



SLOTWORX[®] HP M

High-Feed Roughing

SLOTWORX® HP M

High-feed milling cutter

Increase your profitability -
where long service life meets high feed rate

SLOTWORX HP M is the answer for all those who expect high-performance when roughing. With particularly smooth running, this milling system is especially dedicated to 3D geometries, chamfers, pockets and other deep cavities.



Benefits

- high material removal within a short time
- makes it easier for you to mill deep cavities quickly
- better surface quality thanks to the optimized chip removal by our 3D chip tray
- longer service life of the plate thanks to embedded plate seat
- longer service life of the beam due to ideal ratio of hardness and toughness

Sizes

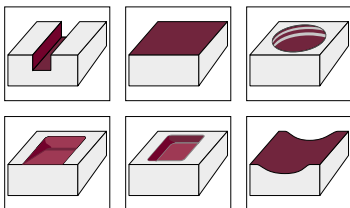
M: Ø 16 - 52 mm

> Site 4

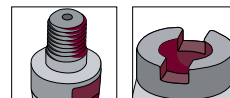
Features

- equipped with an internal coolant supply
- two cutting edges per insert
- suitable for wet and dry processing
- one insert quality each for soft and hard machining with different coatings
- high-precision ground indexable inserts
- high number of teeth on smallest tool diameter
- can replace solid carbide tools in some applications

Processing types



Connectivity



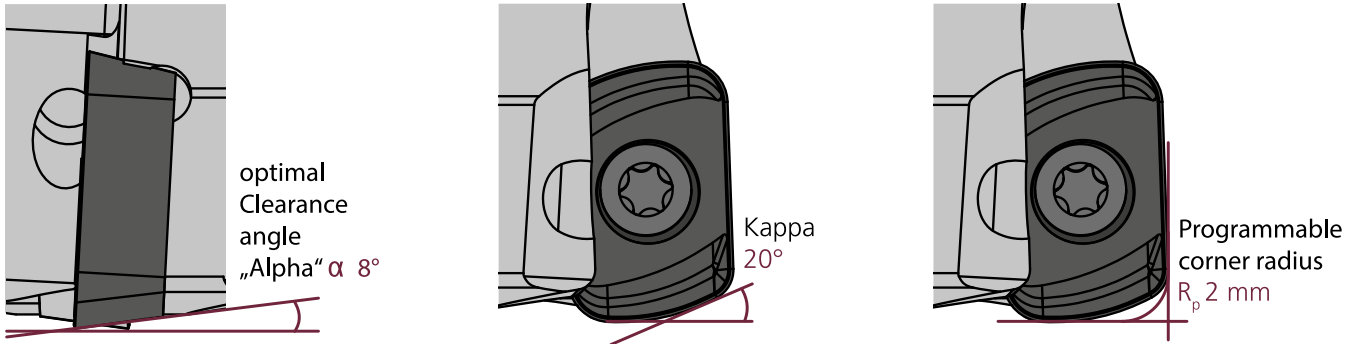
Video in practice SLOTWORX® HP M

Find more product videos on:
youtube.de/pokolmknowhow



SLOTWORX® HP M in detail

Geometry of mold and insert - guarantor for highest performance and efficiency



Technical information

For CAD/CAM programming of the tool geometry, a milling cutter with theoretical corner radius (r_p) 2.0 mm is to be used. The unchipped area of residual material (t) is therefore 0.46 mm. Please use „ d_p “ for tool length measurement.

SLOTWORX® - Breakdown of order number

Tool

HP06-016-E08-02

- Tool type: HP - SLOTWORX®
- Insert size: l/d mm
- Nominal diameter: Ø mm [d_1]
- Type of connection: A - Slip-on connector, E - Screw-in connection
- No. of teeth

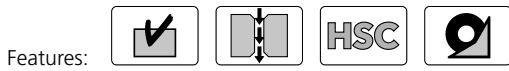
Inserts

HP06-8058-HF-RP

- Tool type: HP - SLOTWORX®
- Insert size: l/d mm
- Grade description
- High Feed
- Chip groove: R - heavy roughing application
- Material: P - steel, M - stainless steel, K - cast iron, N - non-ferrous materials, S - high-temperature alloys, H - hardened steel

