



COUNTERSINKS

• Counterbores • Cross Hole • Single Flute • Three Flute



Smooth Cutting... Perfect Chamfering

Catalogue Code: C107

This new generation of countersink applies the three most important areas for optimal tool life in its design.

Constant rake angle along the entire cutting face, latest developments in coating and superior tool material.

- De-burring
- Countersinking / Counterboring screw holes
- Chamfering of tapping holes
- For use in machine applications

Features

- 5% Cobalt grade High Speed Steel
- Constant flute rake along entire cutting face
- Axial and radial adjusted relief
- Higher dimensional precision
- Improved and sharper cutting edge

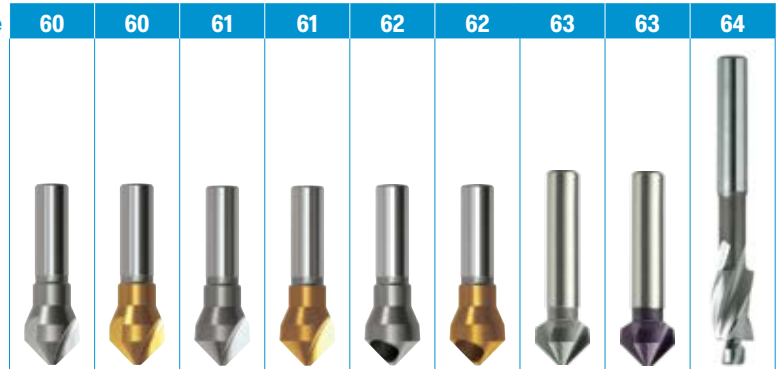
Benefits

- Chatter-free countersinking and de-burring
- Longer lasting
- Excellent chip flow



ISO	VDI	Material Group	Sutton
P	A	Steel	N
M	R	Stainless Steel	VA
K	F	Cast Iron	GG
N	N	Non-Ferrous Metals, Aluminiums & Coppers	Al W
S	S	Titaniums & Super Alloys	Ti Ni
H	H	Hard Materials (≥ 45 HRC)	H

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Catalogue Code
Material
Surface Finish
Sutton Designation
Standard
Depth of Cut
Shank Tolerance

60	60	61	61	62	62	63	63	64
C105	C106	C103	C104	C101	C102	C107	C108	C100
HSS		HSS		HSS		HSS Co		HSS Co
BrT	TiN	BrT	TiN	BrT	TiN	BrT	TiAlN	BrT
N		N		N		N UNI		N
Sutton Standard		Sutton Standard		Sutton Standard		DIN 335		DIN 373
-		-		-		-		-
-		-		-		h9		h6

