



COUNTERSINKS

Artisan's spirit, customers our guide.

Countersinks:

Countersinks can be used on existing holes of most materials for deburring, chamfering or hole enlarging. TiN or TiCN coated countersinks are recommended for hard or corrosive materials. Countersinks with special geometry are available for hard to machine materials.



TQ Cutting offer standard angles: 60° -82° -90° -100° -120°
Other angles available according to your drawings or requests

Product Features :

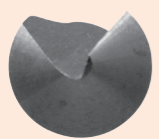
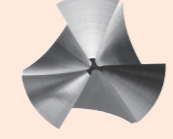

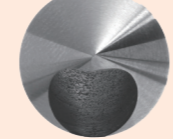
- ◆ Made by High-performance HSS/Tungsten Carbide material, High wear resistance and long tool life;
- ◆ Manufactured by advanced CNC machine. High consistency and quality assurance;
- ◆ CBN fully ground ensure better and sharper cutting edges
- ◆ Modified cutting angle guarantee smooth running and positive cut
- ◆ Grooves opened wide to allow fast and easy chip removal
- ◆ Constant profile relief
- ◆ Ideal centring features
- ◆ Scratch-free surface
- ◆ Applicable for steel, cast iron, non-ferrous and light metals. Best results at low cutting speeds






Groove Styles:

Straight Flute Type		Arc Flute Type	
	<ul style="list-style-type: none"> ◆ General flute type ◆ More economical than arc flute type. 		<ul style="list-style-type: none"> ◆ Large and arc chip space allows faster and easier chip removal ◆ High positive cut, extra rake angle ◆ Smooth low-heat running ◆ Considerably longer tool life

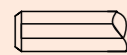
Flute Type:

			
Single Flute Countersinks	Three Flute Countersinks	Multi Flute Countersinks	Zero Flute Deburring Countersinks
Produces excellent roundness of circle, can be used for centering also.	Easy to regrind and work without vibration	For deburring and hole enlarging on hard to machine materials. for the machining of material with tensile strength >1000N/mm ²	For little chamfering on light metals and plastics.

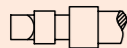
For longer tool life and better chip removal ability, HSS-E and different coatings are available for different materials processing.

HSS-E 	TiN 	TiAlN 
HSS-Co(Cobalt Hss) have higher red hardness permitting drilling of materials such as heat-resistant alloys and materials with hardness greater than 38HRC and high-alloyed chromium steel such as stainless and acidresistant steel	General purpose coating, high cost-effective, makes the cutter long tool life. Provides cutter surface with a higher degree of hardness and high temperature stability meanwhile lower friction coefficient. Suitable for processing steel and cast iron.	High performance coating with a high degree of hardness, high wear resistance and low heat conductivity. Good chemical stability and oxidation resistance and wear resistance. Suitable for processing heat resisting alloys, high-alloy steel, stainless steel, Titanium alloys and NiCo alloys.

Shank Type:

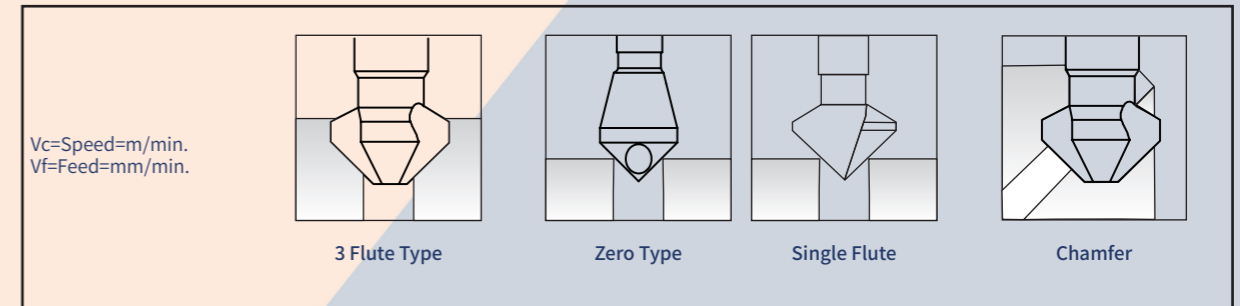


Shank with 3 driving flats prevents slipping in drill chuck and can be effective holding



Morse Type shank

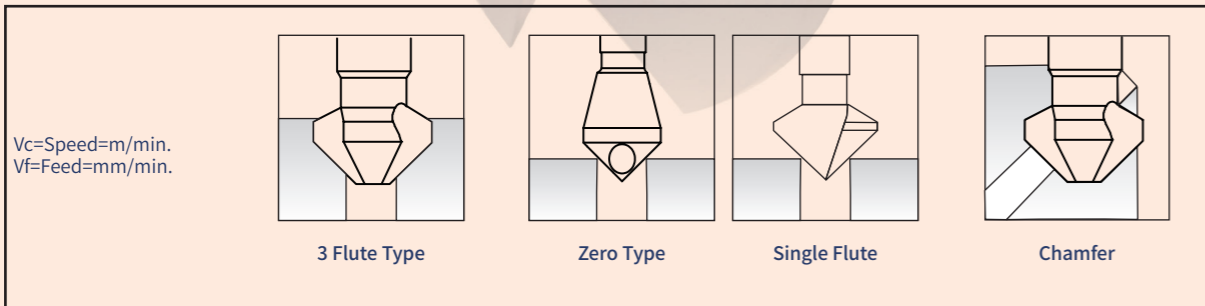
Recommendations for the use of NC and Countersinks:



