Overview of metal drill bits with recommendation

Steel



Quality	★★★★★	★★★★☆	★★★★★	★★★★☆	★★★★★	★★★★★	★★★★★	★★★★☆	★★★★☆	★★★★☆	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
DIN Norm	-	-	-	-	355 C	335 C	335 C	335 C	-	-	-	373	-	-	-	-
Product	-	ECO	-	ECO	-	-	-	ECO	-	-	-	-	-	-	-	-
Product material	HSS-Co 5% HSS-G	HSS-Co 5% HSS-G	HSS-Co 5% HSS-G	HSS-Co 5% HSS-G	HSS-Co 5% HSS-G	HSS-Co 5%	HSS-Co 5%	HSS-Co 5% HSS-G	HSS-Co 5% HSS-G	HSS-G	Carbide	HSS-Co 5%	Carbide	HSS-Co 5% HSS-G	HSS-G	Carbide
Type	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Point angle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coating	-	-	-	-	-	AlTiN	-	-	-	-	-	-	-	-	-	-
Shank	3 flat shank	3 flat shank	3 flat shank	3 flat shank	3 flat shank	3 flat shank	3 flat shank	Straight	Straight	Hex	Hex	Straight	Weldon Nitto	Weldon	Quickln	Straight
Ø mm	4 - 37	4 - 30	3 - 60	4 - 60	6,3 - 40	6,3 - 31	6,3 - 31	6,3 - 30	2 - 20	6,3 - 20,5	3 - 54	M3 - M12	12 - 60	12 - 60	12 - 60	3 - 16
Series	76600 76000	76700 76100	75600 75000	75700 75100	36500 36100	35900	35700 35800	35600 35000	36600	35300	35400	36X00	38900	38700 38500	38300	70000
Article group	12	12	12	12	15	15	15	15	15	15	15	15	84	84	84	70
Page	150	151	152	153	156	157	158	159	160	161	162	162	164	165	166	172
HD Heavy Duty <1,400 N/mm²													+			+
Steel pipes, -profiles, solid metal	++	++	++	++	+++	+++	+++	++	++	++	+++	+++	+++	+++	+++	+++
Cast iron	++	++	+	+	+++	+++	+++	++	++	++	++	++	+++	++	++	+++
Stainless steel	++	++	++	++	+++	+++	++	++	++		++	+++	+++	+++		+++
Non-ferrous metals	++	++	++	++	+++	++	++	++	+	+	++	+++	+++	+++	+++	+++
Sheet metals	+++	+++	+++	+++	++	++	++	++	++	++			++	++	++	
Aluminum	++	++	++	++	+++	+	++	++	++	++	++	++	++	+++	+++	+++
Acryl glass	+	+	++	++	+	+	+	+	+	+	+	+				
Plastic	++	++	++	++	++	+	+	+	++	++	++	++	++	++	++	++
Wood					+	+	+	+	+	+	++	+				

+++ recommended **++ well-suited** **+ suitable**

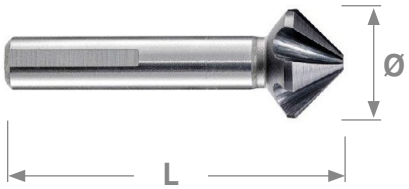
GOLD ★★★★★ SILVER ★★★★☆ BRONZE ★★★☆☆

COUNTERSINKS AND DEBURRERS

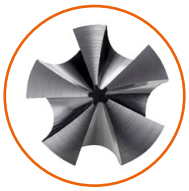


36500 | Countersink 90° With 5 Cutting Edges HSS-Co 5% DIN 335 C



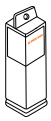


Art.-Group **15**



Innovative countersink with 5 cutting edges from Ø 10.4 mm

- The cutting force is distributed evenly over five cutting edges, which enables low-vibration work and ensures precise countersinking results without chatter marks
- Due to the five unequally divided cutting edges, wear is evenly spread, the feed rate is reduced and thus a significantly longer lifetime is achieved
- The innovative five-cutting edge geometry enables precise countersinking of up to 40 mm - even with hand-guided drilling machines
- With 3-flat shank which prevents spinning in the drill chuck and ensures an optimal power transmission
- For stainless steel (only HSS-Co 5%), steel, non-ferrous metals, aluminum, cast iron and plastics



