

NPA



Member IMC Group
Ingersoll
Cutting Tools

New Product Announcement

NEW-391 • 04/2024

Page 1/8

MILLING - INDEXABLE

Featuring
MULTISURFER™
adaption

Cutter Series

1EJ6A (slotter)
3EJ6A (slotter)

Insert Series

CGM101-001-ML (slotting)

Diameter Range

0.625-1.500"

Cutting Width

0.276"

Grades

IN2505, IN2530

Corner Radius

0.015"

Materials

-  Steel
-  Stainless Steel
-  Cast Iron
-  Non-Ferrous
-  High-Temp Alloys
-  Hardened Steel

MAXSPEED™

Economical, High Productivity Insert. Exchangeable Milling and Slotting Heads.

- » Simple and robust precision mounting design with dual contact and tri-lobe surfaces that enhances rigidity during operation.
- » Minimize setup time due to the simplified head exchange that uses only 1 screw.
- » Double sided 4 corner tangential insert with reinforced edge geometry.



See it in
action! »



WINSPEED™
ADVANCED MACHINING

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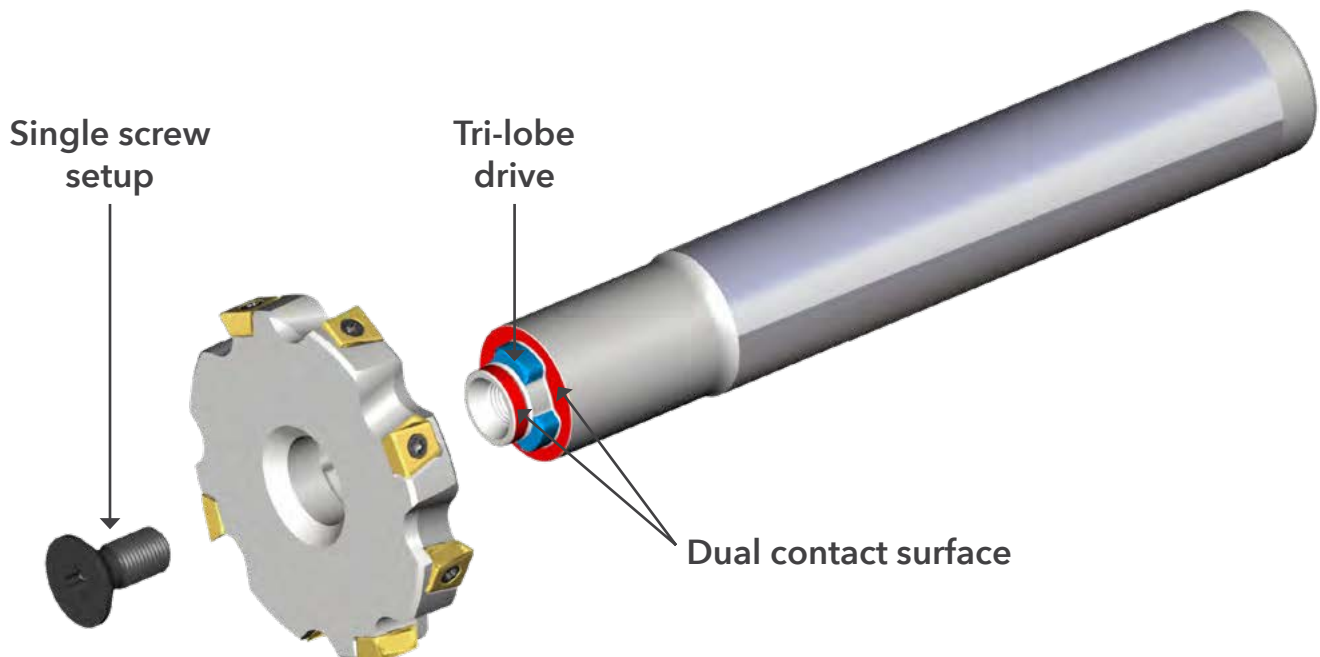


Overview

Introducing an economical, high productivity insert for new, exchangeable milling and slotting heads for Ingersoll's **MaxSFeed** product line.

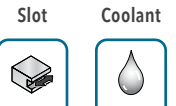
FEATURES & BENEFITS:

- Unique bore/screw/tri-lobe drive connection accommodates large diameter cutting forces.
- New slotting insert utilized in both top and bottom insert pockets.
- 4-index inserts with reinforced cutting-edge geometry.
- Available cutter diameters from .625-1.500".
- Integral shank series come standard with through-coolant.
- MultiSurfer shanks designed with and without coolant.



