



## Tool Holder Styles:

CAT\*ODP  
HSKA\*ODP  
W\*MOD\*SA

## Cutter Body Styles:

1TG1F  
1TG1G  
1DG1P  
15G1F  
15T1G  
15T8E

## Applications:

Long Reach/Gauge Lengths



## **Top-On, M20 Modular Connection**

The new Top-On M20 connection is a very robust connection system that provides increased rigidity in long reach milling applications. The addition of the M20 Top-On now provides increased application range complimenting existing connections M6, M8, M10, M12 and M16. The M20 connection system will provide increased modular milling performance in many applications having larger length-to-diameter ratios. This new M20 connection is offered with many of Ingersoll most popular stock standard cutters, such as:

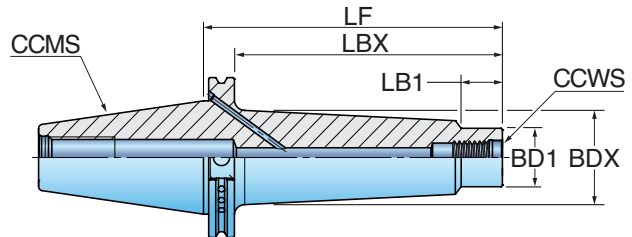
- Hi-Feed Mini
- Hi-Feed Midi
- Power Feed 13+
- Gold Quad 09
- Form-Master Shear - Contour Button Slotters

### **Features & Benefits:**

- M20 connection offers excellent rigidity & strength
- Milling flexibility & increased performance for long reach application
- Standard CAT40, CAT50, HSK & straight shank holders
- Stock standard M20 Top-On cutters for slotting, hi-feed & contouring
- Special holders available upon request

## SERIES CAT ODP

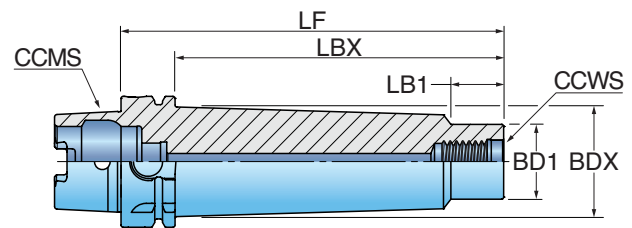
### TOOLHOLDER



Part Number	CCWS Connection Code	LB1 Body Length 1	LBX Body Length Max.	LF Functional Length	BD1 Body Dia. 1	BDX Body Dia. Max.	CCMS Connection Code	CSP Coolant
CAT40ODPM20X7.250	Top-On M20	-	6.500	7.250	1.420	1.750	CAT 40	Yes
CAT50ODPM20X7.250	Top-On M20	1.000	6.500	7.250	1.420	2.290	CAT 50	Yes
CAT50ODPM20X9.250	Top-On M20	1.000	8.500	9.250	1.420	2.480	CAT 50	Yes

## SERIES HSKA ODP INCH

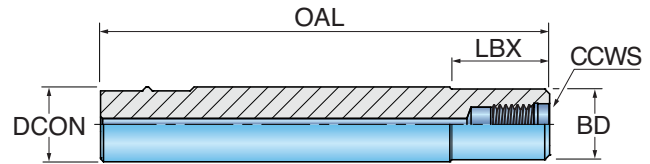
### TOOLHOLDER



Part Number	CCWS Connection Code	LB1 Body Length 1	LBX Body Length Max.	LF Functional Length	BD1 Body Dia. 1	BDX Body Dia. Max.	CCMS Connection Code	CSP Coolant
HSKA63ODP20X7.250	Top-On M20	1.000	6.250	7.250	1.420	2.070	HSKA63	Yes

## SERIES W MOD SA INCH

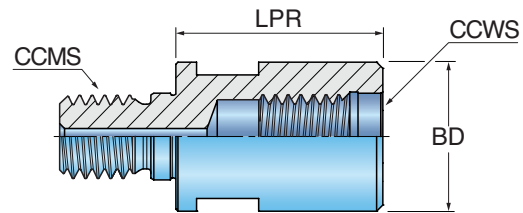
### TOOLHOLDER



Part Number	CCWS Connection Code	LBX Body Length Max.	OAL Overall Length	BD Body Dia.	DCON Shank Dia.	CSP Coolant
W150MOD20SA-90	Top-On M20	2.000	9.000	1.420	1.500	Yes

