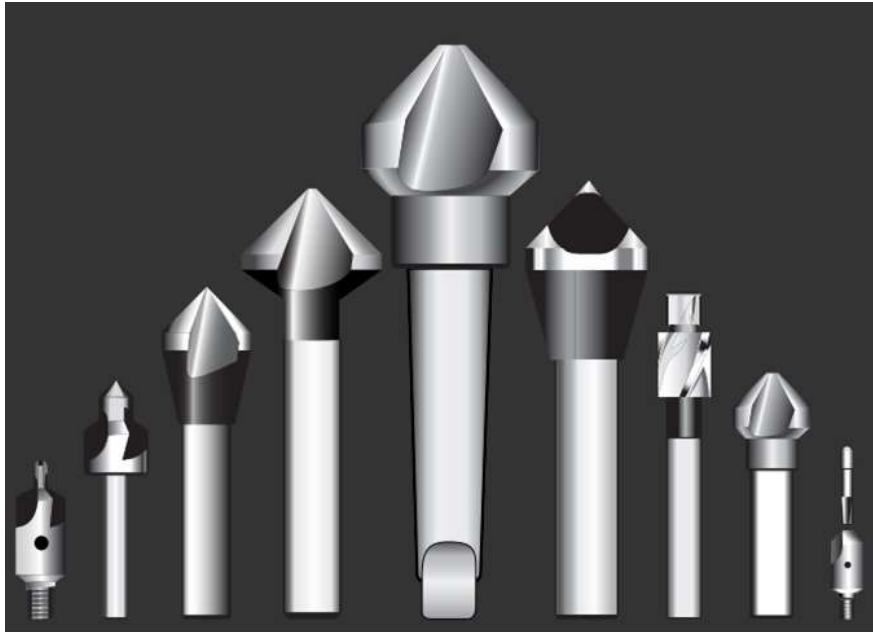


Robert Charles

High Performance Cutting Tools



Quality Countersinks for Aerospace,
Marine, Automotive and General Engineering

Manufactured by
David Richards Engineering Ltd

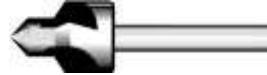


David Richards Engineering Ltd
British Ultra Hard Cutting Tools

Contents

2 - 7 General Information

8-10 Straight Shank Piloted Countersinks



11-12 Microstop Piloted Countersinks



[Cages available on request](#)

13 5858 Imperial 3 Flute Countersinks



14-16 DIN 335C & 334C 3 Flute Countersinks



17-18 5850 2 Flute Countersinks



19 - 20 5880 Deburring Tools (Zero Flute)



19 & 21 5890 Single Flute Countersinks



22 5859 Morse Taper 3 Flute Countersinks



23 - 24 Rose Countersinks

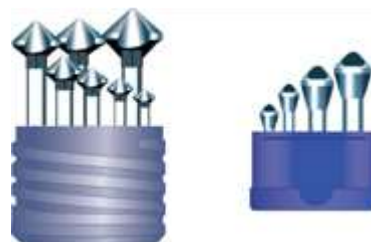


25 5760 Counterbores



26 5770 Imperial Counterbores

(Close Fit, +1/64 & +1/32)



27 Countersink Sets

Price breaks discounts and contact information

Quantity (pcs)	Discount
0-4	Nett
5-9	5%
10-19	8%
20-49	10%
50+	POA

Contact Details:

Mail: sales@dreng.co.uk

Tel: 0(044)1489 790900

UK Carriage Charges

RM 1st Class Postage and Packing from £5.50

APC Day Courier from £8.50



David Richards Engineering Ltd

British Ultra Hard Cutting Tools

About Us

David Richards Engineering Ltd are the sole manufacturer of the **Robert Charles** brand of countersinks and counterbores which, over the past 45 years, have earned their enviable worldwide reputation in the demanding aerospace, automotive, marine, and general engineering industries.

Our high level of customer service and product quality is reinforced by our ISO 9001 registration which helps maintain our position as a leading manufacturer and supplier in this highly competitive market.

Material

We only use M35 and M42 high speed steel to produce our quality products.

The addition of cobalt in M35 (5%) and M42 (8%), greatly enhances performance and tool life when compared to standard high-speed steel.

We also offer a range of coatings for more demanding applications (See page 5 for more details).

Special Requirements

Another large part of our service is manufacturing to customer requirements with products ranging from small back cutters and spot facing tools for the aerospace industry, to 100mm diameter countersinks for the rail industry.

The manufacture of specialist cutting tools in either HSS Co or carbide can often be achieved in 3 to 6 weeks. We pride ourselves in being able to produce bespoke cutting tools from limited information, be that a hand sketch or a finished component drawing.

Available Coatings

Coating our HSS Cobalt tools should always be considered before making the step up to Carbide. Carbide is more expensive and will usually have a longer lead time. We have had great success with customer trials using Hi-Pulse Hard and Hi-Pulse Power. The below coatings are available on our full range. Please enquire for pricing.

Titanium Nitride (TiN) - Colour: Gold. Improves tool life and lubricity in general machining applications.

Hi-Pulse Hard - Colour: Copper/Bronze. Will improve tool life when cutting hardened steels or titanium. HPH perfectly combines the high temperature of a silicon-enhanced coating with the excellent adhesion of HIPIMS technology. **HPH** demonstrates this superior combination in machining hard materials and high temperature applications.

Hi-Pulse Power - Colour: ANTHRACITE, The HIPIMS process gives HPP unparalleled coating adhesion. The high hardness, toughness, and oxidation temperature of **HPP** makes it ideal for machining hardened



steels, superalloys and other difficult to machine materials in either wet or dry conditions. Because it has better adhesion than other coatings, HPP offers excellent wear resistance and release in high temperature settings.

Regrind Service

Our regrind service is a cost-effective way to get more from worn out countersinks (of any brand) and end mills before replacing with new.

Tools returned to us that are eligible for regrinding will usually be completed within 3 days. It is possible that some tools will be rejected for regrinding if they are too worn or damaged.

Cancellations and Returns

For cutting tools requiring special manufacture, cancellation will not generally be permitted once the manufacture process has commenced.

To return standard products, please contact us within 14 days of delivery to obtain authorisation. A restocking fee may be applied for tools that are no longer required and returned due to customer error.

HSS Cobalt Cutting Tools Manufactured to ISO 9001

Specialists in hole preparation and finishing for the aerospace industry.



