

Member IMC Group
Ingersoll
Cutting Tools

• **UPDATED** •

FORMMASTER^{PRO}

Part of the
Ingersoll
D & M line

Diameters

1.000" to 1.500"



Facing



Ramping



Contouring



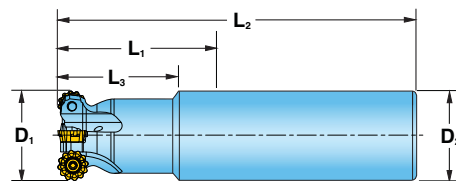
Pocketing



Channeling



Coolant Thru



D ₁ Effective Diameter	Cutter Number	L ₁ Extension	L ₂ Overall Length	Number of Inserts	D ₂ Shank Style	Coolant Thru
1.000	15E1H-1001780R01	1.750	4.500	2	1.00 Weldon	✓
1.000	15E1H-10020S1R01	2.000	6.000	2	1.00 Straight	✓
1.250	15E1H-1202781R01	2.750	5.000	3	1.25 Weldon	✓
1.250	15E1H-12020S9R01	3.750	6.000	3	1.25 Straight	✓
1.500	15E1H-1502386R01	2.340	5.000	4	1.50 Weldon	✓
1.500	15E1H-15020S5R01	2.000	6.000	4	1.50 Straight	✓

Diameters

2.000" to 6.000"



Facing



Ramping



Contouring



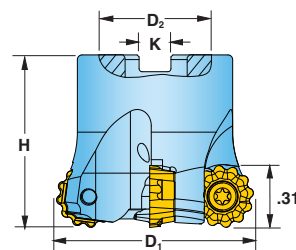
Pocketing



Channeling



Coolant Thru



D ₁ Effective Diameter	Cutter Number	D ₂ Bore Size/Style	H Height	Insert Inscribed Circle	Number of Inserts	Keyway Dimensions	Retension Bolt	Coolant Thru
2.000	5E6K-02R01	.750	1.75	16mm	4	0.32	SD06-46	✓
3.000	5E6K-03R01	1.000	1.75	16mm	6	0.38	SD08-46	✓
4.000	5E6K-04R01	1.250	2.00	16mm	7	0.51	SD10-47	-
5.000	5E6K-05R01	1.500	2.50	16mm	8	0.64	SD12-82	-
6.000	5E6K-06R01	1.500	2.50	16mm	9	0.64	SD12-82	-
2.000	5E6H-20R01	.750	1.75	12mm	5	0.32	SD06-46	✓

Diameters

1.250" to 1.654"



Facing



Ramping



Contouring



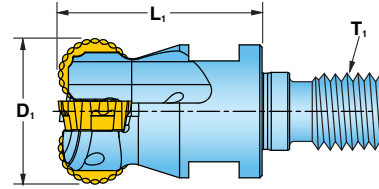
Pocketing



Channeling



Coolant Thru

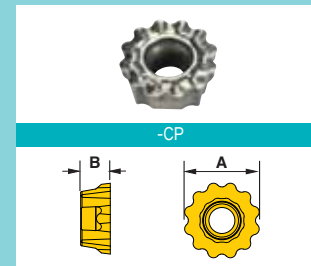
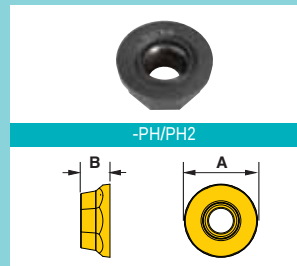
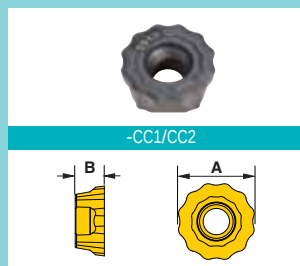
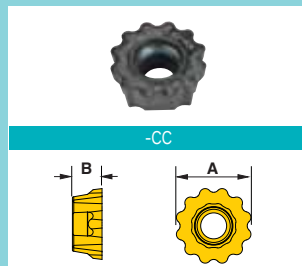


D ₁ Effective Diameter	T ₁ Adaption	Cutter Number	Insert Inscribed Circle	L ₁ Ext. From Holder	Number of Inserts	Wrench Size
1.250	M16	15E1K-12017X8R01	16mm	1.75	2	22mm
1.500	M16	15E1K-15017X8R01	16mm	1.75	3	22mm
42mm (1.654)	M16	15E1K042043X8R00	16mm	1.69	3	22mm
1.000	M12	15E1H-10015X7R01	12mm	1.50	2	17mm
1.250	M16	15E1H-12015X8R01	12mm	1.50	3	22mm
1.500	M16	15E1H-15015X8R01	12mm	1.50	4	22mm

*Recommended DOC .015-.030 for Top•On Series for extended length applications.

