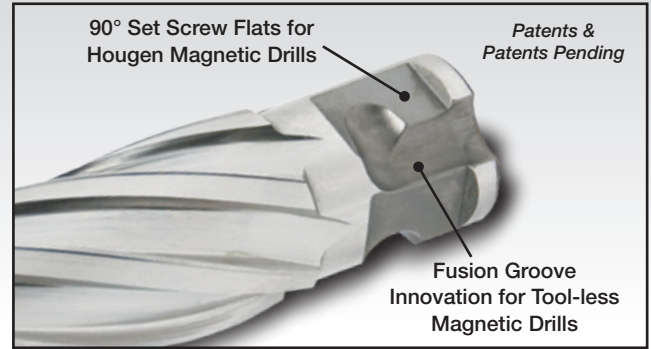


HOUGEN® CUTTER COMPARISON CHART

										
Tool Series:	Rotacut™	Extended Reach	Holcutter™	Carbide Holcutter™	Rotaloc™	Rotaloc Plus™	"12,000-Series"	Copperhead™	"42/43,000"	
Diameter Range Min. / Max.	1/4" to 1-1/2" (6mm - 25mm)	3/8" to 9/16" (6.4mm)	1 1/16" to 3" (3.2mm)	1 1/16" to 3" (3.2mm)	1/2" to 1-1/16" (12mm - 27mm)	7/16" to 1-3/8" (12mm - 35mm)	7/16" to 2-3/8" (12mm - 60mm)	9/16" to 2" (14mm - 60mm)	3/4" to 3-1/16"	
Max. Depth of Cut	1/4" to 1/2" (6.4mm - 12.7mm)	1/4" (6.4mm)	1/8" (3.2mm)	1/8" (3.2mm)	3/4" - (19mm) Stack Geometry	1" - (25mm)	1" to 6" (25mm to 152mm)	1" to 4" (25mm to 102mm)	2" or 3" (50mm or 76mm)	
Mounting	3/8" or 1/2" Triple Flat Shank	3/8" Triple Flat Shank	3/8" Triple Flat Shank	3/8" or 1/2" Triple Flat Shank	Bayonet Style	Bayonet Style	3/4" Double Flat or Fusion™ Shank	3/4" Double Flat or Fusion™ Shank	3/4" Weldon or 1-1/4" Weldon	
Cutter Material(s) Available	M2 HSS	M2 HSS	M2 HSS	Carbide Tip	M42 HSS	M2 HSS	M2 HSS, M2 TIN Coat, or M42 TIN	Carbide Tip	M2 HSS or M2 TIN Coat	
Can be Resharpened	===== Disposable =====									
Available Grind Down (Within Limits)										
Max. Application Hardness Rating	275 BHN (28.5 HRC)	275 BHN (28.5 HRC)	275 BHN (28.5 HRC)	450 BHN (47.2 HRC)	350 BHN (37.7 HRC)	275 BHN (28.5 HRC)	275 BHN (28.5 HRC)	450 BHN (47.2 HRC)	275 BHN (28.5 HRC)	
Recommended Lubrication	Slick-Stik™	Slick-Stik™	Slick-Stik™	Slick-Stik™	Slick-Stik™	Slick-Stik™	Rotamagic™	Rotamagic™	Rotamagic™	
Aluminum	===== High RPM & Fast Feed Rates Suggested =====									
Mild Steel										
Harder Steel		Good			Better	Good	Standard - Good TIN - Better		Standard - Good TIN - Better	
Stainless Steel	Good		Recommend Speed Reducer		Good		TIN Coat or Premium Recommended		TIN Coat Recommended	

HOUGEN® "12,000-SERIES" FUSION™ ANNULAR CUTTERS

Designed for convenience with all the quality and characteristics of the "12,000-Series" cutters with the added benefit of the Fusion™ shank for use in Hougen® drills and competitive tool-less magnetic drills. "12,000-Series" Fusion™ Cutters provide 2x the tool life when used in Hougen® magnetic drills.



