

Countersinks Counterbores

- Counterbores
- Countersinks
- Conical Sheet Drills
- Multi Step Drills
- Core Drills





Countersinks, Counterbores and Core Drills HSS

Standard	Type	Material	Dia. (mm)	Dia. (ins)	Surface	Web thinning	List-No.	Page	
Counterbores with straight shank DIN 373		fine, medium, tapping hole	HSS	M3 - M12		P0	57010/57020/ 57030	169	
Counterbores with taper shank	Factory Standard 	fine, medium	HSS	M10 - M30		P0	57008	170	
	DIN 375 	for detachable pilots	HSS	15,0 - 57,0		P0	57004	171	
Detachable Pilots DIN 1868		fine, medium, tapping hole	HSS	M8 - M30		P0	57310/57320/ 57330	172	
Countersinks with straight shank	DIN 334 	60° Form C	HSS	6,3 - 25,0		P0	78011	173	
	DIN 335		90° Form C	HSS	4,3 - 31,0		P0	78010	174
			90° Form C	HSS	4,3 - 20,5		P5	78015	174
Countersinks with taper shank DIN 335		90° Form D	HSS	16,5 - 80,0		P0	78020	175	
Conical Sheet Drills Factory Standard			HSS	3,0 - 60,0		P0	06200	176	
Multi Step Drills Factory Standard			HSS	4,0 - 30,0		P0	06300	177	
Core Drills 3 flutes DIN 343		Std. Helix	HSS	7,8 - 40,0	1/4 - 1 1/2	P1	17000	178-180	

P0-Bright • P1-Steam tempered • P2-Bronze • P3-Moc • P4-Nitrided lands • P5-TiN • P6-TiCN • P7-HY • P8-TiAlN • P9-TiB



Countersinks / Counterbores

Counterbores with fixed pilot and straight shank, DIN 373 Catalogue: page 169

Type	Material	List-No.	Surface
	HSS	57010 57020 57030	P0 P0 P0



d • Packing unit
mm • pcs.
All diam. • l

Applications

For producing counterbores for socket head cap screws and slotted cheese head screws. Intended for machining all ferrous and non-ferrous metals as well as soft and hard plastics. Designed to pilot in the "medium" or "fine" clearance hole or in the core hole.

Design characteristics

Flute form: right hand helix
Helix angle: normal

Counterbores with fixed pilot and taper shank, factory standard Catalogue: page 170

Type	Material	List-No.	Surface
	HSS	57008	P0



d • Packing unit
mm • pcs.
All diam. • l

Applications

For producing counterbores for socket head cap screws and slotted cheese head screws. Intended for machining all ferrous and non-ferrous metals as well as soft and hard plastics. Designed to pilot in the "medium" clearance hole.

Design characteristics

Flute form: right hand helix
Helix angle: normal

Counterbores for detachable pilots, with taper shank, DIN 375 Catalogue: page 171

Type	Material	List-No.	Surface
	HSS	57004	P0



d • Packing unit
mm • pcs.
All diam. • l

Applications

For producing counterbores for socket head cap screws and slotted cheese head screws. Intended for machining all ferrous and non-ferrous metals as well as soft and hard plastics. To be used in combination with detachable pilots according to DIN 1868.

Design characteristics

Flute form: right hand helix
Helix angle: normal

Detachable Pilots for Counterbores, DIN 1868 Catalogue: page 172

Type	Material	List-No.	Surface
	HSS	57310 57320 57330	P0 P0 P0



d • Packing unit
mm • pcs.
All diam. • l

Applications

To be used in combination with counterbores according to DIN 375. Designed to pilot in the "medium" or "fine" clearance hole or in the core hole.

Design characteristics

Countersinks 60° with straight shank, DIN 334 Catalogue: page 173

Type	Material	List-No.	Surface
Form C	HSS	78011	P0



d • Packing unit
mm • pcs.
All diam. • l

Applications

Universal tool for deburring and countersinking. Advantages are chatter-free working and easy regrinding at the cutting face.