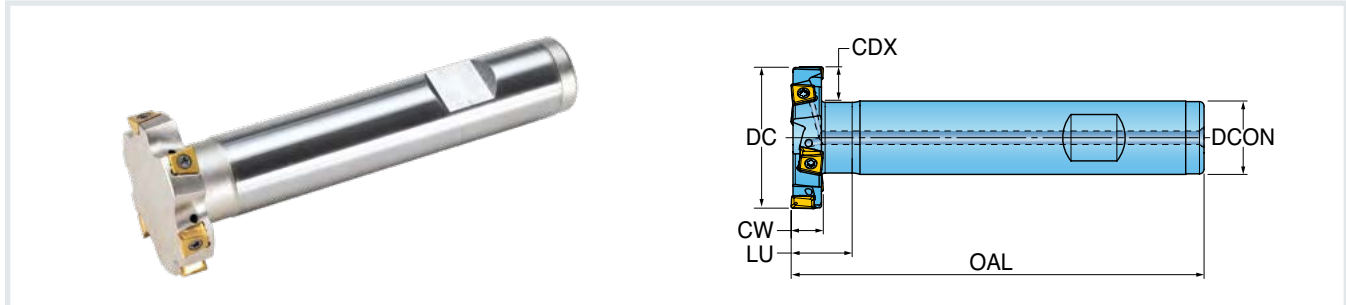
SCAN/CLICK/TAP to view the expanded **MaxSFeed** indexable milling product line →





Series 1EJ6A

SLOTTER - INTEGRAL WELDON SHANK

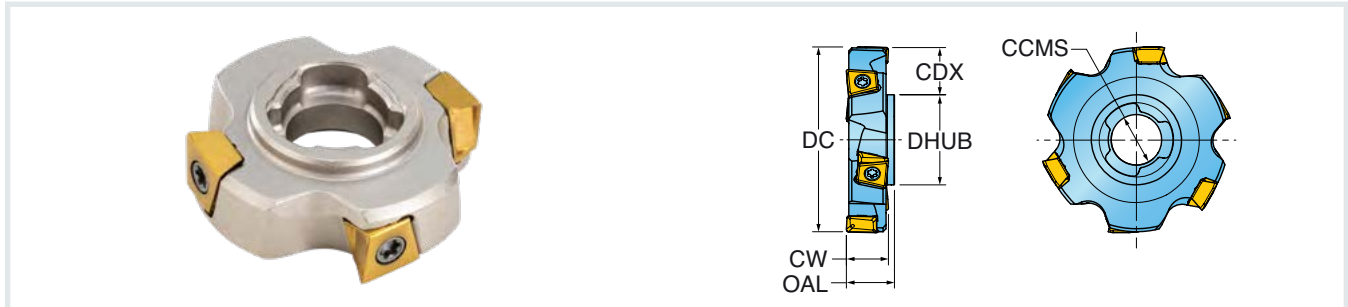


Part Number	DC Cutting Dia.	CW Cutting Width	CDX Cutting Depth Max.	LUX Functional Length	OAL Overall Length	ZEFP Effective Teeth Periphery	ZNP Peripheral Insert Count	DCON Shank Dia.	CSP Coolant
INCH									
1EJ6A-0602778R01	0.625	0.276	0.114	0.512	3.500	1	2	0.500	Yes
1EJ6A-0702778R01	0.750	0.276	0.138	0.512	3.500	2	4	0.500	Yes
1EJ6A-1002778R01	1.000	0.276	0.264	0.512	3.500	2	4	0.500	Yes
1EJ6A-1202779R01	1.250	0.276	0.311	0.512	3.500	3	6	0.625	Yes
1EJ6A-1502779R01	1.500	0.276	0.433	0.512	4.125	4	8	0.625	Yes



