

MILLING - INDEXABLE

Cutter Series

End Mill: 15U1G

Face Mill: 5H6G

Insert Series

SHET11

Diameter Range

1.000 - 6.000"

25-100mm

Depth of Cut

0.41"

Corner Radii

.008" .020" .031" .062" .093" &
.125" R

Materials

■ Non-Ferrous

ALUMINATOR™



0.008"R



0.020"R



0.031"R



0.062"R



0.093"R



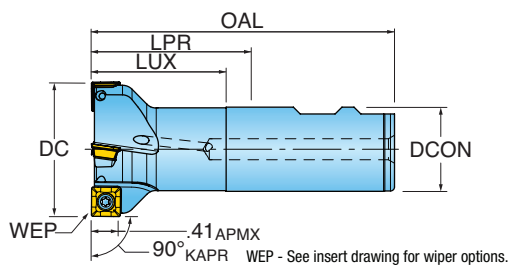
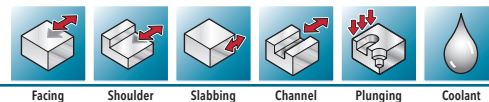
0.125"R

Quad-Style Shoulder Mills Engineered for Roughing, Finishing and Plunging Aluminum

Features & Benefits:

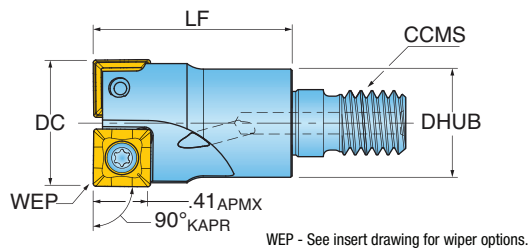
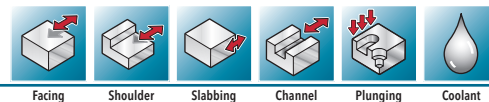
- » Mirror Finishes from 15 - 25 Ra
- » True 90° Shoulders when Stepping Down
- » Corner Radius Diversity
- » Aggressive Feed Rate Capability for Utmost Productivity

15U1G - 90° End Mill for Aluminum



Part Number	DC Cutting Dia. (in)	LUX Usable Length Max. (in)	LPR Protruding Length (in)	OAL Overall Length (in)	ZEFF Effective Teeth	DCON Shank Diameter (in)	RPMX RPM Max.
15U1G-1001780R01	1.00	1.70	1.75	4.00	2.00	1.00	10000
15U1G-1202281R01	1.25	2.20	2.25	4.50	3.00	1.25	10000
15U1G-1502281R01	1.50	2.25	2.25	4.50	3.00	1.25	10000
15U1G-2002281R01	2.00	2.25	2.25	4.50	4.00	1.25	10000

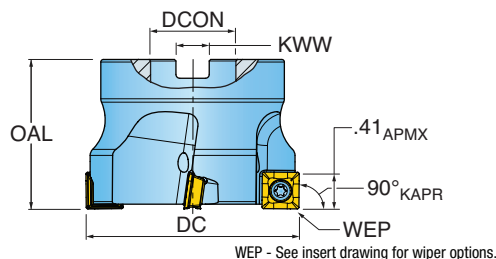
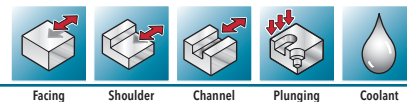
15U1G - 90° End Mill for Aluminum



Part Number	DC Cutting Dia. (in)	LF Functional Length (in)	ZEFF Effective Teeth	CCMS Connection Code	DHUB Hub Dia. (in)	RPMX RPM Max.
15U1G-10015X7R01	1.00	1.50	2	TopOn M12	0.90	10000
15U1G-12017X8R01	1.25	1.75	3	TopOn M16	1.13	10000
15U1G-15017X8R01	1.50	1.75	3	TopOn M16	1.39	10000

