



# TURN SPEED<sup>TM</sup>

TURNING PRODUCTS

**Number of Cutting Edges:**

3

**External Holders:**

1.00"

1.25"

**Depth of Cut:**

HFP: .020-.100" (0.5~2.5mm)

HFG: .020-.080" (0.5~2.0mm)

**Feed Rates:**

HFP: .040-.100" (1.0-2.5mm)

HFG: .060-.120" (1.5-3.0mm)

**Grades:**

Steel - TT8115B, TT8125B &amp; TT8135B

Stainless Steel - TT9225

**Fittings & Hoses:**


Sold separately.

See last page.

## New High Feed Product Line Capable of Bi-directional Turning

Ingersoll is pleased to introduce a high feed turning system featuring a trigon-shaped positive insert and coolant-thru holder. The insert design takes advantage of chip-thinning in order to provide high feed capability. The neutral-oriented holder allows turning in either direction, and eliminates a need to use multiple tools to turn between shoulders. The insert geometry is designed to provide excellent chip control in high feed turning applications while maintaining strength at the cutting edge.

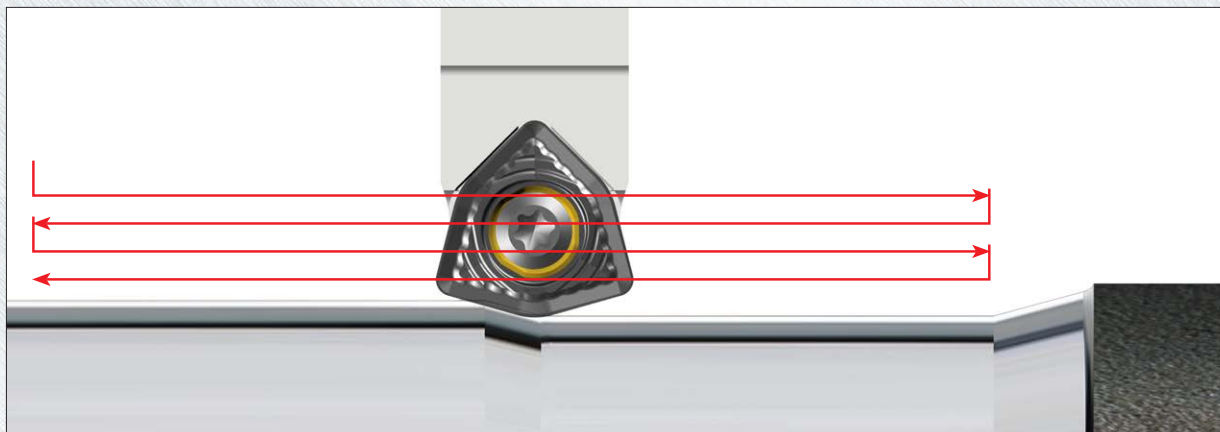
**Features & Benefits:**

- Productive, high feed turning with a maximum .120" (3mm) feed per revolution and up to .100" (2.5mm) depth of cut
- Positive, trigon-shaped insert with 6 cutting edges (3 indexes) and optimized chip breaker
- Bi-directional (left or right) continuous turning with one neutral holder.
  - Dramatically reduced cycle time
  - Less inventory of holders
- Anti-rotation groove design on the bottom of insert along with a special screw design provides very stable clamping & machining, even at incredibly high feed rates
-  **COOLBURST**<sup>TM</sup> high-pressure through coolant from above and below insert enhances chip control TT8115B, TT8125B, TT8135B two-tone colored CVD-coated grades protect against heat and crater wear

