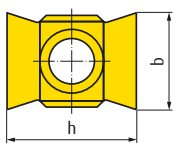
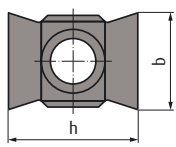
mit Zylinderschaft DIN 1835 B

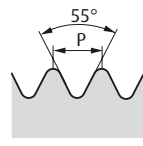
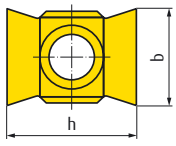
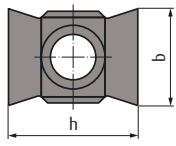
with straight shank acc. DIN 1835 B

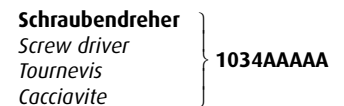
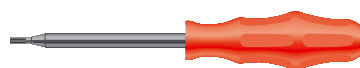
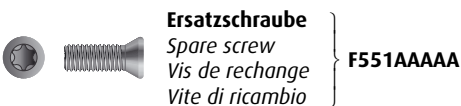
avec queue cylindrique selon DIN 1835 B

con gambo cilindrico secondo DIN 1835 B

$\emptyset D_{\min.}$ mm	l_5	l_1	l_3	$\emptyset d_1$	$\emptyset d_2$	Z_p	Plattentyp Tip type Plaquette type Placchetta tipo	Art.-Nr. Article no. Code article Articolo nr.
40	95	155	56	32,85	25	3	F511	F501F0012
40	95	159	60	32,85	32	3	F511	F501F0011
40	115	179	60	32,85	32	3	F511	F501F0007

Kat.-Nr. / Cat. No. / N° cat. / Tipo					F511			
<p>Gewindefräsplatte, 4 Zähne, auswechselbar Thread milling insert, 4 tooth, indexable Plaquettes de filetage, à 4 dents, interchangeables Inserti filettati, con 4 denti, intercambiabili</p> <p>für Innengewinde for internal threads pour filetage intérieur per filettatura interne</p>  <p>Metrisches ISO-Gewinde nach DIN 13 und Unified-Gewinde nach ANSI B1.1 ISO Metric thread acc. DIN 13 and Unified thread acc. ANSI B1.1 Filetage métrique ISO selon DIN 13 et filetage américain selon ANSI B1.1 Filettatura ISO metrica sec. DIN 13 e filettatura UN sec. ANSI B1.1</p>					 <p>TiN</p>		 <p>TiAlN</p>	
Plattentyp Tip type Plaquette type Placcetta tipo	P mm	P Gg/1"	b	h	Art.-Nr. Article no. Code article Articolo nr.	Art.-Nr. Article no. Code article Articolo nr.		
F511	1,5 - 2,5	16 - 10	8,5	13,5	F511AAAAA	F511F0001		
F511	2,5 - 5,5	10 - 4,5	8,5	13,5	F511AABAA	F511F0002		

Kat.-Nr. / Cat. No. / N° cat. / Tipo				F511			
<p>Gewindefräsplatte, 4 Zähne, auswechselbar Thread milling insert, 4 tooth, indexable Plaquettes de filetage, à 4 dents, interchangeables Inserti filettati, con 4 denti, intercambiabili</p> <p>für Innen- und Außengewinde for internal and external threads pour filetage intérieur et extérieur per filettature interne ed esterne</p>  <p>Whitworth-Gewinde BS 84 und Whitworth-Rohrgewinde DIN EN ISO 228 Whitworth thread BS 84 and Whitworth pipe thread DIN EN ISO 228 Filetage Whitworth BS 84 et filetage Whitworth pas du gaz DIN EN ISO 228 Filettatura Whitworth BS 84 e filettatura gas Whitworth DIN EN ISO 228</p>				 <p>TiN</p>		 <p>TiAlN</p>	
Plattentyp Tip type Plaquette type Placcetta tipo	P Gg/1"	b	h	Art.-Nr. Article no. Code article Articolo nr.	Art.-Nr. Article no. Code article Articolo nr.		
F511	11	8,5	13,5	F511AACAA	F511F0003		



Einzahn-Gewindefräser NES mKB mit Wendepplatten

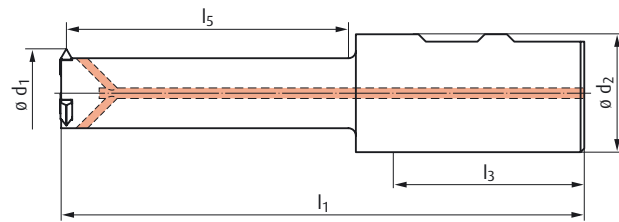
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Fraise à fileter NES mKB une dent à plaquettes à jeter

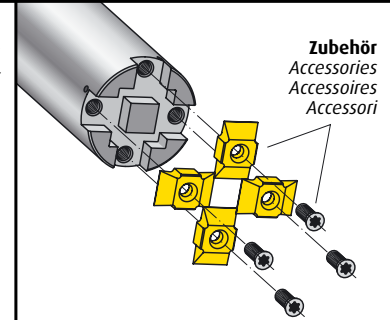
Frese a filettare NES mKB con placchette reversibili ad una fila di denti

Kat.-Nr. / Cat. No. / N° cat. / Tipo

F501



für Innengewinde
for internal threads
pour filetage intérieur
per filettatura interne



mit Zylinderschaft DIN 1835 B

with straight shank acc. DIN 1835 B

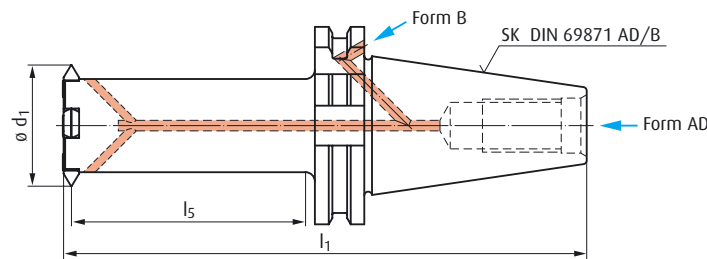
avec queue cylindrique selon DIN 1835 B

con gambo cilindrico secondo DIN 1835 B

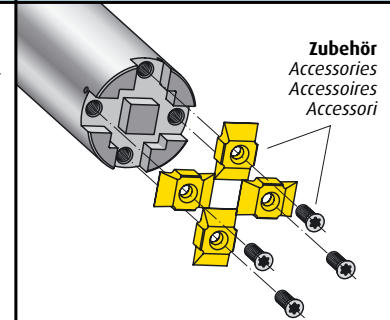
ø D _{min.} mm	l ₅	l ₁	l ₃	ø d ₁	ø d ₂	Z _p	Plattentyp Tip type Plaquette type Placcetta tipo	Art.-Nr. Article no. Code article Articolo nr.
48	110	173	60	40,25	32	4	F512	F501F0013
48	145	208	60	40,25	32	4	F512	F501F0010

