NEW ROUND INSERTS FOR STEEL MACHINING



- new reference for roughing tool steels with medium strength (up to 1.100 N/mm²)
- highest process reliability at extreme high feed rates with medium to big depth of cut
- excellent performance at cutting speeds from 150 up to 180 m/min
- → designed for machining with long overhang and heavy interrupted conditions.
- extra thick [8µm] and wear resistant PVD coating, brand name "PVGO"
- Video clip: round inserts for steel machining in action:



Indexable insert	nue no.							
	Catalos	ISO Standard	Carbide Grade	Coating	d	s	/ r	M
	02 10 846	RDMX1003M0 SN	P 40	PVGO	10	3,18	5	M 3,5
	03 12 846K	RDMX12T3M0 SN	P 40	PVGO	12	3,97	6	M 3,5

Pokolm milling cutter bodies for round inserts

A wide range of different diameters for round inserts alone, plus numerous additional geometries and sizes – combined with two different rake angles in our milling cutter bodies – provide optimum cutting conditions for almost every application you can think of.

The patent-protected, specially developed insert seats in our milling cutter bodies absorb all axial and radial milling forces, because the insert is not only fixed with a Torx® screw, it is also supported by being embedded into the cutter body. Compared to open insert seats, our incorporated insert seats allow stronger teeth, clearly improving the rigidity of our milling cutters. This results in longer tool life and allows higher feed rates. Additional double clamps provide excellent support, even under extreme cutting conditions.

Our chip spaces were specially designed for exceptionally easy chip flow, thus protecting both body and workpiece from damage. Specially selected materials and extra-hard coatings offer higher tensile strength and heat resistance, making Pokolm tools and arbor systems unbeatable in durability and long-life-cycles.





TECHNICAL INFORMATION

Cutting speed V_c in m/min | Feed per tooth (f_z) | d.o.c. (a_p)

Material		`	.:u5		t lates		,tt)
	Applicatio	Insert	radit	Machinif	NO PAOPVCC	b Feedbertoo	PAO PUGO
Gtool		-	10	roughing	120-200	f _z (mm)	0.2 - 1.0
Steel	∀ ∀	5	10	finishing	200-350	a _p (mm)	0.15 - 1.5
Cost iven			10	roughing	100-200	f _z (mm)	0.2 - 0.8
Cast Iron		5	10	finishing	200-350	a _p (mm)	0.15 - 1.2
Stool		6	12	roughing	120-200	f _z (mm)	0.25 - 1.0
Sieer	∀	0	12	finishing	200-350	a _p (mm)	0.2 - 2.0
Castivan		6	12	roughing	100-200	f _z (mm)	0.25 - 0.8
Cast Iron				finishing	200-350	a _p (mm)	0.2 - 1.8

Application field - PVD coated milling grades

Carbide Grade Coating	Description	Application area
P25 PVTi	850	Stable conditions at high feed rates.
P40 PVGO	846	Dry machining in all conditions. Special at high feed rates and interrupt cut.
P40 PVTi	840	Weak materials at medium cutting speeds and high feed rates.

Random test - heavy interrupted

	Pokolm 03 12 846K	Competetive product		
Component	400 x 300 x 150 mm	400 x 300 x 150 mm		
Material	1,2312	1,2312		
Cutter body	52 310/7	52 mm diam.		
Arbor	50 22 710	50 22 710		
ISO Standard	RDMX12T3M0 SN	RDMW12T3M0 SN		
V _c (speed)	155 m/min	155 m/min		
V _f (feed rate)	3500 mm/min	3500 mm/min		
Machining time	120 min	120 min		
Life length	420 mm	420 mm		
Chip volume	109 cm³/min	109 cm³/min		

A direct comparison confirms considerable lower wear of the Pokolm indexable round inserts.

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Peristar









Pokolm 03 12 846K

Wear pattern





Competetive product