MATERIAL		HSS	HSS +TIN	Carbide	HSS	HSS +TIN	HSS	HSS +TIN	HSS	HSS +TIN	Carbide
		Vc	Vc	Vc	Vc	Vc	Vc	Vc	Vc	Vc	Vc
Steels ≤ 500 N/mm ²	∅ 10	17-22	17-22	40-80	35-45	35-45	35-45	35-45	17-22	17-22	40-80
	∅ 20 Vf	85	85	250	165	165	165	165	85	85	250
	∅ 30	45	45	125	85	85	85	85	45	45	125
Steels 500-800 N/mm ²	∅ 10	10-15	10-15	30-60	20-30	20-30	20-30	20-30	10-15	10-15	30-60
	∅ 20 Vf	60	60	170	110	110	110	110	60	60	170
	∅ 30	30	30	85	55	55	55	55	30	30	85
Steels 800-1000 N/mm ²	∅ 10	8-12	8-12	20-40	15-20	15-20	15-20	15-20	8-12	8-12	20-40
	∅ 20 Vf	35	35	100	55	55	55	55	35	35	100
	∅ 30	25	25	60	35	35	35	35	25	25	60
Steels 1000-1300 N/mm ²	∅ 10	6-10	6-16	20-40	12-15	12-15	12-15	12-15	6-10	6-10	20-40
	∅ 20 Vf	30	30	100	45	45	45	45	30	30	100
	∅ 30	15	15	60	25	25	25	25	15	15	60
Abrasion Resistant Steel	∅ 10			15-20							15-20
	∅ 20 Vf			55							55
	∅ 30			35							35
Nimonic	∅ 10			10-12						4.6	10-12
	∅ 20 Vf			30						16	30
	∅ 30			16						8	16
Treated Steel Z60 HRC	∅ 10			8-10							8-10
	∅ 20 Vf			20							20
	∅ 30			10							10
				8							8

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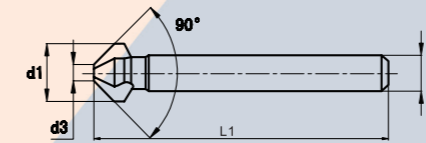
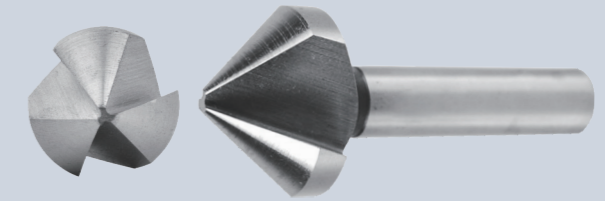
Recommendations for the use of NC and Countersinks:



MATERIAL		HSS	HSS +TIN	Carbide	HSS	HSS +TIN	HSS	HSS +TIN	HSS	HSS +TIN	Carbide
		Vc	Vc	Vc	Vc	Vc	Vc	Vc	Vc	Vc	Vc
Cast iron	∅ 10	15-25	15-25	40-80	20-40	20-40	20-40	20-40	15-25	15-25	40-80
	∅ 20	70	70	250	125	125	125	125	70	70	250
	∅ 30	40	40	150	75	75	75	75	40	40	150
Aluminium	∅ 10	35-45	35-45	40-100	50-60	50-60	50-60	50-60	35-45	35-45	40-100
	∅ 20	200	200	350	255	255	255	255	200	200	350
	∅ 30	130	130	230	180	180	180	180	130	130	230
Bronze Brass	∅ 10	20-30	20-30		30-40	30-40	30-40	30-40	20-30	20-30	
	∅ 20	120	120		150	150	150	150	120	120	
	∅ 30	85	85		110	110	110	110	85	85	
Copper	∅ 10	15-25	15-25	50-80	20-30	20-30	20-30	20-30	15-25	15-25	50-80
	∅ 20	95	95	300	120	120	120	120	95	95	300
	∅ 30	60	60	200	80	80	80	80	60	60	200
Laminated	∅ 10	35-70	35-70		50-100	50-100	50-100	50-100	35-70	35-70	
	∅ 20	300	300		400	400	400	400	300	300	
	∅ 30	200	200		300	300	300	300	200	200	
PVC Plastics	∅ 10	15-25	15-25	50-80	20-30	20-30	20-30	20-30	15-25	15-25	50-80
	∅ 20	400	400		450	450	450	450	400	400	
	∅ 30	300	300		350	350	350	350	300	300	

90° Three Flute Countersinks, Cylindrical Shank Straight Flute Type

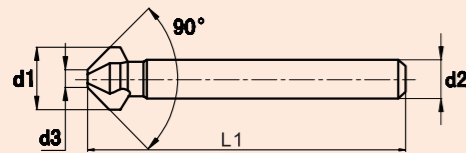
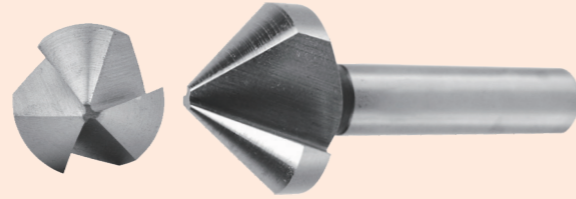
- ◆ CBN fully ground ensure better and sharper cutting edges
- ◆ Grooves opened wide to allow chips away out
- ◆ Positive cut, standard rake angle
- ◆ Constant profile relief
- ◆ Smooth running
- ◆ Ideal centring features
- ◆ Applicable for steel, cast iron, non-ferrous and light metals.



