

CF
Series

Indexable Copy Milling

仿形銑削系列

Suitable for mould & die machining and steel profiling !!

適用於模具加工與一般鋼成形加工 !!



● **CF21 Series :**

Copy milling for medium & finishing

適合精加工與中加工

WP32 Inserts : 6R, 8R, 10R, 12.5R & 16R

WP32 刀片尺寸 : 6R, 8R, 10R, 12.5R & 16R

● **CF22 Series :**

Copy milling for roughing

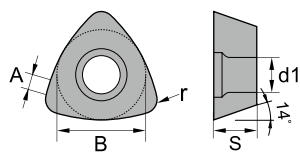
適合粗加工

WP26 Inserts : 14R & 25R

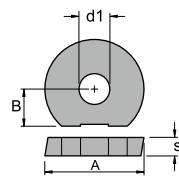
WP26 刀片尺寸 : 14R & 25R

W190902EC

Insert Specification 刀片規格



WP26..



WP32..

Insert 刀片	Dimensions (mm)				
	A	B	S	r	d1
WP26339R14	-	9.52	3.97	1.2	4.4
WP26379R25	1.1	13	5.56	2.0	5.5

Insert 刀片	Dimensions (mm)				
	A	B	S	r	d1
WP3212	12	6	2.5	-	5
WP3216	16	6	3	-	5
WP3220	20	6	3	-	5
WP3225	25	9	4	-	6
WP3232	32	10	5	-	8

Insert Geometry 刀片幾何

Shape 形狀	Chipbreaker 斷屑槽	Application 特性	
 WP32..		SM	New geometry design for finishing cutting in hardened steel and difficult-to-cut material. 全新的刀口設計，適用於硬化鋼及難切削材的精加工應用
 WP32..		SG	Sharp geometry design for finishing cutting in steel, stainless steel and cast iron. 鋒利的刀口設計，適用於鋼件、不鏽鋼，及鑄鐵的精加工應用
 WP32..		MM	New geometry design for medium cutting in hardened steel and difficult-to-cut material. 全新的刀口設計，適用於硬化鋼及難切削材的中加工應用
 WP32..		MG	Low cutting force for medium cutting in steel, stainless steel and cast iron. 低切削阻力的刀口設計，適用於鋼件、不鏽鋼、鑄鐵的中加工應用
 WP26..		RG	Strong geometry design for rough cutting in steel, alloy steel and hardened steel. 強壯的刀口設計，適用於鋼件、合金鋼、預應鋼的粗加工應用

Insert Grade 刀片材質等級

Grade Type 材質類別	Machining Application 加工特性	Industry area 產業應用範圍
CX12HS	- Continuous finishing machining 適用於連續穩定精加工 - For Hardened steel 適合高硬度鋼銑削	- Die and mould 模具產業 - Hardened parts 硬質零件
CX22HS	- Continuous semi-finishing machining 適用於連續穩定輕加工 - For Hardened steel and Cast Iron 適合高硬度鋼和鑄鐵銑削	- Die and mould 模具產業 - Hardened parts 硬質零件
CX32HS	- Medium machining 適用於中加工 - For Carbon steel, Alloy steel and Stainless steel 適合碳鋼，合金鋼和不鏽鋼銑削	- Auto parts 汽車零件 - Machinery parts 機械零件
CX53TS	- Roughing or interrupted machining 適用於粗加工或斷續加工 - For Stainless steel and High temperature alloy 適合不鏽鋼和高溫合金銑削	- Auto and Machinery parts 汽車和機械零件 - Aircraft parts 航太零件

※ Different grades for various applications are available to select, please contact us for more information.
針對不同的加工應用，本公司提供不同的材質等級供選擇。如果您有需要，請與我們連繫。

