Ingersoll max line

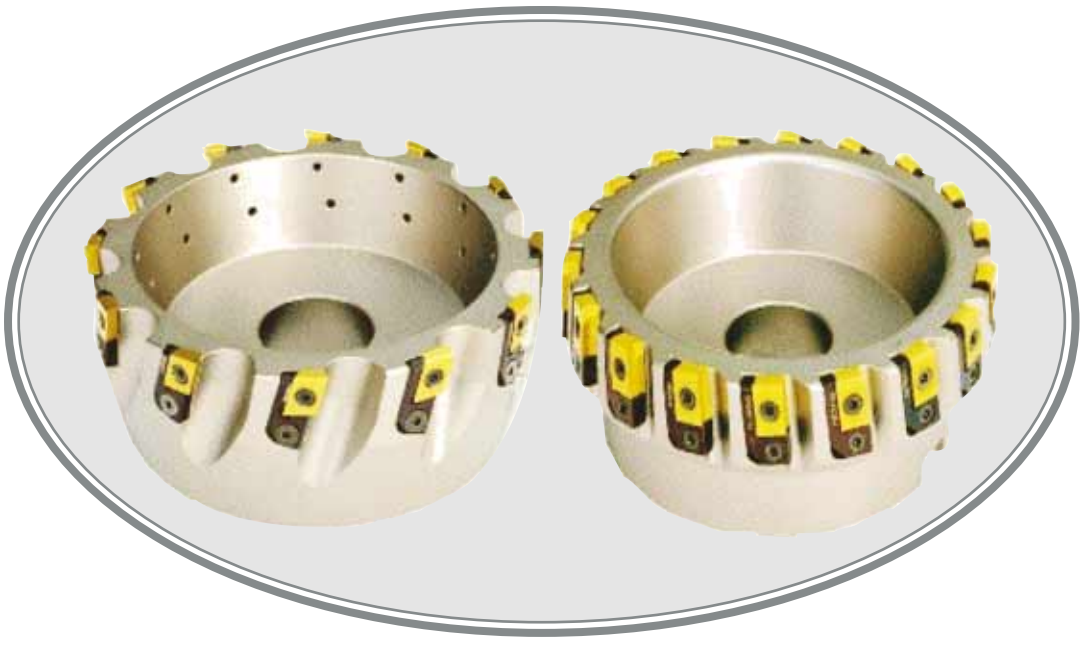
Ingersoll Cutting Tools

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.*

V-MAX™

. . . to today!

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 MAX™ 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!


Member IMC Group
Ingersoll
Cutting Tools

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Products

Diameter Range	Description	Applications	
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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)	

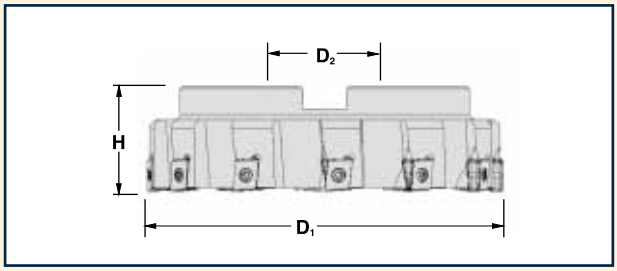
Choosing an Insert

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 45º	VMAX 6K6V, 6K5V, 56K6V	SM40-120-20 (TORX 15)	25-30
NNE324-108	IN2015, IN2030, IN2040	R .031" W/ 1º WIPER	VMAX 36L5V	SM40-120-00 (TORX 15)	25-30
NNE324-110	IN2015, IN2030, IN2040	.031" X MULTI FACET	VMAX 6M6V	(LOW HEAD) SM40-120-20 (TORX 15)	25-30
NNE324-125	IN6515 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 3º	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 45º (4 RH EDGES)	SMAX SN6N	SM50-160-10 (TORX 20)	35-40

0° LEAD HEAVY DEPTH FACE MILL SERIES SJ6N

Diameters	Cutting Edge Length	Insert Corner
3.00" to 12.00"	.68" (4RH)	.031", .062"R

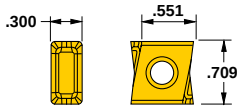
NEW!



D_1 Effective Diameter	**New Cutter Number**	Number of Inserts	H Height	D_2 Bore Diameter	Bolt Circle	Keyway	Insert Color Code
3.000	SJ6N-03R01	5	2.375	1.00	-	.37	
4.000	SJ6N-04R01	6	2.375	1.50	-	.63	
6.000	SJ6N-06R01	10	2.375	1.50	-	.63	
8.000	SJ6N-08R01	12	2.375	2.50	4.00	1.00	
10.000	SJ6N-10R01	14	2.375	2.50	4.00	1.00	
12.000	SJ6N-12R01	16	2.375	2.50	4.00, 7.00	1.00	

INSERTS (0° Lead)

DPM434R



Insert Color Code	**Insert Number**	**Corner** IN	Grades 1530	2005	2015	2040	6515
	DPM434R001	.031R	■	■	■	■	
	DPM434R002	.062R		■	■	■	■
	DPM434R003	.093R	■				
	DPM434R004	.125R	■				

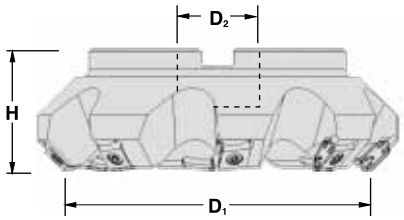
HARDWARE

Insert Screw		Driver
Part No.	Torque	Part No.
SM50-160-10 (SE03-70)	35-40 in. lbs.	DS-0034

45° LEAD HEAVY FEED FACE MILL SERIES SN6N

Diameters	Cutting Edge Length	Insert Corner
3.00" to 12.00"	.350" (4RH)	.125" x 45°

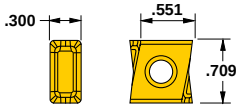
NEW!



D_1 Effective Diameter	**New Cutter Number**	Number of Inserts	H Height	D_2 Bore Diameter	Bolt Circle	Keyway	Insert Color Code
3.000	SN6N-03R01	5	2.375	1.00	-	.37	
4.000	SN6N-04R01	6	2.375	1.50	-	.63	
6.000	SN6N-06R01	8	2.375	1.50	-	.63	
8.000	SN6N-08R01	10	2.375	2.50	4.00	1.00	
10.000	SN6N-10R01	12	2.375	2.50	4.00	1.00	
12.000	SN6N-12R01	14	2.375	2.50	4.00, 8.00	1.00	

INSERTS (45° Lead)

DPM434R



Insert Color Code	**Insert Number**	**Corner**	IN	Grades 1530	2005	2015	2040
	DPM434R045	.125" X 45°		■	■	■	■

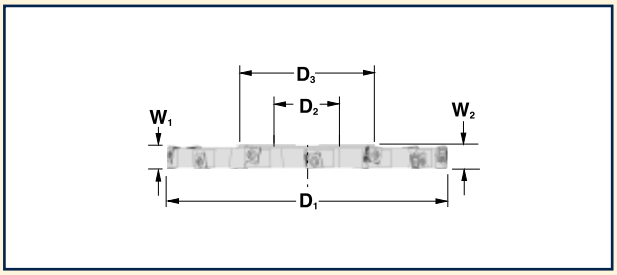
HARDWARE

Insert Screw		Driver
Part No.	Torque	Part No.
SM50-160-10 (SE03-70)	35-40 in. lbs.	DS-0034 (Tx-20)

HEAVY-DUTY AXIAL DRIVE SLOTTER SERIES 3SJ6

Diameters	Width of Cut	Insert Corner
4", 5", 6", 8", 10"	.625" - 1.000"	.031", .062", .093", .125"R (2RH/2LH)

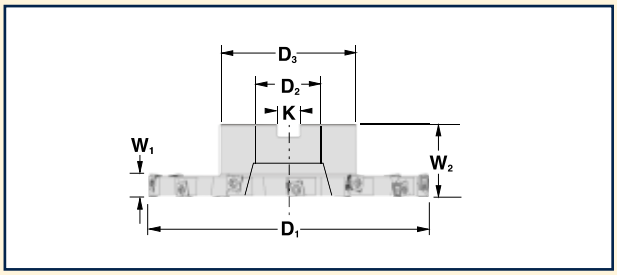
NEW!



