



suttontools

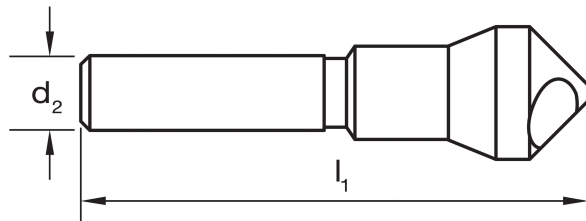
C102 -Deburring Countersinks - 90° Cross Hole - Sutton Tools

Deburring tool

Features:

- Cross Hole Deburring Countersink 90°

Range:



Item #	Diameter d1 (mm)	Diameter d2 (inch)	Length l1 (mm)	Range
C1020901	6.00	1/4	45	3 - 6
C1020902	10	1/4	43	4 - 10
C1020903	13.00	1/4	48	5 - 13
C1020904	20	1/2	67	8 - 20
C1020905	28	1/4	72	14 - 28
C1020906	37	1/2	89	13 - 37

Applications:

ISO	VDI	Description	Condition	Hardness	Strength	Optimal
P	1	Steel - Non-alloy, cast & free cutting (~ 0.15 %C)	Annealed	125MPa	440MPa	●
P	2	Steel - Non-alloy, cast & free cutting (~ 0.45 %C)	Annealed	190MPa	640MPa	●
P	3	Steel - Non-alloy, cast & free cutting (~ 0.45 %C)	Quenched & Tempered	250MPa	840MPa	●
P	4	Steel - Non-alloy, cast & free cutting (~ 0.75 %C)	Annealed	270MPa	910MPa	●
P	5	Steel - Non-alloy, cast & free cutting (~ 0.75 %C)	Quenched & Tempered	300MPa	1010MPa	○
P	6	Steel - Low alloy & cast < 5% of alloying elements	Annealed	180MPa	610MPa	●
P	7	Steel - Low alloy & cast < 5% of alloying elements	Quenched & Tempered	275MPa	930MPa	●
P	8	Steel - Low alloy & cast < 5% of alloying elements	Quenched & Tempered	300MPa	1010MPa	○
P	9	Steel - Low alloy & cast < 5% of alloying elements	Quenched & Tempered	350MPa	1180MPa	○
P	10	Steel - High alloy, cast & tool	Annealed	200MPa	680MPa	●
P	11	Steel - High alloy, cast & tool	Hardened & Tempered	325MPa	1100MPa	○
P	12	Steel - Corrosion resistant & cast - Ferritic / Martensitic	Annealed	200MPa	680MPa	○
P	13	Steel - Corrosion resistant & cast - Martensitic	Quenched & Tempered	240MPa	810MPa	○
M	14.1	Stainless Steel - Austenitic	Age Hardened	180MPa	610MPa	●
M	14.2	Stainless Steel - Duplex		250MPa	840MPa	●
M	14.3	Stainless Steel - Precipitation Hardening		250MPa	840MPa	○
K	15	Cast Iron, Grey (GG) - Ferritic / Pearlitic		180MPa	610MPa	●
K	16	Cast Iron, Grey (GG) - Pearlitic		260MPa	880MPa	○
K	17	Cast Iron, Nodular (GGG) - Ferritic		160MPa	570MPa	●
K	18	Cast Iron, Nodular (GGG) - Pearlitic		250MPa	840MPa	○
K	19	Cast Iron, Malleable - Ferritic		130MPa	460MPa	●
K	20	Cast Iron, Malleable - Pearlitic		230MPa	780MPa	○
N	21	Aluminum & Magnesium, wrought alloy - Non Heat Treatable		60MPa	210MPa	○
N	22	Aluminum & Magnesium, wrought alloy - Heat Treatable	Age Hardened	100MPa	360MPa	○
N	23	Aluminum & Magnesium, cast alloy ?12% Si - Non Heat Treatable		75MPa	270MPa	●
N	24	Aluminum & Magnesium, cast alloy ?12% Si - Heat Treatable	Age Hardened	90MPa	320MPa	●
N	25	Aluminum & Magnesium, cast alloy >12% Si - Non Heat Treatabl		130HB	460MPa	
N	26	Copper & Copper alloys (Brass/Bronze) - Free cutting, Pb > 1%		110MPa	390MPa	●
N	27	Copper & Copper alloys (Brass/Bronze) - Brass (CuZn, CuSnZn)		90MPa	320MPa	○
N	28	Copper & Copper alloys (Brass/Bronze) - Bronze (CuSn)		100HB	360MPa	
N	29	Non-metallic - Thermosetting & fiber-reinforced plastics				
N	30	Non-metallic - Hard rubber, wood etc.				
S	31	High temperature alloys - Fe based	Annealed	200HB	680MPa	
S	32	High temperature alloys - Fe based	Age Hardened	280HB	950MPa	
S	33	High temperature alloys - Ni / Co based	Annealed	250HB	840MPa	
S	34	High temperature alloys - Ni / Co based	Age Hardened	350HB	1180MPa	
S	35	High temperature alloys - Ni / Co based	Cast	320HB	1080MPa	
S	36	Titanium & Titanium alloys - CP Titanium			400MPa	
S	37.1	Titanium & Titanium alloys - Alpha alloys			860MPa	
S	37.2	Titanium & Titanium alloys - Alpha / Beta alloys	Annealed		960MPa	
S	37.3	Titanium & Titanium alloys - Alpha / Beta alloys	Age Hardened		1170MPa	
S	37.4	Titanium & Titanium alloys - Beta alloys	Annealed		830MPa	
S	37.5	Titanium & Titanium alloys - Beta alloys	Age Hardened		1400MPa	
H	38.1	Hardened steel	Hardened & Tempered	45HRC		
H	38.2	Hardened steel	Hardened & Tempered	55HRC		

KEY

● Optimal ○ Effective



Steel



Stainless



Cast Iron



Non-Ferous Metals



Titanium & Super Alloys



Hard Materials

Applications:

ISO	VDI	Description	Condition	Hardness	Strength	Optimal
H	39.1	Hardened steel	Hardened & Tempered	58HRC		
H	39.2	Hardened steel	Hardened & Tempered	62HRC		
H	40	Cast Iron - Chilled	Cast	400MPa	1350MPa	o
H	41	Cast Iron	Hardened & Tempered	55HRC		

KEY

● Optimal o Effective ||
 P Steel
 M Stainless
 K Cast Iron
 N Non-Ferrous Metals
 S Titanium & Super Alloys
 H Hard Materials