

# GOLD TRIO 06

## 90° MILL FAMILY OFFERING 3 HI-POSITIVE EDGES FOR THE PRICE OF 2!

### Multi-Purpose



### Polished for Aluminum



### SS/Hi-Temp/Ti



**Diameters:**  
Ø.625" - Ø 3.000"

**Depth of Cut:**  
.27"

**Insert Series:**  
TH\*S06  
THS06\_P  
THLS06\_HR

**Materials:**  
Aluminum, Iron, Steel, Stainless  
Steel, Hi-Temps, Titanium

**AHB** Tooling & Machinery, Inc.  
ISO Certified  
(800) 991-4225  
www.ahbinc.com  
customerservice@ahbinc.com  
Complete Metalworking Solutions  
Roseville Saginaw & Jackson, MI



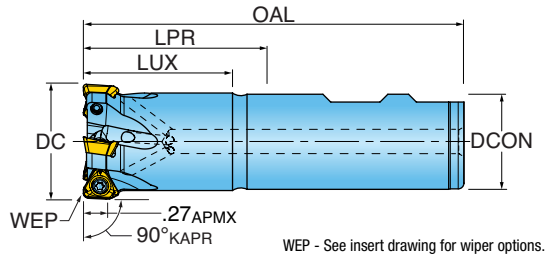
### General Features:

- Hi-Positive geometry with 3 cutting edges for performance and economy
- Diverse range of insert corner and grade options for a broad range of materials and milling methods
- Inserts equipped with integrated wipers for surface finishes between 32-63 Ra
- Cutters offered with coolant through
- Ramping capability for versatility

**UPDATED  
PRODUCT  
ANNOUNCEMENT  
2017**

Member IMC Group  
**Ingersoll**  
Cutting Tools

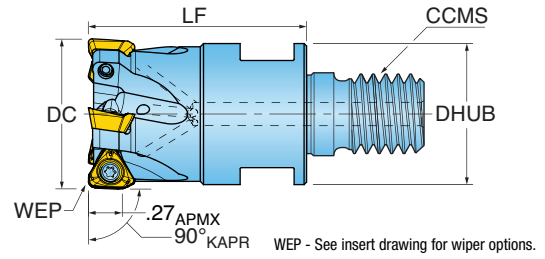
**90° END MILL**



WEP - See insert drawing for wiper options.

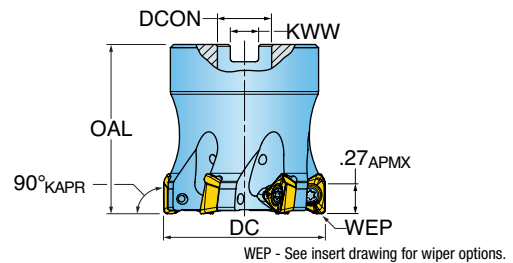
Part Number	DC Cutting Diameter	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Effective Teeth	DCON Shank Diameter	CSP Coolant	RMPX Ramp Angle Max.
1KJ1D-0601279R01	0.625	1.22	1.25	3.25	1	0.625	Yes	4
1KJ1D-0702084R01	0.725	1.80	2.00	4.00	2	0.750	Yes	3.1
1KJ1D-0701184R01	0.750	1.05	1.25	3.25	2	0.750	Yes	3.1
1KJ1D-0701784R01	0.750	1.55	1.75	3.75	2	0.750	Yes	3.1
1KJ1D-0703084R01	0.750	2.80	3.00	5.00	2	0.750	Yes	3.1
1KJ1D-0801784R01	0.875	1.75	1.75	3.75	2	0.750	Yes	2.5
1KJ1D-1001780R01	1.000	1.55	1.75	4.00	3	1.000	Yes	2.1
1KJ1D-1001784R01	1.000	1.75	1.75	3.75	3	0.750	Yes	2.1
1KJ1D-1003780R01	1.000	3.38	3.75	6.00	3	1.000	Yes	2.1
1KJ1D-1003784R01	1.000	3.55	3.75	6.00	3	0.750	Yes	2.1
1KJ1D-1201780R01	1.250	1.75	1.75	4.00	5	1.000	Yes	1.5
1KJ1D-1201784R01	1.250	1.75	1.75	3.75	4	0.750	Yes	1.5
1KJ1D-1501780R01	1.500	1.75	1.75	4.00	6	1.000	Yes	1.3
1KJ1D-1501784R01	1.500	1.75	1.75	3.75	5	0.750	Yes	1.3
1KJ1D-1502281R01	1.500	2.25	2.25	4.50	6	1.250	Yes	1.3