Series 3EJ6A

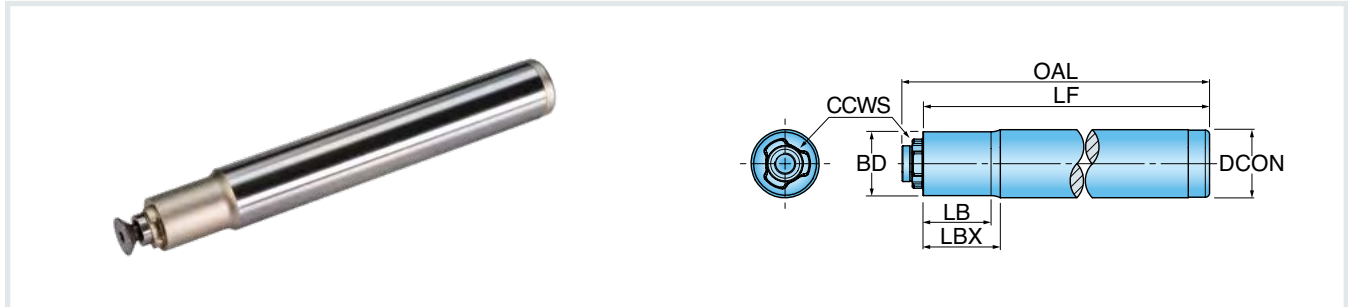
SLOTTER - MULTISURFER ADAPTION



Part Number	DC Cutting Dia.	CW Cutting Width	CDX Cutting Depth Max.	DHUB Hub Dia.	OAL Overall Length	ZEFP Effective Teeth Periphery	ZNP Peripheral Insert Count	CCMS Connection Code Machine Side
INCH								
3EJ6A-09027LPR01	0.875	0.276	0.161	0.550	0.315	2	4	MultiSurfer LP
3EJ6A-10027LPR01	1.000	0.276	0.224	0.512	0.315	2	4	MultiSurfer LP
3EJ6A-12027LQR01	1.250	0.276	0.307	0.590	0.315	3	6	MultiSurfer LQ
3EJ6A-15027LRR01	1.500	0.276	0.394	0.670	0.394	4	8	MultiSurfer LR

Series S_L_SA

STEEL SHANK, NECKED - MULTISURFER ADAPTION

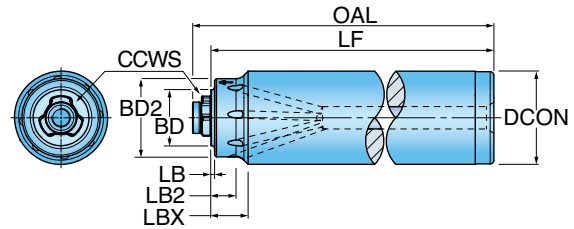


Part Number	CCWS Connection Code Workpiece Side	LB Body Length	LBX Body Length Max.	LF Functional Length	OAL Overall Length	BD Body Dia.	DCON Shank Dia.	BMC Body Material Code
INCH								
S062LPSA-05	MultiSurfer LP	0.600	0.650	4.000	4.170	0.510	0.625	Steel
S062LQSA-06	MultiSurfer LQ	0.700	0.720	4.000	4.190	0.590	0.625	Steel
S062LQSA-07	MultiSurfer LQ	0.780	0.800	5.000	5.190	0.590	0.625	Steel
S075LRSA-08	MultiSurfer LR	0.900	0.940	5.500	5.730	0.670	0.750	Steel
METRIC								
S016LPSA-16	MultiSurfer LP	13.00 mm	16.60 mm	100.00 mm	104.35 mm	13.00 mm	16.00 mm	Steel
S016LQSA-18	MultiSurfer LQ	16.00 mm	18.20 mm	100.00 mm	104.90 mm	15.00 mm	16.00 mm	Steel
S016LQSA-19	MultiSurfer LQ	16.00 mm	18.20 mm	130.00 mm	134.90 mm	15.00 mm	16.00 mm	Steel
S020LRSA-23	MultiSurfer LR	20.20 mm	23.80 mm	140.00 mm	146.00 mm	17.00 mm	20.00 mm	Steel

*Shank modifications can be made by cutting off the back to desired length or turning back the neck for more usable length.

Series S_L_SA

STEEL SHANK - MULTISURFER ADAPTION

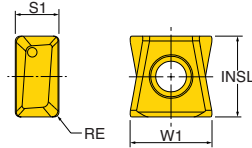


Part Number	CCWS Connection Code Workpiece Side	LB Body Length	LB2 Body Length 2	LBX Body Length Max.	LF Functional Length	OAL Overall Length	BD Body Dia.	BD2 Body Dia. 2	DCON Shank Dia.	CNSC Coolant Entry Style Code	CXSC Coolant Exit Style Code	BMC Body Material Code
INCH												
S075LPSA-03	MultiSurfer LP	0.030	0.300	0.380	4.250	4.420	0.510	0.625	0.750	1	1, 3	Steel
S100LQSA-03	MultiSurfer LQ	0.030	0.300	0.380	4.250	4.440	0.590	0.812	1.000	1	1, 3	Steel
S125LRSA-03	MultiSurfer LR	0.030	0.300	0.380	5.750	5.980	0.670	1.125	1.250	1	1, 3	Steel
METRIC												
S020LPSA-10	MultiSurfer LP	0.76 mm	7.60 mm	10.00 mm	100.00 mm	104.35 mm	13.00 mm	16.00 mm	20.00 mm	1	1, 3	Steel
S025LQSA-10	MultiSurfer LQ	0.76 mm	7.60 mm	10.00 mm	100.00 mm	104.90 mm	15.00 mm	21.00 mm	25.00 mm	1	1, 3	Steel
S032LRSA-10	MultiSurfer LR	0.76 mm	7.60 mm	10.00 mm	140.00 mm	146.00 mm	17.00 mm	28.00 mm	32.00 mm	1	1, 3	Steel

*Shank modifications can be made by cutting off the back to desired length or turning back the neck for more usable length.