Cutter Dia. (Metric)	Decimal Equivalent	Part No.	
		1" D.O.C. (25mm)	2" D.O.C. (50mm)
Use with pilot		10531	10532
12mm	.4724	82312	82412
13mm	.5118	82313	82413
14mm	.5512	82314	82414
15mm	.5906	82315	82415
Use with pilot		10527	10528
16mm	.6299	82316	82416
17mm	.6693	82317	82417
18mm	.7087	82318	82418
19mm	.7480	82319	82419
20mm	.7874	82320	82420
21mm	.8268	82321	82421
22mm	.8661	82322	82422
23mm	.9055	82323	82423
24mm	.9449	82324	82424
25mm	.9843	82325	82425
26mm	1.0236	82326	82426
27mm	1.0630	82327	82427
28mm	1.1024	82328	82428
29mm	1.1417	82329	82429
30mm	1.1811	82330	82430
31mm	1.2205	82331	82431
32mm	1.2598	82332	82432
33mm	1.2992	82333	82433
34mm	1.3386	82334	82434
35mm	1.3779	82335	82435
36mm	1.4173	82336	82436

Cutter Dia. (Metric)	Decimal Equivalent	Part No.	
		1" D.O.C. (25mm)	2" D.O.C. (50mm)
Use with pilot		10527	10528
37mm	1.4567	82337	82437
38mm	1.4961	82338	82438
39mm	1.5354	82339	82439
40mm	1.5743	82340	82440
41mm	1.6142	82341	82441
42mm	1.6535	82342	82442
43mm	1.6929	82343	82443
44mm	1.7323	82344	82444
45mm	1.7717	82345	82445
46mm	1.8110	82346	82446
47mm	1.8504	82347	82447
48mm	1.8898	82348	82448
49mm	1.9291	82349	82449
50mm	1.9685	82350	82450
51mm	2.0079	82351	82451
52mm	2.0472	82352	82452

All Cutters are available with **stack geometry**.
To order: add 'S' to end of part no. ie...82325S.
(Some sizes may take 7-10 days. Call for availability).

"12,000-SERIES" TAP DRILL SIZES

A clean, accurate hole helps to make tapping an easier task. You can achieve that task easily with these tap drill size "12,000-Series" Cutters. Kit #12007 contains five popular sizes of tap drills.

Cutter Dia. (Inches)	Decimal Equivalent	Thread	Part No.	
			1" D.O.C.	2" D.O.C.
Use with Pilot			10531	10532
7/16	.4375	1/2-13	12114	12214
29/64	.4531	1/2-20	----	12010
31/64	.4844	9/16-12	----	12011
33/64	.5156	9/16-18	----	12012
17/32	.5313	5/8-11	12117	12217
37/64	.5781	5/8-18	----	12014
19/32	.5938	11/16-11	----	12219
Use with Pilot			10527	10528
21/32	.6563	3/4-10	12121	12221
11/16	.6875	3/4-16	12122	12222
23/32	.7188	1/2-14 NPT	----	12223
49/64	.7656	7/8-9	----	12020
25/32	.7812	7/8-9	12125	12225
13/16	.8125	7/8-14	12126	12226
7/8	.8750	1-8	12128	12228
59/64	.9219	1-12	----	12025

PILOTS - "12,000-SERIES"

The pilot serves three functions when used with "12,000-Series" cutters in a portable magnetic drill; 1) Locate the holes center point, 2) Initiate coolant flow to the center of the tool, 3) Eject the slug at the end of the cut. Always use a sharp pilot for best results.



Part No.	Description
10527	1" D.O.C. Pilot (5/8" - 2-3/8" & 16mm - 60mm)
10528	2" D.O.C. Pilot (5/8" - 2-3/8" & 16mm - 60mm)
10531	1" D.O.C. Pilot (7/16 - 9/16" & 12 - 15mm)
10532	2" D.O.C. Pilot (7/16 - 9/16" & 12 - 15mm)
24131	3" D.O.C. Pilot (3/4" - 2-3/8" & 19mm - 52mm)
4-10528	4" Pilot for Extended Reach "12,000-Series"
6-10528	6" Pilot for Extended Reach "12,000-Series"
Pilots for Old Style "12,000-Series" Cutters	
10533	1" D.O.C. Pilot (1/2" - 11/16" & 13mm - 18mm)
10534	2" D.O.C. Pilot (1/2" - 11/16" & 13mm - 18mm)