Kat.-Nr. / Cat. No. / N° cat. / Tipo

F505



für Innengewinde
for internal threads
pour filetage intérieur
per filettatura interne



mit Steilkegel DIN 69871 AD/B

with ISO taper acc. DIN 69871 AD/B

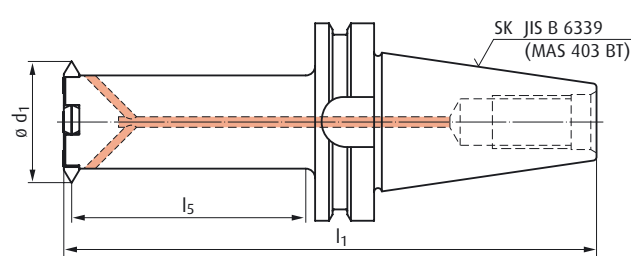
avec queue cône SA selon DIN 69871 AD/B

con gambo conico ISO secondo DIN 69871 AD/B

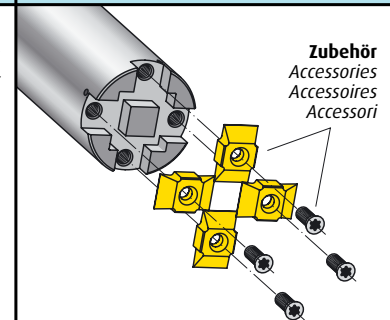
ø D _{min.} mm	l ₅	l ₁	ø d ₁	SK	Z _p	Plattentyp Tip type Plaquette type Placcetta tipo	Art.-Nr. Article no. Code article Articolo nr.
48	110	212	40,25	SK 40	4	F512	F505AADAA
48	110	245	40,25	SK 50	4	F512	F505AADAC
48	145	247	40,25	SK 40	4	F512	F505AAWAA
48	145	280	40,25	SK 50	4	F512	F505AAWAB

Kat.-Nr. / Cat. No. / N° cat. / Tipo

F505



für Innengewinde
for internal threads
pour filetage intérieur
per filettatura interne



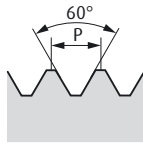
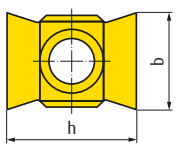
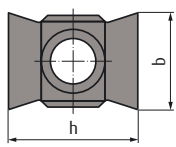
mit Steilkegel JIS B 6339 (MAS 403 BT)

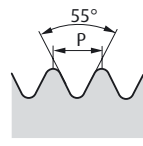
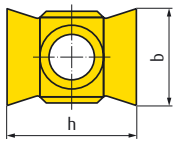
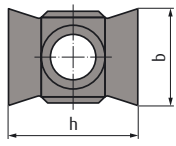
with ISO taper acc. JIS B 6339 (MAS 403 BT)

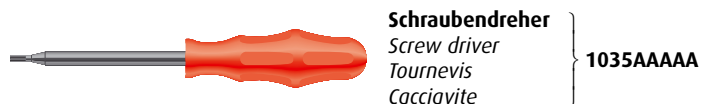
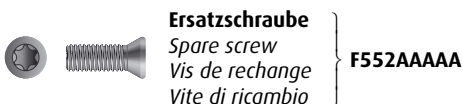
avec queue cône SA selon JIS B 6339 (MAS 403 BT)

con gambo conico ISO secondo JIS B 6339 (MAS 403 BT)

ø D _{min.} mm	l ₅	l ₁	ø d ₁	SK	Z _p	Plattentyp Tip type Plaquette type Placcetta tipo	Art.-Nr. Article no. Code article Articolo nr.
48	110	217	40,25	BT 40	4	F512	F505F0029
48	110	264	40,25	BT 50	4	F512	F505AADAF
48	145	252	40,25	BT 40	4	F512	F505F0028
48	145	299	40,25	BT 50	4	F512	F505F0025

Kat.-Nr. / Cat. No. / N° cat. / Tipo					F512	
Gewindefräsplatte, 4 Zähne, auswechselbar <i>Thread milling insert, 4 tooth, indexable</i> <i>Plaquettes de filetage, à 4 dents, interchangeables</i> <i>Inserti filettati, con 4 denti, intercambiabili</i>						
<p style="text-align: right;">für Innengewinde <i>for internal threads</i> <i>pour filetage intérieur</i> <i>per filettatura interne</i></p> 						
Metrisches ISO-Gewinde nach DIN 13 und Unified-Gewinde nach ANSI B1.1 <i>ISO Metric thread acc. DIN 13 and Unified thread acc. ANSI B1.1</i> <i>Filetage métrique ISO selon DIN 13 et filetage américain selon ANSI B1.1</i> <i>Filettatura ISO metrica sec. DIN 13 e filettatura UN sec. ANSI B1.1</i>						
					 TiN	 TiAlN
Plattentyp <i>Tip type</i> <i>Plaquette type</i> <i>Placcetta tipo</i>	P mm	P Gg/1"	b	h	Art.-Nr. <i>Article no.</i> <i>Code article</i> <i>Articolo nr.</i>	Art.-Nr. <i>Article no.</i> <i>Code article</i> <i>Articolo nr.</i>
F512	1,5 - 3	16 - 9	9,5	15,5	F512AAAAA	F512F0001
F512	3 - 6	9 - 4	9,5	15,5	F512AABAA	F512F0002