**90° MODULAR END MILL**



Part Number	DC Cutting Diameter	LF Functional Length	ZEFF Effective Teeth	CCMS Connection Code	DHUB Hub Diameter	CSP Coolant	RMPX Ramp Angle Max.
1KJ1D-07015X6R01	0.750	1.50	2	TopOn M10	.69	Yes	3.1
1KJ1D-10015X7R01	1.000	1.50	2	TopOn M12	.81	Yes	2.1
1KJ1D-10015X7R02	1.000	1.50	3	TopOn M12	.81	Yes	2.1
1KJ1D-12017X8R02	1.250	1.75	5	TopOn M16	1.13	Yes	1.5
1KJ1D-15017X8R01	1.500	1.75	5	TopOn M16	1.13	Yes	1.3

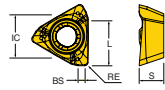
**90° FACE MILL**



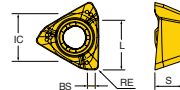
Part Number	DC Cutting Diameter	OAL Overall Length	ZEFF Effective Teeth	DCON Bore Diameter	KWW Keyway	CSP Coolant	RMPX Ramp Angle Max.
KJ5D-15R01	1.500	1.57	6	0.500	0.250	Yes	1.3
KJ5D-20R01	2.000	1.57	7	0.750	0.312	Yes	1.2
KJ6D-30R01	3.000	1.75	9	1.000	0.375	Yes	.4

# GOLD<sup>e</sup>TRIO INSERTS

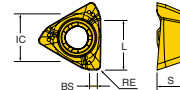
## THES06



## THES06\_P



## THLS06



## THLS06\_HR



Part Number	Application	RE Corner Radius	BS Wiper Length	L Cutting Edge Length	IC Inscribed Circle Diameter	S Thickness	Grade	IN10K	IN2035	IN2504	IN2505	IN2510	IN2530	IN2540	IN4030
THES060404R	Multi-Purpose; Ground Periphery	0.015 R	0.051	0.270	0.272	0.157					•				
THES060408R	Multi-Purpose; Ground Periphery	0.031 R	0.035	0.270	0.272	0.157					•				
THES060404FR-P	Grd/Pol for Al	0.015 R	0.051	0.270	0.272	0.157	•								
THES060408FR-P	Grd/Pol for Al	0.031 R	0.035	0.270	0.272	0.157	•								
THLS060404R	Multi-Purpose	0.015 R	0.051	0.270	0.272	0.157					•	•			
THLS060408R	Multi-Purpose	0.031 R	0.035	0.270	0.272	0.157				•	•	•	•	•	•
THLS060416R	Multi-Purpose	0.062 R	0.022	0.270	0.272	0.157					•				
THLS060404R-HR	SS/Hi-Temp/Ti	0.015 R	0.051	0.270	0.272	0.157			•						
THLS060408R-HR	SS/Hi-Temp/Ti	0.031 R	0.035	0.270	0.272	0.157			•						