W_1 Cutter Width	D_1 Nominal Diameter	**New Cutter Number**	D_2 Bore Diameter	W_2 Hub Width	D_3 Hub Diameter	Keyway	Number of Effective Inserts	Insert Color Code
.625	4.000	**3SJ6E-04062AG-01**	1.250	.625	2.25	.32	5	
.750	4.000	**3SJ6H-04075AG-01**	1.250	.750	2.25	.32	5	
1.000	4.000	**3SJ6L-04100AG-01**	1.250	1.000	2.75	.32	4	
.625	5.000	**3SJ6E-05062AH-01**	1.500	.625	2.75	.38	6	
.750	5.000	**3SJ6H-05075AH-01**	1.500	.750	2.75	.38	6	
1.000	5.000	**3SJ6L-05100AH-01**	1.500	1.000	2.75	.38	5	
.625	6.000	**3SJ6E-06062AH-01**	1.500	.625	3.50	.38	7	
.750	6.000	**3SJ6H-06075AH-01**	1.500	.750	3.50	.38	7	
1.000	6.000	**3SJ6L-06100AH-01**	1.500	1.000	3.50	.38	6	
.625	8.000	**3SJ6E-08062AK-01**	2.000	.625	3.50	0.5	8	
.750	8.000	**3SJ6H-08075AK-01**	2.000	.750	3.50	0.5	8	
1.000	8.000	**3SJ6L-08100AK-01**	2.000	1.000	3.50	0.5	7	
.625	10.000	**3SJ6E-10062AK-01**	2.000	.625	3.50	0.5	9	
.750	10.000	**3SJ6H-10075AK-01**	2.000	.750	3.50	0.5	9	
1.000	10.000	**3SJ6L-10100AK-01**	2.000	1.000	3.50	0.5	8	

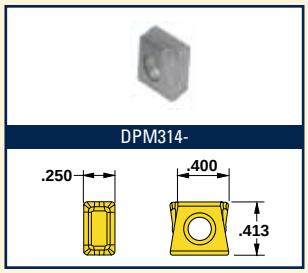
HEAVY-DUTY RADIAL DRIVE SLOTTER SERIES 3SJ6

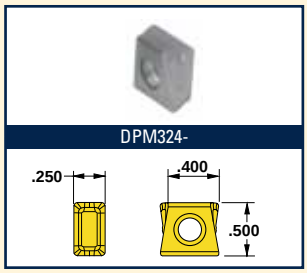
Diameters	Width of Cut	Insert Corner
4", 5", 6", 8", 10"	.625" - 1.000"	.031", .062", .093", .125"R (2RH/2LH)

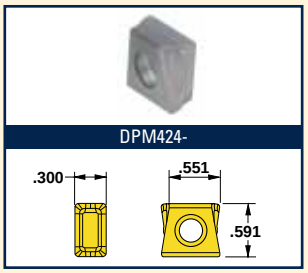


W_1 Cutter Width	D_1 Nominal Diameter	New Cutter Number	D_2 Bore Diameter	W_2 Hub Width	D_3 Hub Diameter	K Keyway	Number of Effective Inserts	Insert Color Code
.625	4.000	**3SJ6E-0406257-01**	1.00	1.50	2.00	.38	5	
.750	4.000	**3SJ6H-0407557-01**	1.00	1.50	2.00	.38	5	
1.000	4.000	**3SJ6L-0410057-01**	1.00	1.50	2.00	.38	4	
.625	5.000	**3SJ6E-0506257-01**	1.00	1.50	2.75	.38	6	
.750	5.000	**3SJ6H-0507557-01**	1.00	1.50	2.75	.38	6	
1.000	5.000	**3SJ6L-0510057-01**	1.00	1.50	2.75	.38	5	
.625	6.000	**3SJ6E-0606258-01**	1.50	2.00	3.81	.63	7	
.750	6.000	**3SJ6H-0607558-01**	1.50	2.00	3.81	.63	7	
1.000	6.000	**3SJ6L-0610058-01**	1.50	2.00	3.81	.63	6	
.625	8.000	**3SJ6E-0806258-01**	1.50	2.00	3.81	.63	8	
.750	8.000	**3SJ6H-0807558-01**	1.50	2.00	3.81	.63	8	
1.000	8.000	**3SJ6L-0810058-01**	1.50	2.00	3.81	.63	7	
.625	10.000	**3SJ6E-1006261-01**	2.50	2.00	4.87	1.00	9	
.750	10.000	**3SJ6H-1007561-01**	2.50	2.00	4.87	1.00	9	
1.000	10.000	**3SJ6L-1010061-01**	2.50	2.00	4.87	1.00	8	

INSERTS (Slotting)





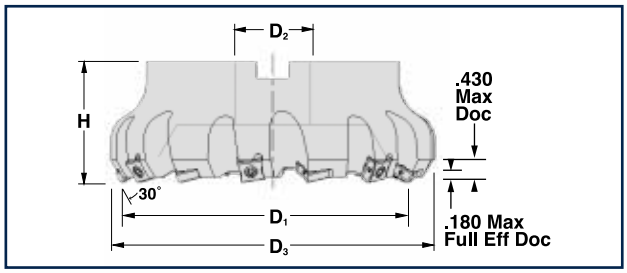


Insert Color Code	Insert Number	Corner IN	Grades 2015	2040	2005
	DPM314-001	.031	■	■	■
	DPM314-002	.062	■	■	■
	DPM314-003	.094	■	■	■
	DPM314-004	.125	■	■	■
	DPM324-001	.031	■	■	■
	DPM324-002	.062	■	■	■
	DPM324-003	.094	■	■	■
	DPM324-004	.125	■	■	■
	DPM424-001	.031	■	■	■
	DPM424-002	.062	■	■	■
	DPM424-003	.094	■	■	■
	DPM424-004	.125	■	■	■

HARDWARE

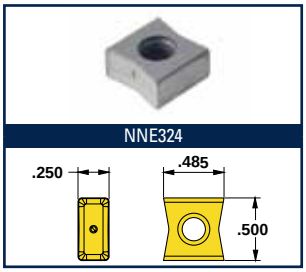
Insert Screw		Driver
Part No.	Torque	Part No.
SM40-120-20 (SE02-81) (DPM314, DPM324)	25-30 in. lbs. (DPM314, DPM324)	DS-T15T (Tx-15) (DPM314, DPM324)
SM50-160-10 (SE03-70) (DPM424)	35-40 in. lbs. (DPM424)	DS-0034 (Tx-20) (DPM424)

Diameters	Cutting Edge Length	Insert Corner
2.50" to 12.00"	.180"	.032" x 45°



D_1 Effective Diameter	**New Cutter Number**	Old Cutter Number	Number of Inserts	H Height	D_2 Bore Diameter	Bolt Circle	D_3 Overall Diameter
2.500	VM6V-02R25	6M6V-02R25	6	2.375	1.000	-	2.970
3.000	VM6V-03R01	6M6V-03R01	8	2.375	1.000	-	3.470
4.000	VM6V-04R01	6M6V-04R01	10	2.375	1.500	-	4.470
5.000	VM6V-05R01	6M6V-05R01	12	2.375	1.500	-	5.470
6.000	VM6V-06R01	6M6V-06R01	14	2.375	1.500	-	6.470
8.000	VM6V-08R01	6M6V-08R01	18	2.375	2.500	4.00	8.470
10.000	VM6V-10R01	6M6V-10R01	22	2.375	2.500	4.00	10.470
12.000	VM6V-12R01	6M6V-12R01	26	2.375	2.500	4.00, 7.00	12.470

INSERTS (30°)



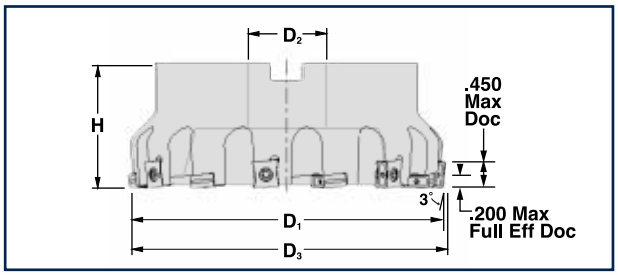
Insert Number	**Corner**	Grades				
		IN	2015	2030	2040	6515
NNE324-110	(2x) .031" x 45°		■	■	■	■

Will also accept NNE324-100, NNE432-102 but surface finish will be affected.