Piloted Countersinks



Microstop Countersinks
removable pilot



Microstop Countersinks
integral pilot



Back Cutters
available with bayonet, threaded,
and pin type pilots

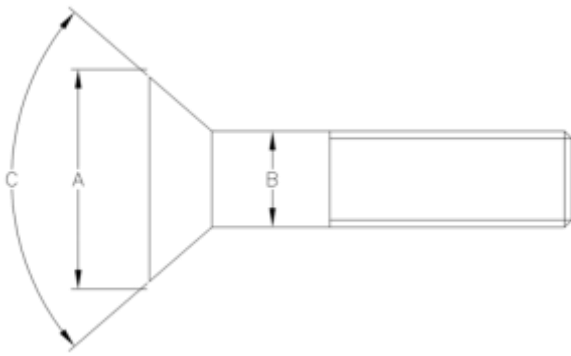


Many other tools available on request

Router cutters
Back spot facers
Drills and Reamers
Back spot countersinks

Diamond coated tools
Microstop cages
Rad cutters
Rivet mills

Screw Size Chart

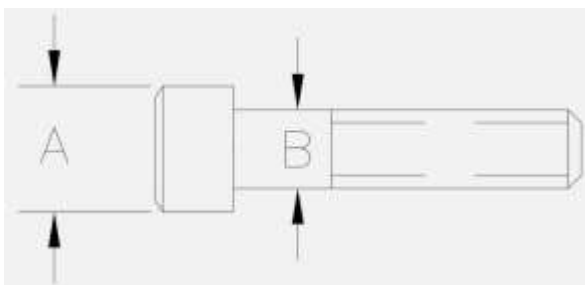


ISO Metric Screws			
Size	A	B	C
M3	6.72mm	3.00mm	90°
M4	8.96mm	4.00mm	90°
M5	11.20mm	5.00mm	90°
M6	13.44mm	5.00mm	90°
M8	17.92mm	8.00mm	90°
M10	22.40mm	10.00mm	90°
M12	26.88mm	12.00mm	90°
M14	30.24mm	14.00mm	90°

BA, BSW BSF			
Size	A	B	C
8 BA	.164" (4.16mm)	.0866"	82°
6 BA	.211" (5.35mm)	.1102"	82°
5 BA	.239" (6.07mm)	.1260"	82°
4 BA	.269" (6.83mm)	.1417"	82°
3 BA	.307" (7.80mm)	.1614"	82°
2 BA	.351" (8.90mm)	.1850"	82°
1 BA	.396" (10.05mm)	.2087"	82°
0 BA	.449" (11.40mm)	.2362"	82°
1/8	.239" (6.07mm)	.1250"	82°
3/16	.356" (9.04mm)	.1875"	82°
1/4	.475" (12.06mm)	.2500"	82°
5/16	.594" (15.08mm)	.3125"	82°
3/8	.712" (18.08mm)	.3750"	82°
7/16	.831" (21.10mm)	.4375"	82°
1/2	.950" (24.13mm)	.5000"	82°
9/16	1.069" (27.15mm)	.5625"	82°
5/8	1.187" (30.15mm)	.6250"	82°
3/4	1.425" (36.20mm)	.7500"	82°

UNC and UNF Screws			
Size	A	B	C
No.0	.138" (3.50mm)	.0600"	82°
No.1	.168" (4.27mm)	.0730"	82°
No.2	.197" (5.00mm)	.0860"	82°
No.3	.226" (5.74mm)	.0990"	82°
No.4	.255" (6.47mm)	.1120"	82°
No.5	.281" (7.13mm)	.1250"	82°
No.6	.307" (7.80mm)	.1380"	82°
No.8	.359" (9.11mm)	.1640"	82°
No.10	.411" (10.40mm)	.1900"	82°
1/4	.531" (13.40mm)	.2500"	82°
5/16	.656" (16.66mm)	.3125"	82°
3/8	.781" (19.83mm)	.3750"	82°
7/16	.844" (21.43mm)	.4375"	82°
1/2	.935" (23.75mm)	.5000"	82°
5/8	1.188" (30.17mm)	.6250"	82°
3/4	1.438" (36.52mm)	.7500"	82°
7/8	1.688" (42.87mm)	.8750"	82°
1	1.938" (49.22mm)	1.000"	82°

Counterbore Cap Screw Size Chart



ISO Metric Screws				
Size	A	B	Pilot Dia.	Head Dia.
M3	5.50mm	3.00mm	3.40mm	6.00mm
M4	7.00mm	3.00mm	4.50mm	6.00mm
M5	8.50mm	5.00mm	5.50mm	10.00mm
M6	10.00mm	6.00mm	6.40mm	11.00mm
M8	13.00mm	8.00mm	9.00mm	15.00mm
M10	16.00mm	10.00mm	11.00mm	18.00mm
M12	18.00mm	12.00mm	14.00mm	20.00mm



Imperial Piloted Countersinks

3 Flutes - Integral Pilot - Straight Shank

5855 x 82° / 90° / 100° / 120°



Product Code	Pilot Diameter	Inclusive Angle	Body Diameter	Shank Diameter	Overall Length	Shank Length	Price (£)
5855-3/32-82	3/32	82	0.190	3/16	2.1/2	1.3/4	22.50
5855-3/32-90	3/32	90	0.170	3/16	2.1/2	1.3/4	17.00
5855-3/32-100	3/32	100	0.190	3/16	2.1/2	1.3/4	17.00
5855-3/32-120	3/32	120	0.190	3/16	2.1/2	1.3/4	17.00
5855-1/8-82	1/8	82	0.252	3/16	2.1/2	1.3/4	23.00
5855-1/8-90	1/8	90	0.228	3/16	2.1/2	1.3/4	17.50
5855-1/8-100	1/8	100	0.252	3/16	2.1/2	1.3/4	17.50
5855-1/8-120	1/8	120	0.252	3/16	2.1/2	1.3/4	17.50
5855-5/32-82	5/32	82	0.340	3/16	2.1/2	1.3/4	25.50
5855-5/32-90	5/32	90	0.275	3/16	2.1/2	1.3/4	18.00
5855-5/32-100	5/32	100	0.340	3/16	2.1/2	1.3/4	18.00
5855-5/32-120	5/32	120	0.340	3/16	2.1/2	1.3/4	18.00
5855-3/16-82	3/16	82	0.405	3/16	2.1/2	1.3/4	26.50
5855-3/16-90	3/16	90	0.360	3/16	2.1/2	1.3/4	20.50
5855-3/16-100	3/16	100	0.405	3/16	2.1/2	1.3/4	20.50
5855-3/16-120	3/16	120	0.405	3/16	2.1/2	1.3/4	20.50
5855-7/32-82	7/32	82	0.440	3/16	2.1/2	1.3/4	27.50
5855-7/32-90	7/32	90	0.440	3/16	2.1/2	1.3/4	21.50
5855-7/32-100	7/32	100	0.440	3/16	2.1/2	1.3/4	21.50
5855-7/32-120	7/32	120	0.440	3/16	2.1/2	1.3/4	21.50
5855-1/4-82	1/4	82	0.530	3/16	2.1/2	1.3/4	29.00
5855-1/4-90	1/4	90	0.470	3/16	2.1/2	1.3/4	24.00
5855-1/4-100	1/4	100	0.530	3/16	2.1/2	1.3/4	24.00
5855-1/4-120	1/4	120	0.530	3/16	2.1/2	1.3/4	24.00

Pilot Diameter Tolerance = -0.0005" -0.0015"