Single packaging with hanger

★★★★★

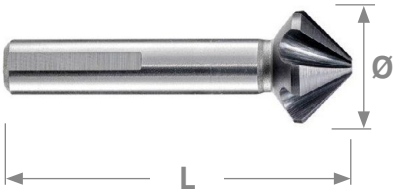
Ø mm	L mm	Ø Shank	Item No.
6.3	45	5	365 063
8.3	50	6	365 083
10.4	50	6	365 104

Ø mm	L mm	Ø Shank	Item No.
12.4	56	8	365 124
16.5	60	10	365 165
20.5	63	10	365 205

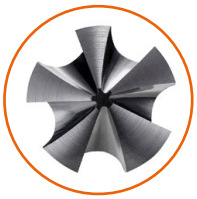
Ø mm	L mm	Ø Shank	Item No.
25.0	67	10	365 250
31.0	71	12	365 310
40.0	80	13	365 400

36100 | Countersink 90° With 5 Cutting Edges HSS-G DIN 335 C

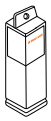




Art.-Group **15**



For product description see item series 36500



Single packaging with hanger

★★★★★

Ø mm	L mm	Ø Shank	Item No.
6.3	45	5	361 063
8.3	50	6	361 083
10.4	50	6	361 104

Ø mm	L mm	Ø Shank	Item No.
12.4	56	8	361 124
16.5	60	10	361 165
20.5	63	10	361 205

Ø mm	L mm	Ø Shank	Item No.
25.0	67	10	361 250
31.0	71	12	361 310
40.0	80	13	361 400

Sets

Art.-Group **16**

★★★★★

Content	Material	Pieces	Packaging	Item No.
Ø 6.3 - 8.3 - 10.4 - 12.4 - 16.5 - 20.5 mm	HSS-Co 5%	6	Plastic box	36 505
Ø 6.3 - 8.3 - 10.4 - 12.4 - 16.5 - 20.5 mm	HSS-G	6	Plastic box	36 105



36 505



36 105

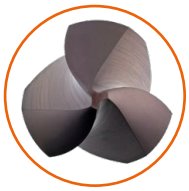
GOLD ★★★★★ SILVER ★★★★☆ BRONZE ★★★☆☆

35900 | Countersink 90° With 3 Curved Cutting Edges HSS-Co 5% AlTiN DIN 335 C



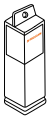


Art.-Group **15**



Innovative countersink with curved cutting edges

- The 3 unequally divided and curved cutting edges ensure vibration-free cutting as well as precise and chatter-free countersinking
- With aluminum titanium nitride coating (AlTiN) for high heat hardness and oxidation resistance
- Depending on the application, the AlTiN coating enables up to ten times longer lifetime and higher cutting speeds can be achieved
- The innovative cutting geometry enables a reduced feed rate, which significantly extends the lifetime of the tools
- With 3-flat shank which prevents spinning in the drill chuck and ensures an optimal power transmission
- For countersinking according to DIN 74 AF/BF and DIN 75 AF/BF
- Designed to drill: steel up to 1,100 N/mm², stainless steels, non-ferrous metals, cast iron, aluminum and plastics



Single packaging with hanger

★★★★★

Ø mm	L mm	Ø Shank	Ø Tip	Item No.
6.3	45	5	1.5	359 063
8.3	50	6	2.0	359 083
10.4	50	6	2.5	359 104
12.4	56	8	2.8	359 124

Ø mm	L mm	Ø Shank	Ø Tip	Item No.
16.5	60	10	3.2	359 165
20.5	63	10	3.5	359 205
25.0	67	10	3.8	359 250
31.0	71	12	4.2	359 300

Countersinks for countersunk screws DIN 74/ DIN 75

Ø mm	Countersunk Screws
6.3	M3
8.3	M4
10.4	M5
12.4	M6
16.5	M8
20.5	M10
25.0	M12
31.0	M16

