

Application Range

Internal grooving, profiling, copying, threading and boring from $\varnothing 8\text{mm} \sim \varnothing 16\text{mm}$

Features

- 3 Insert geometries (and multiple sizes) can be used in one holder.
- Choice of steel shank holder or carbide shank for reduced vibration in deep bores.
- Ground insert for high precision machining.
- Strong pocket design to stop insert rotation.



Recommended Cutting Conditions

Workpiece	Minimum diameter for machining ($\varnothing\text{Dmm}$)				
		$\varnothing 8$	$\varnothing 11$	$\varnothing 14$	$\varnothing 16$
Carbon Steel	vc (m/min)	30~80	30~100	30~100	30~100
	fn (mm/rev)	0.01~0.04	0.01~0.05	0.02~0.05	0.02~0.06
Alloy Steel	vc (m/min)	30~80	30~100	30~100	30~100
	fn (mm/rev)	0.01~0.02	0.01~0.04	0.02~0.04	0.02~0.05
Cast Iron	vc (m/min)	30~80	30~100	30~100	30~100
	fn (mm/rev)	0.01~0.05	0.01~0.05	0.02~0.05	0.02~0.05
Non-ferrous Alloy	vc (m/min)	70~150	100~150	100~150	100~150
	fn (mm/rev)	0.02~0.06	0.02~0.06	0.02~0.06	0.02~0.06

*Notes

- If chattering occurs, please reduce the cutting speed and feed.
- To find the optimum speed and feed, please increase from the lowest recommendation gradually.
- In groove depths over 1mm, please step the feed rate.



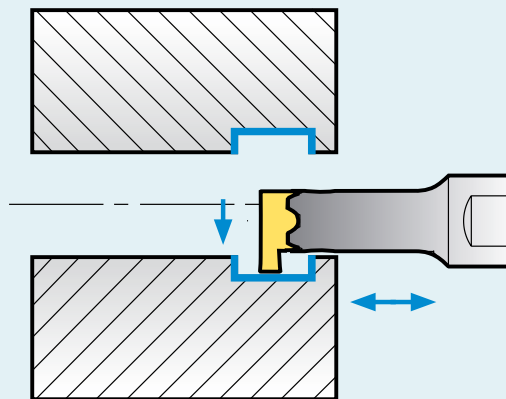
Grooving



Copying



Threading

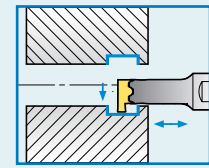
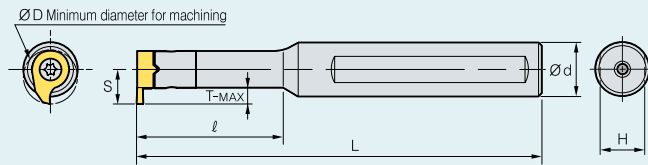


**Fine Tool
FTIH**



FTF, FTG, FTT

For grooving, turning, relieving, profiling and aluminium machining



Designation		£	ØD	Ød	L	ℓ	T-MAX	H	S	INSERTS FTG - Grooving FTF - Copying FTT - Threading	SCREW	WRENCH
FTIH	08312S	£45.00	8	12	80	24	1	10	4.8	FTG08***R FTF08***R FTT08***R	PTKA02508	TW08P
	08312C	£75.00	8	12	80	24	1	10	4.8			
	08412C	£75.00	8	12	90	32	1	10	4.8			
	08512C	£75.00	8	12	100	40	1	10	4.8			
	11312S	£45.00	11	12	95	33	2.3	11	6.7	FTG11***R FTF11***R FTT11***R	PTKA03510	TW15P
	11312C	£75.00	11	12	95	33	2.3	11	6.7			
	11412C	£75.00	11	12	110	44	2.3	11	6.7			
	11512C	£75.00	11	12	120	55	2.3	11	6.7			
	14312S	£45.00	14	12	100	42	2.8	11	9	FTG14***R FTF14***R FTT14***R	PTKA0412	TW15P
	14312C	£75.00	14	12	100	42	2.8	11	9			
	14412C	£75.00	14	12	110	56	2.8	11	9			
	14512C	£75.00	14	12	130	70	2.8	11	9			
16312S	£45.00	16	12	130	48	4.3	11	10.2	FTG16***R FTF16***R FTT16***R	PTKA0512	TW20P	
16412C	£75.00	16	12	130	64	4.3	11	10.2				
16512C	£75.00	16	12	150	80	4.3	11	10.2				
16316C	£91.00	16	16	130	48	4.3	15	10.2				
16416C	£91.00	16	16	130	64	4.3	15	10.2				
16516C	£91.00	16	16	150	80	4.3	15	10.2				


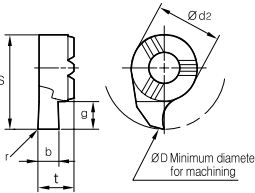
For inserts please see page D71~D72

Shank Type

Steel Shank	Carbide Shank
FTIH08***S	FTIH08***C
FTIH11***S	FTIH11***C
FTIH14***S	FTIH14***C
FTIH16***S	FTIH16***C