Part Number	DC Cutting Dia. (mm)	LF Functional Length (mm)	ZEFF Effective Teeth	CCMS Connection Code	DHUB Hub Dia. (mm)	RPMX RPM Max.
15U1G025035X7R00	25.00 mm	35.0 mm	2	TopOn M12	21.0 mm	10000
15U1G032043X8R00	32.00 mm	43.0 mm	3	TopOn M16	29.0 mm	10000
15U1G040043X8R00	40.00 mm	43.0 mm	3	TopOn M16	29.0 mm	10000

5H6G - 90° Face Mill for Aluminum

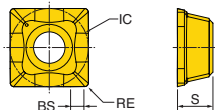


Part Number	DC Cutting Dia. (in)	OAL Overall Length (in)	ZEFF Effective Teeth	DCON Shank Diameter (in)	KWW Keyway (in)	RPMX RPM Max.
5H6G-20R01	2.000	1.570	5.000	0.750	0.312	23100
5H6G-20R02	2.000	1.570	3.000	0.500	0.250	23100
5H6G-25R01	2.500	1.750	4.000	1.000	0.375	20500
5H6G-30R01	3.000	1.750	8.000	1.000	0.375	18200
5H6G-30R02	3.000	1.750	3.000	1.000	0.375	18200
5H6G-40R01	4.000	2.375	9.000	1.500	0.625	16300
5H6G-40R02	4.000	2.375	5.000	1.500	0.625	16300
5H6G-60R02	6.000	2.375	5.000	1.500	0.625	12100

Part Number	DC Cutting Dia. (mm)	OAL Overall Length (mm)	ZEFF Effective Teeth	DCON Shank Diameter (mm)	KWW Keyway (mm)	RPMX RPM Max.
5H6G050R00	50.00 mm	40.00 mm	4	22.00 mm	10.40 mm	23100
5H6G063R00	63.00 mm	40.00 mm	5	22.00 mm	10.40 mm	20500
5H6G080R00	80.00 mm	50.00 mm	7	27.00 mm	12.40 mm	18200
5H6G100R00	100.00 mm	50.00 mm	9	32.00 mm	14.40 mm	16300

Inserts

SHET11



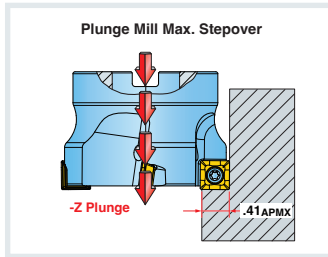
Part Number	Application	RE Corner Radius	BS Wiper Length	IC Inscribed Circle Dia.	S Thickness	NOI Number of Indexes	IH Insert Hand	Grade
								IN15K
INCH								
SHET110502FR-P	Grd/Pol for Al	0.008	0.092	0.433	0.197	4	Neutral	•
SHET110505FR-P	Grd/Pol for Al	0.020	0.080	0.433	0.197	4	Neutral	•
SHET110508FR-P	Grd/Pol for Al	0.031	0.069	0.433	0.197	4	Neutral	•
SHET110516FR-P	Grd/Pol for Al	0.062	0.038	0.433	0.197	4	Neutral	•
SHET110524FN-P	Grd/Pol for Al	0.093	-	0.433	0.197	4	Neutral	•
SHET110532FN-P	Grd/Pol for Al	0.125	-	0.433	0.197	4	Neutral	•