Max ∅ d1 mm	Min ∅ d3 mm	Overall Length L1 mm	Shank ∅ d2 mm	HSS Shiny Part Number	HSS	TiN Coated Part Number	HSS TiN	TiAlN Coated Part Number	HSS TiAlN
4.3	1.3	40	4	Q14DC0027		Q14DC0001		Q14DC0116	
4.8	1.5	40	4	Q14DC0112		Q14DC0114		Q14DC0117	
5.0	1.5	40	4	Q14DC0028		Q14DC0002		Q14DC0118	
5.3	1.5	40	4	Q14DC0029		Q14DC0003		Q14DC0119	
5.8	1.5	45	5	Q14DC0030		Q14DC0004		Q14DC0120	
6.0	1.5	45	5	Q14DC0031		Q14DC0005		Q14DC0121	
6.3	1.5	45	5	Q14DC0032		Q14DC0006		Q14DC0122	
7.0	1.8	50	6	Q14DC0033		Q14DC0007		Q14DC0123	
7.3	1.8	50	6	Q14DC0034		Q14DC0008		Q14DC0124	
8.0	2.0	50	6	Q14DC0035		Q14DC0009		Q14DC0125	
8.3	2.0	50	6	Q14DC0036		Q14DC0010		Q14DC0126	
9.4	2.2	50	6	Q14DC0037		Q14DC0011		Q14DC0127	
10.0	2.5	50	6	Q14DC0038		Q14DC0012		Q14DC0128	
10.4	2.5	50	6	Q14DC0040		Q14DC0013		Q14DC0129	
11.5	2.8	56	8	Q14DC0041		Q14DC0014		Q14DC0130	
12.4	2.8	56	8	Q14DC0042		Q14DC0015		Q14DC0131	
13.4	2.9	56	8	Q14DC0043		Q14DC0016		Q14DC0132	
14.4	3.0	56	8	Q14DC0113		Q14DC0115		Q14DC0133	
15.0	3.2	60	10	Q14DC0044		Q14DC0017		Q14DC0134	
16.5	3.2	60	10	Q14DC0045		Q14DC0018		Q14DC0135	

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90° Three Flute Countersinks, Cylindrical Shank Straight Flute Type

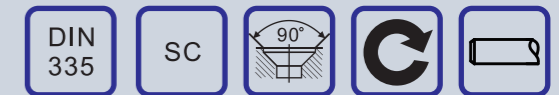
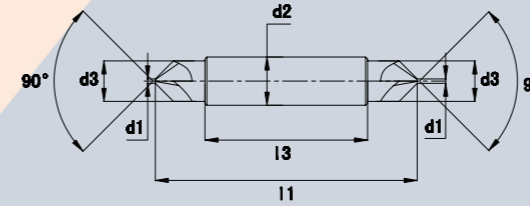
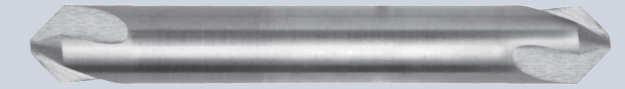


Max Ø d1 mm	Min Ø d3 mm	Overall Length l1 mm	Shank Ø d2 mm	HSS Shiny Part Number	TiN Coated Part Number	TiAlN Coated Part Number
19.0	3.5	63	10	Q14DC0046	Q14DC0019	Q14DC0136
20.5	3.5	63	10	Q14DC0047	Q14DC0020	Q14DC0137
23.0	3.8	67	10	Q14DC0048	Q14DC0021	Q14DC0138
25.0	3.8	67	10	Q14DC0049	Q14DC0022	Q14DC0139
26.0	3.8	67	10	Q14DC0050	Q14DC0023	Q14DC0140
28.0	4.0	71	12	Q14DC0051	Q14DC0024	Q14DC0141
30.0	4.2	71	12	Q14DC0052	Q14DC0025	Q14DC0142
31.0	4.2	71	12	Q14DC0053	Q14DC0026	Q14DC0143

Shank with 3 driving flats available as per requirements which enables effective holding.

90° Three Flute Solid Carbide Countersinks Double Ended Arc Flute Type, Solid Carbide

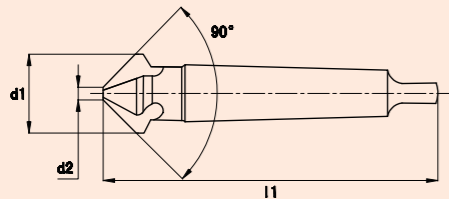
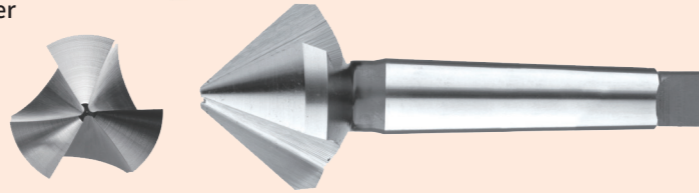
- ◆ SDC fully ground ensure better and sharper cutting edges
- ◆ Grooves opened wide to allow chips away out
- ◆ High positive cut, extra rake angle
- ◆ Constant profile relief
- ◆ Smooth low-heat running
- ◆ Considerably longer tool life
- ◆ Ideal centring features
- ◆ Scratch-free surface
- ◆ Applicable for a variety of metals and non-metallic, Ideal for Hardened heat-treated steels, exceeding 1200 N/mm² (> 38 HRC), Rust and acid-resistant steels, Hard non-ferrous metals



Max Ø d1 mm	Min Ø d3 mm	Overall Length l1 mm	Shank Ø d2 mm	Shank Length Ø l3 mm	HM Shiny Part Number
8.3	2.0	67	10	46	Q14DC0305
10.4	2.5	74	12	47	Q14DC0306
12.4	5.8	76	14	45	Q14DC0307

90° Three Flute Countersinks, Morse Taper Shank Arc Flute Type

- ◆ CBN fully ground ensure better and sharper cutting edges
- ◆ Large and arc chip space allows faster and easier chip removal
- ◆ High positive cut, extra rake angle
- ◆ Constant profile relief
- ◆ Smooth low-heat running
- ◆ Considerably longer tool life
- ◆ Ideal centring features
- ◆ Scratch-free surface
- ◆ Applicable for steel, cast iron, non-ferrous and light metals
- ◆ Best results at low cutting speeds