Kat.-Nr. / Cat. No. / N° cat. / Tipo					F512	
Gewindefräsplatte, 4 Zähne, auswechselbar <i>Thread milling insert, 4 tooth, indexable</i> <i>Plaquettes de filetage, à 4 dents, interchangeables</i> <i>Inserti filettati, con 4 denti, intercambiabili</i>						
<p style="text-align: right;">für Innen- und Außengewinde <i>for internal and external threads</i> <i>pour filetage intérieur et extérieur</i> <i>per filettature interne ed esterne</i></p> 						
Whitworth-Gewinde BS 84 und Whitworth-Rohrgewinde DIN EN ISO 228 <i>Whitworth thread BS 84 and Whitworth pipe thread DIN EN ISO 228</i> <i>Filetage Whitworth BS 84 et filetage Whitworth pas du gaz DIN EN ISO 228</i> <i>Filettatura Whitworth BS 84 e filettatura gas Whitworth DIN EN ISO 228</i>						
					 TiN	 TiAlN
Plattentyp <i>Tip type</i> <i>Plaquette type</i> <i>Placcetta tipo</i>	P Gg/1"	b	h	Art.-Nr. <i>Article no.</i> <i>Code article</i> <i>Articolo nr.</i>	Art.-Nr. <i>Article no.</i> <i>Code article</i> <i>Articolo nr.</i>	
F512	11	9,5	15,5	F512AACAA	F512F0003	



Einzahn-Gewindefräser NES mKB mit Wendepplatten

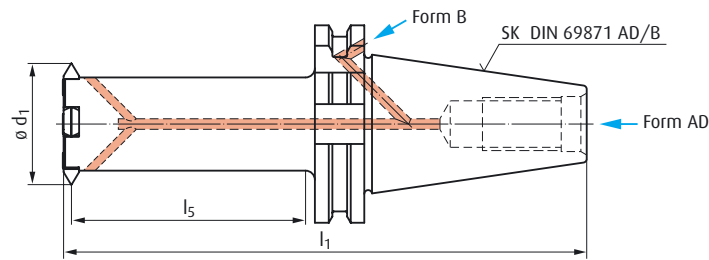
Single tooth milling cutter NES mKB with reversible inserts

Fraise à fileter NES mKB une dent à plaquettes à jeter

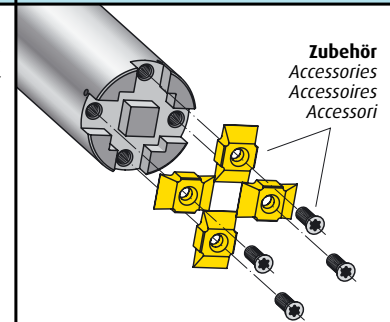
Frese a filettare NES mKB con placchette reversibili ad una fila di denti

Kat.-Nr. / Cat. No. / N° cat. / Tipo

F505



für Innengewinde
for internal threads
pour filetage intérieur
per filettature interne



mit Steilkegel DIN 69871 AD/B

with ISO taper acc. DIN 69871 AD/B

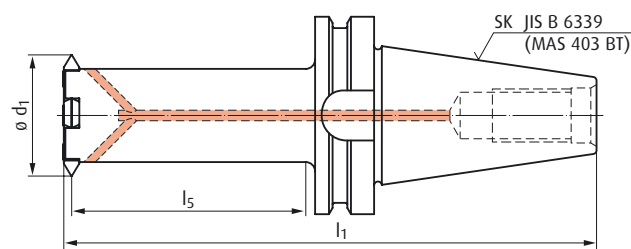
avec queue cône SA selon DIN 69871 AD/B

con gambo conico ISO secondo DIN 69871 AD/B

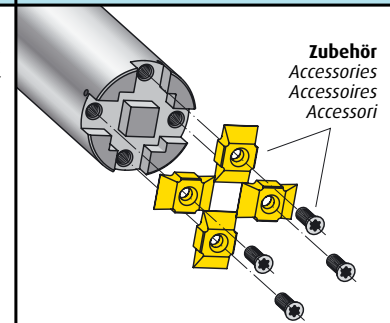
$\varnothing D_{min.}$ mm	l_5	l_1	$\varnothing d_1$	SK	Z_p	Plattentyp Tip type Plaquette type Placcetta tipo	Art.-Nr. Article no. Code article Articolo nr.
64	150	286	52,55	SK 50	4	F513	F505AAEAB
64	195	331	52,55	SK 50	4	F513	F505F0007
80	170	308	66,55	SK 50	7	F513	F505AACAA
80	260	398	66,55	SK 50	7	F513	F505E5553

Kat.-Nr. / Cat. No. / N° cat. / Tipo

F505



für Innengewinde
for internal threads
pour filetage intérieur
per filettature interne



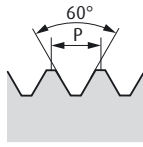
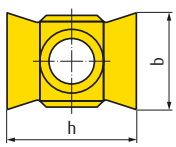
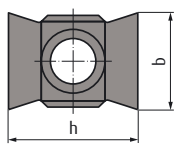
mit Steilkegel JIS B 6339 (MAS 403 BT)

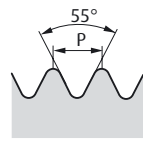
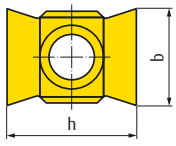
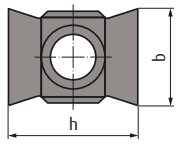
with ISO taper acc. JIS B 6339 (MAS 403 BT)

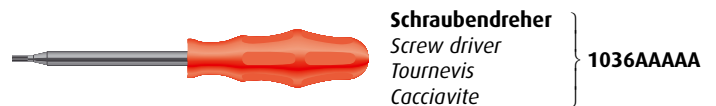
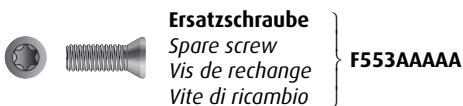
avec queue cône SA selon JIS B 6339 (MAS 403 BT)

con gambo conico ISO secondo JIS B 6339 (MAS 403 BT)

$\varnothing D_{min.}$ mm	l_5	l_1	$\varnothing d_1$	SK	Z_p	Plattentyp Tip type Plaquette type Placcetta tipo	Art.-Nr. Article no. Code article Articolo nr.
64	150	258	52,55	BT 40	4	F513	F505F0041
64	150	305	52,55	BT 50	4	F513	F505F0031
64	195	303	52,55	BT 40	4	F513	F505F0032
64	195	350	52,55	BT 50	4	F513	F505F0026
80	170	327	66,55	BT 50	7	F513	F505F0042
80	260	417	66,55	BT 50	7	F513	F505F0034