Additional Sizes and Angles Available on Request

Contact Us for More Information and Bespoke Quotation



Imperial Piloted Countersinks

3 Flutes - Integral Pilot - Straight Shank

5801 - 5844 x 90° / 100° / 120°



Product Code	Pilot Diameter	Inclusive Angle	Body Diameter	Shank Diameter	Overall Length	Shank Length	Price (£)
5801	3/32	90	3/16	3/16	2.1/2	1.3/4	17.00
5805	3/32	90	1/4	3/16	2.1/2	1.3/4	17.50
5802	3/32	100	3/16	3/16	2.1/2	1.3/4	17.00
5806	3/32	100	1/4	3/16	2.1/2	1.3/4	19.00
5804	3/32	100	3/8	3/16	2.1/2	1.3/4	19.50
5803	3/32	120	3/16	3/16	2.1/2	1.3/4	17.00
5807	3/32	120	1/4	3/16	2.1/2	1.3/4	17.50
5809	1/8	90	1/4	3/16	2.1/2	1.3/4	17.50
5816	1/8	90	5/16	3/16	2.1/2	1.3/4	18.00
5825	1/8	90	3/8	3/16	2.1/2	1.3/4	19.50
5810	1/8	100	1/4	3/16	2.1/2	1.3/4	17.50
5817	1/8	100	5/16	3/16	2.1/2	1.3/4	18.50
5811	1/8	100	3/8	3/16	2.1/2	1.3/4	19.50
5812	1/8	120	1/4	3/16	2.1/2	1.3/4	17.50
5818	1/8	120	5/16	3/16	2.1/2	1.3/4	18.00
5826	1/8	120	3/8	3/16	2.1/2	1.3/4	19.50
5820	5/32	90	5/16	3/16	2.1/2	1.3/4	18.00
5827	5/32	90	3/8	3/16	2.1/2	1.3/4	19.50
5821	5/32	100	5/16	3/16	2.1/2	1.3/4	18.00
5823	5/32	100	3/8	3/16	2.1/2	1.3/4	19.50
5822	5/32	120	5/16	3/16	2.1/2	1.3/4	18.00
5828	5/32	120	3/8	3/16	2.1/2	1.3/4	19.50
5830	3/16	90	3/8	3/16	2.1/2	1.3/4	19.50
5831	3/16	100	3/8	3/16	2.1/2	1.3/4	19.50
5832	3/16	120	3/8	3/16	2.1/2	1.3/4	19.50
5834	3/16	120	7/16	3/16	2.1/2	1.3/4	21.50
5835	7/32	90	7/16	3/16	2.1/2	1.3/4	21.50
5837	7/32	100	7/16	3/16	2.1/2	1.3/4	21.50
5838	7/32	120	7/16	3/16	2.1/2	1.3/4	21.50
5840	1/4	90	7/16	3/16	2.1/2	1.3/4	21.50
5843	1/4	90	1/2	3/16	2.1/2	1.3/4	23.00
5841	1/4	100	7/16	3/16	2.1/2	1.3/4	21.50
5839	1/4	100	1/2	3/16	2.1/2	1.3/4	23.00
5842	1/4	120	7/16	3/16	2.1/2	1.3/4	21.50
5844	1/4	120	1/2	3/16	2.1/2	1.3/4	23.00

Pilot Diameter Tolerance = -0.0005" -0.0015"

Additional Sizes and Angles Available on Request

Contact Us for More Information and Bespoke Quotation



David Richards Engineering Ltd
British Ultra Hard Cutting Tools

Metric Piloted Countersinks

3 Flutes - Integral Pilot - Straight Shank

5845 x 90° / 100° / 120°



Product Code	Pilot Diameter	Inclusive Angle	Body Diameter	Shank Diameter	Overall Length	Shank Length	Price (£)
5845-2.5-90	2.5	90	4.76	3/16	2.50	1.3/4	17.00
5845-2.5-100	2.5	100	4.76	3/16	2.50	1.3/4	17.00
5845-2.5-120	2.5	120	4.76	3/16	2.50	1.3/4	17.00
5845-3.0-90	3.0	90	6.72	3/16	2.50	1.3/4	18.00
5845-3.0-100	3.0	100	6.72	3/16	2.50	1.3/4	18.00
5845-3.0-120	3.0	120	6.72	3/16	2.50	1.3/4	18.00
5845-3.5-90	3.5	90	8.60	3/16	2.50	1.3/4	19.00
5845-3.5-100	3.5	100	8.60	3/16	2.50	1.3/4	19.00
5845-3.5-120	3.5	120	8.60	3/16	2.50	1.3/4	19.00
5845-4.0-90	4.0	90	8.96	3/16	2.50	1.3/4	19.50
5845-4.0-100	4.0	100	8.96	3/16	2.50	1.3/4	19.50
5845-4.0-120	4.0	120	8.96	3/16	2.50	1.3/4	19.50
5845-5.0-90	5.0	90	11.20	3/16	2.50	1.3/4	23.00
5845-5.0-100	5.0	100	11.20	3/16	2.50	1.3/4	23.00
5845-5.0-120	5.0	120	11.20	3/16	2.50	1.3/4	23.00
5845-6.0-90	6.0	90	13.44	3/16	2.50	1.3/4	27.00
5845-6.0-100	6.0	100	13.44	3/16	2.50	1.3/4	27.00
5845-6.0-120	6.0	120	13.44	3/16	2.50	1.3/4	27.00
5845-8.0-90	8.0	90	17.92	3/8	3.12	1.3/4	38.00
5845-8.0-100	8.0	100	17.92	3/8	3.12	1.3/4	38.00
5845-8.0-120	8.0	120	17.92	3/8	3.12	1.3/4	38.00
5845-10.0-90	10.0	90	22.40	3/8	3.12	1.3/4	52.00
5845-10.0-100	10.0	100	22.40	3/8	3.12	1.3/4	52.00
5845-10.0-120	10.0	120	22.40	3/8	3.12	1.3/4	52.00
5845-12.0-90	12.0	90	26.88	3/8	3.12	1.3/4	63.50
5845-12.0-100	12.0	100	26.88	3/8	3.12	1.3/4	63.50
5845-12.0-120	12.0	120	26.88	3/8	3.12	1.3/4	63.50

Pilot Diameter Tolerance = -0.0005" -0.0015"

Additional Sizes and Angles Available on Request

Contact Us for More Information and Bespoke Quotation



Piloted Microstop Countersinks

3 Flutes - Integral Pilot - Threaded Shank

90° / 100° / 120° (Cages Available on Request)



Product Code	Pilot Diameter	Cutter Diameter	Inclusive Angle	Thread	Radius between Pilot & Flute	Price (£)
S2.38-90-10	3/32	10.00	90	M6x1	0.010"-0.015"	37.50
S3.17-90-10	1/8	10.00	90	M6x1	0.015"-0.020"	37.50
S3.96-90-10	5/32	10.00	90	M6x1	0.020"-0.025"	37.50
S4.76-90-10	3/16	10.00	90	M6x1	0.020"-0.025"	37.50
S4.76-90-14	3/16	14.00	90	M8x1	0.025"-0.030"	40.50
S6.35-90-14	1/4	14.00	90	M8x1	0.025"-0.030"	40.50
S7.94-90-17	5/16	17.00	90	M8x1	0.035"-0.040"	65.00
S9.52-90-21	3/8	21.00	90	M8x1	0.035"-0.040"	68.00
S2.38-100-10	3/32	10.00	100	M6x1	0.010"-0.015"	24.00
S3.17-100-10	1/8	10.00	100	M6x1	0.015"-0.020"	24.00
S3.96-100-10	5/32	10.00	100	M6x1	0.020"-0.025"	24.00
S4.76-100-10	3/16	10.00	100	M6x1	0.020"-0.025"	24.00
S4.76-100-14	3/16	14.00	100	M8x1	0.025"-0.030"	29.00
S6.35-100-14	1/4	14.00	100	M8x1	0.025"-0.030"	29.00
S7.94-100-17	5/16	17.00	100	M8x1	0.035"-0.040"	41.50
S9.52-100-21	3/8	21.00	100	M8x1	0.035"-0.040"	44.00
S2.38-120-10	3/32	10.00	120	M6x1	0.010"-0.015"	38.00
S3.17-120-10	1/8	10.00	120	M6x1	0.015"-0.020"	38.00
S3.96-120-10	5/32	10.00	120	M6x1	0.020"-0.025"	38.00
S4.76-120-10	3/16	10.00	120	M6x1	0.020"-0.025"	38.00
S4.76-120-14	3/16	14.00	120	M8x1	0.025"-0.030"	40.00
S6.35-120-14	1/4	14.00	120	M8x1	0.025"-0.030"	40.00
S7.94-120-17	5/16	17.00	120	M8x1	0.035"-0.040"	65.00
S9.52-120-21	3/8	21.00	120	M8x1	0.035"-0.040"	68.00