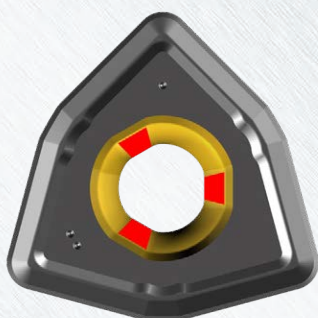




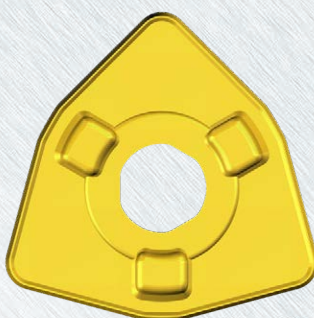
## CAPABLE OF BI-DIRECTIONAL (LEFT & RIGHT) CONTINUOUS TURNING



## SCREW HOLE AND GROOVES FOR ANTI-ROTATION

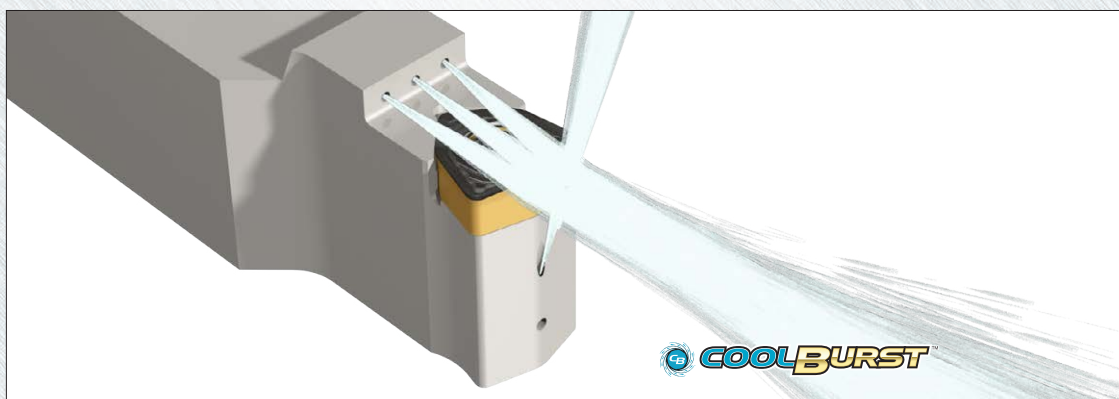


Special screw hole




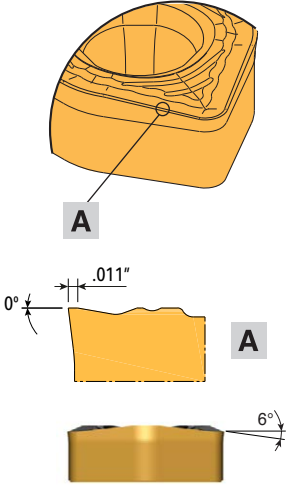
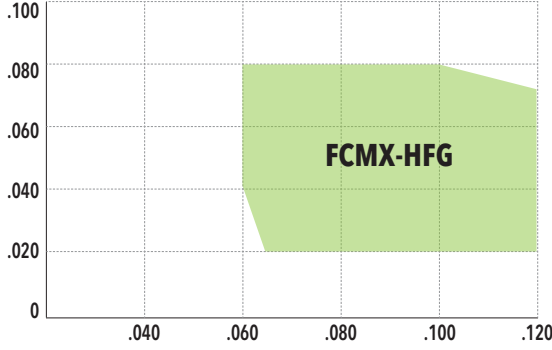
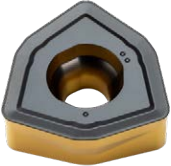
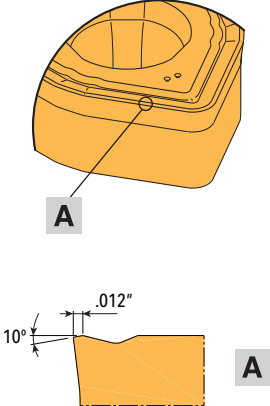
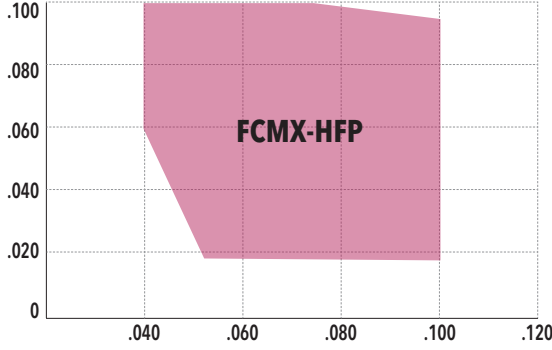
3 grooves on bottom side