Kat.-Nr. / Cat. No. / N° cat. / Tipo					F513			
<p>Gewindefräsplatte, 4 Zähne, auswechselbar <i>Thread milling insert, 4 tooth, indexable</i> <i>Plaquettes de filetage, à 4 dents, interchangeables</i> <i>Inserti filettati, con 4 denti, intercambiabili</i></p> <p>für Innengewinde <i>for internal threads</i> <i>pour filetage intérieur</i> <i>per filettatura interne</i></p>  <p>Metrisches ISO-Gewinde nach DIN 13 und Unified-Gewinde nach ANSI B1.1 <i>ISO Metric thread acc. DIN 13 and Unified thread acc. ANSI B1.1</i> <i>Filetage métrique ISO selon DIN 13 et filetage américain selon ANSI B1.1</i> <i>Filettatura ISO metrica sec. DIN 13 e filettatura UN sec. ANSI B1.1</i></p>					 <p>TiN</p>		 <p>TiAlN</p>	
Plattentyp <i>Tip type</i> <i>Plaquette type</i> <i>Placcetta tipo</i>	P mm	P Gg/1"	b	h	Art.-Nr. <i>Article no.</i> <i>Code article</i> <i>Articolo nr.</i>	Art.-Nr. <i>Article no.</i> <i>Code article</i> <i>Articolo nr.</i>		
F513	1,5 - 3	16 - 9	12,5	19	F513AAAAA	F513F0001		
F513	3 - 6	9 - 4	12,5	19	F513AABAA	F513F0002		

Kat.-Nr. / Cat. No. / N° cat. / Tipo					F513			
<p>Gewindefräsplatte, 4 Zähne, auswechselbar <i>Thread milling insert, 4 tooth, indexable</i> <i>Plaquettes de filetage, à 4 dents, interchangeables</i> <i>Inserti filettati, con 4 denti, intercambiabili</i></p> <p>für Innen- und Außengewinde <i>for internal and external threads</i> <i>pour filetage intérieur et extérieur</i> <i>per filettature interne ed esterne</i></p>  <p>Whitworth-Gewinde BS 84 und Whitworth-Rohrgewinde DIN EN ISO 228 <i>Whitworth thread BS 84 and Whitworth pipe thread DIN EN ISO 228</i> <i>Filetage Whitworth BS 84 et filetage Whitworth pas du gaz DIN EN ISO 228</i> <i>Filettatura Whitworth BS 84 e filettatura gas Whitworth DIN EN ISO 228</i></p>					 <p>TiN</p>		 <p>TiAlN</p>	
Plattentyp <i>Tip type</i> <i>Plaquette type</i> <i>Placcetta tipo</i>	P Gg/1"	b	h	Art.-Nr. <i>Article no.</i> <i>Code article</i> <i>Articolo nr.</i>	Art.-Nr. <i>Article no.</i> <i>Code article</i> <i>Articolo nr.</i>			
F513	11	12,5	19	F513AACAA	F513F0003			





Characteristics:

- chipping process
- interrupted cut
- for internal and external threads
- produces always short chips
- suitable for most materials up to 63 Rc
- cutting material: carbide
- with different coatings available

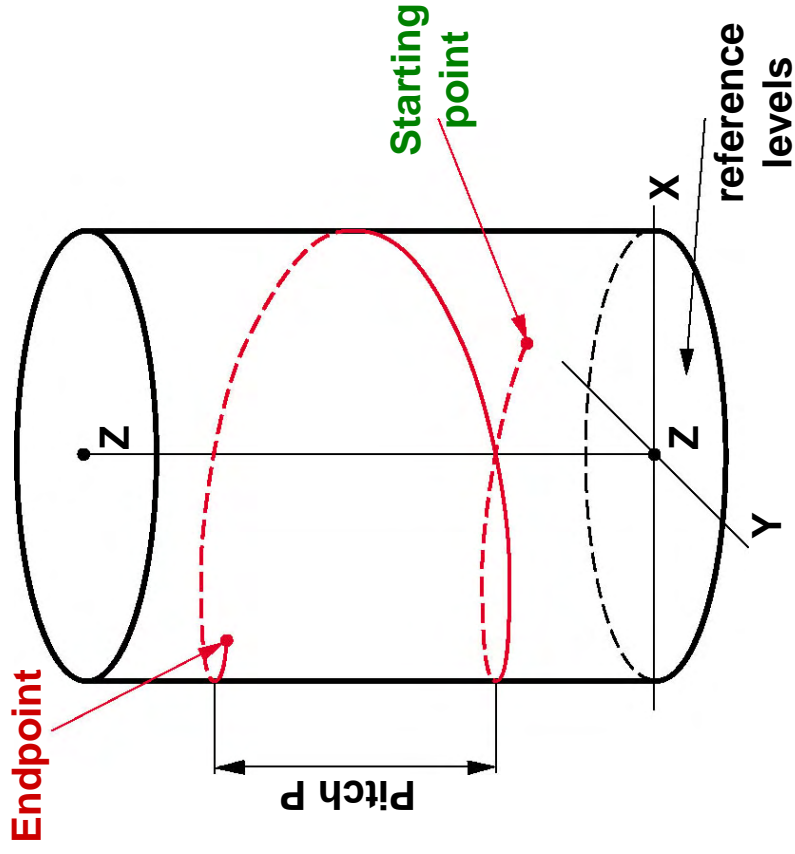
Requirements:

- 3-axis-CNC-machine
- good clamping of the tool and the workpiece
- Internal coolant supply (min. 20 bar)
(BGF and SF Universal types)

