

Through-Coolant Roughers for Aluminum 81-800 Series

Do you have a machining center with
Coolant Through the Spindle capabilities?

If so, take advantage of Onsrud Cutter's through-coolant roughers. Through coolant provides flow and pressure directly to the cutting zone. The coolant provides lubricant, dissipates heat and clear chips, which is especially important during deep cavity work, resulting in increased tool life and productivity levels.

An improved rougher pattern generates lower cutting forces and allows for increased feed rates.

Stub Length - Solid Carbide Double Edge Upcut Spiral

Part Number	CED	CEL	Shank	OAL	Corner Radius	List Price
81-809	1/4	3/8	1/4	2	0.020	\$37.50
81-812	3/8	1/2	3/8	2 1/2	0.020	\$51.15
81-815	1/2	5/8	1/2	3	0.020	\$85.05
81-818	5/8	3/4	5/8	3	0.020	\$149.95
81-821	3/4	1 1/8	3/4	3	0.020	\$197.45
81-824	1	1 1/4	1	3	0.020	\$355.00

Standard Length - Solid Carbide Double Edge Upcut Spiral

Part Number	CED	CEL	Shank	OAL	Corner Radius	ERL	List Price
81-839	1/4	3/8	1/4	2 1/2	0.020	3/4	\$40.05
81-842	3/8	1/2	3/8	2 1/2	0.020	1 1/8	\$54.75
81-845	1/2	5/8	1/2	3	0.020	1 1/2	\$94.40
81-848	5/8	3/4	5/8	3 1/2	0.020	1 7/8	\$197.10
81-851	3/4	1	3/4	4	0.020	2 1/4	\$258.70
81-854	1	1 1/4	1	4	0.020	3	\$380.00



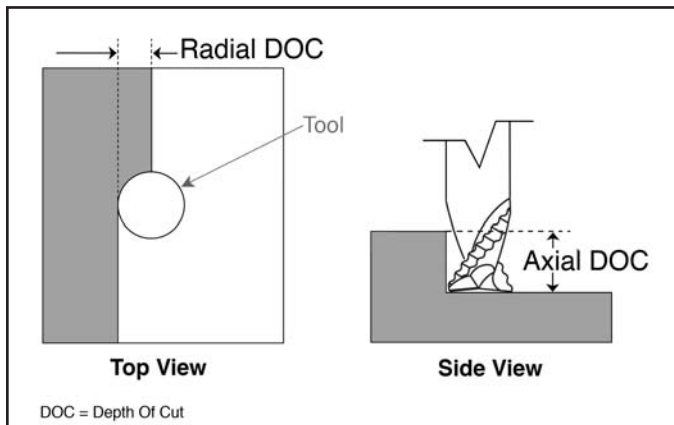
Cutting Data

Stub Length

Part Number	Slotting			Periphery			
	SFM	Chipload	Axial DOC	SFM	Chipload	Axial DOC	Radial DOC
81-809	500 - 750	.003 - .006	.250	500 - 750	.003 - .006	.250	.125
81-812	500 - 1,200	.003 - .006	.375	500 - 1,200	.003 - .008	.375	.187
81-815	500 - 1,200	.003 - .008	.500	500 - 1,200	.003 - .010	.500	.250
81-818	500 - 1,200	.003 - .008	.625	500 - 1,200	.003 - .010	.625	.312
81-821	500 - 1,200	.003 - .010	.750	500 - 1,200	.003 - .011	.750	.375
81-824	500 - 1,200	.003 - .010	1.000	500 - 1,200	.003 - .011	1.000	.500

Standard Length with Extended Reach

Part Number	Slotting			Periphery			
	SFM	Chipload	Axial DOC	SFM	Chipload	Axial DOC	Radial DOC
81-839	500 - 750	.003 - .005	.250	500 - 750	.003 - .007	.250	.125
81-842	500 - 750	.003 - .005	.375	500 - 1,200	.003 - .009	.375	.187
81-845	500 - 750	.003 - .006	.500	500 - 1,200	.003 - .009	.500	.250
81-848	500 - 750	.003 - .006	.625	500 - 1,200	.003 - .010	.625	.312
81-851	500 - 750	.003 - .007	.750	500 - 1,200	.003 - .011	.750	.375
81-854	500 - 750	.003 - .007	1.000	500 - 1,200	.003 - .011	1.000	.500



Formulas

$$\text{RPM} = (\text{SFM} \times 3.82) / \text{Diameter}$$

$$\text{Feedrate} = \text{RPM} \times \text{Number of Cutting Edges} \times \text{Chipload}$$

(SFM= Surface Feet per Minute)