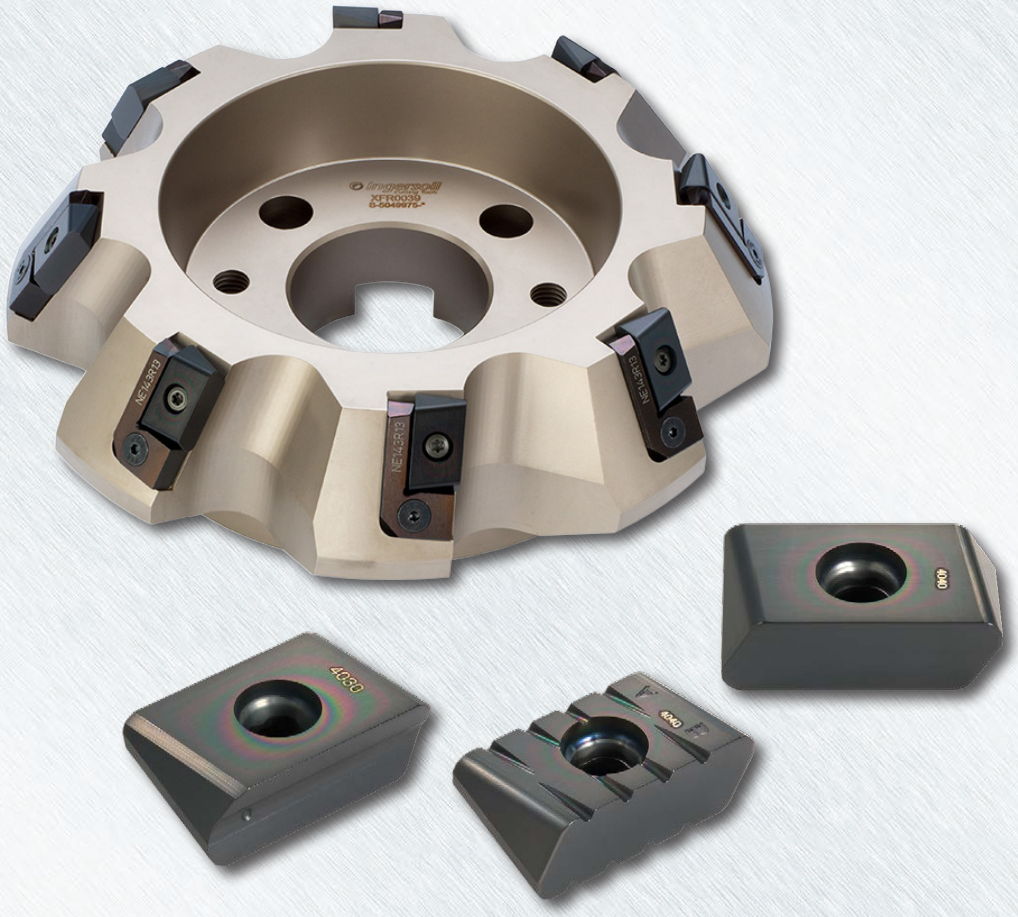
INDUSTRY 4.0
PRODUCT ANNOUNCEMENT
UPDATE
2022

SUPER•MAX™

MILLING PRODUCTS

POWER SHEAR



Diameters:
4.00" – 12.00"

Depth of Cut:
.76"

Insert Style:
LPE546R001-S
LSE546R001-S
ZSE546R001-S

Insert Grades:
IN2530, IN2540, IN4030, IN4040

Materials:
Steels:
Low-High Carbon,
Low-High Alloy,
HSLA, Tool Steel,
Impact Resistant,
Abrasion Resistant

Stainless Steels:
PH Series, Martensitic

Irons:
Ductile, Nodular

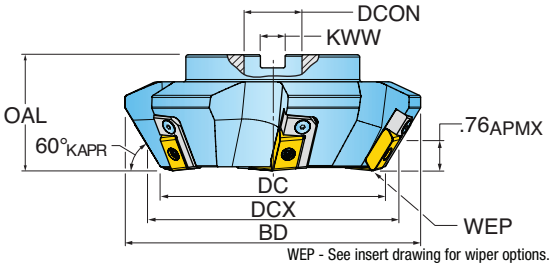
Features & Benefits:

- Power-Shear™ technology for massive chip loads thru scale and interruptions.
- High incline screw technology for greater insert stability.
- Ideally suited to cast, forged & rolled steels, irons and stainless steels.
- One style L-nest seats all three insert geometries

Member IMC Group
Ingersoll Cutting Tools

SUPERMAX™ SERIES 9M2L

HEAVY DUTY 60° FACE MILL WITH 4 INDEXES



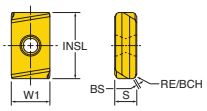
WEP - See insert drawing for wiper options.