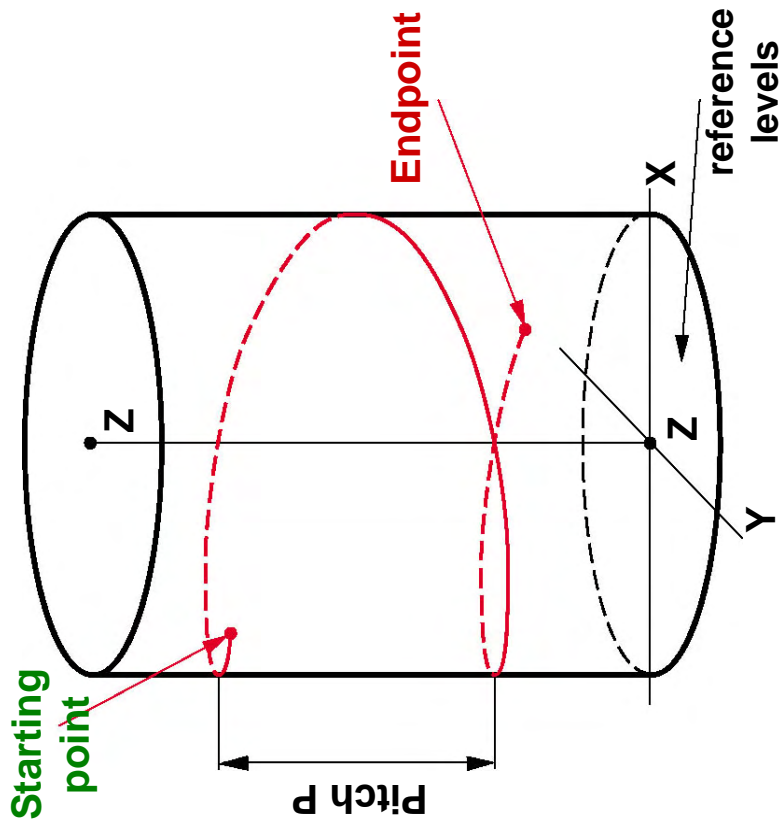
Advantages:

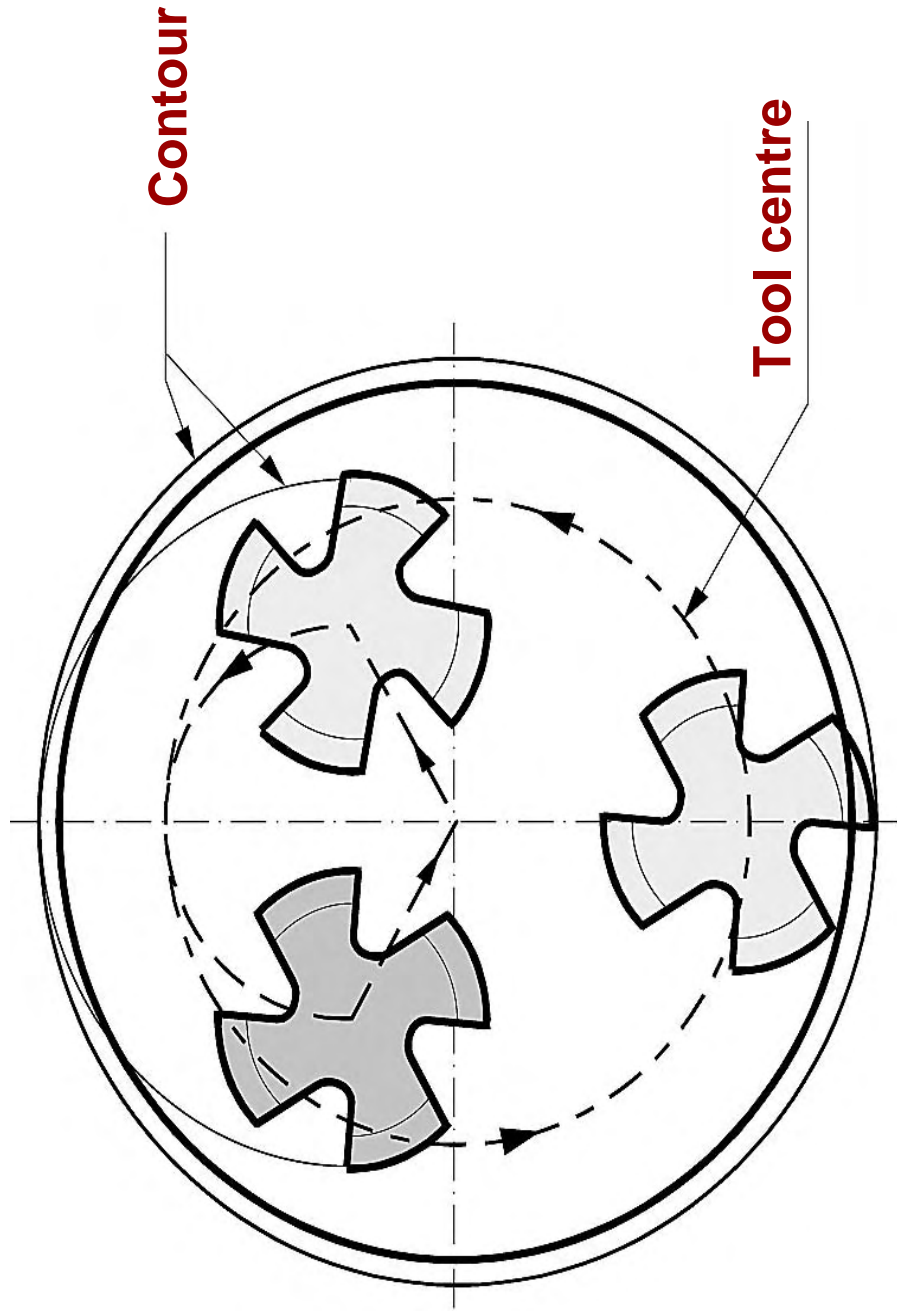
- through and blind hole threads, left and right hand threads, different diameters and tolerances, with only one tool
- better surface quality on the thread
- with emulsion, compressed air or minimized lubrication
- short machining times
- exact position
- no chip problems
- no oversize of the thread
- no reversing of the spindle necessary
- save space in the toolchanger
- thread depth close to the bottom
- easy machining of difficult materials
- more production safety
- low tool cost due to changable inserts