HARDWARE

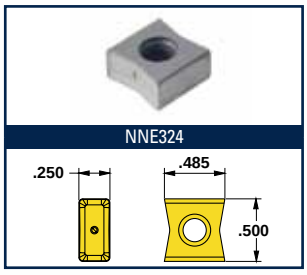
Insert Screw		Driver
Part No.	Torque	Part No.
SM40-120-20 (SE02-81)	25-30 in. lbs.	DS-T15T (Tx-15)

Diameters	Cutting Edge Length	Insert Corner
2.50" to 12.00"	.200"	.031"R



D_1 Effective Diameter	**New Cutter Number**	New Cutter Number	Number of Inserts	H Height	D_2 Bore Diameter	Bolt Circle	D_3 Overall Diameter
2.500	VL6V-02R25	6L6V-02R25	6	2.375	1.000	-	2.589
3.000	VL6V-03R01	6L6V-03R01	8	2.375	1.000	-	3.089
4.000	VL6V-04R01	6L6V-04R01	10	2.375	1.500	-	4.089
5.000	VL6V-05R01	6L6V-05R01	12	2.375	1.500	-	5.089
6.000	VL6V-06R01	6L6V-06R01	14	2.375	1.500	-	6.089
8.000	VL6V-08R01	6L6V-08R01	18	2.375	2.500	4.00	8.089
10.000	VL6V-10R01	6L6V-10R01	22	2.375	2.500	4.00	10.089
12.000	VL6V-12R01	6L6V-12R01	26	2.375	2.500	4.00, 7.00	12.089

INSERTS (3°)



Insert Number	Corner	Grades					
		IN	2005	2015	2030	2040	6515
NNE324R107	.031R	■	■	■	■	■	■

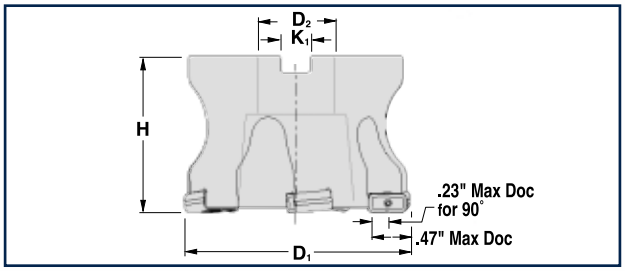
Will also accept NNE324-100, NNE432-102 but surface finish will be affected.

HARDWARE

Insert Screw		Driver
Part No.	Torque	Part No.
SM40-120-20 (SE02-81)	25-30 in. lbs.	DS-T15T (Tx-15)

A comprehensive selection of standard metric tools of this cutter series is available. Contact your sales agent for more information. The metric tools utilize the same inserts.

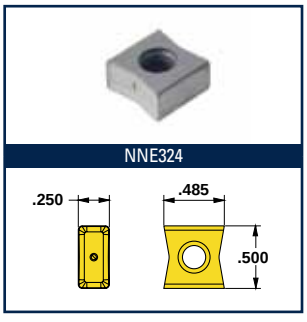
Diameters	Cutting Edge Length	Insert Corner
2.00" to 6.00"	.47" .23" or less for 90° shoulder	.031", .063", .125"R



D_1 Nominal Diameter	New Cutter Number	K_1 Keyway	Number of Inserts	H Height	D_2 Bore Diameter	Retention Bolt
Right-Hand Rotation						
2.00	**VHU-20015D1R01**	.32	4	1.570	.750	SD06-46
2.50	**VHU-25015D1R01**	.32	5	1.570	.750	SD06-46
3.00	**VHU-30020D3R01**	.38	5	2.000	1.000	SD08-47
4.00	**VHU-4001958R01**	.63	7	1.970	1.500	-
5.00	**VHU-5001958R01**	.63	9	1.970	1.500	-
6.00	**VHU-6001958R01**	.63	11	1.970	1.500	-
Left-Hand Rotation						
2.00	**VHU-20015D1L01**	.32	4	1.570	.750	SD06-46
2.50	**VHU-25015D1L01**	.32	5	1.570	.750	SD06-46
3.00	**VHU-30020D3L01**	.38	5	2.000	1.000	SD08-47
4.00	**VHU-4001958L01**	.63	7	1.970	1.500	-
5.00	**VHU-5001958L01**	.63	9	1.970	1.500	-
6.00	**VHU-6001958L01**	.63	11	1.970	1.500	-

*Can be used with INNOFIT system. **Note:** RH plungers can use remaining insert edges from a RH 0° lead 6K6V, 6K5V or 4W2A cutter If using long edge V-Max use a RH insert in a LH tool and a LH insert in a RH tool.

INSERTS (Plunge)



Insert Number	Corner	Grades						
		IN	1530	2005	2015	2030	2040	6515
NNE324-100	.031R		■	■	■	■	■	■
NNE324-102	.063R				■	■	■	■
NNE324-125	.125R					■		

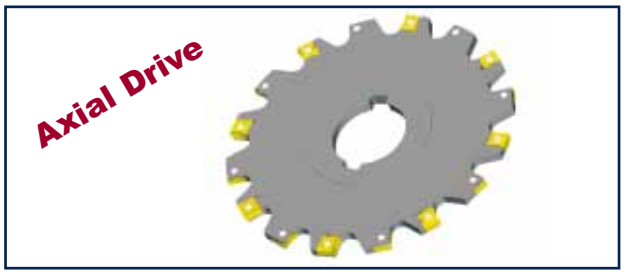
HARDWARE

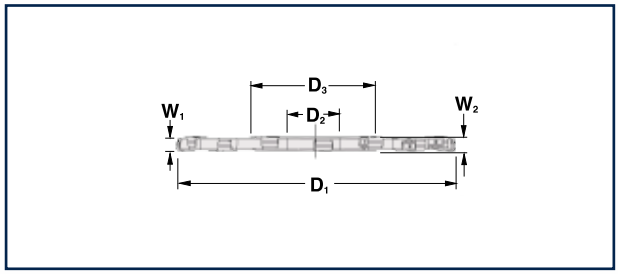
Insert Screw		Driver
Part No.	Torque	Part No.
SM40-120-20 (SE02-81)	25-30 in. lbs.	DS-T15T (Tx-15)

Diameters
4.000" to 8.000"

Width of Cut
.375" and .500"

Insert Corner
.031"R



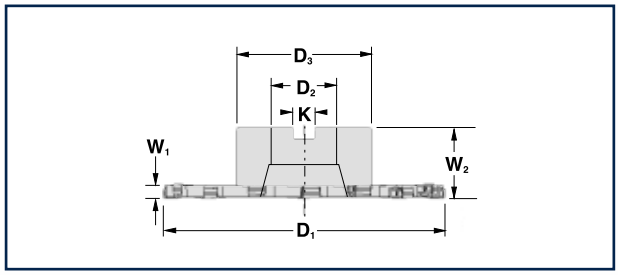


W_1 Cutter Width	D_1 Nominal Diameter	**New Cutter Number**	Old Cutter Number	D_2 Bore Diameter	W_2 Hub Width	D_3 Hub Diameter	K Keyway	Number of Effective Inserts
.375	4.000	**3VL5-04037AG-01**	36L5V-04037AG-01	1.250	.375	2.25	.32	5
.500	4.000	**3VL5-04037AG-01**	36L5V-04037AG-01	1.250	.500	2.25	.32	5
.375	5.000	**3VL5-05037AH-01**	36L5V-05037AH-01	1.500	.375	2.75	.38	6
.500	5.000	**3VL5-05050AH-01**	36L5V-05050AH-01	1.500	.500	2.75	.38	6
.375	6.000	**3VL5-06037AH-02**	36L5V-06037AH-02	1.500	.375	2.75	.38	7
.500	6.000	**3VL5-06050AH-02**	36L5V-06050AH-02	1.500	.500	2.75	.38	7
.375	8.000	**3VL5-08037AK-01**	36L5V-08037AK-01	2.000	.375	3.50	.50	8
.500	8.000	**3VL5-08050AK-01**	36L5V-08050AK-01	2.000	.500	3.50	.50	8

Diameters
4.000" to 8.000"

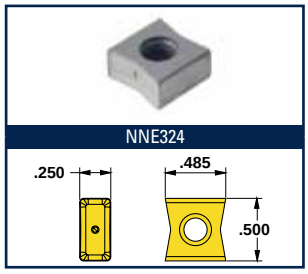
Width of Cut
.375" and .500"

Insert Corner
.031"R



W_1 Cutter Width	D_1 Nominal Diameter	**New Cutter Number**	Old Cutter Number	D_2 Bore Diameter	W_2 Hub Width	D_3 Hub Diameter	K Keyway	Number of Effective Inserts
.375	4.000	**3VL5-04037D3R01**	36L5V-04037D3R01	1.000	1.50	2.00	.38	5
.500	4.000	**3VL5-04050D3R01**	36L5V-04050D3R01	1.000	1.50	2.00	.38	5
.375	5.000	**3VL5-05037D3R01**	36L5V-05037D3R01	1.000	1.50	2.75	.38	6
.500	5.000	**3VL5-05050D3R01**	36L5V-05050D3R01	1.000	1.50	2.75	.38	6
.375	6.000	**3VL5-0603758R02**	36L5V-0603758R02	1.500	2.00	3.80	.63	7
.500	6.000	**3VL5-0605058R02**	36L5V-0605058R02	1.500	2.00	3.80	.63	7
.375	8.000	**3VL5-0803758R01**	36L5V-0803758R01	1.500	2.00	3.80	.63	8
.500	8.000	**3VL5-0805058R01**	36L5V-0805058R01	1.500	2.00	3.80	.63	8

INSERTS (Slotting)



Insert Number	Corner	Grades			
		IN	2015	2030	2040
NNE324-108	.031R		■	■	■

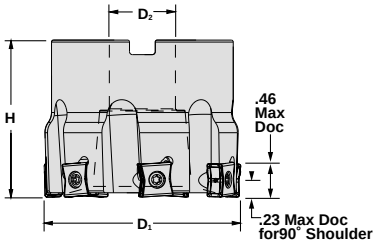
HARDWARE

Insert Screw		Driver
Part No.	Torque	Part No.
SM40-120-00 (SE02-75)	25-30 in. lbs.	DS-T15T (Tx-15)

PRODUCT – UPDATE

NNE324-108 Insert (shown above) utilizes a wiper flat to extend tool life and provide exceptional side wall finish when slotting.