## SERIES MOD SA INCH

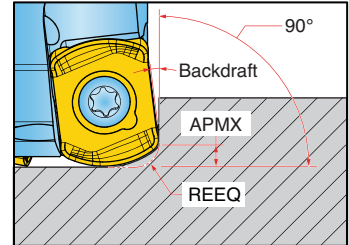
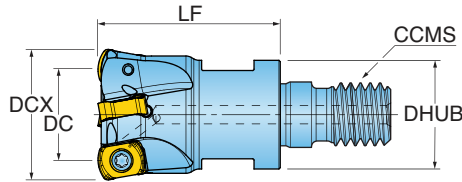
### EXTENSION



Part Number	CCWS Connection Code	BD Body Dia. 1	CCMS Connection Code	CSP Coolant	LPR Protruding Length
MOD20MOD20SA050	Top-On M20	1.420	Top-On M20	Yes	1.97

## HI-FEED MINI™ SERIES 1TG1F TOP-ON STYLE

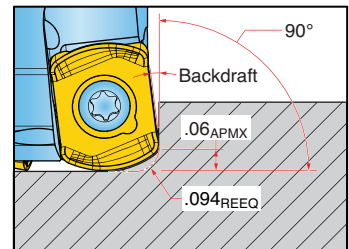
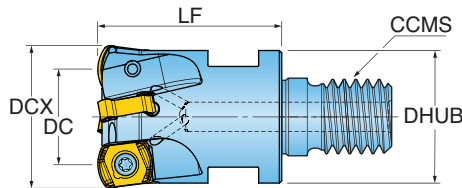
MODULAR END MILLS, 06MM IC  
INSERT SERIES



Part Number	DCX Cutting Dia. Max.	IC	APMX Depth of Cut Max.	LF Functional Length	ZEFF Effective Teeth	REEQ Program Radius	KAPR Cutting Edge Angle	DHUB Hub Dia.	CCMS Connection Code	CSP Coolant	RMPX Ramp Angle Max.
1TG1F-15017X9R01	1.500	1.196	0.04	1.75	6	0.074	90.0	1.42	Top-On M20	Yes	0.8

## HI-FEED MIDI™ SERIES 1TG1G TOP-ON STYLE

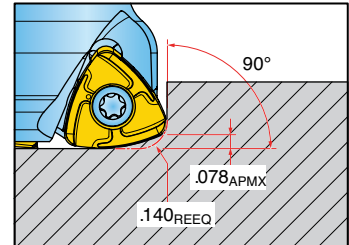
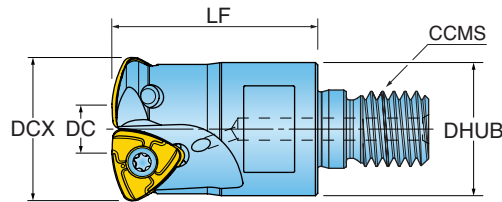
MODULAR END MILLS, 09MM IC  
INSERT SERIES



Part Number	DCX Cutting Dia. Max.	DC Cutting Dia.	APMX Depth of Cut Max.	LF Functional Length	ZEFF Effective Teeth	REEQ Program Radius	KAPR Cutting Edge Angle	DHUB Hub Dia.	CCMS Connection Code	CSP Coolant	RMPX Ramp Angle Max.
1TG1G-15015X9R10	1.500	1.090	.06	1.57	5	0.094	90.0	1.42	Top-On M20	Yes	1.5

