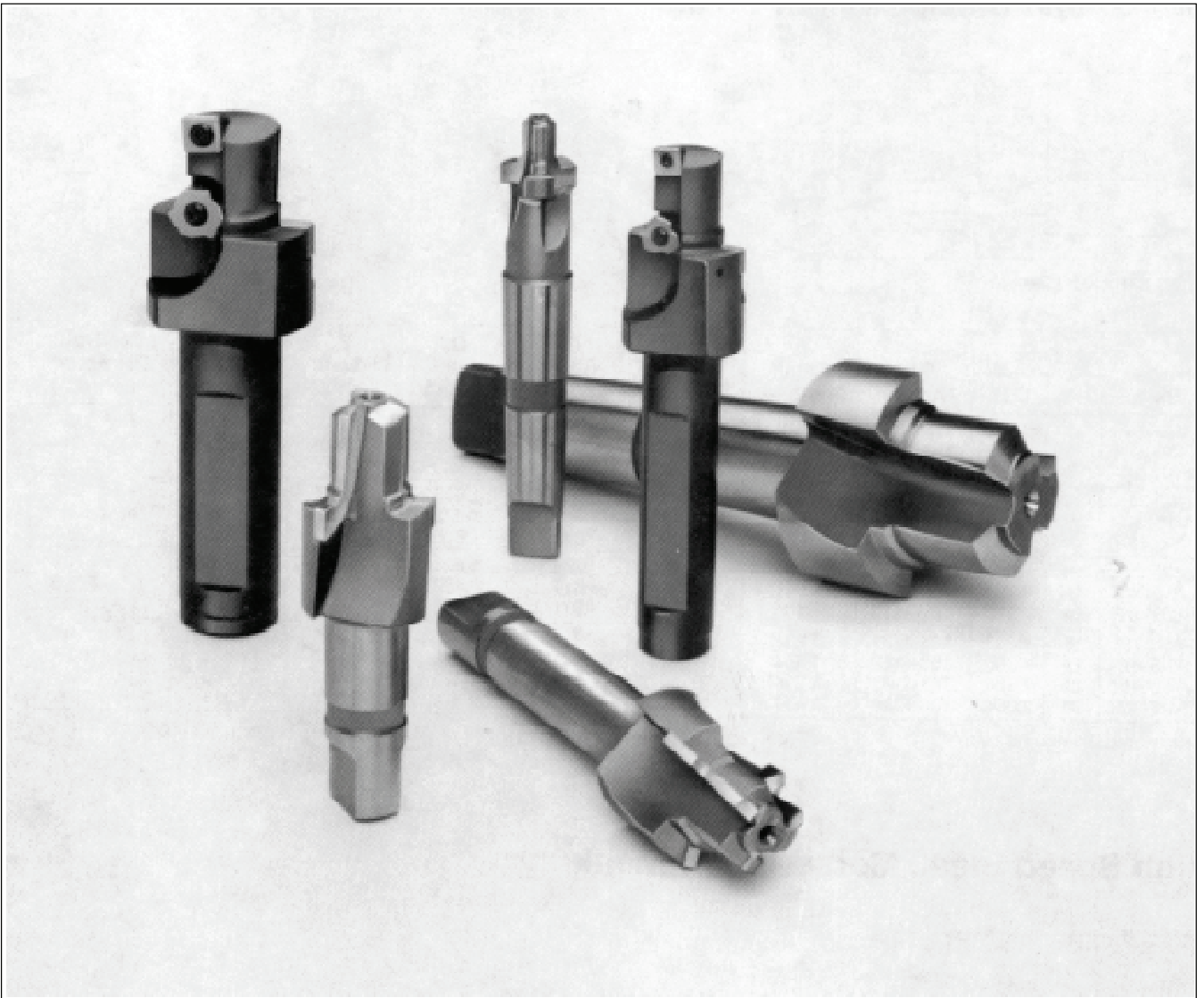


Port Contour Cutters



A Full Range of Porting Tools for SAE, ISO, BSPP/BSPPF & NASA Specifications

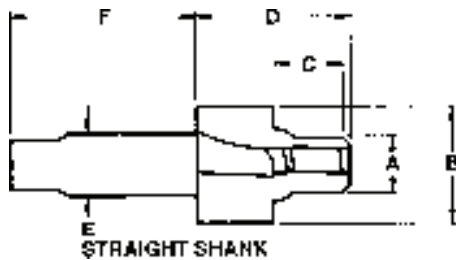
METCUT Port Contour Cutters produce the form and finish required on internal straight thread o-ring ports in a single operation. Straight thread ports usually are required for high-pressure hydraulic fittings, which must be in compliance with automotive, military, aerospace and commercial specifications.

METCUT porting tools are form-relief ground and designed so that a simple face grinding reconditions the tool with no dimensional loss.

METCUT produces the most complete line of Port Contour Cutters in the industry. High speed steel and carbide tipped are standard in all sizes. Straight, morse taper and radial drive shank styles are available on all size tools. Indexable porting tools are available for meeting SAE and military specifications.

Port Contour Cutters – SAE J1926, MS 16142

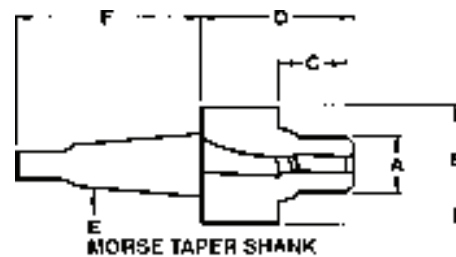
High Speed Steel, Straight Shank