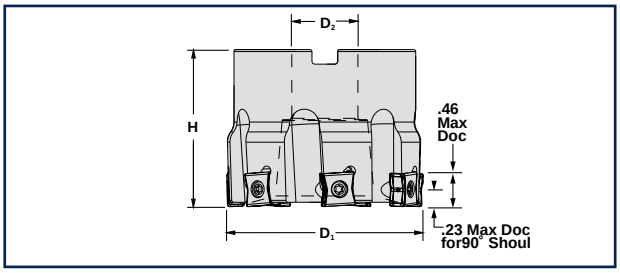
Diameters	Cutting Edge Length	Insert Corner
2.00" to 12.00"	.46" .23" (4RH/4LH)	.031", .063", .125"R and .031" x 45° chamfer



D_1 Effective Diameter	**New Cutter Number**	Old Cutter Number	Number of Inserts	H Height	D_2 Bore Diameter	Bolt Circle	Keyway
Coarse Density - Right-Hand Rotation							
2.000	VK6V-02R02	6K6V-02R02	3	1.570	0.750	-	.32
3.000	VK6V-03R02	6K6V-03R02	5	2.375	1.000	-	.38
4.000	VK6V-04R02	6K6V-04R02	6	2.375	1.500	-	.63
6.000	VK6V-06R02	6K6V-06R02	8	2.375	1.500	-	.63
8.000	VK6V-08R02	6K6V-08R02	10	2.375	2.500	4.00	1.00
10.000	VK6V-10R02	6K6V-10R02	12	2.375	2.500	4.00, 7.00	1.00
12.000	VK6V-12R02	6K6V-12R02	14	2.375	2.500	4.00, 7.00	1.00
Coarse Density - Left-Hand Rotation							
2.000	VK6V-02L02	6K6V-02L02	3	1.570	0.750	-	.32
3.000	VK6V-03L02	6K6V-03L02	5	2.375	1.000	-	.38
4.000	VK6V-04L02	6K6V-04L02	6	2.375	1.500	-	.63
6.000	VK6V-06L02	6K6V-06L02	8	2.375	1.500	-	.63
8.000	VK6V-08L02	6K6V-08L02	10	2.375	2.500	4.00	1.00
10.000	VK6V-10L02	6K6V-10L02	12	2.375	2.500	4.00, 7.00	1.00
12.000	VK6V-12L02	6K6V-12L02	14	2.375	2.500	4.00, 7.00	1.00

0° MEDIUM-DENSITY FACE MILL SERIES VK6V

Diameters	Cutting Edge Length	Insert Corner
2.00" to 12.00"	.46" .25" (4RH/4LH)	.031", .063", .125"R and .031" x 45° chamfer

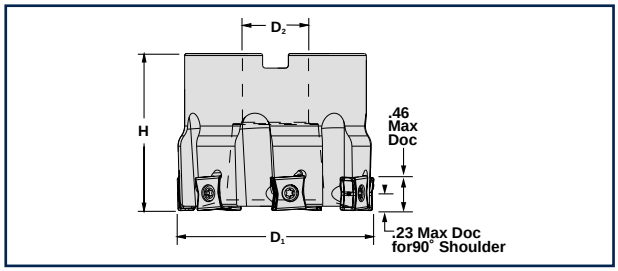


D_1 Effective Diameter	**New Cutter Number**	Old Cutter Number	Number of Inserts	H Height	D_2 Bore Diameter	Bolt Circle	Keyway
Medium Density - Right-Hand Rotation							
2.000	VK6V-02R01	6K6V-02R01	5	1.570	0.750	-	.32
2.500	VK6V-02R25	6K6V-02R25	6	1.570	1.000	-	.38
3.000	VK6V-03R01	6K6V-03R01	8	2.375	1.000	-	.38
4.000	VK6V-04R01	6K6V-04R01	9	2.375	1.500	-	.63
5.000	VK6V-05R01	6K6V-05R01	10	2.375	1.500	-	.63
6.000	VK6V-06R01	6K6V-06R01	13	2.375	1.500	-	.63
8.000	VK6V-08R01	6K6V-08R01	16	2.375	2.500	4.00	1.00
10.000	VK6V-10R01	6K6V-10R01	20	2.375	2.500	4.00, 7.00	1.00
12.000	VK6V-12R01	6K6V-12R01	24	2.375	2.500	4.00, 7.00	1.00
Medium Density - Left-Hand Rotation							
2.000	VK6V-02L01	6K6V-02L01	5	1.570	0.750	-	.32
2.500	VK6V-02L25	6K6V-02L25	6	1.570	1.000	-	.38
3.000	VK6V-03L01	6K6V-03L01	8	2.375	1.000	-	.38
4.000	VK6V-04L01	6K6V-04L01	9	2.375	1.500	-	.63
5.000	VK6V-05L01	6K6V-05L01	10	2.375	1.500	-	.63
6.000	VK6V-06L01	6K6V-06L01	13	2.375	1.500	-	.63
8.000	VK6V-08L01	6K6V-08L01	16	2.375	2.500	4.00	1.00
10.000	VK6V-10L01	6K6V-10L01	20	2.375	2.500	4.00, 7.00	1.00
12.000	VK6V-12L01	6K6V-12L01	24	2.375	2.500	4.00, 7.00	1.00

A comprehensive selection of standard metric tools of this cutter series is available. Contact your sales agent for more information. The metric tools utilize the same inserts.

0° HI-DENSITY FACE MILL SERIES VK5V

Diameters	Cutting Edge Length	Insert Corner
2.00" to 12.00"	.46" .23" (4RH/4LH)	.031", .063", .125R and .031" x 45° chamfer

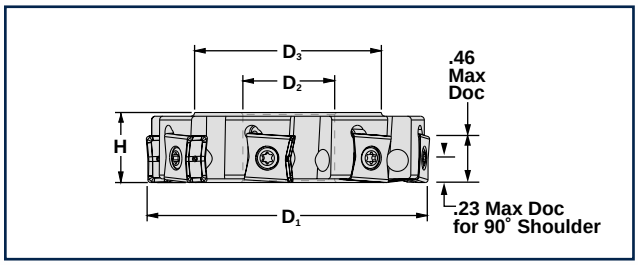


D_1 Effective Diameter	**New Cutter Number**	Old Cutter Number	Number of Inserts	H Height	D_2 Bore Diameter	Bolt Circle	Keyway
High Density - Right-Hand Rotation							
2.000	VK5V-02R01	6K5V-02R01	6	1.570	0.750	-	.32
2.500	VK5V-02R25	6K5V-02R25	8	1.570	1.000	-	.38
3.000	VK5V-03R01	6K5V-03R01	10	2.375	1.000	-	.38
4.000	VK5V-04R01	6K5V-04R01	13	2.375	1.500	-	.63
5.000	VK5V-05R01	6K5V-05R01	16	2.375	1.500	-	.63
6.000	VK5V-06R01	6K5V-06R01	21	2.375	1.500	-	.63
8.000	VK5V-08R01	6K5V-08R01	26	2.375	2.500	4.00	1.00
10.000	VK5V-10R01	6K5V-10R01	32	2.375	2.500	4.00, 7.00	1.00
12.000	VK5V-12R01	6K5V-12R01	38	2.375	2.500	4.00, 7.00	1.00
High Density - Left-Hand Rotation							
2.000	VK5V-02L01	6K5V-02L01	6	1.570	0.750	-	.32
2.500	VK5V-02L25	6K5V-02L25	8	1.570	1.000	-	.38
3.000	VK5V-03L01	6K5V-03L01	10	2.375	1.000	-	.38
4.000	VK5V-04L01	6K5V-04L01	13	2.375	1.500	-	.63
5.000	VK5V-05L01	6K5V-05L01	16	2.375	1.500	-	.63
6.000	VK5V-06L01	6K5V-06L01	21	2.375	1.500	-	.63
8.000	VK5V-08L01	6K5V-08L01	26	2.375	2.500	4.00	1.00
10.000	VK5V-10L01	6K5V-10L01	32	2.375	2.500	4.00, 7.00	1.00
12.000	VK5V-12L01	6K5V-12L01	38	2.375	2.500	4.00, 7.00	1.00

A comprehensive selection of standard metric tools of this cutter series is available. Contact your sales agent for more information. The metric tools utilize the same inserts.