Climb milling

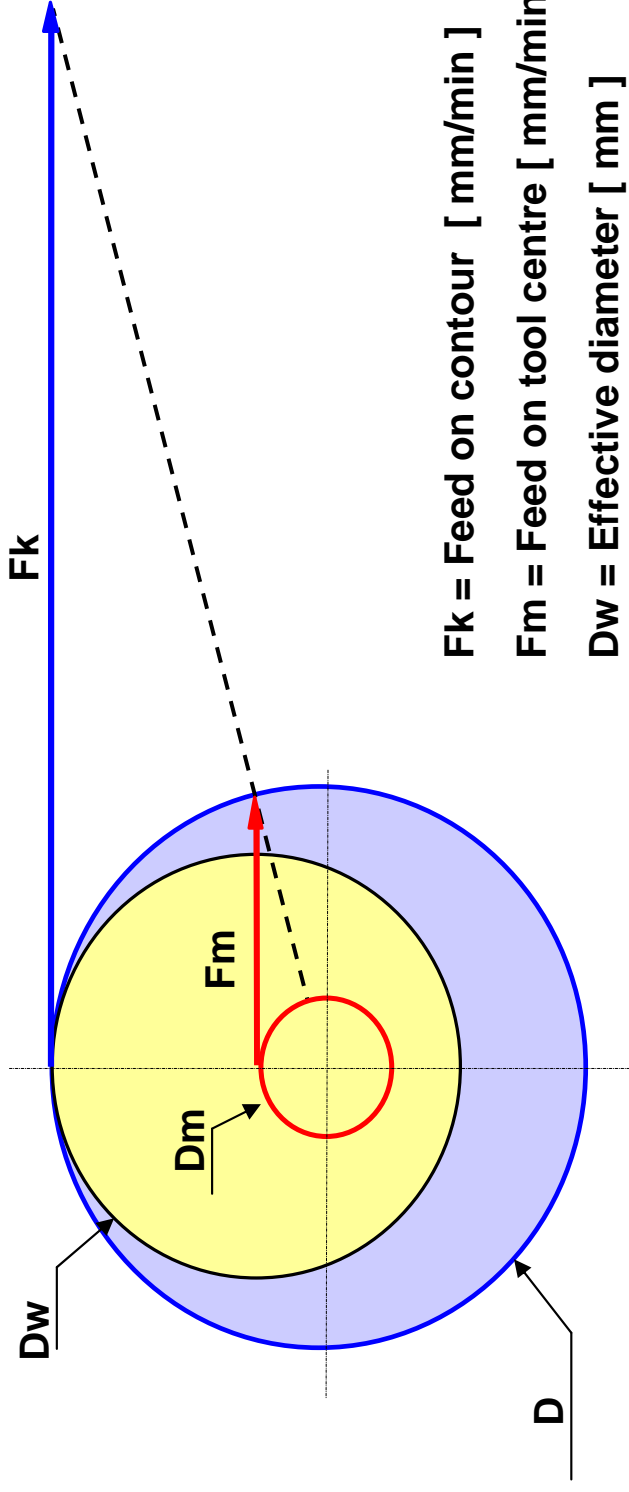


Opposed milling





Speed conditions Fk and Fm



Fk = Feed on contour [mm/min]

Fm = Feed on tool centre [mm/min]

Dw = Effective diameter [mm]

D = Dimension = Major diameter [mm]

Dm = Dia. of the way of the tool centre = D - Dw

$$\frac{D / 2}{(D - Dw) / 2} = \frac{Fk}{Fm}$$

$$Fm \times D = Fk \times (D - Dw)$$

$$Fm = \frac{Fk \times (D - Dw)}{D} \quad [\text{mm/min}]$$

Feed of the tool centre

$$Fm = \frac{350 \text{ mm/min} \times (70 - 55)}{70} = 75 [\text{mm/min}]$$

with values

Parameters of the application:

Major diameter:

70 mm

Cutting speed Vc:

100 m/min

Effective diameter Dw:

55 mm

Feed per tooth fz:

0,1 mm

Number of teeth:

6

Fk = Feed on contour [mm/min]

Dw = Effective diameter [mm]

Vc = Cutting speed [m/min]

n = Rotation speed [min⁻¹]

fz = Feed per tooth [mm]

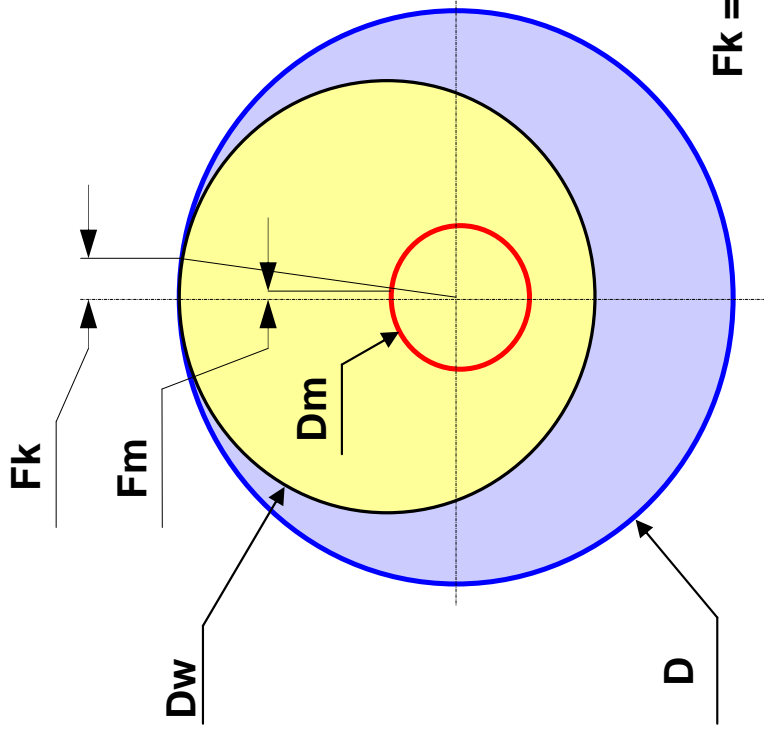
z = Number of teeth (radial)

$$\text{Rotation speed } n = \frac{V_c \times 1000}{\pi \times D_w} \quad [\text{min}^{-1}]$$

$$\text{Values } : n = \frac{100 \text{ m/min} \times 1000}{\pi \times 55} = 580 \text{ min}^{-1}$$

$$\text{Feed on contour } F_k = n \times f_z \times Z \quad [\text{mm/min}]$$

$$\text{Values } F_k = 580 \text{ min}^{-1} \times 0,1 \times 6 = 350 \text{ mm/min}$$



