HI-POS+™

Diameters:
1.00", 1.25", & 1.50"

Insert Sizes:
12mm (AOMT1204)_12S1X-SERIES
18mm (AOMT1805)_12S1E-SERIES

Available Corner Radii:
12mm: .015"R, .031"R, .062"R
18mm: .015"R, .031"R, .062"R,
.093", .118"(3mm), & .125"R

Materials:
Aluminum, Cast Iron, Steel, Stainless Steel, Nickel Based Alloys, Titanium and Other High-Temp Alloys

* Does not produce a flat bottom.

Center-Cutting Endmills

Ingersoll is pleased to announce the newest addition of our indexable drill-mills for plunging, ramping and pocketing all materials.

Features & Benefits

- Upgraded performance with AOMT1805 and AOMT1204 series inserts.
- Cutter diameters from 1.00" thru 1.50" with through the tool coolant.
- Drill, ramp and pocket in one tool.
- Ramping up to 30° angles (without peck or dwell).
- Large variety of corner radii.

Member IMC Group
Ingersoll Cutting Tools

HIPOS+™ SERIES 12S1X

CENTER CUTTING ENDMILL


Facing


Shoulder


Channeling

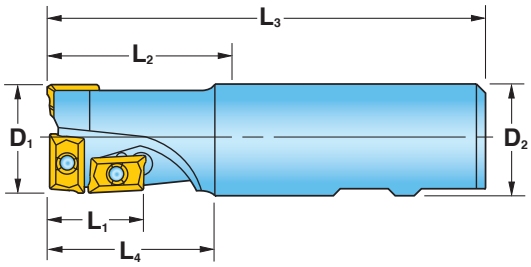

Ramping


Pocketing


Corkscrew


Drilling


Coolant

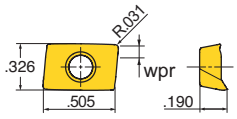


D1 Nom. Diameter	Cutter Number	L1 Max DOC	L2 Extension Length	L3 Overall Length	L4 Projection Length	D2 Shank Size/Style	Number of Effective Flutes	Number of Total Flutes	Number of Inserts Center	Number of Inserts Side
1.000	12S1X-1001780R01	0.87	1.75	4.00	1.60	1.000" W	1	2	1	2
1.250	12S1X-1202781R01	0.93	2.75	5.00	2.60	1.250" W	1	2	1	2

*Overall Length is measured to the sharp corner of the insert.

HIPOS+™ 12MM INSERTS

AOCT120408FR-P



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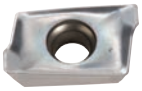

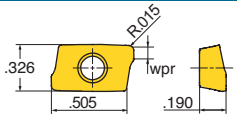

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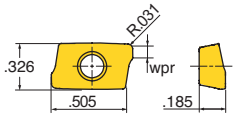

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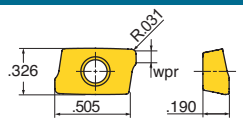

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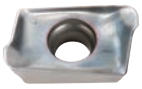
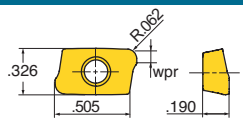




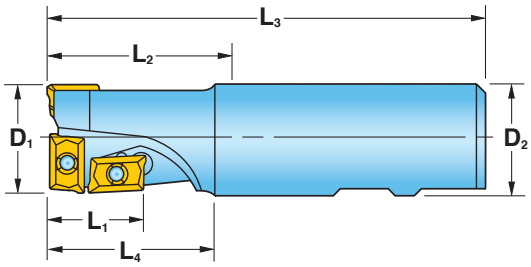
Part Number	Corner	Application	Grade	IN1030	IN10K	IN2005	IN2505	IN2510	IN2530	IN2540
AOMT120404R	0.015 R	Multi-Purpose		X		X				
AOMT120408R	0.031 R	Multi-Purpose		X		X	X	X	X	X
AOMT120416R	0.062 R	Multi-Purpose		X		X		X	X	X
AOMT120408FR	0.031 R	Hi-Temp/Ti				X			X	
AOCT120408FR-P	0.031 R	Grd/Pol for Al			X					

HIPOS+™ HARDWARE

12MM	 Screw	 Driver Handle	 Insert Driver Blade
	SM35-076-10	DS-A00T	DS-T106B

HIPOS+™ SERIES 12S1E

CENTER CUTTING ENDMILL

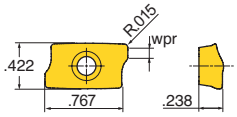


D1 Nom. Diameter	Cutter Number	L1 Max DOC	L2 Extension Length	L3 Overall Length	L4 Projection Length	D2 Shank Size/Style	Number of Effective Flutes	Number of Total Flutes	Number of Inserts Center	Number of Inserts Side
1.500	12S1E-1502781R01	1.26	2.75	5.00	2.75	1.250" W	1	2	1	2

*Overall Length is measured to the sharp corner of the insert.