0° HEAVY-DUTY HALF-SIDE MILL SERIES 5VK6

Diameters	Cutting Edge Length	Insert Corner
3.00" to 10.00"	.46" .23" (4RH/4LH)	.031", .063", .125R and .031" x 45° chamfer

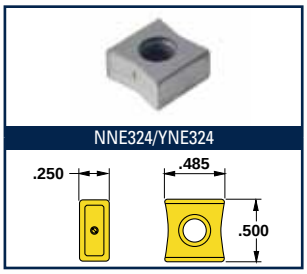


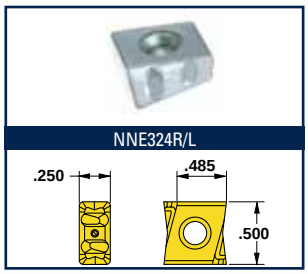
D_1 Effective Diameter	**New Cutter Number**	Old Cutter Number	Number of Inserts	H Height	D_2 Bore Diameter	D_3 Mounting Diameter
Right-Hand Rotation						
3.000	5V6K-03075AFR01	56K6V-03075AFR01	8	0.750	1.000	2.00
4.000	5V6K-04075AHR01	56K6V-04075AHR01	9	0.750	1.500	2.75
5.000	5V6K-05075AHR01	56K6V-05075AHR01	10	0.750	1.500	2.75
6.000	5V6K-06075AHR01	56K6V-06075AHR01	13	0.750	1.500	2.75
8.000	5V6K-08075AKR01	56K6V-08075AKR01	16	0.750	2.00	4.00
10.000	5V6K-10075AKR01	56K6V-10075AKR01	20	0.750	2.00	4.00
Left-Hand Rotation						
3.000	5V6K-03075AFL01	56K6V-03075AFL01	8	0.750	1.000	2.00
4.000	5V6K-04075AHL01	56K6V-04075AHL01	9	0.750	1.500	2.75
5.000	5V6K-05075AHL01	56K6V-05075AHL01	10	0.750	1.500	2.75
6.000	5V6K-06075AHL01	56K6V-06075AHL01	13	0.750	1.500	2.75
8.000	5V6K-08075AKL01	56K6V-08075AKL01	16	0.750	2.00	4.00
10.000	5V6K-10075AKL01	56K6V-10075AKL01	20	0.750	2.00	4.00

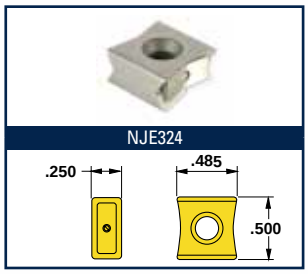
Product Note: Full and half pitch axial Keyway on stock tools

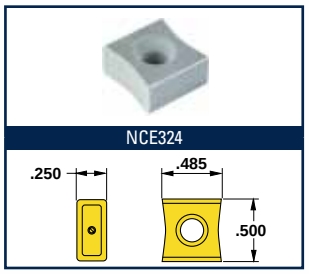
A comprehensive selection of standard metric tools of this cutter series is available. Contact your sales agent for more information. The metric tools utilize the same inserts.

INSERTS (0° Lead)





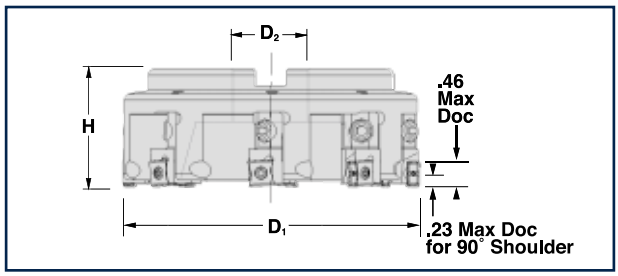




Insert Number	Application	Corner	Cut Edge Configuration	Grades									
				IN	2005	2010	2030	2015	2040	1530	6515	15K	70N
NNE324-100	Multi-Purpose	.031R	4RH/4LH	■			■	■	■	■	■		
NNE324-102	Multi-Purpose	.063R	4RH/4LH				■	■	■		■		
NNE324-104	Multi-Purpose	.031 x 45°	4RH/4LH			■		■					
NNE324-125	Multi-Purpose	.125R	4RH/4LH				■						
YNE324-100	Wiper	.031R	2RH/2LH				■	■	■		■		
NNE324R109	Multi-Purpose	.031R	4RH	■		■	■	■	■		■		
NNE324L109	Multi-Purpose	.031R	4LH	■		■	■	■	■		■		
NJE324-100-P	Aluminum	.031R	4RH/4LH (Polished)									■	
NCE324-100	Iron	.031R	4RH/4LH (SiNit)										■

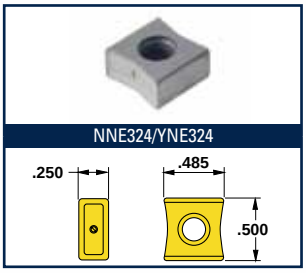
VMAX MULTIPLE GEOMETRY CARTRIDGE FACE MILL SERIES 4W2A

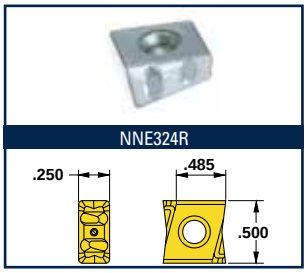
Diameters	Cutting Edge Length	Insert Corner
4.00" to 12.00"	.46" .23" (4RH/4LH)	.031", .063", .125R and .031" x 45° chamfer

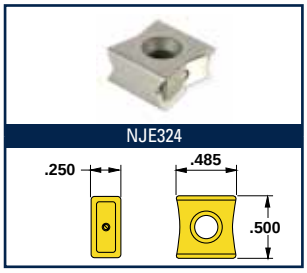


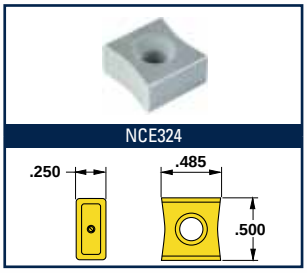
Insert Style	D_1 Nom. Dia.	New Cutter Number	Assembly Components: Cartridge Number	Assembly Components: Body Number	Number of Inserts	H Height	D_2 Bore Dia.	Bolt Circle	Weight with Cartridges	Stock
V MAX	4.00	**4W2A-04A07**	52K-11R02	4W2A-04R01	6	2.460	1.500	–	4.11 lbs.	2
	6.00	**4W2A-06A07**	52K-11R02	4W2A-06R01	8	2.460	1.500	–	10.13 lbs.	2
	8.00	**4W2A-08A07**	52K-11R02	4W2A-08R01	10	2.460	2.500	4.00	17.11 lbs.	2
	10.00	**4W2A-10A07**	52K-11R02	4W2A-10R01	12	2.460	2.500	4.00	28.7 lbs.	2
	12.00	**4W2A-12A07**	52K-11R02	4W2A-12R01	14	2.460	2.500	4.00, 7.00	39.15 lbs.	2

INSERT/HARDWARE CONFIGURATIONS





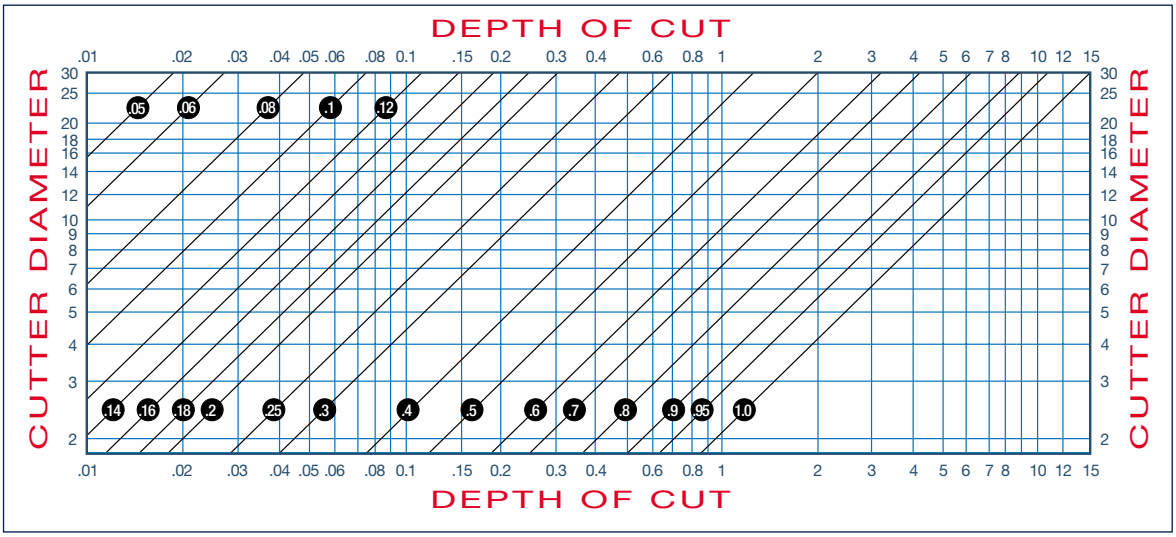




Cartridge Style	Insert Number	Application	Corner	Cut Edge Configuration	Grades: IN	2005	2010	2030	2015	2040	1530	6515	15K	70N
0° Lead VMax	**NNE324-100**	Multi-Purpose	.031R	4RH/4LH	■			■	■	■	■	■		
	NNE324-102	Multi-Purpose	.063R	4RH/4LH				■	■	■		■		
	NNE324-104	Multi-Purpose	.031 x 45°	4RH/4LH			■		■					
	NNE324-125	Multi-Purpose	.125R	4RH/4LH				■						
	YNE324-100	Wiper	.031R	2RH/2LH				■	■	■		■		
	NNE324R109	Multi-Purpose	.031R	4RH	■	■		■	■	■		■		
	NJE324-100-P	Aluminum	.031R	4RH/4LH (Polished)									■	
	NCE324-100	Iron	.031R	4RH/4LH (SiNit)										■

