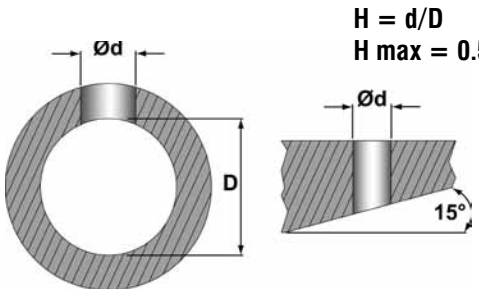
Technical Information

For the standard COFA tool, the maximum cross hole to main hole ratio is 2:1 and the maximum surface angle is 15°. Above these values, the cutting insert may not have enough clearance. With irregular surfaces, the RPM must be lowered but the feed rate is unaffected. Deburr more extreme contours by using the 30° blade with extra clearance relief.



Spring Information

The spring gives cutting force to the carbide blade and the COFA tool easily accommodates several spring sizes. For easier cutting materials such as aluminum, a softer "W" spring is recommended. For harder materials or alloys, a stiffer spring is recommended.

Cutting Data

Material	Hardness BHN	Spring Index	COFA-C 6/8/12 Carbide TiAlN IPR mm/rev	SFM MPM
Carbon Steels	*100-250*	H-Z	.006-.012 .15-.3	100-340 30-104
Free Machining Alloy	*125-340*	H-S S-Z	.006-.012 .15-.3	60-240 18-73
High Alloy Steel	*250-350*	S-Z1	.006-.01 .15-.25	60-200 18-60
Stainless Steel	*140-250*	S-Z2	.006-.01 .15-.25	40-175 12-53
Grey Cast Iron	*150-330*	H H-S	.008-.016 .2-.4	50-330 15-100
Nodular Cast Iron	*140-310*	H H-S	.006-.012 .15-.3	50-300 15-91
Aluminum Alloys	*30-180*	W-H	.008-.014 .2-.35	80-600 24-183
Nickel-based Alloys	*220-310*	Z1-Z3 Z2-Z3	.005-.01 .125-.25	15-80 5-24
Titanium Alloys		Z1-Z3	.005-.01 .125-.25	15-80 5-24
Copper-Brass-Bronze	*80-202*	H H-S	.008-.016 .2-.4	80-600 24-183

NOTE: All listed cutting data are standard values only. The cutting values depend on the amount of slope of the uneven bore edge (i.e. high slope=low cutting value). The feed also depends on the sloping ratio. In case of hard-to-machine materials or uneven bore edges, we recommend applying cutting speeds that are at the lower end of the range for uneven bore edges.