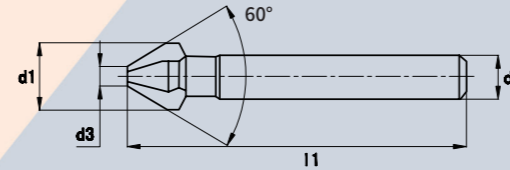
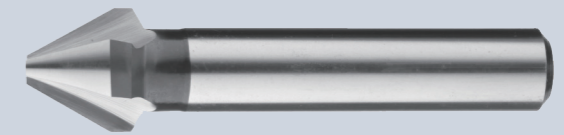


Max Ø d1 mm	Min Ø d3 mm	Overall Length l1 mm	Morse Taper No.	HSS Shiny Part Number	TiN Coated Part Number	TiAlN Coated Part Number
15.0	3.2	85	1	Q14DB0001	Q14DB0017	Q14DB0033
16.5	3.2	85	1	Q14DB0002	Q14DB0018	Q14DB0034
19.0	3.5	100	2	Q14DB0003	Q14DB0019	Q14DB0035
20.5	3.5	100	2	Q14DB0004	Q14DB0020	Q14DB0036
23.0	3.8	106	2	Q14DB0005	Q14DB0021	Q14DB0037
25.0	3.8	103	2	Q14DB0006	Q14DB0022	Q14DB0038
26.0	3.8	103	2	Q14DB0007	Q14DB0023	Q14DB0039
28.0	4.0	112	2	Q14DB0008	Q14DB0024	Q14DB0040
30.0	4.2	112	2	Q14DB0009	Q14DB0025	Q14DB0041
31.0	4.2	112	2	Q14DB0010	Q14DB0026	Q14DB0042
34.0	4.5	118	2	Q14DB0011	Q14DB0027	Q14DB0043
37.0	4.8	118	2	Q14DB0012	Q14DB0028	Q14DB0044
40.0	10.0	140	3	Q14DB0013	Q14DB0029	Q14DB0045
50.0	14.0	150	3	Q14DB0014	Q14DB0030	Q14DB0046
63.0	16.0	180	4	Q14DB0015	Q14DB0031	Q14DB0047
80.0	22.0	190	4	Q14DB0016	Q14DB0032	Q14DB0048

HSS-Co (Cobalt HSS) available as per requirements.

60° Three Flute Countersinks, Straight Shank Arc Flute Type

- ◆ CBN fully ground ensure better and sharper cutting edges
- ◆ Large and arc chip space allows faster and easier chip removal
- ◆ High positive cut, extra rake angle
- ◆ Constant profile relief
- ◆ Smooth low-heat running
- ◆ Considerably longer tool life
- ◆ Ideal centring features
- ◆ Scratch-free surface
- ◆ Applicable for steel, cast iron, non-ferrous and light metals
- ◆ Best results at low cutting speeds

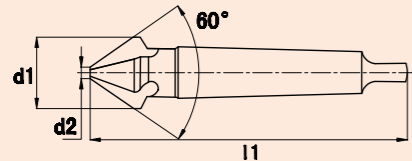
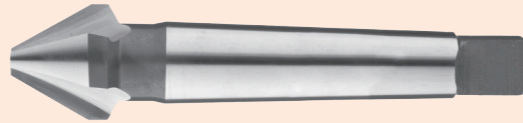


Max Ø d1 mm	Min Ø d3 mm	Overall Length l1 mm	Shank Ø d2 mm	HSS Shiny Part Number
6.3	1.6	45	5	Q14DC0316
8.0	2.0	50	6	Q14DC0317
10.0	2.5	50	6	Q14DC0318
12.5	3.2	56	8	Q14DC0319
16.0	4.0	63	10	Q14DC0320
20.0	5.0	67	10	Q14DC0321
22.0	5.6	71	10	Q14DC0322
25.0	6.3	71	10	Q14DC0323

/ / / are available according to requirements

60° Three Flute Countersinks, Morse Taper Shank Arc Flute Type

- ◆ CBN fully ground ensure better and sharper cutting edges
- ◆ Large and arc chip space allows faster and easier chip removal
- ◆ High positive cut, extra rake angle
- ◆ Constant profile relief
- ◆ Smooth low-heat running
- ◆ Considerably longer tool life
- ◆ Ideal centring features
- ◆ Scratch-free surface
- ◆ Applicable for steel, cast iron, non-ferrous and light metals
- ◆ Best results at low cutting speeds

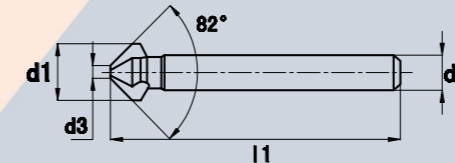
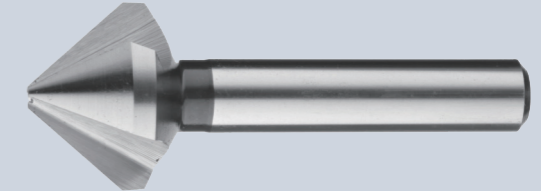


Max Ø d1 mm	Min Ø d3 mm	Overall Length l1 mm	Morse Taper No.	HSS Shiny Part Number	HSS
16.0	4.0	90	1	Q14DB0049	
20.0	5.0	106	2	Q14DB0050	
25.0	6.3	112	2	Q14DB0051	
31.5	10.0	118	2	Q14DB0052	
40.0	12.5	150	3	Q14DB0053	
50.0	16.0	160	3	Q14DB0054	
63.0	20.0	190	4	Q14DB0055	
80.0	25.0	200	4	Q14DB0056	

HSS / / are available according to requirements

82° Three Flute Countersinks, Straight Shank Arc Flute Type

- ◆ CBN fully ground ensure better and sharper cutting edges
- ◆ Large and arc chip space allows faster and easier chip removal
- ◆ High positive cut, extra rake angle
- ◆ Constant profile relief
- ◆ Smooth low-heat running
- ◆ Considerably longer tool life
- ◆ Ideal centring features
- ◆ Scratch-free surface
- ◆ Applicable for steel, cast iron, non-ferrous and light metals
- ◆ Best results at low cutting speeds