Thread Size	Tube		Part Number	A Small Diameter	B Spotface	C Bore Length	D Head Length	E Shank Diameter	F Shank Length	Pre-Drill Diameter/Length
	No.	O.D.								
5/16-24	2	.125	163-2031	.272	.682	.473	1.625	.500	3.125	F x .688
3/8-24	3	.187	163-2037	.335	.760	.473	1.625	.500	3.125	O x .688
7/16-20	4	.250	163-2043	.389	.838	.552	1.625	.500	3.125	U x .812
1/2-20	5	.312	163-2050	.452	.916	.552	1.625	.500	3.125	.44 x .812
9/16-18	6	.375	163-2056	.509	.994	.614	1.625	.500	3.125	.48 x .875
3/4-16	8	.500	163-3075	.689	1.198	.693	1.875	.750	3.875	.67 x .937
7/8-14	10	.625	163-3087	.806	1.354	.786	1.875	.750	3.875	.78 x 1.062
1-1/16-12	12	.750	163-3106	.981	1.635	.911	2.125	.750	3.875	.95 x 1.250
1-3/16-12	14	.875	163-3118	1.106	1.775	.911	2.125	.750	3.875	1.09 x 1.250
1-5/16-12	16	1.000	163-3131	1.231	1.939	.911	2.125	.750	3.875	1.21 x 1.250
1-5/8-12	20	1.250	163-4162	1.544	2.280	.911	2.375	1.000	4.875	1.53 x 1.250
1-7/8-12	24	1.500	163-4187	1.794	2.570	.911	2.375	1.000	4.875	1.78 x 1.250
2-1/2-12	32	2.000	163-4250	2.419	3.490	.911	2.375	1.000	4.875	2.41 x 1.250

All dimensions shown in inches.