Product Code	Pilot Diameter	Cutter Diameter	Inclusive Angle	Thread	Decimal Equivalent	Price (£)
SUNF3/32-100-1/2	3/32	1/2	100	1/4-28	.0938	21.00
SUNF1/8-100-1/2	1/8	1/2	100	1/4-28	.1250	21.00
SUNF5/32-100-1/2	5/32	1/2	100	1/4-28	.1563	21.00
SUNF3/16-100-1/2	3/16	1/2	100	1/4-28	.1875	21.00
SUNF7/32-100-1/2	7/32	1/2	100	1/4-28	.2188	21.00
SUNF1/4-100-1/2	1/4	1/2	100	1/4-28	.2500	21.00

Pilot Diameter Tolerance = -0.0005" -0.0015"

Additional Sizes and Angles Available on Request

Contact Us for More Information and Bespoke Quotation



David Richards Engineering Ltd
British Ultra Hard Cutting Tools

Piloted Microstop Countersinks

2 or 3 Flutes – Removable Pilot - Threaded Shank

90° / 100° / 120° (Cages Available on Request)



Product Code	Pilot Diameter	Pilot Shank Diameter	Inclusive Angle	Cutter Diameter	Number of Flutes	Thread	Price (£)
D2.38-90-10	3/32	2.00	90	10.00	2	M6x1	30.00
D3.17-90-10	1/8	2.50	90	10.00	2	M6x1	30.00
D3.96-90-10	5/32	3.50	90	10.00	2	M6x1	30.00
D4.76-90-10	3/16	3.50	90	10.00	2	M6x1	30.00
D4.76-90-14	3/16	4.00	90	14.00	2	M8x1	37.50
D6.35-90-14	1/4	4.00	90	14.00	2	M8x1	37.50
D7.94-90-17	5/16	5.00	90	17.00	3	M8x1	47.00
D9.52-90-21	3/8	5.00	90	21.00	3	M8x1	50.00
D2.38-100-10	3/32	2.00	100	10.00	2	M6x1	25.00
D3.17-100-10	1/8	2.50	100	10.00	2	M6x1	25.00
D3.96-100-10	5/32	3.50	100	10.00	2	M6x1	25.00
D4.76-100-10	3/16	3.50	100	10.00	2	M6x1	25.00
D4.76-100-14	3/16	4.00	100	14.00	2	M8x1	32.00
D6.35-100-14	1/4	4.00	100	14.00	2	M8x1	32.00
D7.94-100-17	5/16	5.00	100	17.00	3	M8x1	42.00
D9.52-100-21	3/8	5.00	100	21.00	3	M8x1	46.00
D2.38-120-10	3/32	2.00	120	10.00	2	M6x1	30.00
D3.17-120-10	1/8	2.50	120	10.00	2	M6x1	30.00
D3.96-120-10	5/32	3.50	120	10.00	2	M6x1	30.00
D4.76-120-10	3/16	3.50	120	10.00	2	M6x1	30.00
D4.76-120-14	3/16	4.00	120	14.00	2	M8x1	37.00
D6.35-120-14	1/4	4.00	120	14.00	2	M8x1	37.00
D7.94-120-17	5/16	5.00	120	17.00	3	M8x1	47.00
D9.52-120-21	3/8	5.00	120	21.00	3	M8x1	50.00

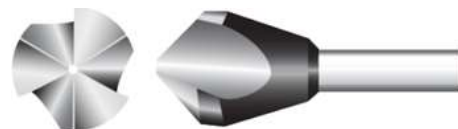
Replacement Pilots

Product Code	Pilot Diameter	Shank Diameter	Material	Price (£)
PILOT2.38-2.00	3/32	2.00	Tool Steel	11.00
PILOT3.17-2.50	1/8	2.50	Tool Steel	11.00
PILOT3.96-3.50	5/32	3.50	Tool Steel	11.00
PILOT4.76-3.50	3/16	3.50	Tool Steel	11.00
PILOT4.76-4.00	3/16	4.00	Tool Steel	11.00
PILOT6.35-4.00	1/4	4.00	Tool Steel	12.50
PILOT7.94-5.00	5/16	5.00	Tool Steel	25.50
PILOT9.52-5.00	3/8	5.00	Tool Steel	34.00

Imperial 3 Flute Countersinks

3 Flutes

5858 60° / 82° / 90° / 100° / 120°



Product Code	Head Diameter	Small Diameter	Shank Diameter	Overall Length	Inclusive Angle	Shank Length	Price (£)
5858-1/4-60	1/4	3/32	3/16	1.3/4	60	1.1/4	13.00
5858-3/8-60	3/8	1/8	1/4	1.3/4	60	1.1/4	15.00
5858-1/2-60	1/2	1/8	3/8	1.7/8	60	1.1/4	17.00
5858-5/8-60	5/8	5/32	1/2	2	60	1.1/4	24.00
5858-3/4-60	3/4	5/32	1/2	2.1/2	60	1.1/2	34.50
5858-1-60	1.00	3/16	1/2	2.3/4	60	1.1/2	45.50
5858-1.1/4-60	1.1/4	1/4	1/2	3	60	1.1/2	68.50
5858-1/4-82	1/4	3/32	3/16	1.3/4	82	1.1/4	18.50
5858-3/8-82	3/8	1/8	1/4	1.3/4	82	1.1/4	22.00
5858-1/2-82	1/2	1/8	3/8	1.7/8	82	1.1/4	24.00
5858-5/8-82	5/8	5/32	1/2	2	82	1.1/4	32.50
5858-3/4-82	3/4	5/32	1/2	2.1/2	82	1.1/2	44.50
5858-1-82	1.00	3/16	1/2	2.3/4	82	1.1/2	56.00
5858-1.1/4-82	1.1/4	1/4	1/2	3	82	1.1/2	96.00
5858-1/4-90	1/4	3/32	3/16	1.3/4	90	1.1/4	12.00
5858-3/8-90	3/8	1/8	1/4	1.3/4	90	1.1/4	14.00
5858-1/2-90	1/2	1/8	3/8	1.7/8	90	1.1/4	15.00
5858-5/8-90	5/8	5/32	1/2	2	90	1.1/4	20.00
5858-3/4-90	3/4	5/32	1/2	2.1/2	90	1.1/2	29.00
5858-1-90	1.00	3/16	1/2	2.3/4	90	1.1/2	40.00
5858-1.1/4-90	1.1/4	1/4	1/2	3	90	1.1/2	69.00
5858-1/4-100	1/4	3/32	3/16	1.5/8	100	1.1/2	18.50
5858-3/8-100	3/8	1/8	1/4	1.5/8	100	1.1/4	21.50
5858-1/2-100	1/2	1/8	3/8	1.5/8	100	1.1/4	24.00
5858-5/8-100	5/8	5/32	1/2	1.7/8	100	1.1/4	32.00
5858-3/4-100	3/4	5/32	1/2	2.1/8	100	1.1/2	44.00
5858-1-100	1.00	3/16	1/2	2.1/2	100	1.1/2	56.00
5858-1.1/4-100	1.1/4	1/4	1/2	2.3/4	100	1.1/2	96.00
5858-1/4-120	1/4	3/32	3/16	1.5/8	120	1.1/4	25.00
5858-3/8-120	3/8	1/8	1/4	1.5/8	120	1.1/4	27.00
5858-1/2-120	1/2	1/8	3/8	1.5/8	120	1.1/4	32.00
5858-5/8-120	5/8	5/32	1/2	1.7/8	120	1.1/4	39.00
5858-3/4-120	3/4	5/32	1/2	2.1/8	120	1.1/2	49.50
5858-1-120	1.00	3/16	1/2	2.1/2	120	1.1/2	65.00
5858-1.1/4-120	1.1/4	1/4	1/2	2.3/4	120	1.1/2	109.00