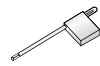
NEW

NEW

# GOLD<sup>e</sup>TRIO HARDWARE



Insert Screw



Screw Driver



Retention Bolt



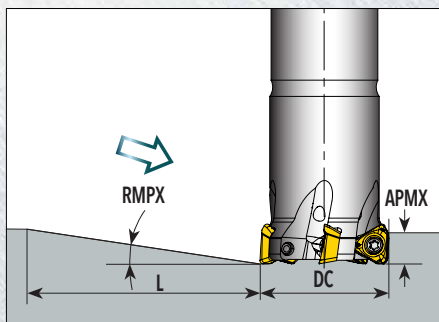
Retention Bolt w/ Coolant



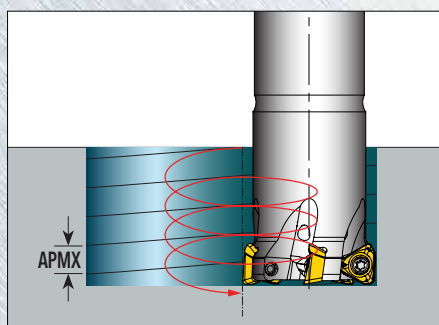
Wrench

Part Number	Insert Screw	Screw Driver	Retention Bolt	Retention Bolt w/ Coolant	Wrench
1KJ1D-0601279R01	SM25-065-R0	DS-T08W	-	-	-
1KJ1D-0702084R01	SM25-065-R0	DS-T08W	-	-	-
1KJ1D-0701184R01	SM25-065-R0	DS-T08W	-	-	-
1KJ1D-0701784R01	SM25-065-R0	DS-T08W	-	-	-
1KJ1D-0703084R01	SM25-065-R0	DS-T08W	-	-	-
1KJ1D-0801784R01	SM25-065-R0	DS-T08W	-	-	-
1KJ1D-1001780R01	SM25-065-R0	DS-T08W	-	-	-
1KJ1D-1001784R01	SM25-065-R0	DS-T08W	-	-	-
1KJ1D-1003780R01	SM25-065-R0	DS-T08W	-	-	-
1KJ1D-1003784R01	SM25-065-R0	DS-T08W	-	-	-
1KJ1D-1201780R01	SM25-065-R0	DS-T08W	-	-	-
1KJ1D-1201784R01	SM25-065-R0	DS-T08W	-	-	-
1KJ1D-1501780R01	SM25-065-R0	DS-T08W	-	-	-
1KJ1D-1501784R01	SM25-065-R0	DS-T08W	-	-	-
1KJ1D-1502281R01	SM25-065-R0	DS-T08W	-	-	-
1KJ1D-07015X6R01	SM25-065-R0	DS-T08W	-	-	615MM
1KJ1D-10015X7R01	SM25-065-R0	DS-T08W	-	-	617MM
1KJ1D-10015X7R02	SM25-065-R0	DS-T08W	-	-	617MM
1KJ1D-12017X8R02	SM25-065-R0	DS-T08W	-	-	622MM
1KJ1D-15017X8R01	SM25-065-R0	DS-T08W	-	-	622MM
KJ5D-15R01	SM25-065-R0	DS-T08W	SD-04-46	-	-
KJ5D-20R01	SM25-065-R0	DS-T08W	SD-06-46	SD-06-89	-
KJ6D-30R01	SM25-065-R0	DS-T08W	SD-08-46	SD-08-92	-

Series 1KJ1D, KJ_D					IN10K	IN2035	IN2504	IN2505	IN2510	IN2530	IN2540	IN4030	Coolant
Material	Brinnell Hardness	SFM	Feed per Insert										
Aluminum	6061-T6, 7075-T6, 2024	-	1500 - 5000	.003-.007	1								Yes
Cast Iron	Gray	150 - 250	300 - 1000	.003-.006			2	3	1			4	No
	Nodular		300 - 600				2	3	1			4	
Steel	Low Carbon 1018, 8620	100 - 250	400 - 1000	.003-.006									No
	High Carbon F-6180	250 - 400	350 - 500										
	Alloyed Steel 4140, 4340	150 - 300	300 - 700				3		2	4	1		
	Tool Steel A-6, D-1, D-2	Up to 300											
Stainless Steel	300 Series, 304, 316	-	300 - 550	.003-.005								2	May not be required at high speeds
	400 Series 15-5 PH	Up to 320	350 - 600		1		4		3				
	13-8 PH	-	200 - 400										
Nickel Alloys	Inconel, Hastelloy, Waspalloy	-	65-120	.003-.005		1		2		4		3	Yes
Titanium	6AL-4V	-	100 - 150	.003-.005		1		4		3		2	Yes
Hard < 54 HRC	All	-	300 - 450	.002-.004			1	2					No
Hard < 63 HRC	All	-	150 - 300	.002-.003			1	2					No

**Straight ramping**


DC Cutter Diameter	RMPX Ramp Angle Max.	APMX Depth of Cut Max.	L
0.625	4.0	0.27	3.8
0.750	3.1	0.27	4.9
0.875	2.5	0.27	6.1
1.000	2.1	0.27	7.3
1.250	1.5	0.27	10.3
1.500	1.3	0.27	11.8
2.000	1.2	0.27	12.8
3.000	0.4	0.27	38.6

**Helical ramping**


DC Cutter Diameter (Using R.031 Insert)	Min. Dia. Milled Hole (Bottom with Cusp)	APMX / Rev.	Max. Dia. Milled Hole (Flat Bottom)	APMX / Rev.
0.625	0.94	0.08	1.21	0.11
0.750	1.19	0.08	1.46	0.13
0.875	0.56	0.09	1.71	0.14
1.000	1.69	0.10	1.96	0.12
1.250	2.19	0.09	2.46	0.11
1.500	2.69	0.09	2.96	0.11
2.000	3.69	0.10	3.96	0.12
3.000	5.69	0.10	5.96	0.11