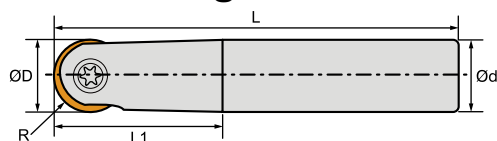
Order Code 刀片訂購碼

Insert 刀片	Order No. 訂購編碼	Designation 名 稱	Working Material					
			P	M	K	N	S	H
	IWP26314RG22HS	WP26339R14-RG-CX22HS	●	○	●		○	●
	IWP26314RG32HS	WP26339R14-RG-CX32HS	●	●	●		○	○
	IWP26725RG22HS	WP26379R25-RG-CX22HS	●	○	●		○	●
	IWP26725RG32HS	WP26379R25-RG-CX32HS	●	●	●		○	○
	IWP26725RG53TS	WP26379R25-RG-CX53TS	●	●			●	
	IWP3212SM12HS	WP3212-SM-CX12HS	○	○	○		○	●
	IWP3212SM22HS	WP3212-SM-CX22HS	●	○	●		○	●
	IWP3216SM12HS	WP3216-SM-CX12HS	○	○	○		○	●
	IWP3216SM22HS	WP3216-SM-CX22HS	●	○	●		○	●
	IWP3220SM12HS	WP3220-SM-CX12HS	○	○	○		○	●
	IWP3220SM22HS	WP3220-SM-CX22HS	●	○	●		○	●
	IWP3225SM12HS	WP3225-SM-CX12HS	○	○	○		○	●
	IWP3225SM22HS	WP3225-SM-CX22HS	●	○	●		○	●
	IWP3232SM22HS	WP3232-SM-CX22HS	●	○	●		○	●
	IWP3212SG22HS	WP3212-SG-CX22HS	●	○	●		○	●
	IWP3216SG22HS	WP3216-SG-CX22HS	●	○	●		○	●
	IWP3220SG22HS	WP3220-SG-CX22HS	●	○	●		○	●
	IWP3225SG22HS	WP3225-SG-CX22HS	●	○	●		○	●
	IWP3212MM22HS	WP3212-MM-CX22HS	●	○	●		○	●
	IWP3216MM22HS	WP3216-MM-CX22HS	●	○	●		○	●
	IWP3220MM22HS	WP3220-MM-CX22HS	●	○	●		○	●
	IWP3225MM22HS	WP3225-MM-CX22HS	●	○	●		○	●
	IWP3232MM22HS	WP3232-MM-CX22HS	●	○	●		○	●
	IWP3212MG22HS	WP3212-MG-CX22HS	●	○	●		○	●
	IWP3216MG22HS	WP3216-MG-CX22HS	●	○	●		○	●
	IWP3220MG22HS	WP3220-MG-CX22HS	●	○	●		○	●
	IWP3225MG22HS	WP3225-MG-CX22HS	●	○	●		○	●

Recommended Cutting Conditions

Working Material	Vc	fz					ap
		WP3212	WP3216	WP3220	WP3225	WP3232	
Carbon Steel (HB85-225)	150 ~ 300	0.20	0.20	0.25	0.25	0.30	$\leq 0.03 \times \varnothing D$
Stainless 300 Series	100 ~ 250	0.20	0.20	0.25	0.25	0.30	$\leq 0.03 \times \varnothing D$
Cast Iron (HB140-220)	90 ~ 350	0.25	0.30	0.30	0.35	0.40	$\leq 0.04 \times \varnothing D$
Hardened steel	100 ~ 350	0.10	0.125	0.15	0.20	0.25	$\leq 0.02 \times \varnothing D$