Sets

Art.-Group **16**



35 901

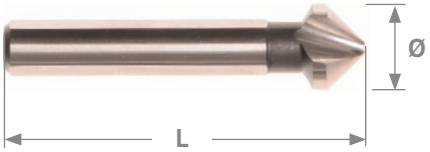
★★★★★

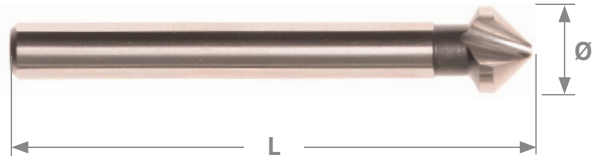
Content	Pieces	Packaging	Item No.
Ø 6.3 - 8.3 - 10.4 - 12.4 - 16.5 - 20.5 mm	6	Metal box	35 901

35700 | Countersink 90° With 3 Cutting Edges HSS-Co 5% DIN 335 C
35800 | Short and Long Version

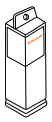


Art.-Group **15**





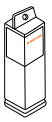
- The 3 unevenly divided cutting edges enable vibration-free working, prevent chatter marks and ensure precise and clean countersinks
- Long lifetime due to high-quality high-speed steel with cobalt alloy
- With 3-flat shank which prevents spinning in the drill chuck and ensures an optimal power transmission
- For countersinking according to DIN 74 AF/BF and DIN 75 AF/BF
- Designed to drill: steel up to 1,100 N/mm², stainless steels, non-ferrous metals, cast iron, aluminum and plastics



Single packaging with hanger

★★★★★

Ø mm	L mm	Ø Shank	Ø Tip	Item No.
6.3	45	5	1.5	357 063
8.3	50	6	2.0	357 083
10.4	50	6	2.5	357 104
12.4	56	8	2.8	357 124
16.5	60	10	3.2	357 165
20.5	63	10	3.5	357 205
25.0	67	10	3.8	357 250
31.0	71	12	4.2	357 300



Single packaging with hanger

★★★★★

Ø mm	L mm	Ø Shank	Ø Tip	Item No.
6.3	156	5	1.5	358 063
8.3	157	6	2.0	358 083
10.4	158	6	2.5	358 104
12.4	160	8	2.8	358 124
16.5	162	10	3.2	358 165
20.5	166	10	3.5	358 205
25.0	170	10	3.8	358 250
31.0	173	12	4.2	358 300

Sets

Art.-Group **16**



35 701

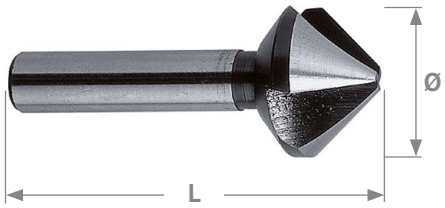
★★★★★

Content	Pieces	Packaging	Item No.
Ø 6.3 - 8.3 - 10.4 - 12.4 - 16.5 - 20.5 mm Short version	6	Metal box	35 701

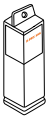
35600 | Countersink 90° With 3 Cutting Edges HSS-Co 5% DIN 335 C ECO



Art.-Group **15**



- Three cutting edges center the countersink exactly in the middle of the drill hole and produce an even round sink with a smooth surface
- Easy, chatter-free deburring of drill holes
- Countersinking and deburring in one working step
- Significant increase in tool life due to proper cooling of countersinks
- Best results at low cutting speed and high feed
- For stainless steel (only HSS-Co 5%), steel, non-ferrous metals, aluminum, cast iron and plastics



Single packaging with hanger

★★★★☆

Ø mm	L mm	Ø Shank	Item No.
6.3	45	5	356 063
8.0	50	6	356 080
8.3	50	6	356 083
10.0	50	6	356 100
10.4	50	6	356 104

Ø mm	L mm	Ø Shank	Item No.
12.0	56	8	356 120
12.4	56	8	356 124
16.0	60	10	356 160
16.5	60	10	356 165
20.0	63	10	356 200

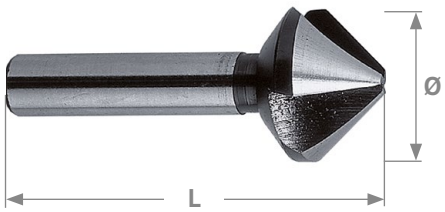
Ø mm	L mm	Ø Shank	Item No.
20.5	63	10	356 205
25.0	67	10	356 250
28.0	71	12	356 280
30.0	71	12	356 300

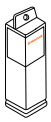
35000 | Countersink 90° With 3 Cutting Edges HSS-G DIN 335 C ECO