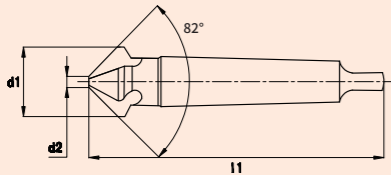
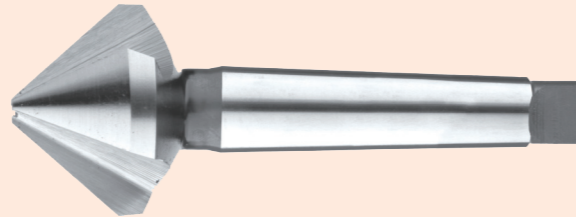


Max Ø d1 mm	Min Ø d3 mm	Overall Length l1 mm	Shank Ø d2 mm	HSS Shiny Part Number	HSS
6.3	1.5	45	5	Q14DC0340	
8.3	2.0	50	6	Q14DC0341	
10.4	2.5	50	6	Q14DC0342	
12.4	2.8	56	8	Q14DC0343	
16.5	3.2	60	10	Q14DC0344	
20.5	3.5	63	10	Q14DC0345	
25.0	3.8	67	10	Q14DC0346	

HSS / / / are available according to requirements

82° Three Flute Countersinks, Morse Taper Shank Arc Flute Type

- ◆ CBN fully ground ensure better and sharper cutting edges
- ◆ Large and arc chip space allows faster and easier chip removal
- ◆ High positive cut, extra rake angle
- ◆ Constant profile relief
- ◆ Smooth low-heat running
- ◆ Considerably longer tool life
- ◆ Ideal centring features
- ◆ Scratch-free surface
- ◆ Applicable for steel, cast iron, non-ferrous and light metals
- ◆ Best results at low cutting speeds

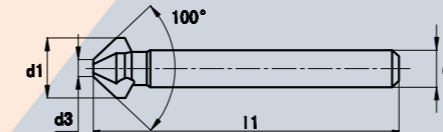
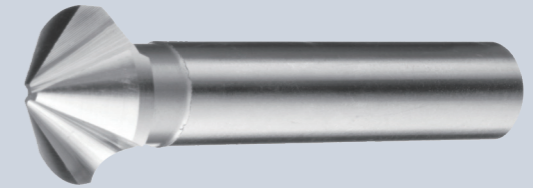


Max Ø d1 mm	Min Ø d3 mm	Overall Length l1 mm	Morse Taper No.	HSS Shiny Part Number	HSS
16.5	3.2	85	1	Q14DB0073	
20.5	3.5	100	2	Q14DB0074	
25.0	3.8	106	2	Q14DB0075	
31.0	4.2	112	2	Q14DB0076	
40.0	10.0	140	3	Q14DB0077	
50.0	14.0	150	3	Q14DB0078	
63.0	16.0	180	4	Q14DB0079	
80.0	22.0	190	4	Q14DB0080	

HSS-E / TiN / TiAIN are available according to requirements

100° Three Flute Countersinks, Straight Shank Arc Flute Type

- ◆ CBN fully ground ensure better and sharper cutting edges
- ◆ Large and arc chip space allows faster and easier chip removal
- ◆ High positive cut, extra rake angle
- ◆ Constant profile relief
- ◆ Smooth low-heat running
- ◆ Considerably longer tool life
- ◆ Ideal centring features
- ◆ Scratch-free surface
- ◆ Applicable for steel, cast iron, non-ferrous and light metals
- ◆ Best results at low cutting speeds

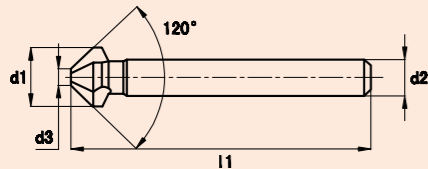
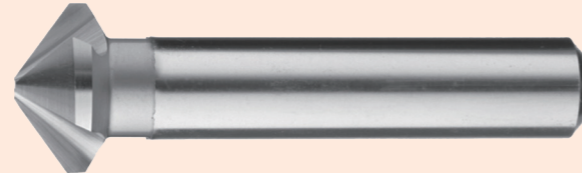


Max Ø d1 mm	Min Ø d3 mm	Overall Length l1 mm	Shank Ø d2 mm	HSS Shiny Part Number	HSS
6.3	1.5	44	5.0	Q14DC0347	
8.3	2.0	49	6.0	Q14DC0348	
10.4	2.5	49	6.0	Q14DC0349	
12.4	2.8	53	6.0	Q14DC0350	
16.5	3.2	56	6.0	Q14DC0351	
20.5	3.5	61	10.0	Q14DC0352	
25.0	3.8	65	10.0	Q14DC0353	

HSS-E / TiN / TiAIN / are available according to requirements

120° Three Flute Countersinks, Straight Shank Arc Flute Type

- ◆ CBN fully ground ensure better and sharper cutting edges
- ◆ Large and arc chip space allows faster and easier chip removal
- ◆ High positive cut, extra rake angle
- ◆ Constant profile relief
- ◆ Smooth low-heat running
- ◆ Considerably longer tool life
- ◆ Ideal centring features
- ◆ Scratch-free surface
- ◆ Applicable for steel, cast iron, non-ferrous and light metals
- ◆ Best results at low cutting speeds