Part Number	DC Cutting Dia.	DCX Cutting Dia. Max.	OAL Overall Length	ZEFF Eff. Teeth	BD Body Dia.	DCON Bore Dia.	KWW Keyway	DBC Bolt Circle Dia.
9M2L-04R01	4.000	4.900	3.000	5	5.66	1.500	0.625	-
9M2L-06R01	6.000	6.900	3.000	6	7.66	1.500	0.625	-
9M2L-08R01	8.000	8.900	3.000	8	9.66	2.500	1.000	4.000"
9M2L-10R01	10.000	10.900	3.000	10	11.66	2.500	1.000	4.000"
9M2L-12R01	12.000	12.900	3.000	12	13.66	2.500	1.000	4.00",4.75",7.00"

Insert screw tightening torque: 40-45 in*lb.

SUPERMAX™ INSERTS

LPE546R001-S



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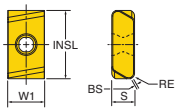
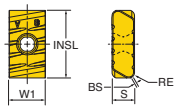


ZSE546R001-S



Part Number	Application	BS Wiper Length	BCH Corner Chamfer Length	RE Corner Radius	INSL Insert Length	W1 Insert Width	S Thickness	NOI Number of Indexes	IH Insert Hand	Grade	IN4030	IN2530	IN4040	IN2540
LPE546R001-S	Multi-Purpose	0.039	0.030	-	1.125	0.657	0.375	4	Right		•	•		
LSE546R001-S	Heavy-Duty	0.025	-	0.090	1.125	0.603	0.375	4	Right				•	•
ZSE546R001-S	Heavy-Duty, Serrated	0.025	-	0.090	1.125	0.603	0.375	4	Right				•	

SUPERMAX™ HARDWARE

	 Insert Screw	 Driver Handle	 Driver Bit	 L-Nest	 L-Nest Screw	 **OPTIONAL** Torque Driver Handle	 **OPTIONAL** Preset Torque Bit	 **OPTIONAL** Torque Driver Bit
9M2L-04R01	SM50-160-R0	DS-A007	DS-T206B	NE143R13	SE-03-65	DS-A00-.25-T	DT-44-.25	DS-T20B
9M2L-06R01	SM50-160-R0	DS-A007	DS-T206B	NE143R13	SE-03-65	DS-A00-.25-T	DT-44-.25	DS-T20B
9M2L-08R01	SM50-160-R0	DS-A007	DS-T206B	NE143R13	SE-03-65	DS-A00-.25-T	DT-44-.25	DS-T20B
9M2L-10R01	SM50-160-R0	DS-A007	DS-T206B	NE143R13	SE-03-65	DS-A00-.25-T	DT-44-.25	DS-T20B
9M2L-12R01	SM50-160-R0	DS-A007	DS-T206B	NE143R13	SE-03-65	DS-A00-.25-T	DT-44-.25	DS-T20B

SUPERMAX™ OPERATING GUIDELINES

MATERIALS				Vc Cutting Speed SFM	fz* Feed/Tooth (inch) LPE Inserts	GRADES (LPE INSERTS) Harder <----------> Tougher				Coolant
ISO	Mat'l Group #VDI 3323	Type	Examples			IN4040	IN2540	IN4030	IN2530	
P	1 - 5	Non-alloy Steel	1018, A36, 1045, A572, 1070	400 - 800	.006 - .018			2	1	NO
M	12 - 13	Stainless Steel (Ferritic & Martensitic)	410, 416, 440	250 - 450	.006 - .014			2	1	NO
	14	Stainless Steel (Austenitic)	303, 304, 316, 15-5, 17-4	250 - 450	.006 - .014			2	1	NO
K	15 - 16	Gray Cast Iron	CLS. 20, 30, 45	500 - 900	.006 - .018			1	2	NO
	17 - 18	Nodular Cast Iron	60-40-18, 100-70-03	400 - 800	.006 - .018			1	2	NO

MATERIALS				Vc Cutting Speed SFM	fz* Feed/Tooth (inch) LSE/ZSE Inserts	GRADES (LSE/ZSE INSERTS) Harder <----------> Tougher				Coolant
ISO	Mat'l Group #VDI 3323	Type	Examples			IN4040	IN2540	IN4030	IN2530	
P	1 - 5	Non-alloy Steel	1018, A36, 1045, A572, 1070	350 - 750	.008 - .024	1	2			NO
	6 - 9	Low-alloy Steel	4140, 4340, P20, 8620, 300M	175 - 450	.008 - .018	1	2			NO
	10 - 11	High-alloy Steel	H13, A2, D2, M2, T1	175 - 450	.008 - .018	1	2			NO
H	38 - 39	Hardened Steel >48	A2, O1, D2	125 - 500	.010 - .014	1	2			NO

Note: Feed and speed recommendations are starting operating parameters. They are only guidelines from which further optimization should take place. Operating parameters are influenced by many machining variables. These variables may cause for reductions in feeds and speed or dramatic increases. Additionally, DOC and WOC may need to be revised to optimize the tools performance.