## POWER-**FEED**<sup>B+</sup>™ SERIES 1DG1P HI-FEED, TOP-ON STYLE

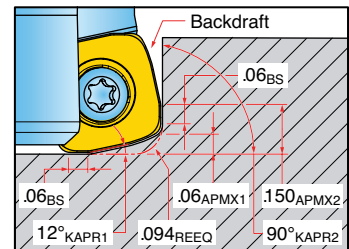
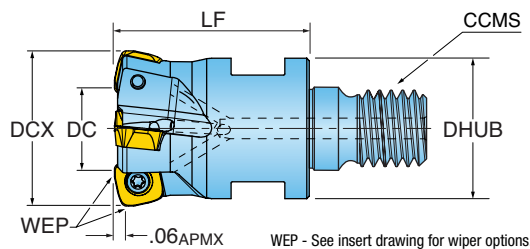
MODULAR END MILLS, 13MM IC INSERT SERIES



Part Number	DCX Cutting Dia. Max.	DC Cutting Dia.	APMX Depth of Cut Max.	LF Functional Length	ZEFF Effective Teeth	REEQ Program Radius	KAPR Cutting Edge Angle	DHUB Hub Dia.	CCMS Connection Code	CSP Coolant	RMPX Ramp Angle Max.
1DG1P-15017X9R01	1.500	0.755	.078	1.75	3	0.139	90.0	1.42	Top-On M20	Yes	1.5

## GOLD-**QUAD**™ SERIES 15G1F HI-FEED, TOP-ON STYLE

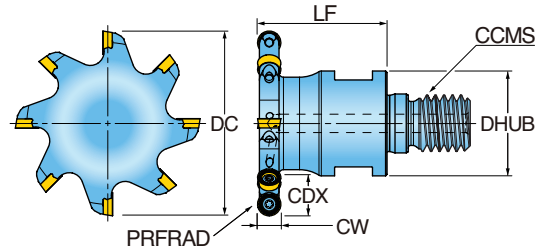
MODULAR END MILLS, 09MM IC INSERT SERIES



Part Number	DCX Cutting Dia. Max.	DC Cutting Dia.	APMX Depth of Cut Max.	LF Functional Length	ZEFF Effective Teeth	REEQ Program Radius	KAPR Cutting Edge Angle	DHUB Hub Dia.	CCMS Connection Code	CSP Coolant	RMPX Ramp Angle Max.
15G1F-15017X9R01	1.500	1.022	0.06	1.75	5	0.094	90	1.42	Top-On M20	Yes	2.3

## FORMMASTER<sup>SH</sup>EAR™ SERIES 15T1G TOP-ON STYLE SLOTTOR

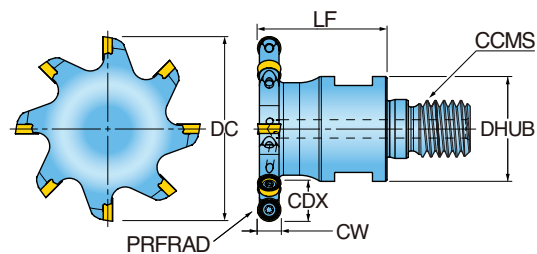
MODULAR SLOTTOR, 10MM IC INSERT SERIES



Part Number	DC Cutting Dia.	CW Cutting Width	CDX Cutting Depth Max.	LF Functional Length	ZNP Peripheral Insert Count	PRFRAD Profile Radius	CCMS Connection Code	DHUB Hub Dia.
15T1G-25039X9R01	2.500	10 mm	0.51	1.75	6	5 mm	Top-On M20	1.42
15T1G-25039X9R02	2.500	10 mm	0.51	1.75	8	5 mm	Top-On M20	1.42
15T1G-30039X9R01	3.000	10 mm	0.76	1.75	8	5 mm	Top-On M20	1.42

## FORMMASTER<sup>SH</sup>EAR™ SERIES 15T8E TOP-ON STYLE SLOTTOR

MODULAR SLOTTOR, 08MM IC INSERT SERIES



Part Number	DC Cutting Dia.	CW Cutting Width	CDX Cutting Depth Max.	LF Functional Length	ZNP Peripheral Insert Count	PRFRAD Profile Radius	CCMS Connection Code	DHUB Hub Dia.
15T8E-25031X9R01	2.500	8 mm	0.51	1.75	8	4 mm	Top-On M20	1.42
15T8E-30031X9R01	3.000	8 mm	0.76	1.75	9	4 mm	Top-On M20	1.42