Design characteristics

Flute form: straight
Number of flutes: 3

Countersinks 90° with straight shank, DIN 335 Catalogue: page 174

Type	Material	List-No.	Surface
Form C	HSS	78010 78015	P0 P5



d • Packing unit
mm • pcs.
All diam. • l

Applications

Universal tool for deburring and countersinking. Used to produce countersinks for screws and a chamfer for tapping. Advantages are chatter-free working and easy regrinding at the cutting face. TiN coating provides longer tool life or increased cutting speeds.

Design characteristics

Flute form: straight
Number of flutes: 3

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Countersinks / Counterbores

Countersinks 90° with taper shank,
DIN 335 Catalogue: page 175

Type	Material	List-No.	Surface
Form D	HSS	78020	P0



d • Packing unit
mm • pcs.
All diam. • 1

Applications

Universal tool for deburring and countersinking. Used to produce countersinks for screws and a chamfer for tapping. Advantages are chatter-free working and easy regrinding at the cutting face.

Design characteristics

Flute form: straight
Number of flutes: 3

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Conical Sheet Drills 20° with straight shank,
factory standard Catalogue: page 176

Type	Material	List-No.	Surface
	HSS	06200	P0



d • Packing unit
mm • pcs.
All diam. • 1

Applications

Universal tool, mainly designed for machining thin sheets. Also used on non-ferrous metals and plastics. Special relief grinding provides chatter-free working.

Design characteristics

Point angle: 118°
Countersink angle: 20°
Flute form: straight
Number of flutes: 2

5

Step Drills with straight shank,
factory standard Catalogue: page 177

Type	Material	List-No.	Surface
	HSS	06300	P0



d • Packing unit
mm • pcs.
All diam. • 1

Applications

Universal tool, mainly designed for machining thin sheets. Also used to drill non-ferrous metals and plastics. Special relief grinding provides chatter-free working. Cylindrical steps provide accurate hole sizes. Subsequent operations deburr each hole.

Design characteristics

Point angle: 118°
Increase: steps of 1 mm or 2 mm
Flute form: straight
Number of flutes: 2

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Core Drills 3 fluted, with taper shank,
DIN 343 Catalogue: page 178 - 180

Type	Material	List-No.	Surface
3 Flutes	HSS	17000	P1



d • Packing unit
mm • pcs.
All diam. • 1

Applications

Robust three fluted drill for enlarging holes that have previously been drilled, cored or punched. Use of Core Drills will ensure corrections of misalignment and concentricity of the preformed hole. The improved surface quality of the enlarged hole guarantees a perfect finishing through a reamer.

Design characteristics

Point grinding: cone relief point
Point angle: 120°
Helix angle: normal
Web thickness: normal
Flute form: normal

8

Special Purpose Tools

Countersinks, Counterbores, Core Drills

- Intermediate sizes
- Different lengths and number of flutes
- Step Core Drills and Subland Core Drills
- All tools are available with straight shank, reinforced straight shank and taper shank
- Different materials and coatings

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P0-Bright • P1-Steam tempered • P2-Bronze • P3-Moc • P4-Nitrided lands • P5-TiN • P6-TiCN • P7-HY • P8-TiAlN • P9-TiB

Counterbores with fixed pilot and straight shank, HSS, DIN 373

Product Group						25				
Type						fine, medium, tapping hole				
List-No.						57010 57020 57030				
Material						HSS				
Surface						P0				
Metric Thread	d2 mm	d1 mm	l1 mm	l2 mm	d3 mm	Availability				
DIN 373, for clearance hole "fine"										
M 3	6,00	3,2	71	14	5,0	•				
M 3,5	6,50	3,7	71	14	5,0	•				
M 4	8,00	4,3	71	14	5,0	•				
M 5	10,00	5,3	80	18	8,0	•				
M 6	11,00	6,4	80	18	8,0	•				
M 8	15,00	8,4	100	22	12,5	•				
M 10	18,00	10,5	100	22	12,5	•				
M 12	20,00	13,0	100	22	12,5	•				
DIN 373, for clearance hole "medium"										
M 3	6,00	3,4	71	14	5,0	•				
M 3,5	6,50	3,9	71	14	5,0	•				
M 4	8,00	4,5	71	14	5,0	•				
M 5	10,00	5,5	80	18	8,0	•				
M 6	11,00	6,6	80	18	8,0	•				
M 8	15,00	9,0	100	22	12,5	•				
M 10	18,00	11,0	100	22	12,5	•				
M 12	20,00	14,0	100	22	12,5	•				
DIN 373, for tapping hole										
M 3	6,00	2,5	71	14	5,0	•				
M 3,5	6,50	2,9	71	14	5,0	•				
M 4	8,00	3,3	71	14	5,0	•				
M 5	10,00	4,2	80	18	8,0	•				
M 6	11,00	5,0	80	18	8,0	•				
M 8	15,00	6,8	100	22	12,5	•				
M 10	18,00	8,5	100	22	12,5	•				
M 12	20,00	10,2	100	22	12,5	•				