High Speed Steel, Morse Taper Shank

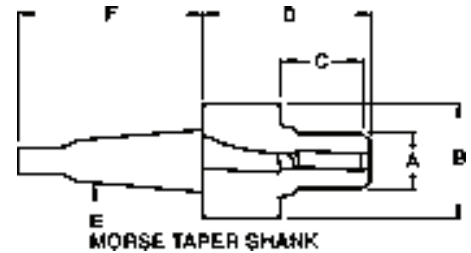


Thread Size	Tube		Part Number	A Small Diameter	B Spotface	C Bore Length	D Head Length	E Shank Diameter	F Shank Length	Pre-Drill Diameter/Length
	No.	O.D.								
5/16-24	2	.125	163-2031	.272	.682	.473	1.625	.500	3.125	F x .688
3/8-24	3	.187	163-2037	.335	.760	.473	1.625	.500	3.125	O x .688
7/16-20	4	.250	163-2043	.389	.838	.552	1.625	.500	3.125	U x .812
1/2-20	5	.312	163-2050	.452	.916	.552	1.625	.500	3.125	.44 x .812
9/16-18	6	.375	163-2056	.509	.994	.614	1.625	.500	3.125	.48 x .875
3/4-16	8	.500	163-3075	.689	1.198	.693	1.875	.750	3.875	.67 x .937
7/8-14	10	.625	163-3087	.806	1.354	.786	1.875	.750	3.875	.78 x 1.062
1-1/16-12	12	.750	163-3106	.981	1.635	.911	2.125	.750	3.875	.95 x 1.250
1-3/16-12	14	.875	163-3118	1.106	1.775	.911	2.125	.750	3.875	1.09 x 1.250
1-5/16-12	16	1.000	163-3131	1.231	1.939	.911	2.125	.750	3.875	1.21 x 1.250
1-5/8-12	20	1.250	163-4162	1.544	2.280	.911	2.375	1.000	4.875	1.53 x 1.250
1-7/8-12	24	1.500	163-4187	1.794	2.570	.911	2.375	1.000	4.875	1.78 x 1.250
2-1/2-12	32	2.000	163-4250	2.419	3.490	.911	2.375	1.000	4.875	2.41 x 1.250

All dimensions shown in inches.

Port Contour Cutters – SAE J1926, MS 16142

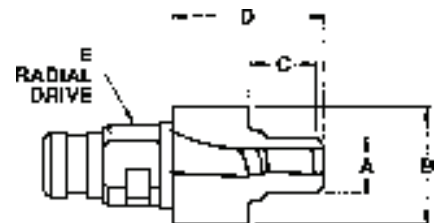
High Speed Steel, Taper Shank with Extra Length Reamer



Thread Size	Tube		Part Number	A Small Diameter	B Spotface Diameter	C Bore Length	D Head Length	E Morse Taper	F Shank Length	Pre-Drill Diameter/Length
	No.	O.D.								
5/16-24	2	.125	161-2031	.272	.682	.580	1.750	2	3.125	F x .812
3/8-24	3	.187	161-2037	.335	.760	.580	1.750	2	3.125	O x .812
7/16-20	4	.250	161-2043	.389	.838	.690	1.750	2	3.125	U x .937
1/2-20	5	.312	161-2050	.452	.916	.690	1.750	2	3.125	.44 x .937
9/16-18	6	.375	161-2056	.509	.979	.750	1.750	2	3.125	.48 x .968
3/4-16	8	.500	161-3075	.689	1.198	.840	2.000	3	3.875	.67 x 1.090
7/8-14	10	.625	161-3087	.806	1.354	.970	2.000	3	3.875	.78 x 1.220
1-1/16-12	12	.750	161-3106	.981	1.635	1.125	2.250	3	3.875	.95 x 1.470
1-3/16-12	14	.875	161-3118	1.106	1.775	1.125	2.250	3	3.875	1.09 x 1.470
1-5/16-12	16	1.000	161-3131	1.231	1.920	1.125	2.250	3	3.875	1.21 x 1.470
1-5/8-12	20	1.250	161-4162	1.544	2.280	1.125	2.250	4	4.875	1.53 x 1.470
1-7/8-12	24	1.500	161-4187	1.794	2.570	1.125	2.250	4	4.875	1.78 x 1.470
2-1/2-12	32	2.000	161-4250	2.419	3.490	1.125	2.250	4	4.875	2.41 x 1.470

All dimensions shown in inches.