FORMMASTER^{PRO}™ INSERTS

INSERTS



Insert Number	A Insert Diameter	B Insert Thickness	Corner	Indexes per Insert	Grades				
					IN	2005	2015	2030	05S
RCLT1606M0N-CC	16mm (.6299)	.256	8mm	4		■	■	■	
RCLT1606M0N-CC1	16mm (.6299)	.256	8mm	4		■	■	■	
RCLT1606M0TN-PH	16mm (.6299)	.256	8mm	8		■	■	■	
RCLT1606M0N-CP	16mm (.6299)	.256	8mm	4					■
RCLT1204M0N-CC1	12mm (.472)	.187	6mm	4		■	■	■	
RCLT1204M0N-CC2	12mm (.472)	.187	6mm	4		■	■	■	
RCLT1204M0TN-PH2	12mm (.472)	.190	6mm	8		■	■	■	
RCLT1204M0N-CP	12mm (.472)	.187	6mm	4					■

FORMMASTER^{PRO}™ HARDWARE

HARDWARE

Insert Series	Insert Screw		Driver
Part No.	Part No.	Torque	Part No.
5E6K	SM50-120-10	50 in. lbs.	DS-T20T (Tx-20)
15E1K	SM50-105-10	50 in. lbs.	DS-T20T (Tx-20)
5E6H	SM40-090-00	30-35 in. lbs.	DS-T15T (Tx-15)
15E1H	SM40-090-00	30-35 in. lbs.	DS-T15T (Tx-15)

OPERATING GUIDELINES

OPERATING GUIDELINES											Grades				
Series 5E6K, 15E1K											IN2005	IN2015	IN2030	IN05S	Coolant
Material		Brinell Hardness	SFM	Feed per Insert		CC/CC1/CC2	CP	PH/PH2							
Aluminum	6061 T-6, 7075 T-6		1600-3300		.007-.012							1	Yes		
Cast Iron	Gray	150-250	500-800	.007-.010		.015-.039	2	1					No		
	Nodular		450-800												
Steel	Low Carbon 1018-8620	150-250	500-700	.007-.012		.015-.039	1	3	2		No				
	High Carbon F-6180	250-400	450-500	.007-.010		.015-.039	1	3	2						
	Alloyed Steel 4140	150-300													
	Tool Steel P20-H13	up to 300													
Stainless Steel	300 Series, 304, 316	up to 320	250-500	.006-.010		.011-.023	2	3	1		Yes				
	400 Series, 15-5 PH, 17-4 PH														
	13-8 PH														
Nickel Alloys	Inconel 600, 706, 718, 903, Hastelloy		50-250	.006-.010		.011-.023	2	3	1		Yes				
Titanium	6AL-4V		50-250	.006-.010		.009-.015	1	3	2		Yes				

Recommended Starting Ranges



FEATURES AND BENEFITS

- FREE CUTTING GEOMETRY AND CHIP MANAGEMENT.
- VERY LOW TOOLING PRESSURE FOR LONG REACH APPLICATIONS.
- STEELS, STAINLESS, CAST IRON, ALUMINUM AND TITANIUM.
- 4 VERSATILE INSERT STYLES FOR DIFFERENT APPLICATIONS.
- 4 INDEXES PER INSERT; 8 INDEXES PER ROUND INSERT (-PH/PH2).
- NEUTRAL INSERT ORIENTATION.

FORMMASTER^{PRO}



D&Mline



Ingersoll Cutting Tools for the Americas

Marketing & Technology Center

845 S. Lyford Road
Rockford, IL 61108-2749 U.S.A.
Tel: 815.387.6600
Fax: 815.387.6968
Email: info@ingersoll-imc.com
Internet: www.ingersoll-imc.com

Ingersoll Cutting Tool Ltd.

4510 Rhodes Drive, Unit #100
Windsor, Ontario N8W 5K5, Canada
Tel: 519.974.1019
Fax: 519.974.2260

Ingersoll Cutting Tools de México S.A. de C.V.

Carr. Saltillo Monterrey Km. 5.5, Local 2 y 3
Saltillo, Coahuila C.P. 25200, México
Tel: (844) 432.2546, (844) 432.2547
Fax: (844) 432.2544

Ingersoll Cutting Tools for Europe

Marketing & Technology Center

Ingersoll Werkzeuge GmbH
Kalteiche-Ring 21-25
35708 Haiger, Germany
Tel: 02773.742 0
Fax: 02773.742 812/814
Email: info@ingersoll-imc.de
Internet: www.ingersoll-imc.de