

## Annular cutter

# High Speed Steel Cobalt



Euroboor HSS-Cobalt annular cutters are made of Molybdenum-Chromium-Vanadium-Tungsten alloy High Speed Steel with an additional 8% Cobalt (M42). The HSS-Cobalt annular cutter is specifically designed to remain cool when cutting holes. All flutes are fully ground, resulting in super-fast feed rates and smooth holes

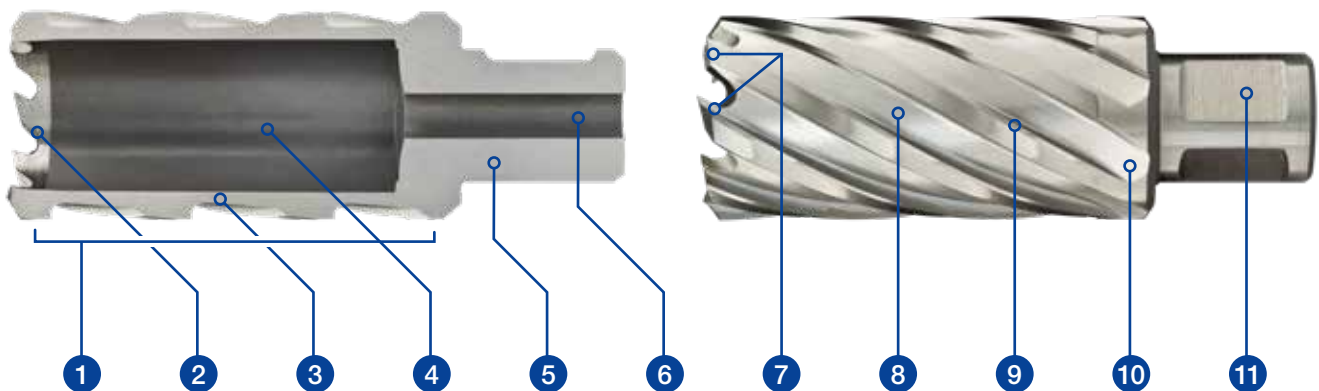
in hard materials, providing better chip clearance and higher cutting performances. The M42 HSS-Cobalt annular cutter is widely used in the metalworking industry for its superior red hardness compared to more conventional high speed steels. This will lead to shorter cycle times in production environments due to higher cutting speeds.

### HSS-Cobalt material application

● Optimal ○ Good ○ Possible

Plastics GRP/CRP	Brass, Copper, Tin	Grey cast iron	Steel					Stainless steel		Aluminium		Exotic materials, Inconnell, Nimonic, HARDOX, Hastelloy	Rails
			< 500N	< 750N	< 900N	< 1,100N	< 1,400N	< 900N	≤ 900N	< 10% Si	≤ 10% Si		
●	●	○	●	●	●	○	○	○	○	●	○	○	

## HSS-Cobalt profile



1. Stage hardening. Combines maximum hardness at the teeth with superior strength at the cutter body, reducing breakage to a minimum.
2. Inner ground cutting teeth. Helps stable "setting" of the cutter, reduces friction during and drilling and helps slug ejection.
3. Wall thickness matched to the diameter of the cutter, combining the best possible cutting time with strength.
4. Tapered inside fitment prevents the cutter getting stuck. Guaranteed slug ejection with usage of the correct pilot pin.
5. Precise shank fitment for maximum interchangeability and close tolerance drilling without run-out.
6. Precise pilot pin fitment for perfect centration, hassle-free pin retraction and controlled lubricant flow.
7. Altering "continuous pre-cut" teeth geometry. Generates faster and more stable drilling performance and results in clear cuts of the highest precision and smooth, burr-free finishes.
8. Well-thought-out spiral flute angles for optimal chip removal.
9. Specially designed blades for optimum stability and heat-reduction.
10. Number of flutes and teeth matched to the diameter of the cutter for the best tooth load and superior cutting speeds.
11. Precision ground shanks for optimum fitment of the cutter itself in the tool holder and of pilot pin in the annular cutter. Increases safety, stability and accurate hole dimensions.

# HSS Cobalt

Weldon shank



Shank sizes

DIA Ø 12 - 60 mm:  
19.05 mm (3/4")

DIA Ø 7/16" - 2 5/16":  
3/4"