High Speed Steel, Radial Drive

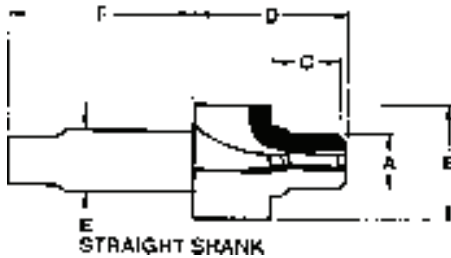


Thread Size	Tube		Part Number	A Small Diameter	B Spotface Diameter	C Bore Length	D Head Length	E Radial Drive	Number of Flutes	Pre-Drill Diameter/Length
	No.	O.D.								
5/16-24	2	.125	160-2031	.272	.875	.473	1.50	RB	3	F x .687
3/8-24	3	.188	160-2037	.335	.875	.473	1.50	RB	3	O x .687
7/16-20	4	.250	160-2043	.389	.875	.552	1.50	RB	3	U x .812
1/2-20	5	.313	160-2050	.452	.938	.552	1.50	RB	3	.44 x .812
9/16-18	6	.375	160-2056	.509	1.000	.614	1.63	RB	3	.48 x .875
3/4-16	8	.500	160-3075	.689	1.219	.693	1.63	RC	3	.67 x .937
7/8-14	10	.625	160-3087	.806	1.375	.786	1.75	RC	4	.78 x 1.062
1-1/16-12	12	.750	160-4106	.981	1.656	.911	1.88	RE	4	.95 x 1.250
1-3/16-12	14	.875	160-5118	1.106	1.813	.911	1.88	RF	4	1.09 x 1.250
1-5/16-12	16	1.000	160-5131	1.231	2.000	.911	1.88	RF	4	1.21 x 1.250
1-5/8-12	20	1.250	160-6162	1.544	2.313	.911	1.88	RJ	4	1.53 x 1.250
1-7/8-12	24	1.500	160-6187	1.794	2.563	.911	1.88	RJ	4	1.78 x 1.250

All dimensions shown in inches.

Port Contour Cutters – SAE J1926, MS 16142

Tungsten Carbide Tipped, Straight Shank



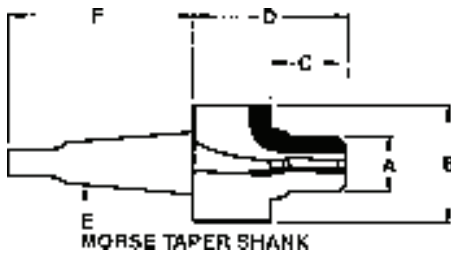
Thread Size	Tube		Part Number	A Small Diameter	B Spotface Diameter	C Bore Length	D Head Length	E Shank Diameter	F Shank Length	Pre-Drill Diameter/Length
	No.	O.D.								
5/16-24	2	.125	263-2031	.272	.682	.473	1.625	.500	3.125	F x .688
3/8-24	3	.187	263-2037	.335	.760	.473	1.625	.500	3.125	O x .688
7/16-20	4	.250	263-2043	.389	.838	.552	1.625	.500	3.125	U x .812
1/2-20	5	.312	263-2050	.452	.916	.552	1.625	.500	3.125	.44 x .812
9/16-18	6	.375	263-2056	.509	.994	.614	1.625	.500	3.125	.48 x .875
3/4-16	8	.500	263-3075	.689	1.198	.693	1.875	.750	3.875	.67 x .937
7/8-14	10	.625	263-3087	.806	1.354	.786	1.875	.750	3.875	.78 x 1.062
1-1/16-12	12	.750	263-3106	.981	1.635	.911	2.125	.750	3.875	.95 x 1.250
1-3/16-12	14	.875	263-3118	1.106	1.775	.911	2.125	.750	3.875	1.09 x 1.250
1-5/16-12	16	1.000	263-3131	1.231	1.920	.911	2.125	.750	3.875	1.21 x 1.250
1-5/8-12	20	1.250	263-4162	1.544	2.280	.911	2.125	1.000	4.875	1.53 x 1.250
1-7/8-12	24	1.500	263-4187	1.794	2.570	.911	2.125	1.000	4.875	1.78 x 1.250
2-1/2-12	32	2.000	263-4250	2.419	3.490	.911	2.125	1.000	4.875	2.41 x 1.250

All dimensions shown in inches.