Fk = Feed on contour [mm/min]

Fm = Feed on tool centre [mm/min]

Dw = Effective diameter [mm]

D = Dimension = Major diameter [mm]

Dm = Dia. of the way of the tool centre = D - Dw

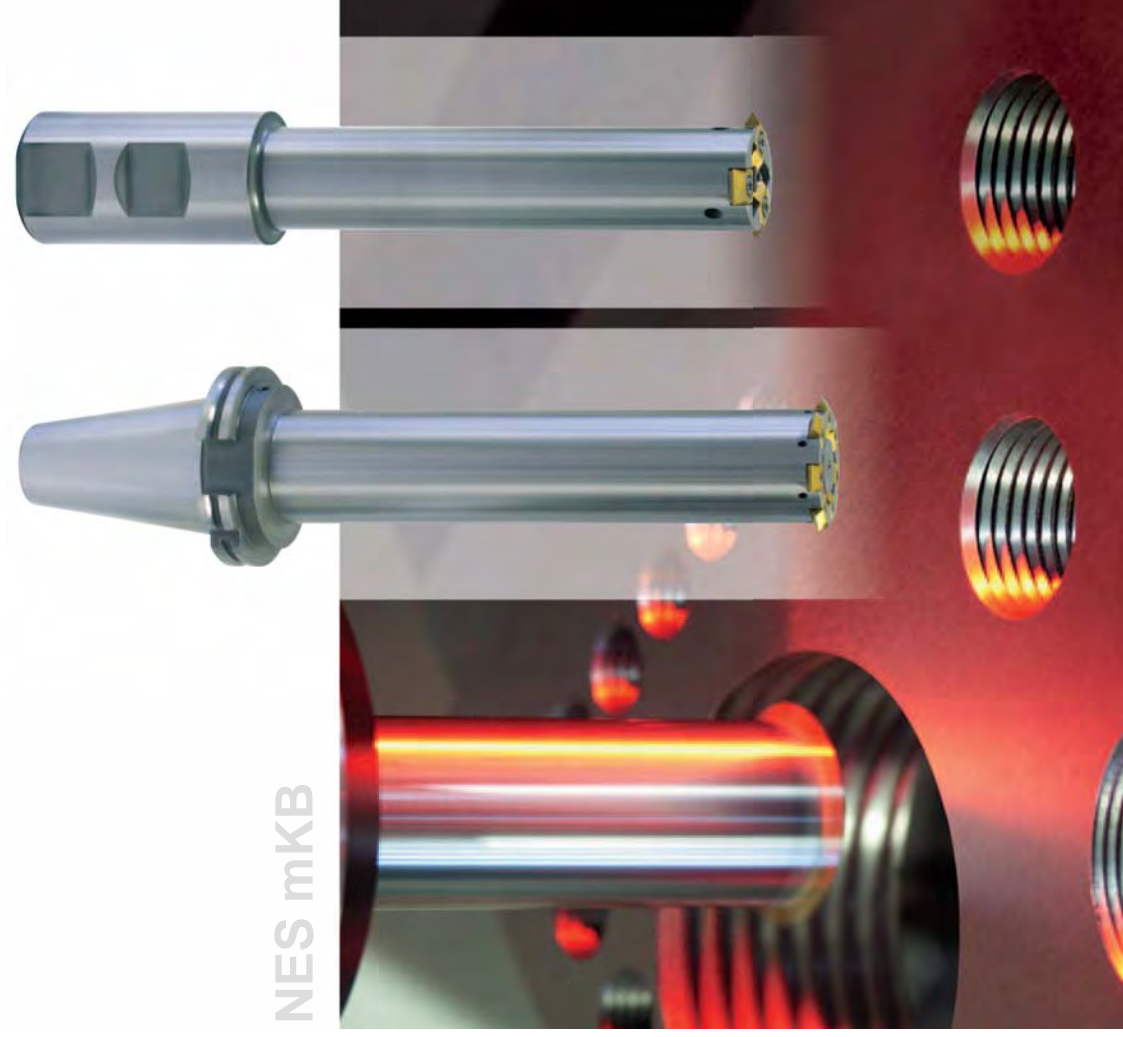
Factor of the feed

$$= \frac{D}{Dm}$$

Values

$$\text{Factor} = \frac{70}{15} = 4,67$$

NORIS NES mKB



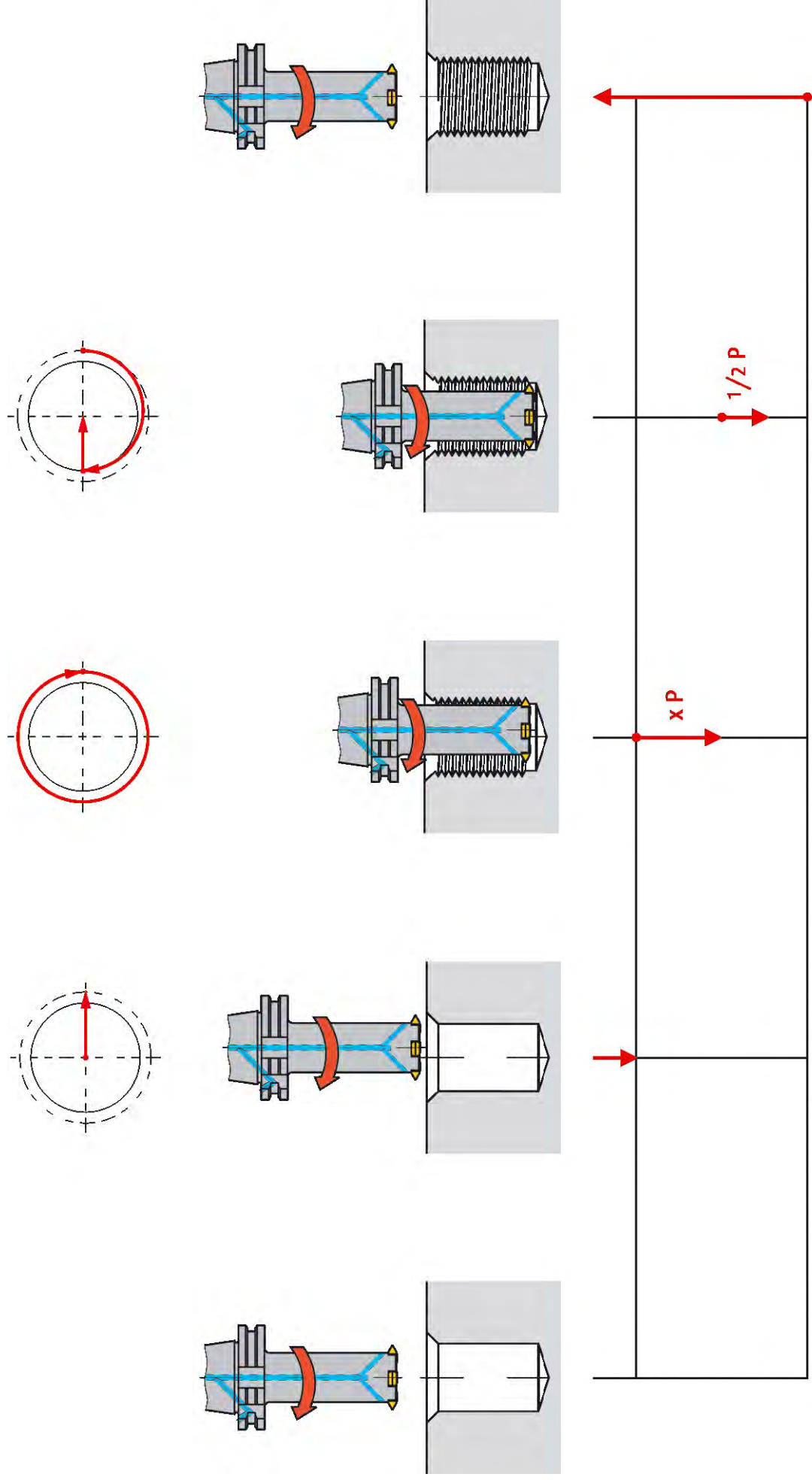
NES mKB

Tool description:

- Single-tooth threadmill with profile corrected indexable inserts made from carbide for the production of internal threads bigger than $\varnothing 20\text{mm}$
- Inserts for universal use (even for different pitches)

Requirements:

- existing corehole

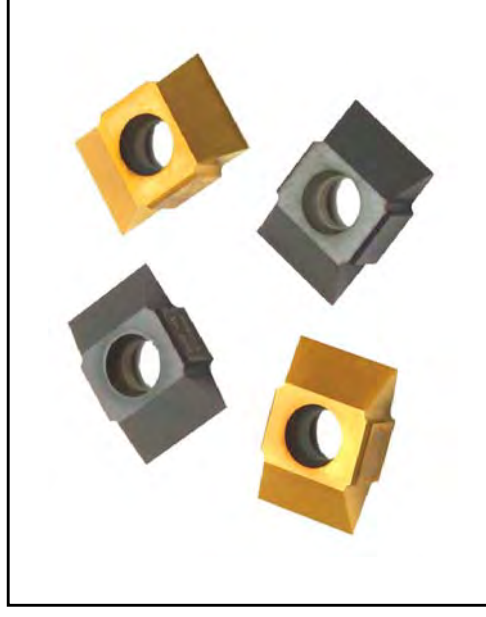
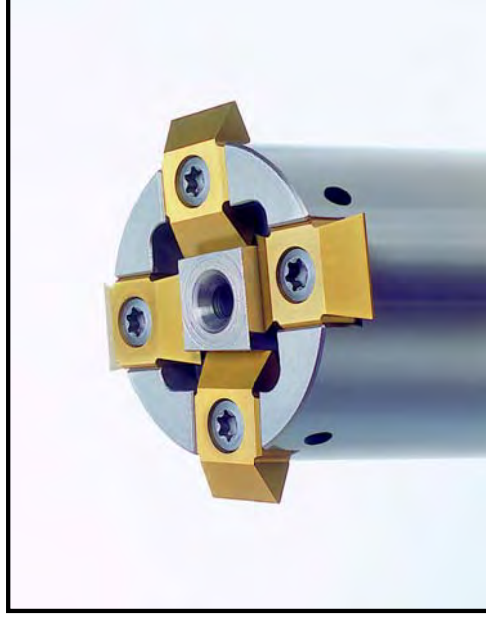