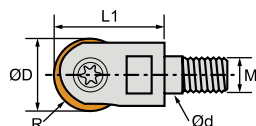
CF21E - Milling tools



Order No. 訂購編碼	R	D	L1	L	d	T	Inserts	Screw	Wrench
ICF21E302012150	6R	12	32	150	12	2	WP3212 ..	IMGR5012	ITK20
ICF21E302012200	6R	12	58	200	16	2			
ICF21E302016150	8R	16	36	150	16	2	WP3216..	IMGR5016	ITK20
ICF21E302016200	8R	16	36	200	16	2			
ICF21E302016201	8R	16	65	200	20	2	WP3220..	IMGR5020	ITK20
ICF21E302020150	10R	20	45	150	20	2			
ICF21E302020200	10R	20	45	200	20	2			
ICF21E302020201	10R	20	76	200	25	2			
ICF21E302020250	10R	20	76	250	25	2	WP3225..	IMGR6025	ITK30
ICF21E302025200	12.5R	25	45	200	25	2			
ICF21E302025250	12.5R	25	45	250	25	2			
ICF21E302025201	12.5R	25	98	200	32	2			
ICF21E302025251	12.5R	25	98	250	32	2			
ICF21E302032200	16R	32	50	200	32	2	WP3232..	IMGR8030	ITK30
ICF21E302032250	16R	32	50	250	32	2			
ICF21E302032300	16R	32	50	300	32	2			

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CF21M - Modular tools



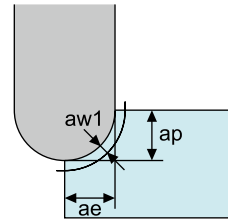
Order No. 訂購編碼	R	D	L1	d	M	T	Inserts	Screw	Wrench
ICF21M302012060	6R	12	22	6.5	M6	2	WP3212 ..	IMGR5012	ITK20
ICF21M302012080	6R	12	30	8.5	M8	2			
ICF21M302016080	8R	16	28	8.5	M8	2	WP3216 ..	IMGR5016	ITK20
ICF21M302020100	10R	20	30	10.5	M10	2	WP3220 ..	IMGR5020	ITK20
ICF21M302025120	12.5R	25	40	12.5	M12	2	WP3225 ..	IMGR6025	ITK30
ICF21M302032160	16R	32	43	17	M16	2	WP3232 ..	IMGR8030	ITK30

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Recommended Cutting Conditions

for WP26339R14

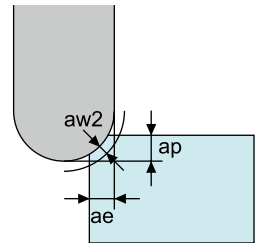
Working Material	Vc	aw1 = (0.5D, 0.5D)	aw2 = (0.25D, 0.25D)
		fz	
Carbon Steel (HB85-225)	120 ~ 250	0.16 ~ 0.30	0.2 ~ 0.39
Stainless 300 Series	100 ~ 180	0.08 ~ 0.14	0.1 ~ 0.18
Cast Iron (HB140-220)	120 ~ 250	0.16 ~ 0.30	0.2 ~ 0.39
High temp. & Titanium alloy	40 ~ 100	0.08 ~ 0.12	0.1 ~ 0.18



$$aw1 = (ap, ae)$$

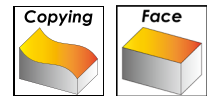
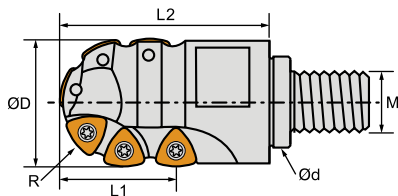
for WP26379R25

Working Material	Vc	aw1 = (0.5D, 0.5D)	aw2 = (0.25D, 0.25D)
		fz	
Carbon Steel (HB85-225)	120 ~ 250	0.20 ~ 0.36	0.26 ~ 0.46
Stainless 300 Series	100 ~ 180	0.08 ~ 0.14	0.10 ~ 0.18
Cast Iron (HB140-220)	120 ~ 250	0.20 ~ 0.36	0.26 ~ 0.46
High temp. & Titanium alloy	40 ~ 100	0.08 ~ 0.12	0.10 ~ 0.18



$$aw2 = (ap, ae)$$

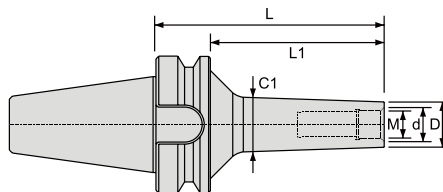
CF22M - Modular tools



Order No. 訂購編碼	R	D	L1	L2	d	M	T	Inserts	Screw	Wrench
ICF22M202025120	12.5R	25	21	42	12.5	M12	2	WP26339R14	ITS4023	ITK15
ICF22M202030120	15R	30	23	50	12.5	M12	2			
ICF22M202032160	16R	32	23	50	17.0	M16	2			
ICF22M202040180	20R	40	38	65	28.0	M18	2	WP26379R25	ITS5007	ITK20
ICF22M202050250	25R	50	45	80	36.0	M25	2			