Special carbide grades and coatings available upon request.

Call quotations for price and availability.

Tungsten Carbide Tipped, Morse Taper Shank



Thread Size	Tube		Part Number	A Small Diameter	B Spotface Diameter	C Bore Length	D Head Length	E Morse Taper	F Shank Length	Pre-Drill Diameter/Length
	No.	O.D.								
5/16-24	2	.125	262-2031	.272	.682	.473	1.625	2	3.125	F x .688
3/8-24	3	.187	262-2037	.335	.760	.473	1.625	2	3.125	O x .688
7/16-20	4	.250	262-2043	.389	.838	.552	1.625	2	3.125	U x .812
1/2-20	5	.312	262-2050	.452	.916	.552	1.625	2	3.125	.44 x .812
9/16-18	6	.375	262-2056	.509	.979	.614	1.625	2	3.125	.48 x .875
3/4-16	8	.500	262-3075	.689	1.198	.693	1.875	3	3.875	.67 x .937
7/8-14	10	.625	262-3087	.806	1.354	.786	1.875	3	3.875	.78 x 1.062
1-1/16-12	12	.750	262-3106	.981	1.635	.911	2.125	3	3.875	.95 x 1.250
1-3/16-12	14	.875	262-3118	1.106	1.775	.911	2.125	3	3.875	1.09 x 1.250
1-5/16-12	16	1.000	262-3131	1.231	1.920	.911	2.125	3	3.875	1.21 x 1.250
1-5/8-12	20	1.250	262-4162	1.544	2.280	.911	2.125	4	4.875	1.53 x 1.250
1-7/8-12	24	1.500	262-4187	1.794	2.570	.911	2.125	4	4.875	1.78 x 1.250
2-1/2-12	32	2.000	262-4250	2.419	3.490	.911	2.125	4	4.875	2.41 x 1.250

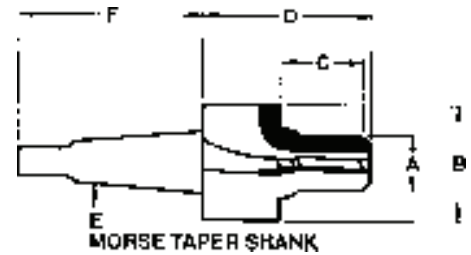
All dimensions shown in inches.

Special carbide grades and coatings available upon request.

Call quotations for price and availability.

Port Contour Cutters – SAE J1926, MS 16142

Tungsten Carbide Tipped Taper Shank with Extra Length Reamer



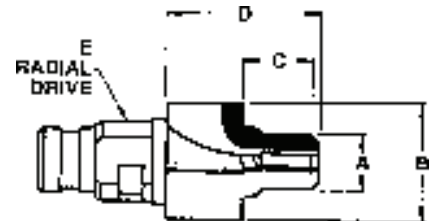
Thread Size	Tube		Part Number	A Small Diameter	B Spotface Diameter	C Bore Length	D Head Length	E Morse Taper	F Shank Length	Pre-Drill Diameter/Length
	No.	O.D.								
5/16-24	2	.125	261-2031	.272	.682	.580	1.750	2	3.125	F x .812
3/8-24	3	.187	261-2037	.335	.760	.580	1.750	2	3.125	O x .812
7/16-20	4	.250	261-2043	.389	.838	.690	1.750	2	3.125	U x .937
1/2-20	5	.312	261-2050	.452	.916	.690	1.750	2	3.125	.44 x .937
9/16-18	6	.375	261-2056	.509	.979	.750	1.750	2	3.125	.48 x .968
3/4-16	8	.500	261-3075	.689	1.198	.840	2.000	3	3.875	.67 x 1.090
7/8-14	10	.625	261-3087	.806	1.354	.970	2.000	3	3.875	.78 x 1.220
1-1/16-12	12	.750	261-3106	.981	1.635	1.125	2.250	3	3.875	.95 x 1.470
1-3/16-12	14	.875	261-3118	1.106	1.775	1.125	2.250	3	3.875	1.09 x 1.470
1-5/16-12	16	1.000	261-3131	1.231	1.920	1.125	2.250	3	3.875	1.21 x 1.470
1-5/8-12	20	1.250	261-4162	1.544	2.280	1.125	2.250	4	4.875	1.53 x 1.470

All dimensions shown in inches.

