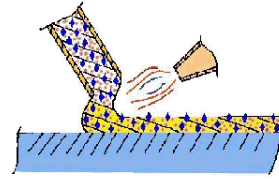
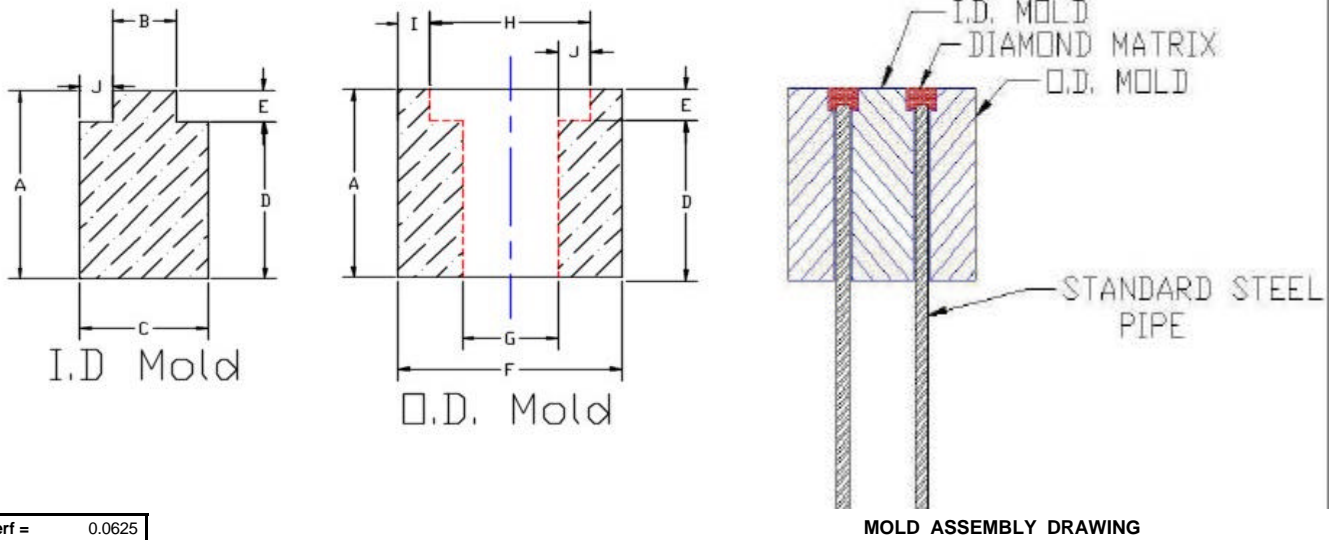


# ANTHON ENGINEERING

Composite Diamond Hardfacing / Abrasive Rods



## GRAPHITE MOLDS FOR MAKING CORE BITS



Kerf =	0.0625
slip fit	0.0020
depth	0.2500
wall	0.2500

Specifications for making DIAMOND CORE BITS from STANDARD SCHEDULE 40 PIPE SIZES

Size	Wall	O.D.	I.D.	A	B	C	D	E	F	G	H	I	J
inches	Pipe	Pipe	Pipe		Core Size						Hole Size		
1/8	0.0680	0.4050	0.2690	2.0000	0.2065	0.2690	1.7500	0.2500	0.6550	0.4070	0.4675	0.2500	0.0625
1/4	0.0880	0.5400	0.3640	2.0000	0.3015	0.3640	1.7500	0.2500	0.7900	0.5420	0.6025	0.2500	0.0625
3/8	0.0910	0.6750	0.4930	2.0000	0.4305	0.4930	1.7500	0.2500	0.9250	0.6770	0.7375	0.2500	0.0625
1/2	0.1090	0.8400	0.6220	2.0000	0.5595	0.6220	1.7500	0.2500	1.0900	0.8420	0.9025	0.2500	0.0625
3/4	0.1130	1.0500	0.8250	2.0000	0.7625	0.8250	1.7500	0.2500	1.3000	1.0520	1.1125	0.2500	0.0625
1	0.1330	1.3150	1.0400	2.0000	0.9775	1.0400	1.7500	0.2500	1.5650	1.3170	1.3775	0.2500	0.0625
1 1/4	0.1400	1.6600	1.3800	2.0000	1.3175	1.3800	1.7500	0.2500	1.9100	1.6620	1.7225	0.2500	0.0625
1 1/2	0.1450	1.9000	1.6100	2.0000	1.5475	1.6100	1.7500	0.2500	2.1500	1.9020	1.9625	0.2500	0.0625
2	0.1540	2.3750	2.0670	2.0000	2.0045	2.0670	1.7500	0.2500	2.6250	2.3770	2.4375	0.2500	0.0625
2 1/2	0.2030	2.8750	2.4690	2.0000	2.4065	2.4690	1.7500	0.2500	3.1250	2.8770	2.9375	0.2500	0.0625
3	0.2160	3.5000	3.0680	2.0000	3.0055	3.0680	1.7500	0.2500	3.7500	3.5020	3.5625	0.2500	0.0625
3 1/2	0.2260	4.0000	3.5480	2.0000	3.4855	3.5480	1.7500	0.2500	4.2500	4.0020	4.0625	0.2500	0.0625
4	0.2370	4.5000	4.0260	2.0000	3.9635	4.0260	1.7500	0.2500	4.7500	4.5020	4.5625	0.2500	0.0625
5	0.2580	5.5630	5.0470	2.0000	4.9845	5.0470	1.7500	0.2500	5.8130	5.5650	5.6255	0.2500	0.0625
6	0.2800	6.6250	6.0650	2.0000	6.0025	6.0650	1.7500	0.2500	6.8750	6.6270	6.6875	0.2500	0.0625

Size	Hole	DEPOSIT Volume	DEPOSIT Volume	NUMBER DRILL BITS	NUMBER Rods	AREA IN <sup>2</sup> CUTTING MATRIX
Inches	Size	cubic cc	cubic inch	PER ROD	PER BIT	
1/8	0.4675	0.5660	0.0345	7.0669	0.1415	0.1382
1/4	0.6025	0.8755	0.0534	4.5687	0.2189	0.2137
3/8	0.7375	1.1538	0.0704	3.4670	0.2884	0.2816
1/2	0.9025	1.6135	0.0985	2.4791	0.4034	0.3939
3/4	1.1125	2.1115	0.1289	1.8943	0.5279	0.5154
1	1.3775	3.0310	0.1850	1.3197	0.7577	0.7398
1 1/4	1.7225	3.9615	0.2417	1.0097	0.9904	0.9670
1 1/2	1.9625	4.6869	0.2860	0.8534	1.1717	1.1440
2	2.4375	6.1887	0.3777	0.6463	1.5472	1.5106
2 1/2	2.9375	9.1304	0.5572	0.4381	2.2826	4.1893
3	3.5625	11.7712	0.7183	0.3398	2.9428	2.8733
3 1/2	4.0625	14.0132	0.8551	0.2854	3.5033	3.4206
4	4.5625	16.4325	1.0028	0.2434	4.1081	4.0111
5	5.6255	21.8829	1.3354	0.1828	5.4707	5.3415
6	6.6875	27.9694	1.7068	0.1430	6.9923	6.8272

**NOTES:**

ONE DIAMOND ROD CONTAINS APPROX 4 CUBIC CENTIMETERS OF DIAMOND MATRIX BRAZE COMPOSITE

STANDARD PIPE REDUCERS CAN BE USED TO ADAPD LARGE PIPE SIZES TO A STANDARD 1/2 INCH DRILL CHUCK

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