Additional Sizes and Angles Available on Request

Contact Us for More Information and Bespoke Quotation



DIN 3 Flute Countersinks

3 Flutes

335C x 90°



Product Code	Head Diameter	Small Diameter	Shank Diameter	Overall Length	Head Length	Price (£)
335C-4.3-90	4.3	1.2	4	40	3.5	12.00
335C-5.3-90	5.3	1.5	4	40	4.0	12.50
335C-6.3-90	6.3	1.5	5	45	5.0	13.00
335C-8.3-90	8.3	2.0	6	50	6.0	13.50
335C-10.0-90	10.0	2.5	6	50	7.1	14.00
335C-10.4-90	10.4	2.5	6	50	7.1	14.00
335C-11.5-90	11.5	2.8	8	56	7.5	15.00
335C-12.4-90	12.4	2.8	8	56	8.0	15.50
335C-15.0-90	15.0	3.2	10	60	9.0	20.50
335C-16.5-90	16.5	3.2	10	60	10.0	21.00
335C-19.0-90	19.0	3.5	10	63	11.2	26.50
335C-20.5-90	20.5	3.5	10	63	12.5	29.50
335C-23.0-90	23.0	3.8	10	67	13.2	38.00
335C-25.0-90	25.0	3.8	10	67	15.0	39.00
335C-26.0-90	26.0	3.8	10	67	15.0	43.00
335C-28.0-90	28.0	4.0	12	71	16.0	53.00
335C-30.0-90	30.0	4.2	12	71	18.0	54.50
335C-31.0-90	31.0	4.2	12	71	18.0	54.50



TiN Coated

Product Code	Head Diameter	Small Diameter	Shank Diameter	Overall Length	Head Length	Price (£)
335C-6.3-90	6.3	1.5	5	45	5.0	18.00
335C-8.3-90	8.3	2.0	6	50	6.0	19.00
335C-10.4-90	10.4	2.5	6	50	7.1	19.50
335C-12.4-90	12.4	2.8	8	56	8.0	23.00
335C-16.5-90	16.5	3.2	10	60	10.0	31.00
335C-20.5-90	20.5	3.5	10	63	12.5	42.00
335C-25.0-90	25.0	3.8	10	67	15.0	52.00
335C-31.0-90	31.0	4.2	12	71	18.0	62.00

DIN 3 Flute Countersinks

3 Flutes

355c x 82°



Product Code	Head Diameter	Small Diameter	Shank Diameter	Overall Length	Head Length	Price (£)
335C-6.3-82	6.3	1.5	5	45	5.0	19.00
335C-8.3-82	8.3	2.0	6	50	6.0	20.00
335C-10.4-82	10.4	2.5	6	50	7.1	22.00
335C-12.4-82	12.4	2.8	8	56	8.0	24.00
335C-16.5-82	16.5	3.2	10	60	10.0	32.00
335C-20.5-82	20.5	3.5	10	63	12.5	44.00
335C-25.0-82	25.0	3.8	10	67	15.0	56.00
335C-30.0-82	30.0	4.2	12	71	18.0	98.00
335C-31.0-82	31.0	4.2	12	71	18.0	98.00

355c x 100°



Product Code	Head Diameter	Small Diameter	Shank Diameter	Overall Length	Head Length	Price (£)
335C-6.3-100	6.3	1.5	5	45	5.0	19.00
335C-8.3-100	8.3	2.0	6	50	6.0	20.00
335C-10.4-100	10.4	2.5	6	50	7.1	22.00
335C-12.4-100	12.4	2.8	8	56	8.0	24.00
335C-16.5-100	16.5	3.2	10	60	10.0	32.00
335C-20.5-100	20.5	3.5	10	63	12.5	44.00
335C-25.0-100	25.0	3.8	10	67	15.0	56.00
335C-30.0-100	30.0	4.2	12	71	18.0	98.00
335C-31.0-100	31.0	4.2	12	71	18.0	98.00

DIN 3 Flute Countersinks

3 Flutes

355c x 120°



Product Code	Head Diameter	Small Diameter	Shank Diameter	Overall Length	Head Length	Price (£)
335C-6.3-120	6.3	1.5	5	45	5.0	26.00
335C-8.3-120	8.3	2.0	6	50	6.0	26.00
335C-10.4-120	10.4	2.5	6	50	7.1	26.50
335C-12.4-120	12.4	2.8	8	56	8.0	32.50
335C-16.5-120	16.5	3.2	10	60	10.0	40.50
335C-20.5-120	20.5	3.5	10	63	12.5	55.00
335C-25.0-120	25.0	3.8	10	67	15.0	69.00
335C-30.0-120	30.0	4.2	12	71	18.0	113.00
335C-31.0-120	31.0	4.2	12	71	18.0	113.00

354c x 60°



Product Code	Head Diameter	Small Diameter	Shank Diameter	Overall Length	Head Length	Price (£)
334C-6.3-60	6.3	1.6	5	45	6.3	14.50
334C-8.0-60	8.0	2.0	6	50	8.0	15.50
334C-10.0-60	10.0	2.5	6	53	10.0	16.00
334C-12.5-60	12.5	3.2	8	56	11.2	18.50
334C-16.0-60	16.0	4.0	10	63	14.0	25.30
334C-20.0-60	20.0	5.0	10	67	17.0	35.50
334C-25.0-60	25.0	6.3	10	71	20.0	49.00