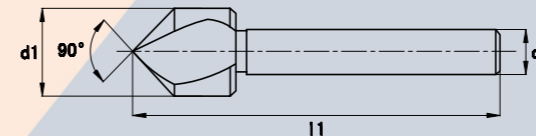
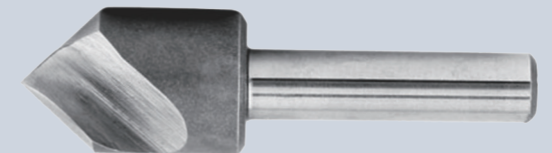


Max Ø d1 mm	Min Ø d3 mm	Overall Length l1 mm	Shank Ø d2 mm	HSS Shiny Part Number	HSS
6.3	1.5	49	5.0	Q14DC0354	
8.3	2.0	49	6.0	Q14DC0355	
12.5	2.8	54	8.0	Q14DC0356	
14.4	2.0	57	8.0	Q14DC0357	
16.0	3.2	57	10.0	Q14DC0358	
20.0	3.5	59	10.0	Q14DC0359	
25.0	3.8	63	10.0	Q14DC0360	

HSS / / / are available according to requirements

90° Single Flute Countersinks, Cylindrical Shank Sharp Point

- ◆ CBN fully ground ensure better and sharper cutting edges
- ◆ Large and arc chip space allows faster and easier chip removal
- ◆ High positive cut, extra rake angle
- ◆ Constant profile relief
- ◆ Smooth low-heat running
- ◆ Ideal centring features
- ◆ Ideal true roundness
- ◆ Scratch-free surface
- ◆ Applicable for steel, cast iron, non-ferrous and light metals
- ◆ Best results at low cutting speeds

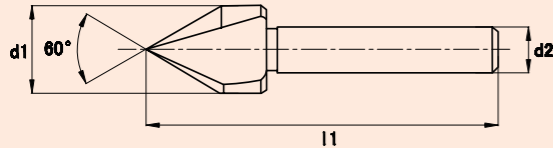
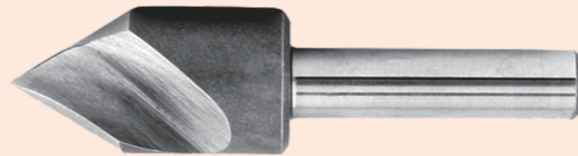


Max Ø d1 mm	Overall Length l1 mm	Shank Ø d2 mm	HSS Shiny Part Number	HSS
6.0	45	6.0	Q14DC0361	
8.0	50	8.0	Q14DC0362	
10.0	49	8.0	Q14DC0363	
12.5	49	8.0	Q14DC0364	
16.0	56	10.0	Q14DC0365	
20.0	60	10.0	Q14DC0366	
25.0	75	12.0	Q14DC0367	
31.5	80	12.0	Q14DC0368	

HSS / / / are available according to requirements

60° Single Flute Countersinks, Cylindrical Shank Sharp Point

- ◆ CBN fully ground ensure better and sharper cutting edges
- ◆ Large and arc chip space allows faster and easier chip removal
- ◆ High positive cut, extra rake angle
- ◆ Constant profile relief
- ◆ Smooth low-heat running
- ◆ Ideal centring features
- ◆ Ideal true roundness
- ◆ Scratch-free surface
- ◆ Applicable for steel, cast iron, non-ferrous and light metals
- ◆ Best results at low cutting speeds

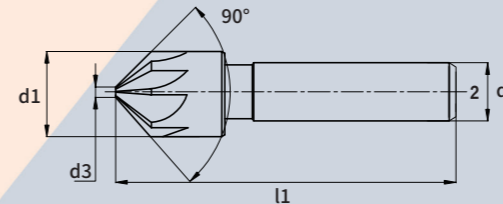
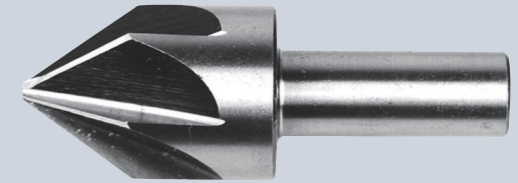


Max Ø d1 mm	Overall Length l1 mm	Shank Ø d2 mm	HSS Shiny Part Number
6.0	45	6	Q14DC0369
8.0	50	8	Q14DC0370
10.0	52	8	Q14DC0371
12.5	52	8	Q14DC0372
16.0	60	10	Q14DC0373
20.0	63	10	Q14DC0374
25.0	82	12	Q14DC0375
31.5	90	12	Q14DC0376

/ / / are available according to requirements

90° Multi Flute Countersinks, Cylindrical Shank

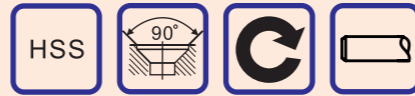
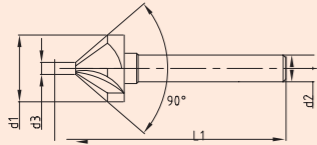
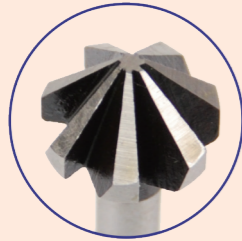
- ◆ CBN ground ensure better cutting edges
- ◆ Multi Grooves to allow chips away out
- ◆ Positive cut, Standard rake angle
- ◆ Standard profile relief
- ◆ Smooth low-heat running
- ◆ Ideal centring features
- ◆ Scratch-free surface
- ◆ Applicable for machining of materials with tensile strength > 1000N/mm²



Max Ø d1 mm	Min Ø d3 mm	Overall Length l1 mm	Shank Ø d2 mm	No. of Flute Z	HSS Shiny Part Number
8.0	N/A	48	8	5	Q14DC0377
12.5	2.0	48	8	5	Q14DC0378
16.0	3.2	56	10	7	Q14DC0379
20.0	5.0	60	10	7	Q14DC0380

