



# CUTTERS FOR INSERTS WITH 4 CUTTING EDGES

diam. 10 mm - 20 mm

The special insert geometry of these tools makes it ideally suited for finishing and pre-finishing operations on modern high-speed milling machines with 5 axes.

The advantage of the insert with 4 cutting edges is: it is reversible, thus it doubles its productivity.

**Optimum cutting conditions can only be achieved with an approach angle of spindle.**

## Milling cutter bodies

Catalogue no.	Dimensions										Accessories	Features
	d <sub>1</sub>	d	r	l <sub>3</sub>	l <sub>2</sub>	l <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	z			

## Threaded shank end mill bodies

Diagram	Dimensions										Accessories	Features
	d <sub>3</sub>	d <sub>2</sub>	d	r	l <sub>3</sub>	l <sub>2</sub>	l <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	z		
	10 210 M6	10	10	5	28.5	-	-	M 6	9.75	2	A, B, C, D, E	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
	12 210 M6	12	12	6	28.7	-	-	M 6	11.5	2	A, B, C, D, E	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
	16 210	16	16	8	36.4	-	-	M 8	13.8	2	A, B, C, D, E	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
	20 210	20	20	10	36.9	-	-	M 10	18	2	A, B, C, D, E	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>

## Indexable inserts

Diagram	Catalogue no.	DIN Specification	Carbide Grade	Coating	Dimensions			
					d	s	r	M
	10 10 860	ROHX 1002	K05	PVTi	10	2.5	5	M 3.5
	10 12 860	ROHX 1203	K05	PVTi	12	3	6	M 4.0
	10 16 860	ROHX 16T3	K05	PVTi	16	4	8	M 5.0
	10 20 860	ROHX 2004	K05	PVTi	20	5	10	M 5.0

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

Material	Quality Coating	Feed per tooth   d.o.c.	Material					
			steel	stainless steel	cast iron	non-ferrous materials	high-temperature alloys	hardened steel
<b>d=10 mm</b>								
K05 PVTi	f <sub>z</sub> (mm)		0,1	0,1	0,1	0,1	0,1	0,1
	a <sub>p</sub> (mm)		0,1	0,1	0,1	0,1	0,1	0,1
<b>d=12 mm</b>								
K05 PVTi	f <sub>z</sub> (mm)		0,12	0,12	0,12	0,12	0,12	0,12
	a <sub>p</sub> (mm)		0,1	0,1	0,1	0,1	0,1	0,1
<b>d=16 mm</b>								
K05 PVTi	f <sub>z</sub> (mm)		0,16	0,16	0,16	0,16	0,16	0,16
	a <sub>p</sub> (mm)		0,1	0,1	0,1	0,1	0,1	0,1
<b>d=20 mm</b>								
K05 PVTi	f <sub>z</sub> (mm)		0,2	0,2	0,2	0,2	0,2	0,2
	a <sub>p</sub> (mm)		0,1	0,1	0,1	0,1	0,1	0,1

## Cutting speed (Vc in m/min)

Material		steel			stainless steel			cast iron			non-ferrous materials			high-temperature alloys			hardened steel		
Quality Coating	Application																		
K05 PVTi	roughing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	pre finishing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	finishing	▽ 150	250	350	▽ 100	175	250	▽ 150	200	250	▽ 100	450	800	▽ 35	43	50	▽ 35	143	250

▽ major application    ▽ minor application

▽ ▽ roughing

▽ ▽ pre-finishing

▽ ▽ finishing