Chatterless Countersinks

2 Flutes

5850 METRIC x 90°



Product Code	Head Diameter	Shank Diameter	Overall Length	Head Length	Inclusive Angle	Price (£)
5850-4.0-90	4.0	1/8	38	19	90	17.00
5850-5.0-90	5.0	1/8	38	19	90	17.50
5850-6.0-90	6.0	3/16	38	19	90	18.00
5850-8.0-90	8.0	1/4	45	26	90	19.00
5850-10.0-90	10.0	1/4	45	26	90	20.00
5850-12.5-90	12.5	3/8	51	26	90	22.00
5850-16.0-90	16.0	3/8	57	32	90	28.00
5850-20.0-90	20.0	1/2	66	35	90	38.00
5850-25.0-90	25.0	1/2	70	38	90	49.00

Additional Angles

5850 METRIC 60° / 82° / 100° / 120°

Add required angle to code



Product Code	Head Diameter	Shank Diameter	Overall Length	Head Length	Inclusive Angle	Price (£)
5850-4.0-...	4.0	1/8	38	19	...	23.00
5850-5.0-...	5.0	1/8	38	19	...	23.00
5850-6.0-...	6.0	3/16	38	19	...	24.00
5850-8.0-...	8.0	1/4	45	26	...	25.00
5850-10.0-...	10.0	1/4	45	26	...	26.00
5850-12.5-...	12.5	3/8	51	26	...	28.00
5850-16.0-...	16.0	3/8	57	32	...	33.50
5850-20.0-...	20.0	1/2	66	35	...	45.00
5850-25.0-...	25.0	1/2	70	38	...	63.50

Chatterless Countersinks

2 Flutes

5850 IMPERIAL x 90°



Product Code	Head Diameter	Shank Diameter	Overall Length	Head Length	Inclusive Angle	Price (£)
5850-1/8-90	1/8	1/8	1.1/2	3/4	90	17.00
5850-3/16-90	3/16	1/8	1.1/2	3/4	90	17.00
5850-1/4-90	1/4	3/16	1.1/2	3/4	90	18.00
5850-5/16-90	5/16	1/4	1.3/4	1	90	19.00
5850-3/8-90	3/8	1/4	1.3/4	1	90	20.00
5850-7/16-90	7/16	3/8	2	1	90	22.50
5850-1/2-90	1/2	3/8	2	1	90	23.00
5850-5/8-90	5/8	3/8	2.1/4	1.1/4	90	28.00
5850-3/4-90	3/4	1/2	2.5/8	1.3/8	90	38.00
5850-7/8-90	7/8	1/2	2.3/4	1.1/2	90	44.00
5850-1-90	1	1/2	2.3/4	1.1/2	90	49.00

Additional Angles

5850 IMPERIAL 60° / 82° / 100° / 120°

Add required angle to code



Product Code	Head Diameter	Shank Diameter	Overall Length	Head Length	Inclusive Angle	Price (£)
5850-1/8-...	1/8	1/8	1.1/2	3/4	...	23.00
5850-3/16-...	3/16	1/8	1.1/2	3/4	...	23.00
5850-1/4-...	1/4	3/16	1.1/2	3/4	...	24.00
5850-5/16-...	5/16	1/4	1.3/4	1	...	25.00
5850-3/8-...	3/8	1/4	1.3/4	1	...	26.00
5850-7/16-...	7/16	3/8	2	1	...	27.00
5850-1/2-...	1/2	3/8	2	1	...	28.00
5850-5/8-...	5/8	3/8	2.1/4	1.1/4	...	33.50
5850-3/4-...	3/4	1/2	2.5/8	1.3/8	...	45.00
5850-7/8-...	7/8	1/2	2.3/4	1.1/2	...	46.00
5850-1-...	1	1/2	2.3/4	1.1/2	...	63.50

Deburring Tools

Through Hole - Zero Flute

5880 METRIC x 90°



Product Code	Head Diameter	Shank Diameter	Overall Length	Shank Length	Standard Cut Range	Price (£)
5880-10.0-90	10.0	6	45	32.0	3-5	15.50
5880-12.5-90	12.5	8	48	32.0	4-8	16.00
5880-14.0-90	14.0	8	52	30.5	6-10	18.00
5880-16.0-90	16.0	10	56	36.0	7-12	21.50
5880-21.0-90	21.0	10	65	37.5	11-15	35.00
5880-25.0-90	25.0	10	65	36.0	13-20	44.00
5880-28.0-90	28.0	12	85	48.0	16-20	69.00
5880-35.0-90	35.0	15	102	56.5	21-25	121.00

Single Flute Countersinks M35-HSS-E 5% Cobalt

1 Flute

5890 METRIC x 90°



Product Code	Head Diameter	Shank Diameter	Overall Length	Shank Length	Inclusive Angle	Price (£)
5890-4.0-90	4.0	4	44	36.0	90	16.50
5890-6.0-90	6.0	5	45	36.0	90	16.50
5890-8.0-90	8.0	6	45	32.0	90	17.00
5890-10.0-90	10.0	6	45	32.0	90	17.50
5890-12.5-90	12.5	8	48	32.0	90	20.50
5890-14.0-90	14.0	8	48	30.5	90	23.00
5890-16.0-90	16.0	10	56	36.0	90	26.00
5890-21.0-90	21.0	10	65	37.5	90	34.00
5890-25.0-90	25.0	10	65	36.0	90	46.00
5890-28.0-90	28.0	12	85	48.0	90	80.00
5890-35.0-90	35.0	15	102	56.5	90	135.00

Deburring Tools

Through Hole - Zero Flute

5880 IMPERIAL x 90°



Product Code	Head Diameter	Shank Diameter	Overall Length	Shank Length	Standard Cut Range			Price (£)
5880-5/16-90	5/6	1/4	1.3/4	1.1/4	7/64	-	1/4	15.50
5880-3/8-90	3/8	1/4	1.3/4	1.1/4	5/32	-	9/32	15.50
5880-1/2-90	1/2	5/16	1.7/8	1.1/4	3/16	-	3/8	16.00
5880-5/8-90	5/8	3/8	2.1/4	1.3/8	5/16	-	15/32	21.50
5880-3/4-90	3/4	3/8	2.1/2	1.1/2	3/8	-	9/16	34.50
5880-1-90	1	3/8	2.3/4	1.1/4	7/16	-	3/4	44.00
5880-1.1/4-90	1.1/4	1/2	3.1/4	1.1/2	1/2	-	1"	110.00

Through Hole - Zero Flute

5880 IMPERIAL x 60° / 82° / 100°

Add required angle to code



Product Code	Head Diameter	Shank Diameter	Overall Length	Shank Length	Standard Cut Range			Price (£)
5880-5/16-...	5/6	1/4	1.3/4	1.1/4	7/16	-	1/4	24.00
5880-3/8-...	3/8	1/4	1.3/4	1.1/4	5/32	-	9/32	24.50
5880-1/2-...	1/2	5/16	1.7/8	1.1/4	3/16	-	3/8	26.00
5880-5/8-...	5/8	3/8	2.1/4	1.3/8	5/16	-	15/32	33.00
5880-3/4-...	3/4	3/8	2.1/2	1.1/2	3/8	-	9/16	44.00
5880-1-...	1	3/8	2.3/4	1.1/4	7/16	-	3/4	65.00
5880-1.1/4-...	1.1/4	1/2	3.1/4	1.1/2	1/2	-	1"	144.00