Art.-Group **15**

For product description see item series 35600





Single packaging with hanger

★★★★☆

Ø mm	L mm	Ø Shank	Item No.
6.3	45	5	35 063
8.0	50	6	35 080
8.3	50	6	35 083
10.0	50	6	35 100
10.4	50	6	35 104

Ø mm	L mm	Ø Shank	Item No.
12.0	56	8	35 120
12.4	56	8	35 124
16.0	60	10	35 160
16.5	60	10	35 165
20.0	63	10	35 200

Ø mm	L mm	Ø Shank	Item No.
20.5	63	10	35 205
25.0	67	10	35 250
28.0	71	12	35 280
30.0	71	12	35 300

Sets

Art.-Group **16**

★★★★☆

Content	Material	Pieces	Packaging	Item No.
Ø 6.3 - 8.3 - 10.4 - 12.4 - 16.5 - 20.5 mm	HSS-Co 5%	6	Plastic box	35 605
Ø 6.3 - 8.3 - 10.4 - 12.4 - 16.5 - 20.5 mm	HSS-G	6	Plastic box	35 005



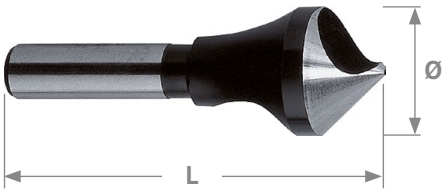
35 605



35 005

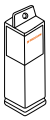
36600 | Countersink With Cross Hole 90° HSS-Co 5%





Art.-Group **15**

- For an easy burr and chatter-free deburring, chamfering and countersinking in one operation
- Preventing damage to the countersink through optimal chip removal due to the cross hole inside the countersink
- Low cutting speed and sufficient cooling ensure optimal results
- For stainless steel (only HSS-Co 5%), steel, non-ferrous metals, aluminum, cast iron and plastics



Single packaging with hanger

★★★★☆

Size	Ø mm	L mm	Ø Shank	Item No.
1	2 - 5	45	6	36 601
2	5 - 10	48	8	36 602

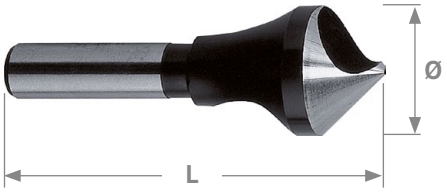
Size	Ø mm	L mm	Ø Shank	Item No.
3	10 - 15	65	10	36 603
4	15 - 20	85	12	36 604

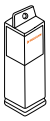
36000 | Countersink With Cross Hole 90° HSS-G



Art.-Group **15**

For product description see item series 36600





Single packaging with hanger

★★★★☆

Size	Ø mm	L mm	Ø Shank	Item No.
1	2 - 5	45	6	36 001
2	5 - 10	48	8	36 002

Size	Ø mm	L mm	Ø Shank	Item No.
3		65	10	36 003
4		85	12	36 004

Sets

Art.-Group **16**

★★★★☆

Content	Material	Pieces	Packaging	Item No.
Size 1 deburring countersink for Ø 2 - 5 mm Size 2 deburring countersink for Ø 5 - 10 mm Size 3 deburring countersink for Ø 10 - 15 mm Size 4 deburring countersink for Ø 15 - 20 mm	HSS-Co 5%	4	Plastic box	36 620
Size 1 deburring countersink for Ø 2 - 5 mm Size 2 deburring countersink for Ø 5 - 10 mm Size 3 deburring countersink for Ø 10 - 15 mm Size 4 deburring countersink for Ø 15 - 20 mm	HSS-G	4	Plastic box	36 020



36 620



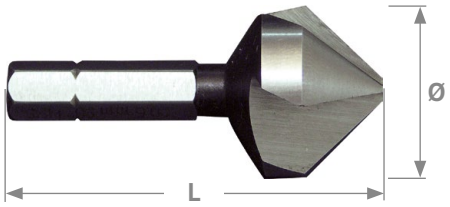
36 020

GOLD ★★★★★ SILVER ★★★★☆ BRONZE ★★★☆☆

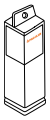
35300 | Countersink Bits 90° With 3 Cutting Edges HSS-G With 6.35 mm [1/4"] Hex Shank