Product Note: See standard Ingersoll catalog for other cartridge and insert combinations available that fit same cutter body.

CHIP THINNING (SLOTTING)



To find the Radial Chip Thinning Factor for a slotting cut:

1. Find the Depth of Cut on the horizontal scale.
2. Locate the nominal diameter of the cutter on the vertical axis.
3. Cross-reference the two figures.
4. Locate the diagonal line closest to the intersection of the vertical and horizontal axes.
   The value of this diagonal is the Radial Chip Thinning Factor for your specific application.
5. Multiply this radial chip thinning factor with the calculated chip thickness to get the actual chip thickness.

VOMAX™ OPERATING PARAMETERS

Material		Brinell Hardness	SFM	Feed per Insert	Grades* IN1530	IN6515	IN2015/IN2010	IN2030	IN2040	IN2005	IN15K (Polished)	IN70N	Coolant
Aluminum	6061-T6, 7075-T6, 2024	-	1500-3000	.004-.015							1		Yes
Cast Iron	Gray	150-280	400-750	.005-.012		2	1						No
	Nodular		300-650										
			1500+	.004-.007								1	
Steel	Low Carbon 1018, 8620	150-250	250-500	.005-.010									No
	High Carbon F-6180, Nitralloy 52100	250-400	200-350	.005-.008									
	Alloyed Steel 4140, 4340, 6150	150-300	250-400	.005-.010				2	1	3			
	Tool Steel A-6, D-1, D-2, P-20	Up to 300											
Stainless Steel	300 Series, 304, 316	-	250-400	.003-.006									May not be required at high speeds
	400 Series, 15-5 PH, 17-4 PH	Up to 320	300-600		1			2		3			
	13-8 PH	-	200-250	.004-.008									Yes
Nickel Alloys	Inconel 600, 706, 718, 903, Hastelloy, Waspalloy	-	75-120	.003-.006	1			3		2			Yes
Titanium	6AL-4V	-	100-150	.003-.006	2			3		1			Yes

*In order of preference.

Operating Parameters

INSERT SERIES: DPM314/DPM324

Material		Brinell Hardness	SFM	Feed per Insert	Grades* IN2015	IN2040	IN2005	Coolant
Cast Iron	Gray	150-280	400-750	.005-.012	1		2	No
	Nodular		300-650					
Steel	Low Carbon 1018, 8620	150-250	250-500	.005-.010		1	2	No
	High Carbon F-6180 Nitralloy 52100	250-400	200-350	.005-.008				
	Alloyed Steel 4140, 4340, 6150	150-300	250-400	.005-.010				
	Tool Steel A-6, D-1, D-2, P-20	Up to 300						
Stainless Steel	300 Series 304, 316	-	250-400	.003-.006	2		1	May not be required at high speeds
	400 series, 15-5 PH, 17-4 PH	Up to 300	300-600					
	13-8 PH	-	200-250	.004-.008				Yes
Nickel Alloys	Inconel 600, 706, 718 903, Hastelloy, Waspalloy	-	75-120	.003-.006	2		1	Yes
Titanium	6AL-4V	-	100-150	.003-.006	2		1	Yes

INSERT SERIES: DPM424/DPM434

Material		Brinell Hardness	SFM	Feed per Insert	Grades* IN2015	IN2040	IN2005	IN1530	IN6515	Coolant
Cast Iron	Gray	150-280	400-750	.007-.018	1		3		2	No
	Nodular		300-650							
Steel	Low Carbon 1018, 8620	150-250	250-500	.005-.015		1	2	3		No
	High Carbon F-6180 Nitralloy 52100	250-400	200-350	.006-.013						
	Alloyed Steel 4140, 4340, 6150	150-300	250-400	.006-.015						
	Tool Steel A-6, D-1, D-2, P-20	Up to 300								
Stainless Steel	300 Series 304, 316	-	250-400	.005-.010			2	1		May not be required at high speeds
	400 series, 15-5 PH, 17-4 PH	Up to 300	300-600							
	13-8 PH	-	200-250	.006-.012						Yes
Nickel Alloys	Inconel 600, 706, 718 903, Hastelloy, Waspalloy	-	75-120	.004-.007			2	1		Yes
Titanium	6AL-4V	-	100-150	.004-.007			1	2		Yes

Grade and Carbide Selection

CHOOSING A GRADE

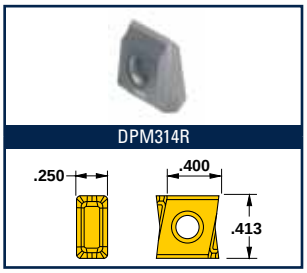
Grade	Material
IN2015 / IN2010	Grey, ductile, nodular iron dry or wet, low to medium cutting speed, low to medium chip thickness.
IN6515	Grey, ductile, nodular iron dry, medium to high cutting speed, medium to high chip thickness. Heavily interrupted cuts.
IN1530	General purpose mild steel, hi-temp alloys, or stainless steel. Interrupted cuts. Wet.
IN2030 / IN2005	Hi-temp alloys. Poor set-up rigidity. Wet or dry.
IN2040	General purpose mild steel and steel alloys, ductile and nodular iron (dry only), when set-up rigidity is good.
IN6542 / IN6510	Grey, ductile, nodular iron dry or wet, non-interrupted milling, low to medium cutting speed, medium to high chip thickness.
IN15K (w/polish)	Non-ferrous materials. Wet.
IN70N	Grey, ductile, nodular iron dry only, very high speed, low to medium chip thickness.

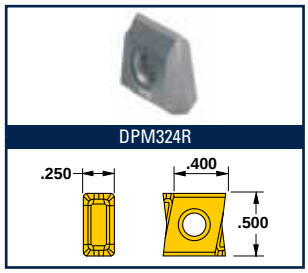
CARBIDE SELECTION GUIDE

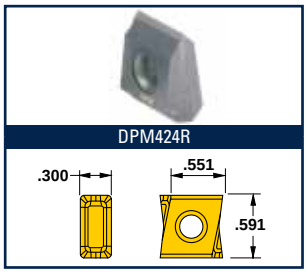
Direction of Use	Wear Resistance → / ← Toughness / ← Increase Feed / Increase Speed →	Wear Resistance → / ← Toughness / ← Increase Feed / Increase Speed →	Wear Resistance → / ← Toughness / ← Increase Feed / Increase Speed →
Material	Short Chipping Malleable Iron, Non-Ferrous Metal, Hardened Iron, Chilled Iron, Cast Iron	High-Temp Alloys, Alloy Iron, Steel Casting, Manganese	Free Cutting Steels, Malleable Iron, Steel Casting, Steel

New CL	Coating	C1						C2		C3		C4							C5						C6		C7		C8		
		K50	K45	K40	K35	K30	K25	K20	K15	K10	K05	K01	M50	M40	M30	M20	M10	P50	P45	P40	P35	P30	P25	P20	P15	P10	P05	P01			
IN15K	Uncoated			IN15K																											
IN6510	CVD							IN6510																							
IN6515	CVD				IN6515																	IN6515									
IN1530	PVD		IN1530											IN1530					IN1530												
IN2005	PVD													IN2005							IN2005										
IN2010	PVD				IN2010																										
IN2015	PVD			IN2015										IN2015							IN2015										
IN2030	PVD		IN2030											IN2030					IN2030												
IN2040	PVD																			IN2040											
N70N	Non-Carbide							IN70N																							

INSERTS: 0° LEAD RH ONLY

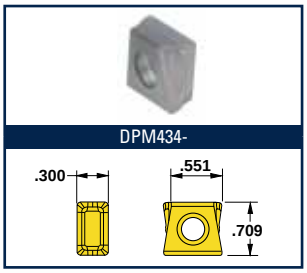






Insert Color Code	Insert Number	Corner IN	Grades 2015	2040	2005
	DPM314R001	.031	■	■	■
	DPM324R001	.031	■	■	■
	DPM424R001	.031	■	■	■

INSERTS: SLOTTING RH/LH



Insert Color Code	Insert Number	Corner IN	Grades 2015	2040	2005	1530
	DPM434-001	.031	■	■	■	■
	DPM434-002	.062	■	■	■	

General Application Information

APPLYING BASIC PRINCIPLES OF MACHINING WITH INDEXABLES CAN IMPROVE PERFORMANCE

The following information is directed toward indexable carbide tools but it can be applied to many other cutting tools, as well. It provides some basic guidelines designed to serve as a starting point for safe and reliable performance. Contact your Ingersoll Cutting Tool Company sales engineer or distributor for specific application assistance.