Single Flute Countersinks

Through Hole - Zero Flute

5890 IMPERIAL x 90°



Product Code	Head Diameter	Shank Diameter	Overall Length	Shank Length	Inclusive Angle	Price (£)
5890-1/4-90	1/4	3/16	1.3/4	1.3/8	90	16.00
5890-5/16-90	5/16	1/4	1.3/4	1.1/4	90	17.00
5890-3/8-90	3/8	1/4	1.3/4	1.1/4	90	17.50
5890-1/2-90	1/2	5/16	1.7/8	1.1/4	90	20.50
5890-5/8-90	5/8	3/8	2.1/4	1.3/8	90	26.50
5890-3/4-90	3/4	3/8	2.1/4	1.1/2	90	34.00
5890-1-90	1	3/8	2.3/4	1.1/4	90	46.00
5890-1.1/4-90	1.1/4	1/2	3.1/4	1.1/2	90	101.00

Through Hole - Zero Flute

5890 IMPERIAL x 60° / 82° / 100°

Add required angle to code

Product Code	Head Diameter	Shank Diameter	Overall Length	Shank Length	Inclusive Angle	Price (£)
5890-1/4-...	1/4	3/16	1.3/4	1.3/8	...	23.00
5890-5/16-...	5/16	1/4	1.3/4	1.1/4	...	24.50
5890-3/8-...	3/8	1/4	1.3/4	1.1/4	...	25.00
5890-1/2-...	1/2	5/16	1.7/8	1.1/4	...	28.50
5890-5/8-...	5/8	3/8	2.1/4	1.3/8	...	35.00
5890-3/4-...	3/4	3/8	2.1/4	1.1/2	...	43.00
5890-1-...	1	3/8	2.3/4	1.1/4	...	60.50
5890-1.1/4-...	1.1/4	1/2	3.1/4	1.1/2	...	132.00

Through Hole - Zero Flute

5890 IMPERIAL x 120°

Product Code	Head Diameter	Shank Diameter	Overall Length	Shank Length	Inclusive Angle	Price (£)
5890-1/4-120	1/4	3/16	1.3/4	1.3/8	120	29.00
5890-5/16-120	5/16	1/4	1.3/4	1.1/4	120	30.00
5890-3/8-120	3/8	1/4	1.3/4	1.1/4	120	30.50
5890-1/2-120	1/2	5/16	1.7/8	1.1/4	120	34.00
5890-5/8-120	5/8	3/8	2.1/4	1.3/8	120	41.00
5890-3/4-120	3/4	3/8	2.1/4	1.1/2	120	48.50
5890-1-120	1	3/8	2.3/4	1.1/4	120	66.50
5890-1.1/4-120	1.1/4	1/2	3.1/4	1.1/2	120	144.00

Morse Taper Countersinks

3 Flutes

5859 x 60°



Product Code	Head Diameter	Small Diameter	Overall Length	Morse Taper Shank	Minimum Head Length	Price (£)
5859-16.0-60	16.0	3.2	97	1	21	57.50
5859-20.0-60	20.0	4.0	120	2	28	76.50
5859-25.0-60	25.0	7.0	125	2	31	95.00
5859-31.5-60	31.5	9.0	132	2	40	133.00
5859-40.0-60	40.0	12.5	160	3	43	180.00
5859-50.0-60	50.0	16.0	165	3	47	POA
5859-63.0-60	63.0	20.0	200	4	49	POA
5859-80.0-60	80.0	25.0	215	4	59	POA

5859 x 82°

Product Code	Head Diameter	Small Diameter	Overall Length	Morse Taper Shank	Minimum Head Length	Price (£)
5859-16.0-82	16.0	3.2	93	1	18	63.50
5859-20.0-82	20.0	4.0	116	2	25	82.50
5859-25.0-82	25.0	7.0	121	2	27	101.00
5859-31.5-82	31.5	9.0	124	2	31	138.00
5859-40.0-82	40.0	12.5	150	3	33	185.00
5859-50.0-82	50.0	16.0	153	3	35	POA
5859-63.0-82	63.0	20.0	185	4	40	POA
5859-80.0-82	80.0	25.0	196	4	44	POA

5859 x 90°

Product Code	Head Diameter	Small Diameter	Overall Length	Morse Taper Shank	Minimum Head Length	Price (£)
5859-16.0-90	16.0	3.2	93	1	18	57.50
5859-20.0-90	20.0	4.0	116	2	25	76.50
5859-25.0-90	25.0	7.0	121	2	27	95.00
5859-31.5-90	31.5	9.0	124	2	31	132.00
5859-40.0-90	40.0	12.5	150	3	33	179.00
5859-50.0-90	50.0	16.0	153	3	35	POA
5859-63.0-90	63.0	20.0	185	4	40	POA
5859-80.0-90	80.0	25.0	196	4	44	POA

Rose Countersinks

6 Flutes

5852 x 90° / 100° / 120°



Product Code	Head Diameter	Shank Diameter	Overall Length	Shank Length	Inclusive Angle	Price (£)
5852-1/2-90	1/2	1/4	1.9/16	7/18	90	12.00
5852-1/2-100	1/2	1/4	1.9/16	7/18	100	15.50
5852-1/2-120	1/2	1/4	1.9/16	7/18	120	17.00

6 Flutes

5853 x 90°



Product Code	Head Diameter	Shank Diameter	Overall Length	Shank Length	Inclusive Angle	Price (£)
5853-3/8-90	3/8	3/16	2	1.11/16	90	11.00
5853-1/2-90	1/2	3/16	2	1.11/16	90	13.00
5853-5/8-90	5/8	1/4	2	1.11/16	90	17.00

6 Flutes

5853 x 100°



Product Code	Head Diameter	Shank Diameter	Overall Length	Shank Length	Inclusive Angle	Price (£)
5853-3/8-100	3/8	3/16	2	1.11/16	100	14.50
5853-1/2-100	1/2	3/16	2	1.11/16	100	17.00
5853-5/8-100	5/8	1/4	2	1.11/16	100	20.50

6 Flutes

5853 x 120°



Product Code	Head Diameter	Shank Diameter	Overall Length	Shank Length	Inclusive Angle	Price (£)
5853-3/8-120	3/8	3/16	2	1.11/16	100	14.50
5853-1/2-120	1/2	3/16	2	1.11/16	100	17.00
5853-5/8-120	5/8	1/4	2	1.11/16	100	20.50

6 Flutes **Heavy Duty**

5854 x 90°

Product Code	Head Diameter	Shank Diameter	Overall Length	Shank Length	Inclusive Angle	Price (£)
5854-1/2-90	1/2	3/8	1.7/8	1.1/4	90	20.50
5854-5/8-90	5/8	1/2	2.1/4	1.1/4	90	25.00
5854-3/4-90	3/4	1/2	2.1/4	1.1/2	90	33.00
5854-1-90	1	1/2	2.3/4	1.1/2	90	50.00

Rose Countersinks

5 and 6 Flutes

DIN 335A x 90°



Product Code	No. of Flutes	Head Diameter	Small Diameter	Shank Diameter	Overall Length	Head Length	Price (£)
335A-8.0-90	5	8.0	0.5	8	48	-	18.40
335A-10.0-90	5	10.0	2.0	8	48	16	19.50
335A-12.5-90	5	12.5	2.0	8	48	16	20.50
335A-16.0-90	6	16.0	3.2	10	56	20	24.50
335A-20.0-90	6	20.0	5.0	10	60	24	30.50
335A-25.0-90	6	25.0	5.0	10	68	30	40.50