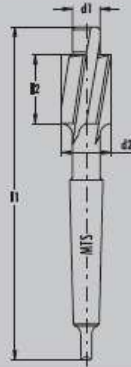
P0-Bright • P1-Steam tempered • P2-Bronze • P3-Moc • P4-Nitrided lands • P5-TiN • P6-TiCN • P7-HY • P8-TiAlN • P9-TiB

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Counterbores with fixed pilot and taper shank, HSS, Factory Standard

Product Group	25
Type	medium
List-No.	57008
Material	HSS
Surface	P0

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Metric Thread	d2 mm	d1 mm	l1 mm	l2 mm	MTS	Availability
DIN 373, for clearance hole "medium"						
M 10	18,00	11,0	150	25	2	•
M 12	20,00	13,5	150	25	2	•
M 14	24,00	15,5	160	30	2	•
M 16	26,00	17,5	190	35	3	•
M 18	30,00	20,0	190	35	3	•
M 20	33,00	22,0	190	35	3	•
M 22	36,00	24,0	205	40	3	•
M 24	40,00	26,0	205	40	3	•
M 27	43,00	30,0	240	46	4	•
M 30	48,00	33,0	240	46	4	•

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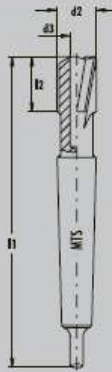

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P0-Bright • P1-Steam tempered • P2-Bronze • P3-Moc • P4-Nitrided lands • P5-TiN • P6-TiCN • P7-HY • P8-TiAlN • P9-TiB

Counterbores with taper shank, HSS, DIN 375, for use with detachable pilot according to DIN 1868

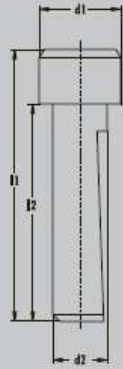
Product Group						25			
List-No.						57004			
Material						HSS			
Surface						P0			
									
Metric Thread	d2 mm	d3 mm	l1 mm	l2 mm	MTS	Availability			
M 8	15,00	4,0	132	22	2	•			
M 10	18,00	5,0	140	25	2	•			
M 12	20,00	5,0	140	25	2	•			
M 14	24,00	6,0	150	30	2	•			
M 16	26,00	8,0	180	35	3	•			
M 18	30,00	8,0	180	35	3	•			
M 20	33,00	10,0	190	40	3	•			
M 22	36,00	10,0	190	40	3	•			
M 24	40,00	10,0	190	40	3	•			
M 27	43,00	12,0	236	50	4	•			
M 30	48,00	12,0	236	50	4	•			
M 33	53,00	16,0	250	63	4	•			
M 36	57,00	16,0	250	63	4	•			

P0-Bright • P1-Steam tempered • P2-Bronze • P3-Moc • P4-Nitrided lands • P5-TiN • P6-TiCN • P7-HY • P8-TiAlN • P9-TiB

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Detachable pilot, DIN 1868 for counterbores according to DIN 375

Product Group	25
Type	fine, medium, tapping hole
List-No.	57310 57320 57330
Material	HSS
Surface	P0