ISO	VDI ^A ₃₃₂₃	Material	Condition	HB	N/mm ²									
P	1	Steel - Non-alloy, cast & free cutting	- 0.15 %C	A	125	440	●	●	●	●	●	●	●	
	2			A	190	640	●	●	●	●	●	●	●	
	3		QT	250	840	○	●	○	●	○	●	○	○	
	4		- 0.75 %C	A	270	910	○	●	○	●	○	●	○	○
	5			QT	300	1010		○		○		○		○
	6	Steel - Low alloy & cast < 5% of alloying elements		A	180	610	●	●	○	●	●	●	●	●
	7			QT	275	930	○	●	○	●	○	●	○	○
	8			QT	300	1010		○		○		○		○
	9			QT	350	1180				○			○	○
	10	Steel - High alloy, cast & tool		A	200	680	○	●	○	●	○	●	○	○
	11			HT	325	1100				○			○	○
12	Steel - Corrosion resistant & cast	Ferritic / Martensitic	A	200	680				○	○	●	○	○	
13		Martensitic	QT	240	810				○	○	●	○	○	
M	14.1	Stainless Steel	Austenitic	AH	180	610		●		●	●	●	○	
	14.2		Duplex		250	840		●		●	●	●	○	
	14.3		Precipitation Hardening		250	840			○		○	●	○	
K	15	Cast Iron - Grey (GG)	Ferritic / Pearlitic		180	610	●	●	●	●	●	●	●	
	16		Pearlitic		260	880	○	○	○	○	○	○	○	
	17	Cast Iron - Nodular (GGG)	Ferritic		160	570	○	●	○	●	○	●	○	
	18		Pearlitic		250	840	○	○	○	○	○	●	○	
	19		Ferritic		130	460	○	●	○	●	○	●	○	
20	Cast Iron - Malleable	Pearlitic		230	780		○		○		●	○		
N	21	Aluminum & Magnesium - wrought alloy	Non Heat Treatable		60	210	●	○	●	○	○	○	○	
	22		Heat Treatable	AH	100	360	●	○	●	○	○	○	○	
	23	Aluminum & Magnesium - cast alloy ≤12% Si	Non Heat Treatable		75	270	○	●	○	●	○	●	○	
	24		Heat Treatable	AH	90	320	○	●	○	●	○	●	○	
	25	Al & Mg - cast alloy >12% Si	Non Heat Treatable		130	460					○	●	○	
	26	Copper & Cu alloys (Brass/Bronze)	Free cutting, Pb > 1%		110	390	○	●	○	●	○	●	○	
	27		Brass (CuZn, CuSnZn)		90	320	○	○	○	○	○	●	○	
	28		Bronze (CuSn)		100	360	○	○	○	○	○	●	○	
29	Non-metallic - Thermosetting & fiber-reinforced plastics									○	○			
30	Non-metallic - Hard rubber, wood etc.													
S	31	High temp. alloys	Fe based	A	200	680						○	○	
	32			AH	280	950						○	○	
	33		Ni / Co based	A	250	840						○	○	
	34			AH	350	1180							○	
	35			C	320	1080							○	
	36	Titanium & Ti alloys	CP Titanium		400 MPa							○	○	
	37.1		Alpha alloys		860 MPa							○	○	
37.2	Alpha / Beta alloys		A	960 MPa							○	○		
37.3			AH	1170 MPa								○		
37.4	Beta alloys		A	830 MPa							○	○		
37.5	AH	1400 MPa									○			
H	38.1	Hardened steel		HT	45 HRC									
	38.2			HT	55 HRC									
	39.1			HT	58 HRC									
	39.2			HT	62 HRC									
	40	Cast Iron	Chilled	C	400	1350	○	○	○	○	○	○	○	
41	HT			55 HRC										

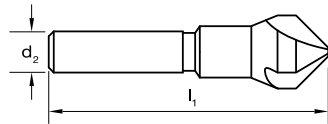
Condition: A (Annealed), AH (Age Hardened), C (Cast), HT (Hardened & Tempered), QT (Quenched & Tempered)

● Optimal ○ Effective

Countersinks Three Flute, 90°

sutton®

- Countersinking tool
- For machine use
- For use on most materials including plastics, non-ferrous & ferrous metals



Catalogue Code	C105	C106
Discount Group	A1106	A1108
Material	HSS	HSS
Surface Finish	Brt	TiN
Sutton Designation	N	N
Geometry	-	-
Point Type	90°	90°
Shank Tolerance	-	-

Size Ref.	Range	l ₁	d ₂	Pieces	Item #	Item #
0901	4-10mm	43	6.35 (1/4)		C105 0901	C106 0901
0902	4-14mm	48	6.35 (1/4)		C105 0902	C106 0902
0903	5-20mm	67	12.7 (1/2)		C105 0903	C106 0903
0904	6-28mm	72	12.7 (1/2)		C105 0904	C106 0904
0905	6-37mm	89	12.7 (1/2)		C105 0905	C106 0905

Set

STF1	0901, 0902, 0903, 0904	4	C105 STF1	
STF1T	0901, 0902, 0903, 0904	4		C106 STF1T



C105 STF1



C106 STF1T

ISO	P										M			K						N						S						H																	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41
C105	●	●	○	○	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
C106	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

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

● Optimal ○ Effective