## UPPER AND LOWER COOLANT SUPPLY



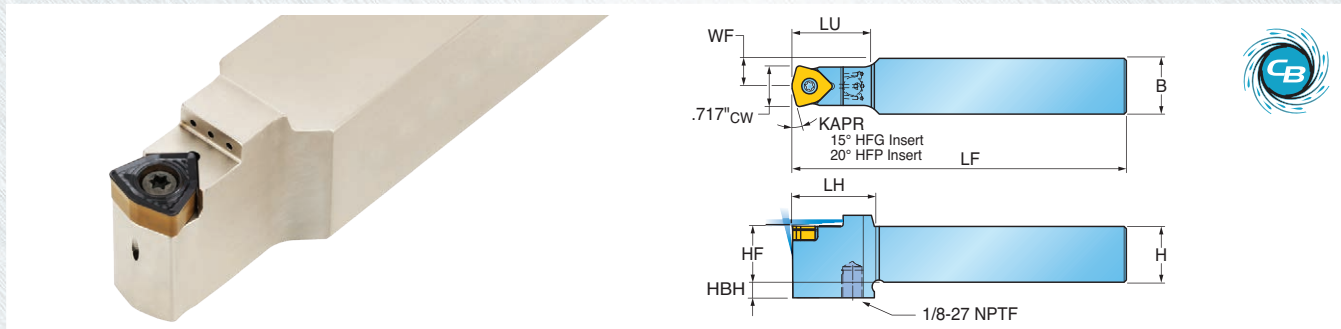



**TURN SPEED<sup>F</sup>™ FCMX CHIP BREAKER GEOMETRY/CHIP CONTROL RANGE**

Chipbreaker	Cutting edge geometry	Graph
 <p><b>HFG</b></p> <ul style="list-style-type: none"> <li>• High feed turning for general purpose in steel and stainless steel</li> <li>• Low cutting force with special inclination (6°) design</li> <li>• Heat radiator design for effective cooling</li> </ul>	 <p><b>A</b></p>	<p>Depth of cut (inch)</p>  <p><b>FCMX-HFG</b></p> <ul style="list-style-type: none"> <li>• Insert: FCMX 100616-HFG</li> <li>• Cutting speed (sfm): 500</li> <li>• Material: AISI 1045 (HB200-230)</li> </ul>
 <p><b>HFP</b></p> <ul style="list-style-type: none"> <li>• High feed turning for steel, especially in alloy steel</li> <li>• Strong cutting edge</li> </ul>	 <p><b>A</b></p>	<p>Depth of cut (inch)</p>  <p><b>FCMX-HFP</b></p> <ul style="list-style-type: none"> <li>• Insert: FCMX 100616-HFP</li> <li>• Cutting speed (sfm): 500</li> <li>• Material: AISI 1045 (HB200-230)</li> </ul>





**TURN SPEED<sup>F</sup>™ SERIES SFXCN SCREW TYPE HOLDERS WITH HIGH PRESSURE COOLANT**



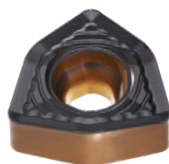
Approach angle	Part Number	Dimension (inch)								Insert
		H Shank Height	HF Functional Height	B Shank Width	LF Functional Length	LU Usuable Length	WF Functional Width	LH Head Length	HBH Head Bottom Offset Height	
15°  	SFXCN 16-4.9D	1.000	1.000	1.000	6.0	1.26	.500	1.46	.26	FCMX 4.944
	SFXCN 20-4.9D	1.250	1.250	1.250	6.0	1.26	.625	1.46	-	