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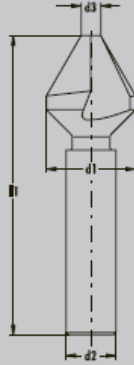
Metric Thread	d1 mm	d2 mm	l1 mm	l2 mm	Availability
for clearance hole "fine"					
M 8	8,40	4,0	27	20	•
M 10	10,50	5,0	31	23	•
M 12	13,00	5,0	33	23	•
M 14	15,00	6,0	38	28	•
M 16	17,00	8,0	44	32	•
M 18	19,00	8,0	44	32	•
M 20	21,00	10,0	55	40	•
M 22	23,00	10,0	55	40	•
M 24	25,00	10,0	55	40	•
for clearance hole "medium"					
M 8	9,00	4,0	27	20	•
M 10	11,00	5,0	31	23	•
M 12	13,50	5,0	33	23	•
M 14	15,50	6,0	38	28	•
M 16	17,50	8,0	44	32	•
M 18	20,00	8,0	44	32	•
M 20	22,00	10,0	55	40	•
M 22	24,00	10,0	55	40	•
M 24	26,00	10,0	58	40	•
M 27	30,00	12,0	68	50	•
M 30	33,00	12,0	72	50	•
for tapping hole					
M 8	6,80	4,0	26	20	•
M 10	8,50	5,0	30	23	•
M 12	10,20	5,0	31	23	•
M 14	12,00	6,0	36	28	•
M 16	14,00	8,0	42	32	•
M 18	15,50	8,0	42	32	•
M 20	17,50	10,0	52	40	•
M 22	19,50	10,0	52	40	•
M 24	21,00	10,0	55	40	•
M 27	24,00	12,0	65	50	•
M 30	26,50	12,0	68	50	•

P0-Bright • P1-Steam tempered • P2-Bronze • P3-Moc • P4-Nitrided lands • P5-TiN • P6-TiCN • P7-HY • P8-TiAlN • P9-TiB

12

Countersinks 60° (three flutes) with straight shank, HSS, DIN 334

Product Group	25
Type	60° Form C
List-No.	78011
Material	HSS
Surface	P0

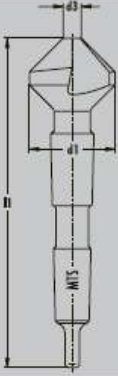



d1 mm	d3 mm	l1 mm	d2 mm	Availability
6,30	1,6	45	5,0	•
8,00	2,0	50	6,0	•
12,50	3,2	56	8,0	•
16,00	4,0	63	10,0	•
20,00	5,0	67	10,0	•
25,00	6,3	71	10,0	•

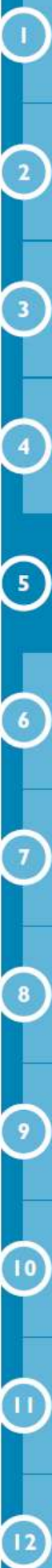
P0-Bright • P1-Steam tempered • P2-Bronze • P3-Moc • P4-Nitrided lands • P5-TiN • P6-TiCN • P7-HY • P8-TiAlN • P9-TiB



Countersinks 90° (three flutes) with taper shank, HSS, DIN 335

Product Group				25
Type				90° Form D
List-No.				78020
Material				HSS
Surface				P0
				
d1	d3	l1	MTS	Availability
15,00	3,2	85	1	•
16,50	3,2	85	1	•
19,00	3,5	100	2	•
20,50	3,5	100	2	•
23,00	3,8	106	2	•
25,00	3,8	106	2	•
26,00	3,8	106	2	•
28,00	4,0	112	2	•
30,00	4,2	112	2	•
31,00	4,2	112	2	•
34,00	4,5	118	2	•
37,00	4,8	118	2	•
40,00	10,0	140	3	•
50,00	14,0	150	3	•
63,00	16,0	180	4	•
80,00	22,0	190	4	•
100,00	28,0	200	4	•

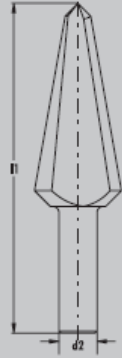
P0-Bright • P1-Steam tempered • P2-Bronze • P3-Moc • P4-Nitrided lands • P5-TiN • P6-TiCN • P7-HY • P8-TiAlN • P9-TiB



1

Conical Sheet Drill with straight shank, HSS

Product Group	25
Type	
List-No.	06200
Material	HSS
Surface	P0



Size	Range mm	l1 mm	d2 mm	Availability
1	3,0 - 14,0	60	6,0	•
2	8,0 - 20,0	62	8,0	•
3	16,0 - 30,5	72	10,0	•
4	26,0 - 40,0	83	12,0	•
5	36,0 - 50,0	87	13,0	•
6	46,0 - 60,0	96	13,0	•
7	4,0 - 30,5	100	10,0	•
8	4,0 - 22,5	80	8,0	•
9	4,0 - 25,4	88	10,0	•