SLOTWORX® HP

HP | Size M - Ø 16 - 52 mm



Insert Milling Cutter	Order No.	d ₁	l	r _p *	l ₃	l ₂	l ₁	d ₂	d ₃	z
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Screw-in cutter										
	HP06-016-E08-02	16	9.95	2	25	1.8	–	M 8	13.8	2
	HP06-020-E10-03	20	9.95	2	30	1.8	–	M 10	18	3
	HP06-025-E12-03	25	9.95	2	35	1.8	–	M 12	21	3
	HP06-025-E12-04	25	9.95	2	35	1.8	–	M 12	21	4
	HP06-032-E16-04	32	9.95	2	40	1.8	–	M 16	29	4
	HP06-032-E16-05	32	9.95	2	40	1.8	–	M 16	29	5
	HP06-035-E16-05	35	9.95	2	40	1.8	–	M 16	29	5

Shell type milling cutter										
	HP06-042-A16-05	42	9.95	2	40	1.8	–	16	35	5
	HP06-042-A16-07	42	9.95	2	40	1.8	–	16	35	7
	HP06-052-A22-05	52	9.95	2	50	1.8	–	22	40	5
	HP06-052-A22-07	52	9.95	2	50	1.8	–	22	40	7

The accessories opposite can be used for all sizes	Accessories	25 550	Torx-Screw	> Site 7
		08 500	Torx-Wrench	> Site 7
		SG25	TORQUE CliX-S-Handle	> Site 7
		TG55	TORQUE CliX-T-Handle	> Site 7
		DM09	Torque adapter 0.9 Nm	> Site 7
		T08-R	Pack of 6 Bits (Torx)	> Site 7

Indexable insert	Order No.	DIN description	Carbide Grade	Coating	l	s	r	M
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	HP06-8058-HF-RP	EPHT 0603	P30	PATG	9.95	3.2	8	M 2.5
	HP06-8068-HF-RK	EPHT 0603	K10	PVTi	9.95	3.2	8	M 2.5




	HP06-8052-HF-RP	EPEW 0603	P30	PATG	9.95	3.2	8	M 2.5
	HP06-8062-HF-RK	EPEW 0603	K10	PVTi	9.95	3.2	8	M 2.5

* Angle radius to be programmed

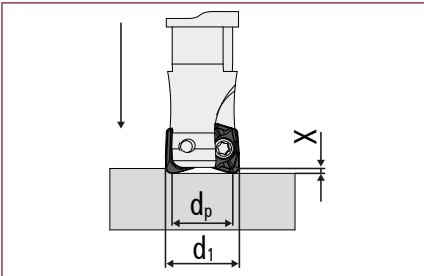
Feed per tooth (fz) | d.o.c. (ap)

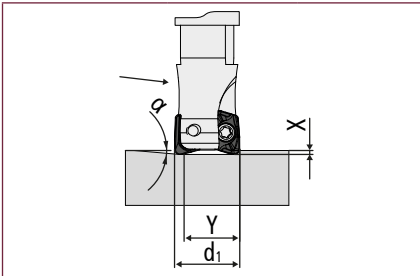
Surface Material							
Carbide Grade Coating	Feed per tooth d.o.c.	Steel	Stainless Steel	Cast iron	non-ferrous materials	high-temperature alloys	hardened steel
P30 PATG	f _z (mm) a _p (mm)	0.8 - 1.5 0.4 - 1	-	-	-	-	-
K10 PVTi	f _z (mm) a _p (mm)	-	-	1.2 - 1.8 0.4 - 1.25	-	-	0.5 - 1 0.15 - 0.4

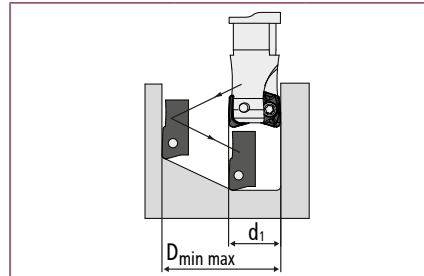
Cutting speed (Vc in m/min)

Surface Material							
Carbide Grade Coating	Application	Steel	Stainless Steel	Cast iron	non-ferrous materials	high-temperature alloys	hardened steel
P30 PATG	roughing semifinishing finishing	 90 135 180 100 145 190 -	-	-	-	-	-
K10 PVTi	roughing semifinishing finishing	-	-	 90 135 180 100 145 190 -	-	-	 65 80 95 75 85 100 -

Extended operation data

Axial immersion in full		
		
Milling Cutter Ø d1	d _p	X _{max} mm
16	7.16	0.7
20	11.16	0.7
25	16.16	0.7
32	23.16	0.7
35	26.16	0.7
42	33.16	0.7
52	43.16	0.7