**Spare Parts**

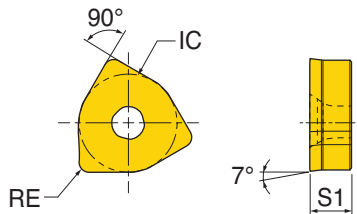
Part Number	Insert Screw	Wrench	
			
SFXCN	SO 45130I	T20	



**TURN SPEED<sup>F</sup>™ SERIES FCMX-HFG POSITIVE HIGH FEED INSERTS**



HFG

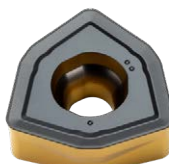


Size	Dimensions (inch)		
	IC Inscribed Circle Dia.	S1 Thickness	RE Corner Radius
4.9 (10)	.608	.256	.063

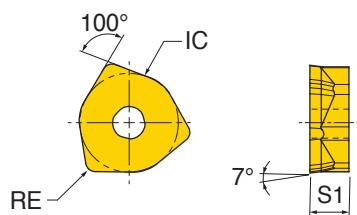
Part Number ANSI (ISO)	ap (inch)	Feed (ipr)	CVD Coated			
			TT8115B	TT8125B	TT8135B	TT9225
FCMX 4.944 (100616) HFG	.020-.080	.060-.120	•	•		•

•: Standard items

**TURN SPEED<sup>F</sup>™ SERIES FCMX-HFP POSITIVE HIGH FEED INSERTS**



HFP



Size	Dimensions (inch)		
	IC Inscribed Circle Dia.	S1 Thickness	RE Corner Radius
4.9 (10)	.647	.256	.063

Part Number ANSI (ISO)	ap (inch)	Feed (ipr)	CVD Coated			
			TT8115B	TT8125B	TT8135B	TT9225
FCMX 4.944 (100616) HFP	.020-.100	.040-.100	•	•	•	

•: Standard items



**COOLBURST™ CONNECTORS**

Fig.1 - STRAIGHT MALE CONNECTOR

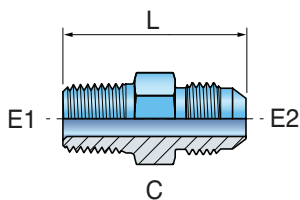


Fig.2 - ELBOW MALE CONNECTOR

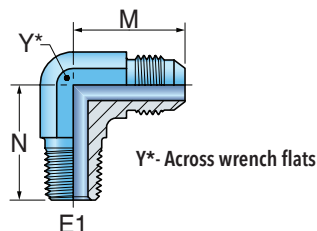


Fig.	Part Number	End Size		C (hex)	L	Max Pressure (psi)
		E1	E2			
1	TB-4-FTX-S	1/8-27 NPTF	1/4 (37° Flare)	1/2"	1.22"	6000

Fig.	Part Number	End Size		Y	M	N	Max Pressure (psi)
		E1	E2				
2	TB-4-CTX-S	1/8-27 NPTF	1/4 (37° Flare)	7/16"	0.89"	0.78"	6000

All connectors ordered separately.

**COOLBURST™ FLEXIBLE HIGH-PRESSURE HOSES**



Part Number	Dimensions			Max Pressure (psi)
	OAL	E1	E2	
TB-HOSE-7/16-7/16-8.0SS	8.0"	1/4 (37° Flare)	1/4 (37° Flare)	3000
TB-HOSE-7/16-7/16-10.0SS	10.0"	1/4 (37° Flare)	1/4 (37° Flare)	3000

Hoses ordered separately.