Art.-Group **15**



- Especially suited for deburring and countersinking
- Quick tool change due to hexagonal shank
- Ideal for the use in hand drills
- Low cutting speed and sufficient cooling ensure optimal results
- For steel, non-ferrous metals, aluminum, cast iron and plastics



Single packaging with hanger

★★★★☆

Ø mm	L mm	Counterbore	Item No.
6.3	31	M3	353 063
8.3	32	M4	353 083

Ø mm	L mm	Counterbore	Item No.
10.4	34	M5	353 104
12.4	36	M6	353 124

Ø mm	L mm	Counterbore	Item No.
16.5	40	M8	353 165
20.5	43	M10	353 205

Sets

Art.-Group **16**



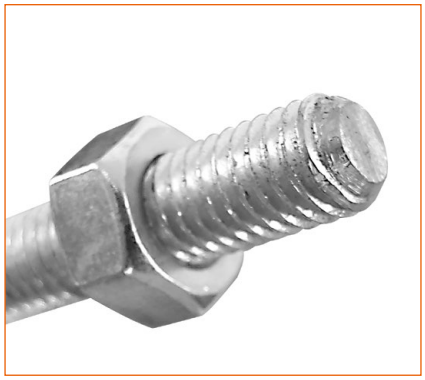
35 003

★★★★☆

Content	Pieces	Packaging	Item No.
6 countersinks with hexagonal shank Ø 6.3 - 8.3 - 10.4 - 12.4 - 16.5 - 20.5 mm 1x universal bit holder	7	Metal box	35 003







Item no. 35401 on page 162

35400 | Outer Reamer With Carbide Cutting Edges

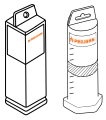


Art.-Group **15**



Ideal for repair of threaded bolts and screws

- Carbide cutting edges ensure a long lifetime as well as a fast and clean deburring of pipes, threaded rods, screws and much more
- 3 sizes cover the diameter range from 3 - 54 mm
- To be used in cordless screwdrivers and drills
- For use with low speed
- For stainless steel, steel, non-ferrous metals, aluminum, cast iron, plastics and wood-based materials

35 401  Single packaging with hanger

★★★★★

Size	Length mm	Ø Range mm	Number of Cutting Edges	Max. RPM	Item No.
1	49	3-19	3	500	35 401
2	57	13-35	5	150	35 402
3	63	34-54	9	60	35 403

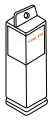
36700 | 36800 | 36900 | Flat Countersinks HSS-Co 5% DIN 373



Art.-Group **15**



- Flat counterbore with spiral fluted cutting edges and a countersink angle of 180°
- For countersinking hexagon screws according to DIN 912, 6912, 7984 and cylindrical screws with slot according to ISO 1207 (DIN 84)
- FINE - for through hole grade fine according to DIN ISO 373
- MEDIUM - for through hole grade medium according to DIN ISO 373
- Core hole - the guide pin of the countersink fits only in threaded core holes
- For countersinks according to DIN 74 sheet 2
- For stainless steel, steel, non-ferrous metals, aluminum, cast iron and plastics

 Single packaging with hanger

36700
for through hole, FINE

★★★★★

Thread	Ø Head	Ø Shank	Ø Pin	Item No.
M3	6 mm	5 mm	3.2 mm	36 703
M4	8 mm	5 mm	4.3 mm	36 704
M5	10 mm	8 mm	5.3 mm	36 705
M6	11 mm	8 mm	6.4 mm	36 706
M8	15 mm	12.5 mm	8.4 mm	36 708
M10	18 mm	12.5 mm	10.5 mm	36 710
M12	20 mm	12.5 mm	13.0 mm	36 712

36800
for through hole, MEDIUM

★★★★★

Ø Pin	Item No.
3.4 mm	36 803
4.5 mm	36 804
5.5 mm	36 805
6.6 mm	36 806
9.0 mm	36 808
11.0 mm	36 810
13.5 mm	36 812

36900
for core hole

★★★★★

Ø Pin	Item No.
2.5 mm	36 903
3.3 mm	36 904
4.2 mm	36 905
5.0 mm	36 906
6.8 mm	36 908
8.5 mm	36 910
10.2 mm	36 912