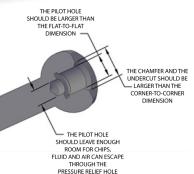
Order our Rotary Broach Tools Online www.buybroaches.com



When Rotary Broaching, a pre-drilled pilot hole is required. The typical pilot hole should be pre-drilled for Hexagons 3% larger than the "across the flats" dimension of the Broach. For example, if you are using a 1/4" Hexagon Rotary Broach, the across the flats dimension is .2525", therefore your pre-drill dimension would be about .260". This may vary depending upon your application, material and final product specifications.

Here is a chart to show the most common pre-drill pilot hole sizes

Inch Polygon Sizes

ment olygon sizes			
<u>Nominal</u>	Finished	Pre-Drill	
.050"	.0510	.053	
1/16"	.0635	.065	
5/64"	.0790	.081	
3/32"	.0950	.098	
7/64"	.1110	.114	
1/8"	.1265	.130	
9/64"	.1425	.147	
5/32"	.1585	.163	
11/64"	.1740	.179	
3/16"	.1895	.196	
7/32"	.2215	.228	
1/4"	.2525	.260	
9/32"	.2840	.293	
5/16"	.3155	.325	
11/32"	.3470	.357	
3/8"	.3785	.390	
13/32"	.4100	.422	
7/16"	.4415	.455	
15/32"	.4730	.488	
1/2"	.5045	.520	

Metric Polygon Sizes

Wictife Folygon 312c3			
<u>Nominal</u>	Finished	Pre-Drill	
1.3mm	.0515	.053	
1.5mm	.0610	.063	
2.0mm	.0810	.083	
2.5mm	.1010	.104	
3.0mm	.1210	.125	
4.0mm	.1610	.166	
5.0mm	.2000	.206	
6.0mm	.2400	.247	
7.0mm	.2790	.287	
8.0mm	.3185	.328	
9.0mm	.3580	.369	
10mm	.3985	.410	
11mm	.4370	.450	
12mm	.4775	.492	
13mm	.5170	.533	
	1		



16770 Link Court #106 Fort Myers, Florida 33912 239-628-4800 | 239-628-4801(fax) www.polygonsolutions.com



Thank you for purchasing our Premier Tool Holder

Instructions for using the Rotary Broach Holder

Hole Preparation

- 1. Be sure to pre-drill your pilot hole larger than the minor diameter or across-flat dimension of the broach (see reverse side for chart)
- 2. The hole should have a chamfer the same size or larger than the major diameter or sharp corner dimension.
- 3. There must be room in the bottom of the hole for chips, cutting fluid, coolant, etc.
- 4. An under-cut, relief or taper in the bottom of the hole provides a better point for chips to break free, but is not necessary.

Set-Up

- 1. The broach holder should be securely held in the machine.
- 2. Lock the broach into the holder using the set screw.
- 3. Start with minimum feed rate of .002-.003 IPR and 700-800 RPM.
- 4. If you remove the broach from the hole before broaching is completed, the tool will not hold alignment. It must be aligned manually or by some mechanical means.
- 5. Some end-play is built into the tool to allow it to follow the hole.

After Broaching is Complete

1. Chips may be removed using a drill or end-mill if required.

Replacement Bearing Packs Available

If you have any further question or need additional instructions please feel free to contact our Technical Support Department: 239-628-4800

Please share your photos and questions with us. Post your comments at:

forum.polygonsolutions.com