HIPOS+™ 18MM INSERTS

AOMT180504FR-P



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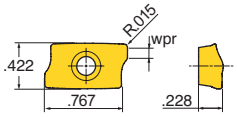

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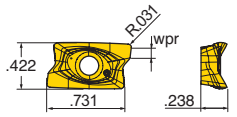

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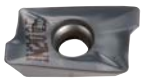

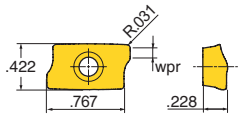

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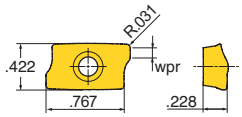

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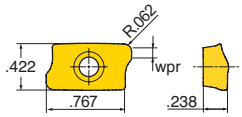

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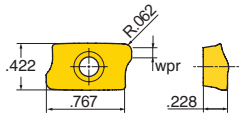

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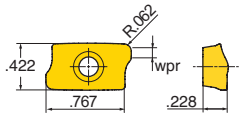

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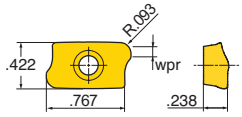

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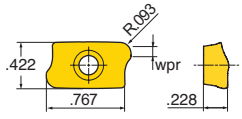

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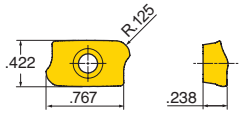

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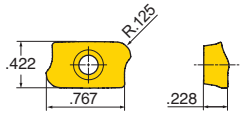

Part Number	Corner	Application	Grade	IN05S	IN1030	IN2005	IN2015	IN2030	IN2040	IN30M	IN4030
AOMT180508R	0.031 R	Multi-Purpose			X	X	X	X	X		X
AOMT180516R	0.062 R	Multi-Purpose			X	X	X	X	X		
AOMT180524R	0.093 R	Multi-Purpose			X	X			X		
AOMT180532R	0.125 R	Multi-Purpose			X	X	X	X	X		
AOMT180504FR-P	0.015 R	Grd/Pol for Al		X							
AOMT180504R-HS	0.015 R	Hi-Temp/Ti						X			
AOMT180508FR-P	0.031 R	Grd/Pol for Al								X	
AOMT180508R-HS	0.031 R	Hi-Temp/Ti				X		X		X	
AOMT180516FR-P	0.062 R	Grd/Pol for Al								X	
AOMT180516R-HS	0.062 R	Hi-Temp/Ti				X					
AOMT180524FR-P	0.093 R	Grd/Pol for Al								X	
AOMT180532FR-P	0.125 R	Grd/Pol for Al								X	

HIPOS+™ HARDWARE

18MM	 Screw	 Driver Handle	 Insert Driver Blade
	SM40-093-20	DS-A00T	DS-T156B

HIPOS+™ 12MM OPERATING GUIDELINES

Material		Brinnell Hardness	SFM	Feed per Insert	IN10K	IN2005/2505	IN2510	IN1030	IN2530	IN2540	Coolant
Aluminum	6061-T6, 7075-T6, 2024	-	1500-8000	.004 - .010	1						Yes
Cast Iron	Gray	150 - 250	300 - 1000	.004 - .010		2	1				No
	Nodular		300 - 600								
Steel	Low Carbon 1018, 8620	100 - 250	400 - 1000	.004 - .010		3		2	1	4	No
	High Carbon F-6180	250 - 400	350 - 500	.004 - .008							
	Alloyed Steel 4140, 4340	150 - 300	300 - 700	.004 - .010							
	Tool Steel A-6, D-1, D-2	Up to 300									
Stainless Steel	300 Series, 304, 316	-	300 - 700	.004 - .010		3		2	1	4	May not be required at high speeds
	400 Series, 15-5 PH, 17-4 PH	-	400 - 900								
	13-8 PH	-	200 - 400								Yes
Nickel Alloys	Inconel 600, 706, 718, 903, Hastelloy, Waspalloy	-	75-120	.003 - .006		3		1	2		Yes
Titanium	6AL-4V, TI-10-2-3, TI-5553	-	100 - 150	.005 - .008		3		1	2		Yes

HIPOS+™ 18MM OPERATING GUIDELINES

Material		Brinnell Hardness	SFM	Feed per Insert	IN05S/IN30M	IN2005	IN2015	IN1030	IN4030	IN2040	Coolant
Aluminum	6061-T6, 7075-T6, 2024	-	1500-8000	.004 - .012	1	3	2				Yes
Cast Iron	Gray	150 - 250	300 - 1000	.004 - .010		2	1				No
	Nodular		300 - 600								
Steel	Low Carbon 1018, 8620	100 - 250	400 - 1000	.004 - .010		3		2	1	4	No
	High Carbon F-6180	250 - 400	350 - 500	.004 - .009							
	Alloyed Steel 4140, 4340	150 - 300	300 - 700	.004 - .010							
	Tool Steel A-6, D-1, D-2	Up to 300									
Stainless Steel	300 Series, 304, 316	-	300 - 700	.004 - .010		3		2	1		May not be required at high speeds
	400 Series, 15-5 PH, 17-4 PH	-	400 - 900								
	13-8 PH	-	200 - 400								
Nickel Alloys	Inconel 600, 706, 718, 903, Hastelloy, Waspalloy	-	75-120	.003 - .006		2	4	3	1		Yes
Titanium	6AL-4V, TI-10-2-3, TI-5553	-	100 - 150	.005 - .008		3		2	1		Yes