/ are available according to requirements

90° Multi Flute Countersinks, Cylindrical Shank Rose Pattern

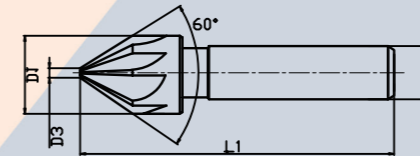
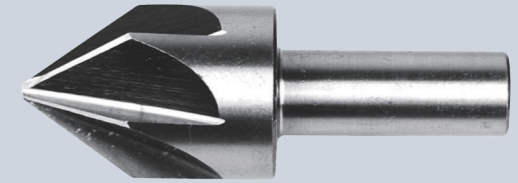


Max Ø d1	Min Ø d3	Overall Length L1	Shank Ø d2	No. of Flute Z	HSS Shiny Part Number	HSS
3/8"	N/A	2"	3/16"	7	Q14DC0396	
1/2"	5/64"	2"	3/16"	7	Q14DC0397	
5/8"	1/8"	2"	1/4"	7	Q14DC0398	

 /  are available according to requirements

60° Multi Flute Countersinks, Cylindrical Shank

- ◆ CBN ground ensure better cutting edges
- ◆ Multi Grooves to allow chips away out
- ◆ Positive cut, Standard rake angle
- ◆ Standard profile relief
- ◆ Smooth low-heat running
- ◆ Ideal centring features
- ◆ Scratch-free surface
- ◆ Applicable for machining of materials with tensile strength > 1000N/mm²

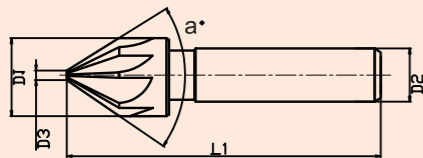
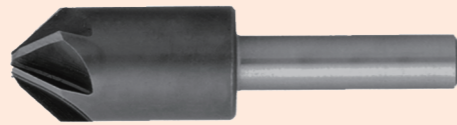


Max Ø D1 mm	Min Ø D3 mm	Overall Length L1 mm	Shank Ø D2 mm	No. of Flute Z	HSS Shiny Part Number	HSS
8.0	N/A	50	8	5	Q14DC0381	
12.5	2.0	50	8	5	Q14DC0382	
16.0	3.2	60	10	7	Q14DC0383	
20.0	5.0	63	10	7	Q14DC0384	

 /  are available according to requirements

Six Flute Countersinks, Cylindrical Shank American Type

- ◆ Milled and precision ground ensure good cutting edges
- ◆ Six Grooves to allow chips away out
- ◆ Positive cut, Standard rake angle
- ◆ Standard profile relief
- ◆ Smooth low-heat running
- ◆ Ideal centring features
- ◆ Scratch-free surface
- ◆ Applicable for any machinable material including iron, steel, soft metals, plastics or wood

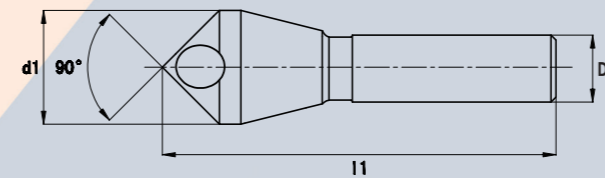
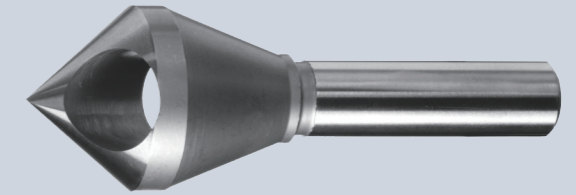


Cutting Dia. Ø D1 Inch	Shank Dia. Ø D2 Inch	Shank Length L1 Inch	Overall Length Ø L2 Inch	Inclusive Angle a°		
				60° Part Number	82° Part Number	90° Part Number
1/8"	1/8"	1-5/8"	1-5/8"	Q14DC0399	Q14DC0413	Q14DC0427
3/16"	3/16"	1-1/2"	1-1/2"	Q14DC0400	Q14DC0414	Q14DC0428
1/4"	3/16"	3/4"	1-1/2"	Q14DC0401	Q14DC0415	Q14DC0429
5/16"	1/4"	7/8"	1-3/4"	Q14DC0402	Q14DC0416	Q14DC0430
3/8"	1/4"	7/8"	1-3/4"	Q14DC0403	Q14DC0417	Q14DC0431
1/2"	3/8"	1-1/8"	2-1/8"	Q14DC0404	Q14DC0418	Q14DC0432
5/8"	3/8"	1-1/8"	2-3/8"	Q14DC0405	Q14DC0419	Q14DC0433
3/4"	1/2"	1-5/16"	2-11/16"	Q14DC0406	Q14DC0420	Q14DC0434
7/8"	1/2"	1-5/16"	2-13/16"	Q14DC0407	Q14DC0421	Q14DC0435
1"	1/2"	1-5/16"	2-13/16"	Q14DC0408	Q14DC0422	Q14DC0436
1-1/4"	3/4"	1-5/8"	3-3/8"	Q14DC0409	Q14DC0423	Q14DC0437
1-1/2"	3/4"	1-5/8"	3-1/2"	Q14DC0410	Q14DC0424	Q14DC0438
1-3/4"	1"	2-1/8"	4-1/4"	Q14DC0411	Q14DC0425	Q14DC0439
2"	1"	2-1/8"	4-3/8"	Q14DC0412	Q14DC0426	Q14DC0440

HSS-Co(Cobalt HSS) available as per requirements.

