

*Ingersoll* **MAX** *line*



Member IATF 16949  
**Ingersoll**  
Cutting Tools

# *Ingersoll* **MAX** *line*

*Over 35 years ago . . . Ingersoll Cutting Tools introduced “On-Edge” insert design to the cutting tool industry.*

*Today . . . “On-Edge” insert designs like CDE, DNE, and LPE are as common to milling as curled chips and keyways.*

*From 35 years ago . . .*



# "On-Edge" *Redefined*

**We** at Ingersoll know it's time to take "On-Edge" insert design to the next level.

**That next step** in productivity is an advanced technology we call **MAXline**

**Take a look** at this product line catalog and see for yourself; new insert additions to the V-MAX family, as well as the exciting introduction of the S-MAX family of cutters and inserts.

**... to today!**

**V-MAX™**



**S-MAX™**



# Ingersoll **MAX** line



## **MAX**™ *Inserts*

- **4 basic insert sizes: 10.5mm-18.0mm long**
  - 2 geometry styles for each size**  
(4 RH cutting edges or 2 RH and 2 LH cutting edges)
- **The latest formed rake face and grade technology provide maximum efficiency and tool life**
- **Comprehensive standard corner radius selection**
- **Precision wiper flats provide outstanding surface finish**



**Make  your preferred selection for:**

- **Heavy feedrate or depth of cut applications**
- **Standard and special slotters**
- **Special end mills and shell mills**
- **Free cutting, fine pitch cutters to minimize h.p. consumption and maximize your feedrate**

# "On-Edge" *Redefined*



*plus*

**3**

**NEW**

**VOMAX**

*insert additions . . .*



4 Edges for extended  
length of cut



Silicon Nitride  
for Iron



High Shear  
& Polished  
for Aluminum

**ALL NEW**

*insert geometries fit the original*

**VOMAX**™ *pocket!*



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## Products



Diameter Range	Description	Applications	
3.00" to 12.00"	0° Heavy Depth Face Mill - Series SJ6N	Heavy Facing	11
3.00" to 12.00"	45° Heavy Feed Face Mill - Series SN6N	Heavy Facing	12
4,5,6,8,10"	Heavy-Duty Axial Drive Slotter - Series 35J6	Slotting (.625"-1.00")	13
4,5,6,8,10"	Heavy-Duty Radial Drive Slotter - Series 35J6	Slotting (.625"-1.00")	14
2.50" to 12.00"	30° Face Mill Series VM6V	Facing • Lead Angle • Ramping	16
2.50" to 12.00"	3° Face Mill Series VL6V	Facing • Shouldering	17
2.00" to 6.00"	Plunging Cutter - Series VHU	Plunging	18
4.000" to 8.000"	Medium-Density Face Mount Slotter - Series 3VL5	Slotting (.375"-.500")	19
2.00" to 12.00"	0° Coarse-Density Face Mill - Series VK6V	Facing • Shouldering	21
2.00" to 12.00"	0° Medium-Density Face Mill - Series VK6V	Facing • Shouldering	22
2.00" to 12.00"	0° Hi-Density Face Mill - Series VK5V	Facing • Shouldering	23
3.00" to 10.00"	0° Heavy-Duty Half-Side Mill Series 5VK6	Facing • Straddle Milling	24
4.00" to 12.00"	Multiple Geometry Cartridge Face Mill - Series 4W2A	Facing • Shouldering	26








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# Choosing a Cutter

	Series	Intended Application
	SJ6N Series (0° Lead)	Heavy Doc roughing, one-cuts, finishing, when RH spindle rotation is available, shoulder cutting up to .680".
	SN6N Series (45° lead)	Heavy feed roughing, one-cuts, finishing, when RH spindle rotation is available, depths of cut up to .350".
	35J6 Series (O.D. mount axial slotter)	Roughing, one-cuts and finishing when either RH or LH spindle rotation is available, when double positive cutting geometry is necessary to reduce h.p. consumption.
	35J6 Series (O.D. mount radial slotter)	Roughing, one-cuts and finishing, when RH spindle rotation is available, when double positive cutting geometry is necessary to reduce h.p. consumption.
	VM6V Series (30° lead)	Roughing only, heavy feed, extended reach, reducing breakout, when only RH rotation spindles are available.
	VL6V series (3° Lead)	Roughing, one-cuts, finishing, cutting near 90° shoulder where minimal lead angle is acceptable, when only RH rotation spindles are available.
	VHU Series (Plunger)	Roughing, high metal removal rates, extended reach applications, when double positive geometry is needed to reduce h.p. consumption.



