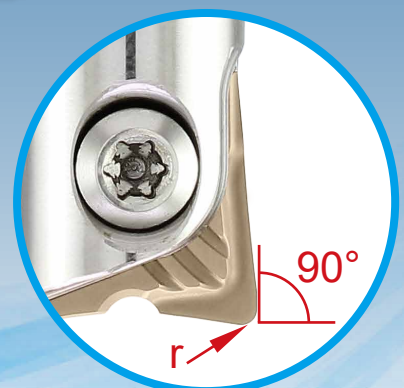
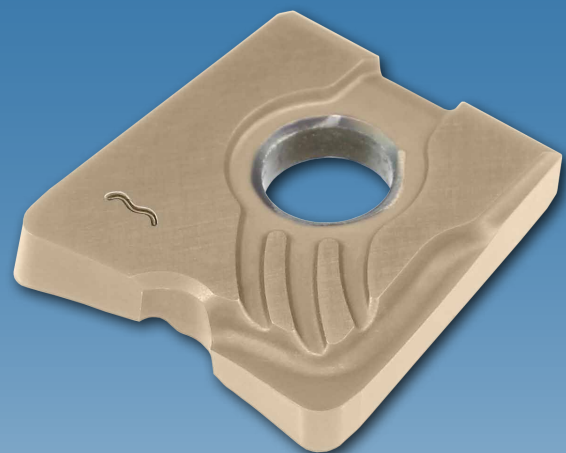


CGWV Indexable Milling Tools

刃先交換式エンドミル

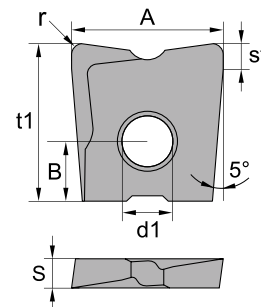
- For finishing to medium milling.
仕上げ加工～中加工用
- Various corner radii available for copy or shoulder milling.
倣い加工又は肩削り加工で使用できる様々なコーナRを提供します



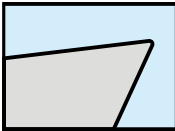
CGWV Series 刃先交換式エンドミル

Insert Specifications 仕様


Insert	Dimensions (mm)						
	A	B	t1	st	S	r	d1
WPBC1605	16	6	16	3	3	0.5	5
WPBC1610	16	6	16	3	3	1.0	5
WPBC1613	16	6	16	3	3	1.3	5
WPBC1620	16	6	16	3	3	2.0	5
WPBC1630	16	6	16	3	3	3.0	5



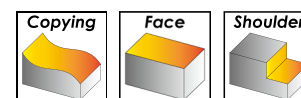
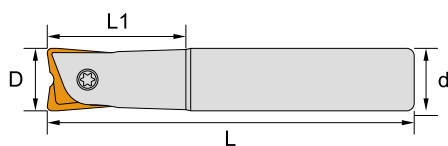
Insert Geometry チップブレーカー

Chipbreaker チップブレーカー	Application 加工特性
 MM	<p>Sharp geometry design for finishing to medium cutting in carbon steel, alloy steel, stainless steel and difficult-to-cut material.</p> <p>シャープなチップブレーカー設計は仕上げ加工～中加工で一般鋼、ステンレス鋼と耐熱合金に適する</p>

Insert Designation チップ型番

Insert	Order No. 注文型番	Designation 型番	Continuous 連続切削	Interrupted 断続切削	Working Material					
					P	M	K	N	S	H
	IWPBC1605MM33TX	WPBC1605-MM-CX33TX	✓		●	●	●		○	●
	IWPBC1605MM43TX	WPBC1605-MM-CX43TX		✓	●	●	●		○	
	IWPBC1610MM33TX	WPBC1610-MM-CX33TX	✓		●	●	●		○	●
	IWPBC1610MM43TX	WPBC1610-MM-CX43TX		✓	●	●	●		○	
	IWPBC1613MM33TX	WPBC1613-MM-CX33TX	✓		●	●	●		○	●
	IWPBC1620MM33TX	WPBC1620-MM-CX33TX	✓		●	●	●		○	●
	IWPBC1630MM33TX	WPBC1630-MM-CX33TX	✓		●	●	●		○	●

CGWV - Milling tools 刃先交換式エンドミル



Insert Brand 推奨チップ: Winstar, LMT tools, ...

Order No. 注文型番	D	L1	L	d	T	Inserts	Screw	Wrench	Stock
ICGWVE016150	16	35	150	16	2	WPBC16..	MGR5016	ETL20	●
ICGWVE016200	16	35	200	16	2				●

● stock ○ by inquiry

CGWV Series 刃先交換式エンドミル

Recommended Cutting Conditions 推奨切削条件

for Copy milling 倣い加工用

Working Material	Vc	fz	ap	ae
Carbon Steel / Alloy Steel	170 ~ 270	0.20 ~ 0.25	≤ 0.03D	≤ 0.03D
Stainless Steel	170 ~ 190	0.20 ~ 0.25	≤ 0.03D	≤ 0.03D
Cast Iron	170 ~ 230	0.20 ~ 0.25	≤ 0.04D	≤ 0.04D
High Temperature Alloy	50 ~ 80	0.20 ~ 0.25	≤ 0.02D	≤ 0.02D
Hardened Steel	80 ~ 210	0.15 ~ 0.25	≤ 0.02D	≤ 0.02D

for Shoulder milling 肩削り加工用

Working Material	Vc	fz	ap	ae
Carbon Steel / Alloy Steel	120 ~ 190	0.20 ~ 0.25	0.1 ~ 3	0.1D ~ 1D
Stainless Steel	120 ~ 135	0.20 ~ 0.25	0.1 ~ 3	0.1D ~ 1D
Cast Iron	120 ~ 160	0.20 ~ 0.25	0.1 ~ 3	0.1D ~ 1D
High Temperature Alloy	35 ~ 55	0.20 ~ 0.25	0.1 ~ 0.5	0.1D ~ 1D
Hardened Steel	55 ~ 145	0.15 ~ 0.25	0.1 ~ 0.5	0.1D ~ 1D

※ D = cutter cutting diameter D = 切削径

CF21 holder can be use WPBC16 or WP3216 inserts

CF21ホルダーはWPBC16又はWP3216インサートを使用できます

