Technical information

Art.-Nr. 287 / 1 - Fightmax INOX short

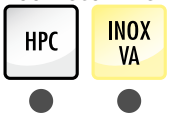
VHM - Schaftfräser FIGHTMAX INOX kurz

Art.-Nr. **287**

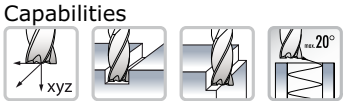
Flutes **4**

Tool data

Tool recommendation



Capabilities



Areas of application and special features

HPC-tool with the latest micro geometry for INOX machining, unequal divided, with an unequal helix and additional defined cutting edge rounding.

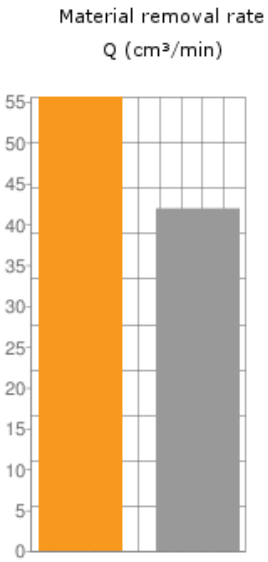
Competitive advantages and profitability

Highest tool life with moderate cutting data.

Example application

Art.-Nr.: **28712010**
Material: **Rust and acid constant steels <700 N/mm² (<205 HB)**

Inovatools –			
D1	12,00	mm	Diameter
z	4		Flutes
ae	6,000	mm	Row pitch
ap	12,000	mm	Cutting depth
vc	140,00	m/min	Cutting speed
n	3714	U/min	Rotation speed
fz	0,05200	mm	Feed per tooth
vf	772,43	mm/min	Feed rate
Q	55,61510331	cm³/min	Material removal rate
hm	0,03310	mm	Middle chipping thickness
K/M		€/std	Machine hourly cost
K/W		€	Tool cost
T		min	Tool life
V		cm³	Processing volume
Tb		min	Process time
€/Ws		€	Cost workpiece



Competitor:
Art.-Nr.:

Calculator			
D1	12,00	mm	Diameter
z	4		Flutes
ae	6	mm	Row pitch
ap	12	mm	Cutting depth
vc	110,01	m/min	Cutting speed
n	2918	U/min	Rotation speed
fz	0,05000	mm	Feed per tooth
vf	583,62	mm/min	Feed rate
Q	42,02064000	cm³/min	Material removal rate
hm	0,03183	mm	Middle chipping thickness
K/M		€/std	Machine hourly cost
K/W		€	Tool cost
T		min	Tool life
V		cm³	Processing volume
Tb		min	Process time
€/Ws		€	Cost workpiece

Cutting data and application recommendations

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Roughing

ap: 1,00
ae:1,00

Caption:
Ideal
Good
Applicable
Limited applicable

Material	vc m/min	φ Grad	D1 6,00 fz mm	D1 8,00 fz mm	D1 10,00 fz mm	D1 12,00 fz mm	D1 16,00 fz mm	D1 20,00 fz mm	D1 fz mm	D1 fz mm	D1 fz mm	D1 fz mm	D1 fz mm	D1 fz mm	D1 fz mm	D1 fz mm
General steels <500 N/mm² (<150 HB)																
General steels <700 N/mm² (<205 HB)																
Tempering steel <850 N/mm² (<25 HRC)																
Tempering steel <1000 N/mm² (<32 HRC)																
Tempering steel <1400 N/mm² (<44 HRC)																
Hardened steel 45-55 HRC (1400-2000 N/mm²																
Hardened steel 55-60 HRC (>2000 N/mm²)																
Hardened steel 60-65 HRC																
Cast iron <180HB																
Malleable cast iron																
Cast iron with nodular graphite																
Aluminium long-chipping																
Aluminium short-chipping																
Aluminium alloyed over >8% S																
Copper, brass, bronze, red brass																
Plastics - thermoplast																
Plastics - duroplast																
GFK/CFK (fibreglass/carbon fibre plastics)																
Graphite																
Rust and acid constant steels <700 N/mm² (<2(	99	50	0,021	0,027	0,034	0,044	0,063	0,084								
Rust and acid constant steels >700 N/mm² (>2(	71	30	0,017	0,022	0,027	0,035	0,050	0,067								
Inconel, Hastelloy, Nimonic, Monel																
Titanium																

Finishing

ap: 1,00
ae:0,50

Caption:
Ideal
Good
Applicable
Limited applicable

Material	vc m/min	φ Grad	D1 6,00 fz mm	D1 8,00 fz mm	D1 10,00 fz mm	D1 12,00 fz mm	D1 16,00 fz mm	D1 20,00 fz mm	D1 fz mm	D1 fz mm	D1 fz mm	D1 fz mm	D1 fz mm	D1 fz mm	D1 fz mm	D1 fz mm
General steels <500 N/mm² (<150 HB)																
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Tempering steel <850 N/mm² (<25 HRC)																
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Tempering steel <1400 N/mm² (<44 HRC)																
Hardened steel 45-55 HRC (1400-2000 N/mm²																
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Copper, brass, bronze, red brass																
Plastics - thermoplast																
Plastics - duroplast																
GFK/CFK (fibreglass/carbon fibre plastics)																
Graphite																
Rust and acid constant steels <700 N/mm² (<2(	140	50	0,025	0,032	0,040	0,052	0,075	0,100								
Rust and acid constant steels >700 N/mm² (>2(	100	30	0,020	0,026	0,032	0,042	0,060	0,080								
Inconel, Hastelloy, Nimonic, Monel																
Titanium																