90° Zero Flute Deburring Countersinks, Cylindrical Shank Metric Size

- ◆ CBN ground ensure better and sharper cutting edges
- ◆ Single hole to allow faster and easier chips away out
- ◆ High Positive cut
- ◆ Constant profile relief
- ◆ Smooth running
- ◆ Ideal centring features
- ◆ Ideal true roundness
- ◆ Scratch-free surface
- ◆ Easily resharpened by the use of a small mounted grinding stone inserted into the hole
- ◆ Applicable for machining light metals and plastics

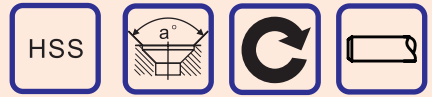
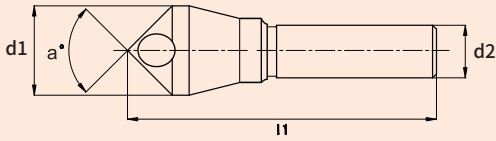
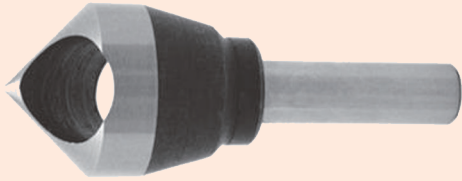


Countersinker Max Ø d1 mm	Countersinker Max Ø d3 mm	Overall Length l1 mm	Head Max Ø d1 mm	Shank Ø D2 mm	HSS Shiny Part Number	HSS TiN Coated Part Number
5	2	45	10	6	Q14DA0009	Q14DA0044
10	5	48	14	8	Q14DA0015	Q14DA0046
15	10	65	21	10	Q14DA0001	Q14DA0048
20	15	85	28	12	Q14DA0005	Q14DA0050
25	20	102	35	15	Q14DA0007	Q14DA0052
30	25	115	44	15	Q14DA0011	Q14DA0054
35	30	127	48	15	Q14DA0013	Q14DA0056
40	35	136	53	15	Q14DA0017	Q14DA0058
50	40	166	60	20	Q14DA0019	Q14DA0060

/ are available according to requirements

Zero Flute Deburring Countersinks, Cylindrical Shank

Imperial Size, Including 60° 82° 90° Point Angle



Size No.	Countersinker Max Ø d1 inch	Countersinker Min Ø d3 inch	Overall Length l1 inch	Head Max Ø d inch	Shank Ø d2 inch	Point Angle α°	HSS Shiny Part Number	TiN Coated Part Number
0#	15/64"	1/16"	1-29/32"	1/4"	1/4"	60°	Q14DA0062	Q14DA0071
1#	13/32"	5/32"	1-27/32"	7/16"	1/4"	60°	Q14DA0063	Q14DA0072
2#	17/32"	3/16"	2-3/32"	9/16"	1/4"	60°	Q14DA0064	Q14DA0073
3#	25/32"	5/16"	2-3/4"	13/16"	1/2"	60°	Q14DA0065	Q14DA0074
4#	1-1/16"	9/16"	3"	1-1/8"	1/2"	60°	Q14DA0066	Q14DA0075
0#	15/64"	1/16"	1-29/32"	1/4"	1/4"	82°	Q14DA0022	Q14DA0080
1#	13/32"	5/32"	1-3/4"	7/16"	1/4"	82°	Q14DA0023	Q14DA0081
2#	17/32"	3/16"	2-1/32"	9/16"	1/4"	82°	Q14DA0024	Q14DA0082
3#	25/32"	5/16"	2-23/32"	13/16"	1/2"	82°	Q14DA0025	Q14DA0083
4#	1-1/16"	9/16"	3"	1-1/8"	1/2"	82°	Q14DA0026	Q14DA0084
5#	1-15/32"	5/8"	3-15/16"	1-1/2"	1/2"	82°	Q14DA0027	Q14DA0085
6#	1-3/4"	3/4"	5-1/8"	1-25/32"	5/8"	82°	Q14DA0028	Q14DA0086
7#	2"	1"	5-9/32"	2-1/32"	5/8"	82°	Q14DA0029	Q14DA0087
8#	2-1/2"	1-1/4"	6"	2-17/32"	3/4"	82°	Q14DA0030	Q14DA0088
0#	15/64"	1/16"	1-29/32"	1/4"	1/4"	90°	Q14DA0031	Q14DA0089
1#	13/32"	5/32"	1-3/4"	7/16"	1/4"	90°	Q14DA0032	Q14DA0090
2#	17/32"	3/16"	2-1/32"	9/16"	1/4"	90°	Q14DA0033	Q14DA0091
3#	25/32"	5/16"	2-23/32"	13/16"	1/2"	90°	Q14DA0034	Q14DA0092
4#	1-1/16"	9/16"	3"	1-1/8"	1/2"	90°	Q14DA0035	Q14DA0093

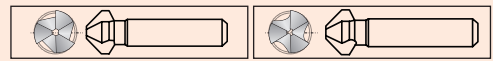
★ Also Available in 100° and 120° point angle

/ are available according to requirements

6pcs 90° Three Flute Countersinks Sets, Cylindrical shank

In Plastic Box

- ◆ Group of 6pcs common size for general applications
- ◆ Plastic box with stand packaging protects cutting edges and convenient for picking and storage



Max Ø d1 mm	Min Ø d3 mm	Overall Length l1 mm	Shank Ø d2 mm	Straight Flute HSS Shiny Part Number	Arc Flute HSS Shiny Part Number
6.3	1.5	45	5	Q27AE0011	Q27AE0006
8.3	2	50	6		
10.4	2.5	50	6		
12.4	2.8	56	8		
16.5	3.2	60	10		
20.5	3.5	63	10		

4pcs 90° Zero Flute Deburring Countersinks Sets, Cylindrical shank

In Metal Box

- ◆ Group of 4 pcs common size for general applications
- ◆ Metal Box with stand packaging protects cutting edges and convenient for packing and storage



Size mm	Head diam mm	Shank mm	Overall Length mm	HSS Shiny Part Number
2-5	10.0	6	45	Q27AE0007
5-10	14.0	6	48	
10-15	21.0	8	65	
15-20	28.0	10	85	

 /
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  /
  are available according to requirements



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