• = Standard Items

Hardware

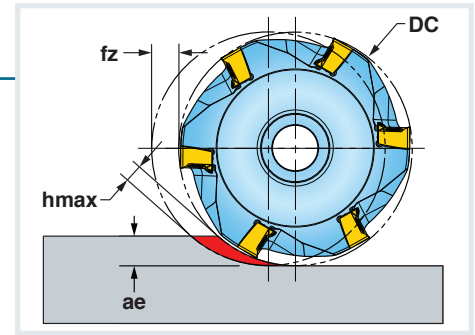
Part Number							Optional			
										
15U1G-1001780R01	SM40-093-20	DS-A00T	DS-T156B	DS-T15T				DS-A00-.25-T	DS-T15B1	DT-35-.25
15U1G-1202281R01	SM40-093-20	DS-A00T	DS-T156B	DS-T15T				DS-A00-.25-T	DS-T15B1	DT-35-.25
15U1G-1502281R01	SM40-093-20	DS-A00T	DS-T156B	DS-T15T				DS-A00-.25-T	DS-T15B1	DT-35-.25
15U1G-2002281R01	SM40-093-20	DS-A00T	DS-T156B	DS-T15T				DS-A00-.25-T	DS-T15B1	DT-35-.25
15U1G-10015X7R01	SM40-093-20	DS-A00T	DS-T156B	DS-T15T	617 MM			DS-A00-.25-T	DS-T15B1	DT-35-.25
15U1G-12017X8R01	SM40-093-20	DS-A00T	DS-T156B	DS-T15T	622 MM			DS-A00-.25-T	DS-T15B1	DT-35-.25
15U1G-15017X8R01	SM40-093-20	DS-A00T	DS-T156B	DS-T15T	622 MM			DS-A00-.25-T	DS-T15B1	DT-35-.25
5H6G-20R01	SM40-093-20	DS-A00T	DS-T156B	DS-T15T		SD-06-46	SD-06-89	DS-A00-.25-T	DS-T15B1	DT-35-.25
5H6G-20R02	SM40-093-20	DS-A00T	DS-T156B	DS-T15T		SD-06-46	SD-06-89	DS-A00-.25-T	DS-T15B1	DT-35-.25
5H6G-25R01	SM40-093-20	DS-A00T	DS-T156B	DS-T15T		SD-08-46	SD-08-92	DS-A00-.25-T	DS-T15B1	DT-35-.25
5H6G-30R01	SM40-093-20	DS-A00T	DS-T156B	DS-T15T		SD-08-46	SD-08-92	DS-A00-.25-T	DS-T15B1	DT-35-.25
5H6G-30R02	SM40-093-20	DS-A00T	DS-T156B	DS-T15T		SD-08-46	SD-08-92	DS-A00-.25-T	DS-T15B1	DT-35-.25
5H6G-40R01	SM40-093-20	DS-A00T	DS-T156B	DS-T15T		SD-12-82	SD-12-99	DS-A00-.25-T	DS-T15B1	DT-35-.25
5H6G-40R02	SM40-093-20	DS-A00T	DS-T156B	DS-T15T		SD-12-82	SD-12-99	DS-A00-.25-T	DS-T15B1	DT-35-.25
5H6G-60R02	SM40-093-20	DS-A00T	DS-T156B	DS-T15T		SD-12-82	SD-12-99	DS-A00-.25-T	DS-T15B1	DT-35-.25
15U1G025035X7R00	SM40-093-20	DS-A00T	DS-T156B	DS-T15T	617 MM			DS-A00-.25-T	DS-T15B1	DT-35-.25
15U1G032043X8R00	SM40-093-20	DS-A00T	DS-T156B	DS-T15T	622 MM			DS-A00-.25-T	DS-T15B1	DT-35-.25
15U1G040043X8R00	SM40-093-20	DS-A00T	DS-T156B	DS-T15T	622 MM			DS-A00-.25-T	DS-T15B1	DT-35-.25
5H6G050R00	SM40-093-20	DS-A00T	DS-T156B	DS-T15T			ISO4762M10X25-12.9	DS-A00-.25-T	DS-T15B1	DT-35-.25
5H6G063R00	SM40-093-20	DS-A00T	DS-T156B	DS-T15T			ISO4762M10X25-12.9	DS-A00-.25-T	DS-T15B1	DT-35-.25
5H6G080R00	SM40-093-20	DS-A00T	DS-T156B	DS-T15T			ISO4762M12X35-12.9	DS-A00-.25-T	DS-T15B1	DT-35-.25
5H6G100R00	SM40-093-20	DS-A00T	DS-T156B	DS-T15T			ISO4762M16X30-12.9	DS-A00-.25-T	DS-T15B1	DT-35-.25

11 mm • Operating Guidelines



CHIP THINNING

When ae is less than 25%,
Chip Thinning Calculator
is recommended to ensure
 h_{max} is within f_z range. ►



Materials				Vc Cutting Speed SFM	fz* Feed/Tooth (inch)	Grade	Coolant
ISO	Mat'l Group #VDI 3323	Type	Examples			IN15K	
N	21-30	Aluminum	7075, 6061	1000-10000	.008 - .020	1	Yes

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.