Oblique immersion in full		
		
Milling Cutter Ø d1	α°	y mm
16	4	12
20	3	16
25	2.5	21
32	1.7	28
35	1.5	31
42	1.2	38
52	1	48

Circular milling		
		
Milling Cutter Ø d1	D _{min} mm	D _{max} mm
16	25	32
20	33	40
25	43	50
32	57	64
35	63	70
42	77	84
52	97	104

Examples of applications I

Processing task in 1.2738 HH

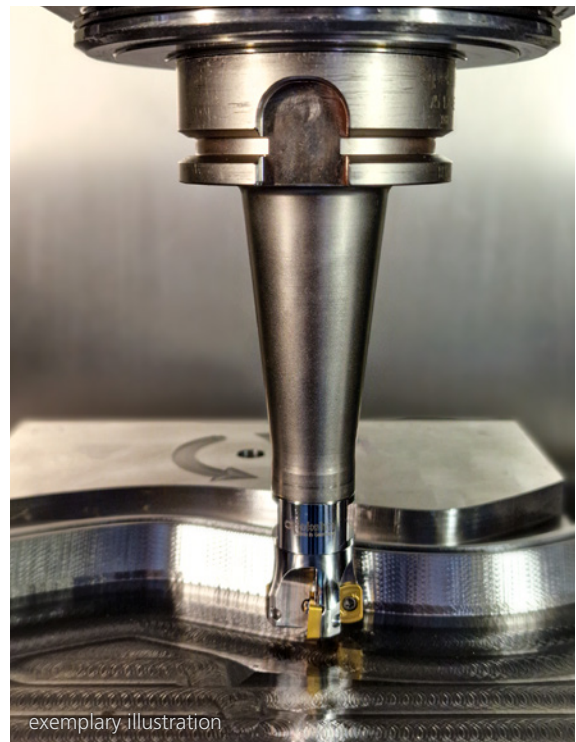
Milling Cutter:	HP06-035-E16-05
D_c (Nominal diameter):	35 mm
Cooling:	Dry
Cutting Material:	P30
Indexable insert:	HP06-8052-HF-RP
Coating:	PATG
V_c (Speed):	176 m/min
n (revolutions):	1600 min ⁻¹
f_z (feed per tooth):	0.938 mm
V_f (feed rate):	7500 mm/min
a_p (depth of cut):	0.6 mm
a_e (width of cut):	22 - 35 mm
Tool life:	> 150 min
Material:	1.2738 HH



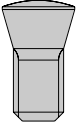




Examples of applications II

Processing task in 1.2312

Milling Cutter:	HP06-035-E16-05
D_c (Nominal diameter):	35 mm
Cooling:	Dry
Cutting Material:	P30
Indexable insert:	HP06-8052-HF-RP
Coating:	PATG
V_c (Speed):	176 m/min
n (revolutions):	1600 min ⁻¹
f_z (feed per tooth):	0.938 mm
V_f (feed rate):	7500 mm/min
a_p (depth of cut):	0.6 mm
a_e (width of cut):	22 - 35 mm
Tool life:	> 140 min
Material:	1.2312



Pokolm original accessories

Accessories	Order No.	Description	Measurements			
Torx-Screw						
	25 550	Torx-Screw M 2.5 L 5.4 T 8 0.9 Nm	M 2.5	L 5.4	T 8	0.9 Nm
Torx-Wrench						
	08 500	Torx-Wrench T 8	-	-	T 8	-
Torque screwdriver and accessories Handes						
	SG25	TORQUE CLiX S-Handle	-	-	-	-
	TG55	TORQUE CLiX T-Handle	-	-	-	-
Torque screwdriver and accessories Torque adapters						
	DM09	Torque adapters 0.9 Nm	-	-	-	0.9 Nm
Torque screwdriver and accessories Torx bits						
	T08-R	Pack of 6 Bits (Torx)	-	-	T08	-

We are there for you!

For questions or a individual advice please contact our technical field service.



Service Hotline: +49 5247 9361-0

For further information please request our catalogs:



Milling Cutter Bodies



Arbor and Adapter Systems



Solid Carbide End Mills



FL-346-EN

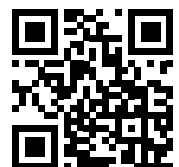
Pokolm Frästechnik GmbH & Co. KG

Adam-Opel-Straße 5
33428 Harsewinkel | Germany

Phone: +49 5247 9361-0

Telefax: +49 5247 9361-99

info@pokolm.de | www.pokolm.de



www.pokolm.de