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BT40/50 - Replaceable Integrated Shank

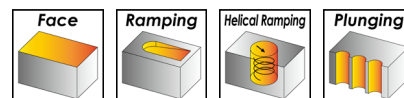
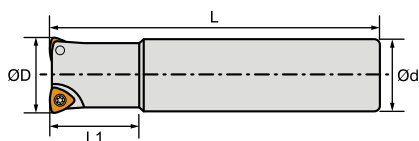


Order No.	d	L	L1	D	C1	M	Arbor Type
IBT40DM08050	8.5	50	23	13	15	M8	BT40
IBT40DM10057	10.5	57	30	18	21	M10	
IBT40DM12080	12.5	80	53	21	25	M12	
IBT40DM16087	17.0	87	60	28	31	M16	
IBT40FMC403060	28.0	60	30	36	40	M18	
IBT40FMC406090	28.0	90	60	36	40	M18	
IBT50FMC5003065	36.0	65	30	48	50	M25	BT50
IBT50FMC50080115	36.0	115	80	48	50	M25	
IBT50FMC50130165	36.0	165	130	48	50	M25	

Recommended Cutting Conditions

Working Material	WP26339R14			WP26379R25		
	Vc	fz	ap	Vc	fz	ap
Carbon Steel (HB85-225)	120 ~ 250	0.4 ~ 1.5	0.4 ~ 1.5	120 ~ 250	0.4 ~ 3.0	0.4 ~ 2.0
Stainless 300 Series	100 ~ 180	0.4 ~ 1.2	0.4 ~ 1.0	100 ~ 180	0.4 ~ 2.0	0.4 ~ 1.4
Cast Iron (HB140-220)	120 ~ 250	0.4 ~ 1.5	0.4 ~ 1.5	120 ~ 250	0.4 ~ 3.0	0.4 ~ 2.0
High temp. & Titanium alloy	40 ~ 100	0.4 ~ 1.0	0.4 ~ 1.0	40 ~ 100	0.4 ~ 1.6	0.4 ~ 1.2

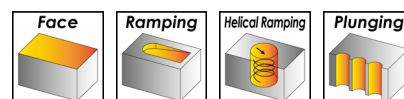
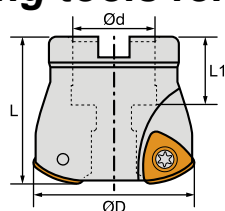
CF23E - Milling tools for high feed face milling



Order No. 訂購編碼	D	L1	L	d	T	Inserts	Screw	Wrench
ICF23E203032150	32	28	150	32	3	WP26339R14	ITS4005	ITK15
ICF23E203035180	35	40	180	32	3			
ICF23E203035230	35	40	230	32	3			
ICF23E204040200	40	40	200	32	4			
ICF23E202040200	40	45	200	32	2	WP26379R25	ITS5002	ITK20
ICF23E203050200	50	45	200	32	3			

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CF23F - Milling tools for high feed face milling



Order No. 訂購編碼	D	L1	L	d	T	Inserts	Screw	Wrench
ICF23F203050220	50	21	50	22	3	WP26379R25	ITS5002	ITK20
ICF23F204063220	63	21	50	22	4			
ICF23F205080270	80	23	50	27	5			
ICF23F206100320	100	26	50	32	6			
ICF23F207125400	125	38	63	40	7			
ICF23F208160400	160	38	63	40	8			

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