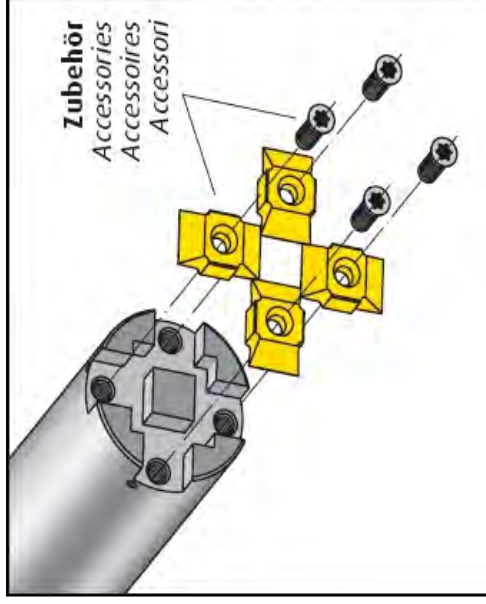




F501

F505

Cat. No.:	F501 and F505
Thread types:	M, UN, G
Material:	Holder: 42CrMo4 with internal coolant supply
Coating:	TiN or TiAlN
Numer of inserts:	F501: 2 or 3 F505: 4 or 7
Cat. No. Inserts:	F501: F510, F511, F512, F521 F505: F512, F513, F514
Thread depth:	Depending on the length of the holder
Shank:	DIN 1835B



Cat. No.:	F510, F511, F512, F513, F514, F521
Thread types:	M, UN, G
Material:	Carbide - P30
Coating:	TiN or TiAlN
Cutting edges:	F521: 2 / all others 4
Dimensions:	M: 1,0 mm – 8,0 mm pitch
	UN: 24 – 3 tpi
	G: 11 and 14 tpi
Suitable for:	Steels and difficult machinable materials up to 1400N/mm ²
	Stainless steels up to 1100N/mm ²
	Non ferrous and cast materials