Special carbide grades and coatings available upon request.

Call quotations for price and availability.

Tungsten Carbide Tipped, Radial Drive



Use with 320, 321 & 323 Series Holders (Pages 60-61)

Thread Size	Tube		Part Number	A Small Diameter	B Spotface Diameter	C Bore Length	D Head Length	E Radial Drive	Number of Flutes	Pre-Drill Diameter/Length
	No.	O.D.								
5/16-24	2	.125	260-2031	.272	.875	.473	1.50	RB	3	F x .687
3/8-24	3	.188	260-2037	.335	.875	.473	1.50	RB	3	O x .687
7/16-20	4	.250	260-2043	.389	.875	.552	1.50	RB	3	U x .812
1/2-20	5	.313	260-2050	.452	.938	.552	1.50	RB	3	.44 x .812
9/16-18	6	.375	260-2056	.509	1.000	.614	1.63	RB	3	.48 x .875
3/4-16	8	.500	260-3075	.689	1.219	.693	1.63	RC	3	.67 x .937
7/8-14	10	.625	260-3087	.806	1.375	.786	1.75	RC	4	.78 x 1.062
1-1/16-12	12	.750	260-4106	.981	1.656	.911	1.88	RE	4	.95 x 1.250
1-3/16-12	14	.875	260-5118	1.106	1.813	.911	1.88	RF	4	1.09 x 1.250
1-5/16-12	16	1.000	260-5131	1.231	2.000	.911	1.88	RF	4	1.21 x 1.250
1-5/8-12	20	1.250	260-6162	1.544	2.313	.911	1.88	RJ	4	1.53 x 1.250
1-7/8-12	24	1.500	260-6187	1.794	2.563	.911	1.88	RJ	4	1.78 x 1.250
2-1/2-12	32	2.000	260-7250	2.419	3.500	.911	1.88	RS	4	2.41 x 1.250

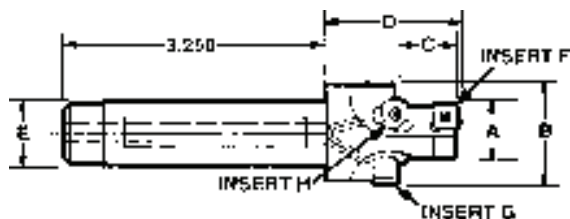
All dimensions shown in inches.

Special carbide grades and coatings available upon request.

Call quotations for price and availability.

Port Contour Cutters – SAE J1926, MS 16142

Indexable, Straight Shank - Through Coolant



Thread Size	Tube		Part Number	A Small Diameter	B Spotface Diameter	C Bore Length	D Head Length	E Shank Diameter	Pre-Drill Diameter/Length
	No.	O.D.							
7/16-20	4	.250	267-3043	.389	.875	.552	1.389	.750	U x .812
1/2-20	5	.312	267-3050	.452	.916	.552	1.389	.750	.44 x .812
9/16-18	6	.375	267-3056	.509	.979	.614	1.819	.750	.48 x .875
3/4-16	8	.500	267-3075	.689	1.198	.693	1.654	.750	.67 x .937
7/8-14	10	.625	267-3087	.806	1.354	.786	1.874	.750	.78 x 1.062
1-1/16-12	12	.750	267-4106	.981	1.635	.911	2.014	1.000	.95 x 1.250
1-3/16-12	14	.875	267-4118	1.106	1.775	.911	2.014	1.000	1.09 x 1.250
1-5/16-12	16	1.000	267-4131	1.231	1.920	.911	2.014	1.000	1.21 x 1.250
1-5/8-12	20	1.250	267-5162	1.544	2.280	.911	2.275	1.250	1.53 x 1.250
1-7/8-12	24	1.500	267-5187	1.794	2.570	.911	2.275	1.250	1.78 x 1.250
2-1/2-12	32	2.000	267-8250	2.419	3.490	.911	2.685	2.000	2.41 x 1.250

All dimensions shown in inches. Inserts included with tool.