Intended Application	Series	
Roughing, one-cuts, finishing, heavy duty option when conventional inserts do not provide acceptable tool life, applications requiring exceptional side wall finishes.	3VL5 Series (Slotter)	
Roughing, one-cuts, finishing, reduction of axial/radial cutting forces when coarse density used, when both RH and LH spindle rotation is available, shoulder cutting up to .230" high, accepts dedicated YNE Series wiper insert, silicon nitride, and polished geometry for aluminum.	VK6V Series Coarse-Density (0° lead)	
Roughing, one-cuts, finishing, nodular irons, when both RH and LH spindle rotation is available, shoulder cutting up to .230" high, accepts dedicated YNE cutting up to .230" high, accepts dedicated YNE Series wiper insert, silicon nitride, and polished geometry for aluminum.	VK5V Series Medium-Density (0° lead)	
Roughing, one-cuts, finishing, intended workpiece is grey, ductile, and nodular irons, when both RH and LH spindle rotation is available, shoulder cutting up to .230" high, accepts dedicated YNE Series wiper insert, silicon nitride, and polished geometry for aluminum.	VK5V Series Hi-Density (0° lead)	
Roughing, one-cuts, finishing, shoulder cutting, ganged for straddle milling, shoulder cutting up to .230" high, accepts dedicated YNE Series wiper insert, silicon nitride, and polished geometry for aluminum.	5VK6 Series (0° lead)	
Roughing, one-cuts, finishing, heavy-duty jobs prone to cutter damage, availability to use other insert geometries, shoulder cutting up to .230" high, accepts dedicated YNE Series wiper insert, silicon nitride, and polished geometry for aluminum.	4W2A Series (0° lead; cartridge)	