5 and 6 Flutes

DIN 334A x 60°



Product Code	No. of Flutes	Head Diameter	Small Diameter	Shank Diameter	Overall Length	Head Length	Price (£)
334A-8.0-60	5	8.0	0.5	8	50	-	19.50
334A-10.0-60	5	10.0	2.0	8	50	18	22.50
334A-12.5-60	5	12.5	2.0	8	50	18	26.50
334A-16.0-60	6	16.0	3.2	10	50	24	33.50
334A-20.0-60	6	20.0	5.0	10	50	27	31.00

Plain Shank Counterbores

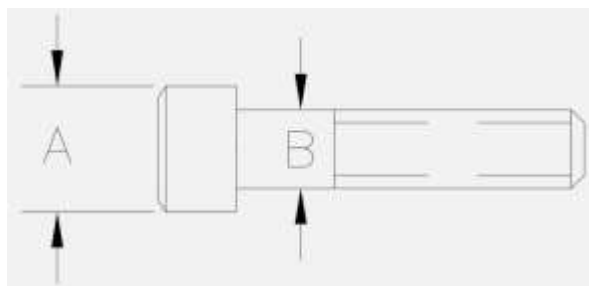
Standard Metric Counterbores

5760 METRIC



Product Code	Cap Screw Size	Pilot Size	Cutting Diameter	Shank Size	Overall Length	Price (£)
5760-M3	M3	3.4	6.0	5.0	71	25.50
5760-M3.5	M3.5	3.9	6.5	5.0	71	25.50
5760-M4	M4	4.5	8.0	5.0	71	27.00
5760-M5	M5	5.5	10.0	8.0	80	28.00
5760-M6	M6	6.4	11.0	8.0	80	30.00
5760-M8	M8	9.0	15.0	12.5	100	39.00
5760-M10	M10	11.0	18.0	12.5	100	49.00
5760-M12	M12	14.0	20.0	12.5	100	55.50

Counterbore Cap Screw Size Chart



ISO Metric Screws				
Size	A	B	Pilot Dia.	Head Dia.
M3	5.50mm	3.00mm	3.40mm	6.00mm
M4	7.00mm	3.00mm	4.50mm	6.00mm
M5	8.50mm	5.00mm	5.50mm	10.00mm
M6	10.00mm	6.00mm	6.40mm	11.00mm
M8	13.00mm	8.00mm	9.00mm	15.00mm
M10	16.00mm	10.00mm	11.00mm	18.00mm
M12	18.00mm	12.00mm	14.00mm	20.00mm

Plain Shank Counterbores M35-HSS-E 5% Cobalt

Close fit, 1/64" Clearance and 1/32" Clearance

5770 IMPERIAL



Product Code	Cap Screw Size	Pilot Size	Cutting Diameter	Shank Size	Overall Length	Price (£)
5770-4-Close Fit	#4	0.112	0.186	5/32	3.0	21.50
5770-4-1/64 Over	#4	0.127	0.202	5/32	3.0	21.50
5770-4-1/32 Over	#4	0.143	0.217	5/32	3.0	21.50
5770-5-Close Fit	#5	0.125	0.205	3/16	3.0	22.00
5770-5-1/64 Over	#5	0.140	0.221	3/16	3.0	22.00
5770-5-1/32 Over	#5	0.156	0.237	3/16	3.0	22.00
5770-6-Close Fit	#6	0.138	0.228	7/32	3.0	22.00
5770-6-1/64 Over	#6	0.153	0.244	7/32	3.0	22.00
5770-6-1/32 Over	#6	0.169	0.260	7/32	3.0	22.00
5770-8-Close Fit	#8	0.164	0.272	1/4	3.0	22.50
5770-8-1/64 Over	#8	0.179	0.288	1/4	3.0	22.50
5770-8-1/32 Over	#8	0.195	0.304	1/4	3.0	22.50
5770-10-Close Fit	#10	0.190	0.314	9/32	4.5	24.00
5770-10-1/64 Over	#10	0.205	0.330	9/32	4.5	24.00
5770-10-1/32 Over	#10	0.221	0.346	9/32	4.5	24.00
5770-1/4-Close Fit	1/4	0.250	0.382	5/16	4.5	26.50
5770-1/4-1/64 Over	1/4	0.265	0.398	5/16	4.5	26.50
5770-1/4-1/32 Over	1/4	0.281	0.414	5/16	4.5	26.50
5770-5/16-Close Fit	5/16	0.312	0.475	3/8	4.5	30.00
5770-5/16-1/64 Over	5/16	0.328	0.491	3/8	4.5	30.00
5770-5/16-1/32 Over	5/16	0.343	0.507	3/8	4.5	30.00
5770-3/8-Close Fit	3/8	0.375	0.572	1/2	5.0	40.50
5770-3/8-1/64 Over	3/8	0.390	0.588	1/2	5.0	40.50
5770-3/8-1/32 Over	3/8	0.406	0.604	1/2	5.0	40.50
5770-7/16-Close Fit	7/16	0.437	0.663	1/2	5.0	54.00
5770-7/16-1/64 Over	7/16	0.452	0.679	1/2	5.0	54.00
5770-7/16-1/32 Over	7/16	0.468	0.695	1/2	5.0	54.00
5770-1/2-Close Fit	1/2	0.500	0.757	1/2	6.0	69.00
5770-1/2-1/64 Over	1/2	0.515	0.773	1/2	6.0	69.00
5770-1/2-1/32 Over	1/2	0.531	0.789	1/2	6.0	69.00
5770-5/8-1/64 Over	5/8	0.641	0.961	5/8	6.0	90.00
5770-5/8-Close Fit	5/8	0.625	0.945	5/8	6.0	90.00
5770-5/8-1/32 Over	5/8	0.656	0.977	5/8	6.0	90.00
5770-3/4-Close Fit	3/4	0.766	1.187	3/4	7.0	134.00
5770-3/4-1/32 Over	3/4	0.781	1.203	3/4	7.0	134.00
5770-7/8-Close Fit	7/8	0.891	1.375	7/8	7.0	162.00
5770-7/8-1/32 Over	7/8	0.906	1.391	7/8	7.0	162.00

Metric Countersink Sets M35-HSS-E 5% Cobalt

3 Flutes

335C x 90°

Product Code	Head Sizes Included						Price (£)
335C-SET-A	6.3	12.4	20.5				57.50
335C-SET-B	8.3	12.4	16.5	25.0			79.00
335C-SET-C	6.3	8.3	10.4	12.4	20.5		105.50
335C-SET-D	6.3	8.3	10.4	12.4	20.5	25.5	144.00



3 Flutes

TiN Coated 335C x 90°

Product Code	Head Sizes Included						Price (£)
BSA335C6TIN	6.3	8.3	10.4	12.4	16.5	20.5	152.00



Through Hole

5880 METRIC x 90°

Product Code	Head Sizes Included						Price (£)
5880-SET.A	10	14.0	21.0	28.0			138.00
5880-SET-B	10	12.5	16.0	21.0			88.00



Additional Sizes and Angles Available on Request

Contact Us for More Information and Bespoke Quotation