Rigidity. Use the most rigid cutter possible. This usually means the cutter with the largest diameter and shortest length. Use the best adaption possible. Integral tapers, such as a 50 V-flange, are better than straight shanks. When selecting straight shank tools, use a cutter with the largest diameter shank possible and a holder with the shortest length possible.

Effective cutting edges. When calculating feed rate, use the effective number of inserts. In extended flute cutters, the effective number of inserts is not the number of rows. Use the effective number listed with the specifications for each series of tools.

Chip load. Carbide cutting tools have to take a "bite" to cut. Be sure to cut with an adequate chip load. Light chip loads can contribute to chatter, causing a cutter to "rub" instead of "bite." This can also result in poor tool life. As a general rule, chip loads should not be less than .004". Also, be sure to use Radial Chip Thinning Factors (RCTF) when calculating feed rates.

Chip recutting. Unlike HSS, carbide cutting tools cannot recut chips. Recutting chips will damage carbide. To evacuate chips, use air or coolant depending on the material being cut.

Coolant. Generous amounts of coolant are required when low thermal conductivity, work hardening, and chip welding tendencies are evident.

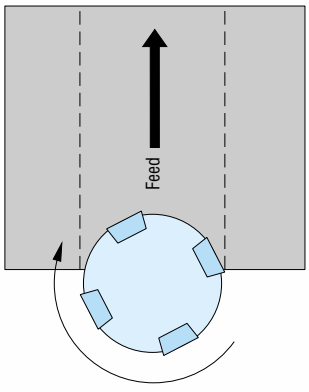
Use coolant only when necessary. Some materials cut better dry. In some applications, coolant causes thermal cracking of inserts and poor tool life.

Feed rates. Reduce feed rates by 50 percent when entering or exiting a cut. Since fewer inserts are engaged in the work, pounding can occur. Reducing feed rates will reduce the shock of the interrupted cut and contribute to longer tool life.

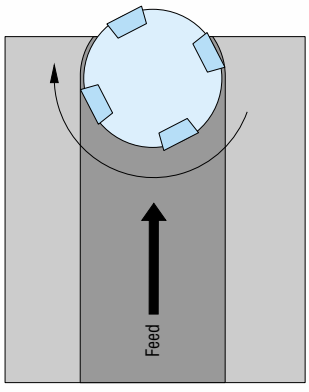
When entering a corner during pocket milling, a larger portion of the cutter's diameter is engaged. Power requirements and tool deflection increase. To compensate, program a reduced interpolated feed rate. Alternately, drill or plunge the corner prior to milling.

Cutter rotation. Climb cut whenever possible. Carbide is designed for climb milling and will not generally perform as well when conventional cutting.

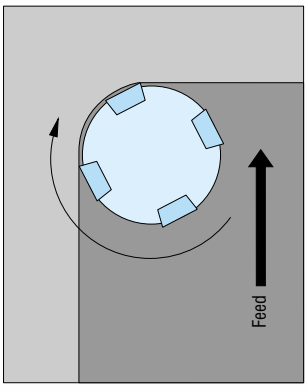
Conventional cutting may be employed on older machines to minimize backlash. It can also extend tool life in sandy, scaly, or torch-cut surfaces as the cutting edge enters into cleaner, softer material.



Entering a Cut



Exiting a Cut



Corner Cutting

Reduce feed rates by 50% when entering a cut, exiting a cut, or entering a corner. This reduces pounding and cutting forces and can extend the life of your indexable carbide tool.

Standard Milling Formulas

Surface Speed per Minute

$$SFM = .26 \times Diameter \times RPM$$

Revolutions per Minute

$$RPM = \frac{3.82 \times SFM}{Diameter}$$

Feed per Revolution

$$FPR = \frac{IPM}{RPM}$$

Inches per Minute

$$IPM = RPM \times FPR$$

Feed per Insert

$$FPI = \frac{FPR}{No.\ Eff.\ Insert}$$

Horsepower equals Material Removal Rate divided by the "K" Factor

Horsepower

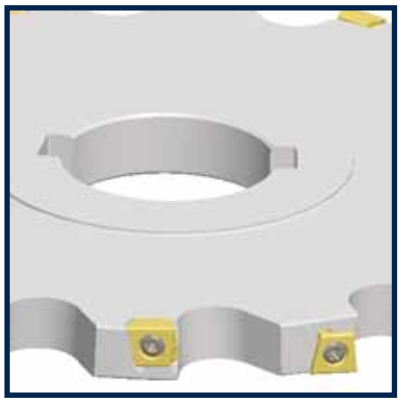
$$HP = \frac{WOC \times DOC \times IPM}{K}$$

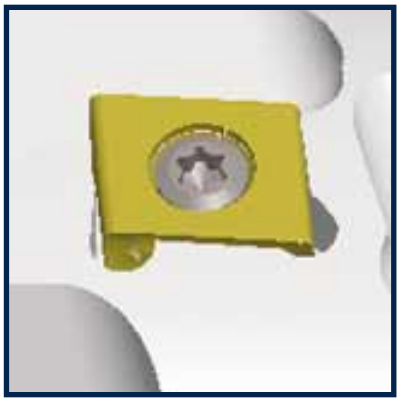
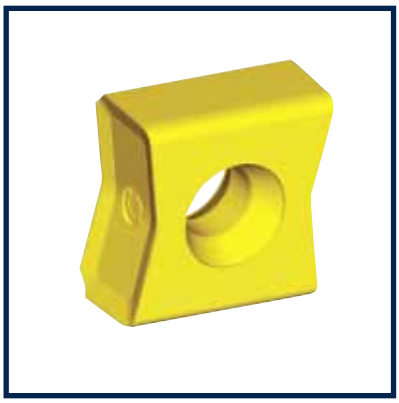
Material	"K" Factors
Aluminum	3.0 - 4.0
Brass-Soft	3.0
Brass-Hard	2.0
Bronze-Hard	1.4
Bronze-VH	.5 - .7
Cast Iron 200 Bhn	1.5 - 2.0
Cast Iron > 200 Bhn	1,3 - 1.8
Steel 100 Bhn	1.5
Steel 150 Bhn	.9
Steel 200 Bhn	.7
Steel 250 Bhn	.6
Steel 400 Bhn	.5
Stainless Steel	.5 - 1.0
High Temp Alloys	.3 - .8

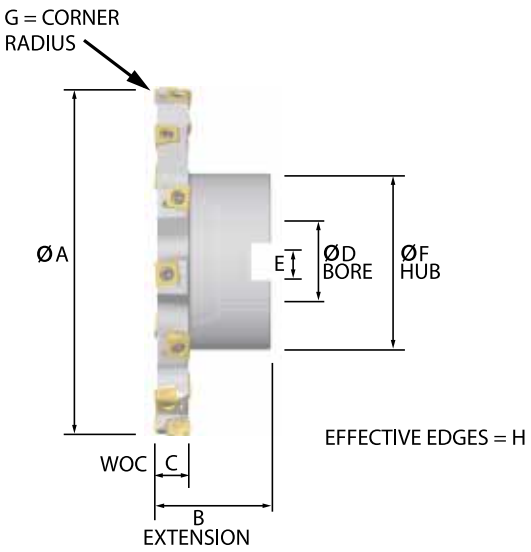
MODIFIED STANDARDS AND SPECIALS

PRODUCT WORKSHEETS

- APPENDIX -



SUGGESTED DIAMETER 4.00"+

VARIABLE FEATURES

A:_____

B:_____

C:_____

D:_____

E:_____

F:_____

G:_____

H:_____

MEASUREMENT UNITS USED

☐ INCH ☐ MM

SLOTTING/SLABBING AND T-SLOTTING

APPLICATION DATA

WORKPIECE MATERIAL

AVG. RADIAL DOC

RPM

FEED RATE

MACHINE TYPE

MACHINE H.P.