FTG SERIES - For Internal Grooving & Boring

Application	Picture	Designation	Price £	Dimensions (mm)						Holders	Configuration					
				ØD	b	s	g	Ød2	t							
GROOVING		FTG 08075R PC230	£8.00	Ø8	0.75	7.8	1.5	6	4.0	FTIH08						
		FTG 08085R PC230	£8.00		0.85		1.5									
		FTG 08095R PC230	£8.00		0.95		1.5									
		FTG 08121R PC230	£8.00		1.21		1.8									
		FTG 08141R PC230	£8.00		1.41		1.8									
		FTG 08171R PC230	£8.00		1.71		1.8									
		FTG 08202R PC230	£8.00		2.02		1.8									
		FTG 11075R PC230	£9.00	Ø11	0.75	10.7	2	8	5.05	FTIH11						
		FTG 11085R PC230	£9.00		0.85		2									
		FTG 11095R PC230	£9.00		0.95		2									
		FTG 11100R PC230	£9.00		1.00		2									
		FTG 11121R PC230	£9.00		1.21		2.8									
		FTG 11152R PC230	£9.00		1.52		2.8									
		FTG 11171R PC230	£9.00		1.71		2.8									
		FTG 11200R PC230	£9.00		2.00		2.8									
		FTG 11202R PC230	£9.00		2.02		2.8									
		FTG 11252R PC230	£9.00		2.52		2.8									
		FTG 11302R PC230	£9.00		3.02		2.8									
		FTG 14100R PC230	£9.00		Ø14		1.00					13.5	2	9	6.0	FTIH14
		FTG 14121R PC230	£9.00				1.21						4.3			
		FTG 14141R PC230	£9.00	1.41		4.3										
		FTG 14171R PC230	£9.00	1.71		4.3										
		FTG 14200R PC230	£9.00	2.00		4.3										
		FTG 14252R PC230	£9.00	2.52		4.3										
		FTG 16100R PC230	£10.00	Ø16	1.00	15.7	2	11	6.0	FTIH16						
		FTG 16121R PC230	£10.00		1.21		4.6									
		FTG 16141R PC230	£10.00		1.41		4.6									
		FTG 16171R PC230	£10.00		1.71		4.6									
FTG 16200R PC230	£10.00	2.00	4.6													
FTG 16202R PC230	£10.00	2.02	4.6													
FTG 16302R PC230	£10.00	3.02	4.6													
FTG 16402R PC230	£10.00	4.02	4.6													


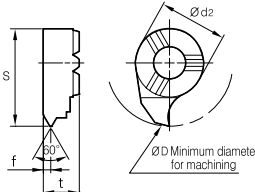
For holders please see page D70

FTF SERIES - For Internal Copying & Profiling

Application	Picture	Designation	Price £	Dimensions (mm)						Holders	Configuration	
				ØD	b	r	S	g	Ød2			t
COPYING & PROFILING		FTF 0808R PC230	£8.00	Ø8	0.8	0.4	7.75	1.3	5.9	4.0	FTIH08	
		FTF 0812R PC230	£8.00		1.2	0.6						
		FTF 0818R PC230	£8.00		1.8	0.9						
		FTF 1108R PC230	£9.00	Ø11	0.8	0.4	10.7	2.6	8	5.05	FTIH11	
		FTF 1112R PC230	£9.00		1.2	0.6						
		FTF 1118R PC230	£9.00		1.8	0.9						
		FTF 1120R PC230	£9.00		2.0	1.0						
		FTF 1130R PC230	£9.00	3.0	1.5							
		FTF 1412R PC230	£9.00	Ø14	1.2	0.6	13.5	4.3	9	6.0	FTIH14	
		FTF 1418R PC230	£9.00		1.8	0.9						
		FTF 1420R PC230	£9.00		2.0	1.0						
		FTF 1422R PC230	£9.00		2.2	1.1						
		FTF 1430R PC230	£9.00	3.0	1.5							
		FTF 1618R PC230	£10.00	Ø16	1.8	0.9	15.7	4.6	11	6.0	FTIH16	
		FTF 1622R PC230	£10.00		2.2	1.1						
		FTF 1630R PC230	£10.00		3.0	1.5						
FTF 1640R PC230	£10.00	4.0	2.0									

For holders please see page D70

FTT SERIES - For Internal Threading

Application	Picture	Designation	Price £	Dimensions (mm)					Holders	Configuration
				ØD	Pitch	S	Ød2	t		
THREADING		FTT 080515R-MPC230	£8.00	Ø8	0.5~1.5	7.8	6	4.0	FTIH08	
		FTT 110525R-MPC230	£9.00	Ø11	0.5~2.5	10.7	8		FTIH11	
		FTT 141025R-MPC230	£9.00	Ø14	1.0~2.5	13.5	9	6.0	FTIH14	
		FTT 161025R-MPC230	£10.00	Ø16	1.0~2.5	15.7	11	6.0	FTIH16	

For holders please see page D70