# Choosing an Insert

Description	Grade(s)	Corner Configuration	Intended Cutter Series	Use with Insert Screw	Suggested Screw Torque (inch/lbs)
NNE324-100	IN6515, IN2015, IN2030, IN2040, IN2005, IN1530	R .031"	VMAX 6K6V, 6K5V, 56K6V	SM40-120-20 (TORX 15)	25-30
NNE324-102	IN6515, IN2015, IN2030, IN2040	R .062"	VMAX 6K6V, 6K5V, 56K6V, VHU	SM40-120-20 (TORX 15)	25-30
NNE324-104	IN2010, IN2015,	039" X 45°	VMAX 6K6V, 6K5V, 56K6V	SM40-120-20 (TORX 15)	25-30
NNE324-108	IN2015, IN2030, IN2040	R .031" W/ 1° WIPER	VMAX 36L5V	SM40-120-00 (TORX 15) (LOW HEAD)	25-30
NNE324-110	IN2015, IN2030, IN2040 IN6515	.031" X MULTI FACET	VMAX 6M6V	SM40-120-20 (TORX 15)	25-30
NNE324-125	IN2030	R .125"	VMAX 6K6V, 6K5V, 56K6V, 56K6V, VHU	SM40-120-20 (TORX 15)	25-30
NNE324-144	IN6510	R .031" W/SIMUL. SPIN GRIND	SPECIAL VMAX BORING	SM40-120-20 (TORX 15)	25-30
NNE324R10	IN6515, IN2015, IN2030, IN2040, IN2005	.125" X 3°	VMAX 6L6V	SM40-120-20 (TORX 15)	25-30
NNE324R109	IN6515, IN2015, IN2030, IN2040, IN2005, IN2010	R .031" (LONG EDGE; RH ONLY)	VMAX 6K6V, 6K5V, 56K6V VHU	SM40-120-20 (TORX 15)	25-30
NNE324L109	IN6515, IN2015, IN2030, IN2040, 2005	R .031" (LONG EDGE; LH ONLY)	VMAX 6K6V, 6K5V, 56K6V, VHU	SM40-120-20 (TORX 15)	25-30
NJE324-100-P	IN15K	R .031" W/ POLISH	VMAX 6K6V, 6K5V, 56K6V	SM40-120-20 (TORX 15)	25-30
NCE324-100	IN70N	R .031"	VMAX 6K6V, 6K5V, 56K6V	SM40-120-20 (TORX 15)	25-30
YNE324-100	IN6515, IN2015, IN2030 IN2040	R.031" (WIPER)	VMAX 6K6V, 6K5V, 56K6V	SM40-120-20 (TORX 15)	25-30
DPM314-001	IN2015, IN2040, IN2005	R .031" (2 RH / 2 LH EDGES)	SMAX 35J6	SM40-120-20 (TORX 15)	25-30
DPM314-002	IN2015, IN2040, IN2005	R .062" (2 RH / 2 LH EDGES)	SMAX 35J6	SM40-120-20 (TORX 15)	25-30
DPM314-003	IN2015, IN2040, IN2005	R .093" (2 RH / 2 LH EDGES)	SMAX 35J6	SM40-120-20 (TORX 15)	25-30
DPM314-004	IN2015, IN2040, IN2005	R .125" (2 RH / 2 LH EDGES)	SMAX 35J6	SM40-120-20 (TORX 15)	25-30
DPM314R001	IN2015, IN2040, IN2005	R .031" (4 RH EDGES)	SMAX SPECIALS	SM40-120-20 (TORX 15)	25-30
DPM324-001	IN2015, IN2040, IN2005	R .031" (2 RH / 2 LH EDGES)	SMAX 35J6	SM40-120-20 (TORX 15)	25-30
DPM324-002	IN2015, IN2040, IN2005	R .062" (2 RH / 2 LH EDGES)	SMAX 35J6	SM40-120-20 (TORX 15)	25-30
DPM324-003	IN2015, IN2040, IN2005	R .093" (2 RH / 2 LH EDGES)	SMAX 35J6	SM40-120-20 (TORX 15)	25-30
DPM324-004	IN2015, IN2040, IN2005	R .125" (2 RH / 2 LH EDGES)	SMAX 35J6	SM40-120-20 (TORX 15)	25-30
DPM324R001	IN2015, IN2040, IN2005	R .031" (4 RH EDGES)	SMAX SPECIALS	SM40-120-20 (TORX 15)	25-30
DPM424-001	IN2015, IN2040, IN2005	R .031" (2 RH / 2 LH EDGES)	SMAX 35J6	SM50-160-10 (TORX 20)	35-40
DPM424-002	IN2015, IN2040, IN2005	R .062" (2 RH / 2 LH EDGES)	SMAX 35J6	SM50-160-10 (TORX 20)	35-40
DPM424-003	IN2015, IN2040, IN2005	R .093" (2 RH / 2 LH EDGES)	SMAX 35J6	SM50-160-10 (TORX 20)	35-40
DPM424-004	IN2015, IN2040, IN2005	R .125" (2 RH / 2 LH EDGES)	SMAX 35J6	SM50-160-10 (TORX 20)	35-40
DPM424R001	IN2015, IN2040, IN2005	R .031" (4 RH EDGES)	SMAX SPECIALS	SM50-160-10 (TORX 20)	35-40
DPM434-001	IN2015, IN2040, IN2005	R .031" (2 RH / 2 LH EDGES)	SMAX SPECIAL SLOTTING	SM50-160-10 (TORX 20)	35-40
DPM434-002	IN2015, IN2040, IN2005	R .062" (2 RH / 2 LH EDGES)	SMAX SPECIAL SLOTTING	SM50-160-10 (TORX 20)	35-40
DPM434R001	IN2015, IN2040, IN2005 IN1530	R .031" (4 RH EDGES)	SMAX SJ6N	SM50-160-10 (TORX 20)	35-40
DPM434R002	IN2015, IN2040, IN2005 IN6515, IN1530	R .062" (4 RH EDGES)	SMAX SJ6N	SM50-160-10 (TORX 20)	35-40
DPM434R003	IN1530	R .093" (4 RH EDGES)	SMAX SJ6N	SM50-160-10 (TORX 20)	35-40
DPM434R004	IN1530	R .125" (4 RH EDGES)	SMAX SJ6N	SM50-160-10 (TORX 20)	35-40
DPM434R045	IN2015, IN2040, IN2005 IN1530	.125" X 45° (4 RH EDGES)	SMAX SN6N	SM50-160-10 (TORX 20)	35-40