MAX. TOOL ASSY. WEIGHT

REMARKS

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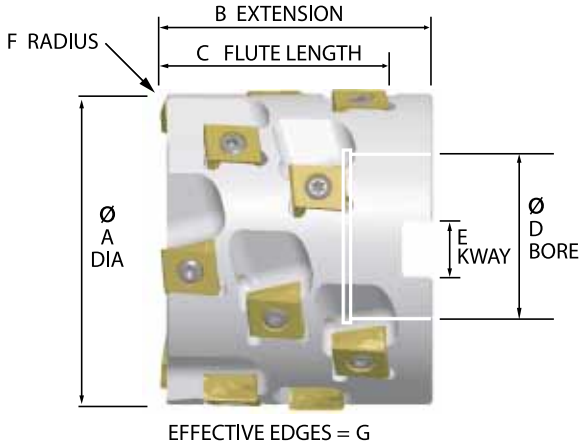
Member IMC Group Ingersoll Cutting Tools



SUGGESTED DIAMETER 2.00"+

VARIABLE FEATURES

A:_____

B:_____

C:_____

D:_____

E:_____

F:_____

G:_____

MEASUREMENT UNITS USED
☐ INCH ☐ MM

HEAVY-DUTY SHELL MILL

COOLANT THRU: YES NO

APPLICATION DATA

WORKPIECE MATERIAL

AVG. RADIAL DOC

RPM

FEED RATE

MACHINE TYPE

MACHINE H.P.

MAX. TOOL ASSY. WEIGHT

REMARKS

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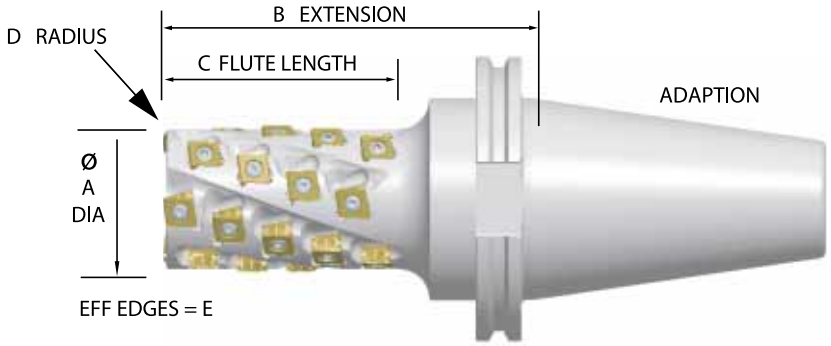

SUGGESTED DIAMETER 1.50"+

VARIABLE FEATURES

A:_____

B:_____

C:_____

D:_____

E:_____

MEASUREMENT UNITS USED

☐ INCH ☐ MM

HEAVY-DUTY ENDMILLING

COOLANT THRU: YES NO

ADAPTION STYLE:_____

APPLICATION DATA

WORKPIECE MATERIAL

AVG. RADIAL DOC

RPM

FEED RATE

MACHINE TYPE

MACHINE H.P.

MAX. TOOL ASSY. WEIGHT

REMARKS

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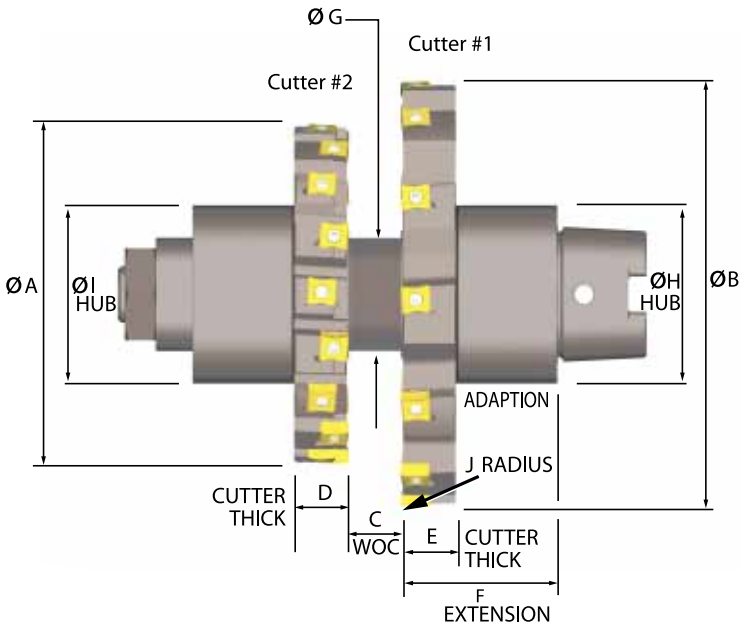

Optional
PA-0613 Anvil

VARIABLE FEATURES

A:_____

B:_____

C:_____

D:_____

E:_____

F:_____

G:_____

H:_____

I:_____

J:_____

MEASUREMENT UNITS USED

☐ INCH ☐ MM

STRADDLE MILLING
FULL SIDE MILLING

CUTTER #1 QUANTITY OF INSERTS:_____

CUTTER # 2 QUANTITY OF INSERTS:_____

ADAPTION STYLE:_____

APPLICATION DATA

WORKPIECE MATERIAL_____

AVG. AXIAL DOC_____

RPM_____

FEED RATE_____

MACHINE TYPE_____

MACHINE H.P._____

MAX. TOOL ASSY. WEIGHT_____

REMARKS

_____

_____

_____

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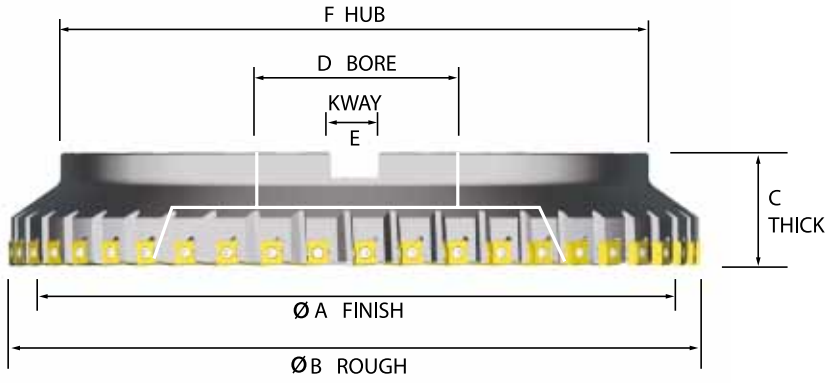
Member IMC Group Ingersoll Cutting Tools



VARIABLE FEATURES

A:_____

B:_____

C:_____

D:_____

E:_____

F:_____

MEASUREMENT UNITS USED

☐ INCH ☐ MM

COMBINATION FINISH FACE MILL

PROPOSED QUANTITY OF ROUGHER INSERTS:_____

PROPOSED QUANTITY OF FINISHER INSERTS:_____

ROUGHER L-NEST PROTECTION/ ADJUSTMENT REQUESTED: . . . . . YES NO

COOLANT MANIFOLD REQUESTED: . .YES NO

APPLICATION DATA

WORKPIECE MATERIAL _____

AVG. AXIAL DOC _____

RPM _____

FEED RATE _____

MACHINE TYPE _____

MACHINE H.P. _____

MAX. TOOL ASSY. WEIGHT _____

REMARKS

_____

_____

_____

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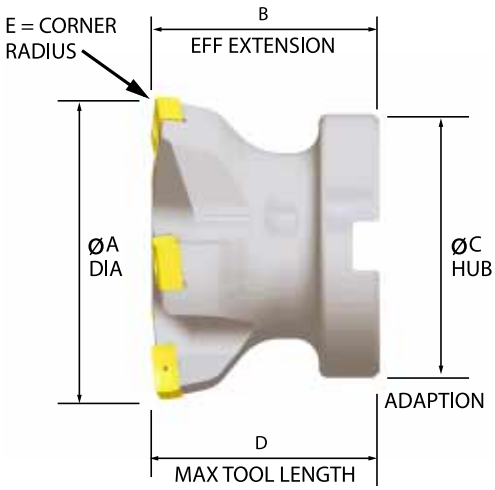
Member IMC Group Ingersoll Cutting Tools



OPTIONAL
PAR0615/PAL0615
NEST

SUGGESTED DIAMETER 2.50"+

VARIABLE FEATURES

A:_____

B:_____

C:_____

D:_____

E:_____

MEASUREMENT UNITS USED
☐ INCH ☐ MM

BORING

QUANTITY OF INSERTS:_____

ADAPTION STYLE:_____

COOLANT THRU: . . . . . YES NO

L-NEST POCKET PROTECTION/
ADJUSTMENT REQUESTED . . . . . .YES NO

APPLICATION DATA

WORKPIECE MATERIAL

AVG. RADIAL DOC

RPM

FEED RATE

MACHINE TYPE

MACHINE H.P.

MAX. TOOL ASSY. WEIGHT

REMARKS

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