Inserts

CGM101-001-ML



Part Number	Application	RE Corner Radius	INSL Insert Length	W1 Insert Width	S1 Thickness (Overall)	Grade	
						IN2505	IN2530
CGM101-001-ML	Slotting	0.015	0.197	0.197	0.106	•	•

Hardware

Part Number	 Screw	 Driver
1EJ6A-0602778R01	SM18-049-00	TD 6P
1EJ6A-0702778R01	SM18-049-00	TD 6P
1EJ6A-1002778R01	SM18-049-00	TD 6P
1EJ6A-1202779R01	SM18-049-00	TD 6P
1EJ6A-1502779R01	SM18-049-00	TD 6P
3EJ6A-09027LPR01	SM18-049-00	TD 6P
3EJ6A-10027LPR01	SM18-049-00	TD 6P
3EJ6A-12027LQR01	SM18-049-00	TD 6P
3EJ6A-15027LRR01	SM18-049-00	TD 6P

Hardware (MultiSurfer)

Part Number	 Insert Screw	 Driver Handle	 Torx Bit
S062LPSA-05	TS40T098/HG-P	DS-A00T	DS-TP156B
S062LQSA-06	TS50T110/HG-P	DS-A00T	DS-TP206B
S062LQSA-07	TS50T110/HG-P	DS-A00T	DS-TP206B
S075LRSA-08	TS60T130/HG-P	DS-A00T	DS-TP206B
S016LPSA-16	TS40T098/HG-P	DS-A00T	DS-TP156B
S016LQSA-18	TS50T110/HG-P	DS-A00T	DS-TP206B
S016LQSA-19	TS50T110/HG-P	DS-A00T	DS-TP206B
S020LRSA-23	TS60T130/HG-P	DS-A00T	DS-TP206B
S075LPSA-03	TS40T098/HG-P	DS-A00T	DS-TP156B
S100LQSA-03	TS50T110/HG-P	DS-A00T	DS-TP206B
S125LRSA-03	TS60T130/HG-P	DS-A00T	DS-TP206B
S020LPSA-10	TS40T098/HG-P	DS-A00T	DS-TP156B
S025LQSA-10	TS50T110/HG-P	DS-A00T	DS-TP206B
S032LRSA-10	TS60T130/HG-P	DS-A00T	DS-TP206B

Operating Guidelines

ISO	Materials			Vc Cutting Speed SFM	fz* Feed/Tooth (inch)	Harder «---» Tougher		Coolant	Geometry 
	Material Group #VDI 3323	Type	Examples			IN2505	IN2530		
P	1-5	Non-alloy steel	1018, A36, 1045, A572, 1070	400-850	.0015-.0030	1	2	No	1
	6-9	Low-alloy steel	4140, 4340, P20, 8620, 300M	350-500	.0015-.0030	1	2	No	1
	10, 11	High-alloy steel	H13, A2, D2, M2, T1	250-500	.0015-.0030	1	2	No	1
M	12, 13	Stainless steel (ferritic & martensitic)	410, 416, 440	350-550	.0015-.0030	2	1	Yes	1
	14	Stainless steel (austenitic)	303, 304, 316, 15-5, 17-4	300-500	.0015-.0030	2	1	May not be required at high speeds	1
K	15, 16	Gray cast iron	CLS. 20, 30, 45	500-700	.0015-.0030	1	2	No	1
	17, 18	Ductile cast iron	60-40-18, 100-70-03	400-650	.0015-.0030	1	2	No	1
N	21-30	Aluminum	7075, 6061	1000+	.0015-.0030	1	2	Yes	1
S	31-35	High-temp alloys	Inconel, Hastelloy, Monel	60-130	.0015-.0030	2	1	Yes	1
	36, 37	Titanium alloys	6Al-4V, 5Al-5Mo-5V-3Cr	65-150	.0015-.0030	2	1	Yes	1
H	38, 39	Hardened steel >48	A2, O1, D2	150-400	.0015-.0030	1	2	No	1

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.