Inserts & Accessories for Indexable, Straight Shank Port Contour Cutters

Tool Number	Insert "F&G" Honed Coated	Insert "F&G" Unhoned Uncoated	Torx Screw	Torx Wrench	Insert "H" Honed Coated	Insert "H" Unhoned Uncoated	Torx Screw	Torx Wrench
267-3043	C-250-BD	C-250-CC	056-1017	056-2017 T-7	D-312-GF	D-312-FE	056-1017	056-2017 T-7
267-3050	C-250-BD	C-250-CC	056-1017	056-2017 T-7	D-312-GF	D-312-FE	056-1017	056-2017 T-7
267-3056	C-250-BD	C-250-CC	056-1017	056-2017 T-7	D-312-GF	D-312-FE	056-1017	056-2017 T-7
267-3075	C-312-BD	C-312-CC	056-1020	056-2028 T-8	D-375-GF	D-375-FE	056-1033	056-2033 T-10
267-3087	C-312-BD	C-312-CC	056-1020	056-2028 T-8	D-375-GF	D-375-FE	056-1033	056-2033 T-10
267-4106	C-375-BD	C-375-CC	056-1018	056-2015 T-15	D-500-GF	D-500-FE	056-1018	056-2015 T-15
267-4118	C-375-BD	C-375-CC	056-1018	056-2015 T-15	D-500-GF	D-500-FE	056-1018	056-2015 T-15
267-4131	C-375-BD	C-375-CC	056-1018	056-2015 T-15	D-500-GF	D-500-FE	056-1018	056-2015 T-15
267-5162	C-500-BD	C-500-CC	056-1018	056-2015 T-15	D-500-GF	D-500-FE	056-1018	056-2015 T-15
267-5187	C-500-BD	C-500-CC	056-1018	056-2015 T-15	D-500-GF	D-500-FE	056-1018	056-2015 T-15
267-8250	C-502-BD	C-502-CC	056-1018	056-2015 T-15	D-500-GF	D-500-FE	056-1018	056-2015 T-15

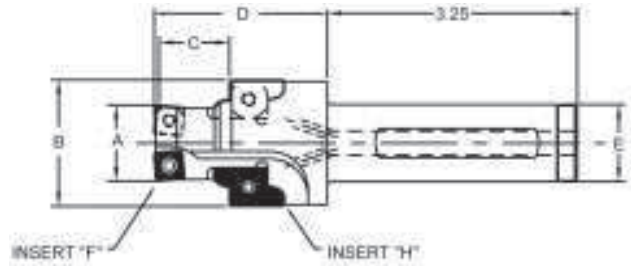
NOTE: Sizes not listed, and special configurations available on request.

NOTE: Insert G is available with 1/64" nose radius (e.g. C-251-BD, C-313-BD, C-376-BD, C-501-BD). Prices on request.

NOTE: Insert H is available with a 'HF' chip breaker for long chipping materials such as 300 series stainless steel (e.g., D-375-HF)

Port Contour Cutters – SAE J1926, MS 16142

Double Feed Indexable Porting Tools (Two Effective Flutes)



Thread Size	Tube		Part Number	A Small Diameter	B Spotface Diameter	C Bore Length	D Head Length	E Shank Diameter	Pre-Drill Diameter/Length
	No.	O.D.							
9/16-18	6	.375	367-3056	.509	.979	.614	2.000	.750	.41 x .875
3/4-16	8	.500	367-3075	.689	1.297	.693	2.250	.750	.53 x .937
7/8-14	10	.625	367-3087	.806	1.348	.786	2.250	.750	.65 x 1.062
1-1/16-12	12	.750	367-4106	.981	1.642	.911	2.500	1.000	.81 x 1.250
1-5/16-12	16	1.000	367-4131	1.231	1.939	.911	2.500	1.000	1.05 x 1.250

Protected under Greenfield Industries US Patent No. 5816753, "Port Cutting Tool with Multiple Function Inserts".