	DoC 30 mm Weldon	DoC 55 mm Weldon
DIA	Ø 12 - 60 mm	
	Code	Code
Ø 12	IBS.120	IBL.120
Ø 13	IBS.130	IBL.130
Ø 14	IBS.140	IBL.140
Ø 15	IBS.150	IBL.150
Ø 16	IBS.160	IBL.160
Ø 17	IBS.170	IBL.170
Ø 18	IBS.180	IBL.180
Ø 19	IBS.190	IBL.190
Ø 20	IBS.200	IBL.200
Ø 21	IBS.210	IBL.210
Ø 22	IBS.220	IBL.220
Ø 23	IBS.230	IBL.230
Ø 24	IBS.240	IBL.240
Ø 25	IBS.250	IBL.250
Ø 26	IBS.260	IBL.260
Ø 27	IBS.270	IBL.270
Ø 28	IBS.280	IBL.280
Ø 29	IBS.290	IBL.290
Ø 30	IBS.300	IBL.300
Ø 31	IBS.310	IBL.310
Ø 32	IBS.320	IBL.320
Ø 33	IBS.330	IBL.330
Ø 34	IBS.340	IBL.340
Ø 35	IBS.350	IBL.350
Ø 36	IBS.360	IBL.360
Ø 37	IBS.370	IBL.370
Ø 38	IBS.380	IBL.380
Ø 39	IBS.390	IBL.390
Ø 40	IBS.400	IBL.400
Ø 41	IBS.410	IBL.410
Ø 42	IBS.420	IBL.420
Ø 43	IBS.430	IBL.430
Ø 44	IBS.440	IBL.440
Ø 45	IBS.450	IBL.450
Ø 46	IBS.460	IBL.460
Ø 47	IBS.470	IBL.470
Ø 48	IBS.480	IBL.480
Ø 49	IBS.490	IBL.490
Ø 50	IBS.500	IBL.500
Ø 51	IBS.510	IBL.510
Ø 52	IBS.520	IBL.520
Ø 53	IBS.530	IBL.530
Ø 54	IBS.540	IBL.540
Ø 55	IBS.550	IBL.550
Ø 56	IBS.560	IBL.560
Ø 57	IBS.570	IBL.570
Ø 58	IBS.580	IBL.580
Ø 59	IBS.590	IBL.590
Ø 60	IBS.600	IBL.600

	DoC 1" Weldon	DoC 2" Weldon	DoC 3" Weldon
DIA	Ø 7/16" - 2 5/16"		
	Code	Code	Code
Ø 7/16"	IBS.7/16"	IBL.7/16"	IBY.7/16"
Ø 1/2"	IBS.1/2"	IBL.1/2"	IBY.1/2"
Ø 9/16"	IBS.9/16"	IBL.9/16"	IBY.9/16"
Ø 5/8"	IBS.5/8"	IBL.5/8"	IBY.5/8"
Ø 11/16"	IBS.11/16"	IBL.11/16"	IBY.11/16"
Ø 3/4"	IBS.3/4"	IBL.3/4"	IBY.3/4"
Ø 13/16"	IBS.13/16"	IBL.13/16"	IBY.13/16"
Ø 7/8"	IBS.7/8"	IBL.7/8"	IBY.7/8"
Ø 15/16"	IBS.15/16"	IBL.15/16"	IBY.15/16"
Ø 1"	IBS.1"	IBL.1"	IBY.1"
Ø 1 1/16"	IBS.1-1/16"	IBL.1-1/16"	IBY.1-1/16"
Ø 1 1/8"	IBS.1-1/8"	IBL.1-1/8"	IBY.1-1/8"
Ø 1 3/16"	IBS.1-3/16"	IBL.1-3/16"	IBY.1-3/16"
Ø 1 1/4"	IBS.1-1/4"	IBL.1-1/4"	IBY.1-1/4"
Ø 1 5/16"	IBS.1-5/16"	IBL.1-5/16"	IBY.1-5/16"
Ø 1 3/8"	IBS.1-3/8"	IBL.1-3/8"	IBY.1-3/8"
Ø 1 7/16"	IBS.1-7/16"	IBL.1-7/16"	IBY.1-7/16"
Ø 1 1/2"	IBS.1-1/2"	IBL.1-1/2"	IBY.1-1/2"
Ø 1 9/16"	IBS.1-9/16"	IBL.1-9/16"	IBY.1-9/16"
Ø 1 5/8"	IBS.1-5/8"	IBL.1-5/8"	IBY.1-5/8"
Ø 1 11/16"	IBS.1-11/16"	IBL.1-11/16"	IBY.1-11/16"
Ø 1 3/4"	IBS.1-3/4"	IBL.1-3/4"	IBY.1-3/4"
Ø 1 13/16"	IBS.1-13/16"	IBL.1-13/16"	IBY.1-13/16"
Ø 1 7/8"	IBS.1-7/8"	IBL.1-7/8"	IBY.1-7/8"
Ø 1 15/16"	IBS.1-15/16"	IBL.1-15/16"	IBY.1-15/16"
Ø 2"	IBS.2"	IBL.2"	IBY.2"
Ø 2 1/16"	IBS.2-1/16"	IBL.2-1/16"	IBY.2-1/16"
Ø 2 1/8"	IBS.2-1/8"	IBL.2-1/8"	IBY.2-1/8"
Ø 2 3/16"	IBS.2-3/16"	IBL.2-3/16"	IBY.2-3/16"
Ø 2 1/4"	IBS.2-1/4"	IBL.2-1/4"	IBY.2-1/4"
Ø 2 5/16"	IBS.2-5/16"	IBL.2-5/16"	IBY.2-5/16"