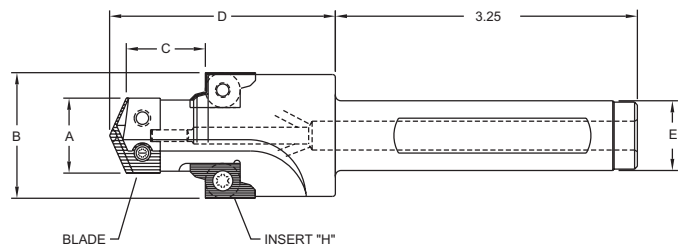
Inserts & Accessories for Double Feed Indexable Porting Tools

Part Number	Insert "F" Standard	Insert "F" Unhoned	Torx Screw	Torx Wrench	Insert "H" Unhoned Coated	Insert "H" Unhoned Uncoated	Insert "H" Honed Coated	Torx Screw	Torx Wrench
367-3056	C-187-BD	C-187-CC	056-1115	056-2025 T-5	J-312-FF	J-312-FE	J-312-GF	056-1020	056-2028 T-8
367-3075	C-250-BD	C-250-CC	056-1017	056-2017 T-7	J-375-FF	J-375-FE	J-375-GF	056-1033	056-2033 T-10
367-3087	C-312-BD	C-312-CC	056-1020	056-2028 T-8	J-375-FF	J-375-FE	J-375-GF	056-1033	056-2033 T-10
367-4106	C-375-BD	C-375-CC	056-1018	056-2015 T-15	J-500-FF	J-500-FE	J-500-GF	056-1834	056-2015 T-15
367-4131	C-375-BD	C-375-CC	056-1018	056-2015 T-15	J-501-FF	J-501-FE	J-501-GF	056-1834	056-2015 T-15

Sizes and special configurations not listed call 1-888-434-4370 for price and availability.

Protected under Greenfield Industries US Patent No. 5957633, "Multiple Function Inserts for Port Cutting Tool".

Double Feed Indexable Porting Tool with Spade Blade Insert



Thread	Tube		Part Number	A Small Diameter	B Spotface Diameter	C Bore Length	D Head Length	E Shank Diameter
	No.	O.D.						
9/16-18	6	.375	467-3056	.509	.979	.628	2.09	.750
3/4-16	8	.500	467-3075	.689	1.297	.736	2.38	.750
7/8-14	10	.625	467-3087	.806	1.348	.851	2.43	.750
1-1/16-12	12	.750	467-4106	.981	1.642	.954	2.44	1.000
1-5/16-12	16	1.000	467-4131	1.231	1.939	.954	2.75	1.000

Application information can be found on METCUT's Spade Blade Brochure.

Spade Blades, Inserts & Accessories for Double Feed Indexable Porting

Part Number	Blade		Locating Pin	Torx Screw	Torx Wrench	Seat Insert "H"	Torx Screw	Torx Wrench
	Multi Layer (TiN/TiCN)	TiALN						
467-3056	7F0-0509G	7F0-0509A	SP-2	056-1014	056-2017 T-7	J312-FF	056-1020	056-2028 T-8
467-3075	7F0-0689G	7F0-0689A	SP-2	056-1014	056-2017 T-7	J375-FF	056-1033	056-2033 T-10
467-3087	7F1-0806G	7F1-0806A	SP-3	056-1020	056-2028 T-8	J375-FF	056-1033	056-2033 T-10
467-4106	7F2-0981G	7F2-0981A	SP-4	056-1018	056-2015 T-15	J500-FF	056-1834	056-2015 T-15
467-4131	7F2-1231G	7F2-1231A	SP-4	056-1018	056-2015 T-15	J501-FF	056-1834	056-2015 T-15

Sizes and special configurations not listed call 1-888-434-4370 for price and availability.

Protected under Greenfield Industries US Patent No. 5957633, "Multiple Function Inserts for Port Cutting Tool".