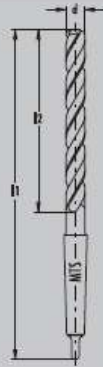
P0-Bright • P1-Steam tempered • P2-Bronze • P3-Moc • P4-Nitrided • P5-TiN • P6-TiCN • P7-HY • P8-TiAlN • P9-TiB

12

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3-Fluted Core Drills with taper shank, DIN 343

Product Range	25
Type	Std. Helix
List-No.	17000
Material	HSS
Cutting direction	right
Web thinning	
Surface	PI



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d	d	l1	l2	MTS	Availability
mm	ins	mm	mm		
6,350	1/4	144	63	1	•
6,747	17/64	150	69	1	•
7,144	9/32	150	69	1	•
7,80		156	75	1	•
7,938	5/16	156	75	1	•
8,00		156	75	1	•
8,731	11/32	162	81	1	•
8,80		162	81	1	•
9,00		162	81	1	•
9,128	23/64	162	81	1	•
9,525	3/8	168	87	1	•
9,80		168	87	1	•
10,00		168	87	1	•
10,319	13/32	168	87	1	•
10,75		175	94	1	•
11,00		175	94	1	•
11,113	7/16	175	94	1	•
11,75		175	94	1	•
11,906	15/32	182	101	1	•
12,00		182	101	1	•
12,303	31/64	182	101	1	•
12,700	1/2	182	101	1	•
12,75		182	101	1	•
13,00		182	101	1	•
13,494	17/32	189	108	1	•
13,75		189	108	1	•
14,00		189	108	1	•
14,288	9/16	212	114	2	•
14,75		212	114	2	•
15,00		212	114	2	•
15,081	19/32	218	120	2	•
15,75		218	120	2	•
15,875	5/8	218	120	2	•
16,00		218	120	2	•
16,272	41/64	223	125	2	•
16,669	21/32	223	125	2	•
16,75		223	125	2	•
17,00		223	125	2	•

P0-Bright • P1-Steam tempered • P2-Bronze • P3-Moc • P4-Nitrided lands • P5-TiN • P6-TiCN • P7-HY • P8-TiAlN • P9-TiB

12

Product Range						25			
Type						Std. Helix			
List-No.						17000			
Material						HSS			
Cutting direction						right			
Web thinning									
Surface						PI			
d	d	I1	I2	MTS		Availability			
mm	ins	mm	mm						
17,463	11/16	228	130	2		•			
17,75		228	130	2		•			
18,00		228	130	2		•			
18,256	23/32	233	135	2		•			
18,70		233	135	2		•			
19,00		233	135	2		•			
19,050	3/4	238	140	2		•			
19,447	49/64	238	140	2		•			
19,70		238	140	2		•			
19,844	25/32	238	140	2		•			
20,00		238	140	2		•			
20,638	13/16	243	145	2		•			
20,70		243	145	2		•			
21,00		243	145	2		•			
21,431	27/32	248	150	2		•			
21,70		248	150	2		•			
22,00		248	150	2		•			
22,225	7/8	248	150	2		•			
22,70		253	155	2		•			
23,00		253	155	2		•			
23,019	29/32	253	155	2		•			
23,813	15/16	281	160	3		•			
24,00		281	160	3		•			
24,606	31/32	281	160	3		•			
24,70		281	160	3		•			
25,00		281	160	3		•			
25,400	1	286	165	3		•			
25,70		286	165	3		•			
26,00		286	165	3		•			
26,70		291	170	3		•			
26,988	1 1/16	291	170	3		•			
27,00		291	170	3		•			
27,70		291	170	3		•			
28,00		291	170	3		•			
28,575	1 1/8	296	175	3		•			
29,00		296	175	3		•			
29,369	1 5/32	296	175	3		•			
29,70		296	175	3		•			
30,00		296	175	3		•			
30,163	1 3/16	301	180	3		•			
30,60		301	180	3		•			
31,00		301	180	3		•			
31,60		306	185	3		•			
31,750	1 1/4	306	185	3		•			
32,00		334	185	4		•			
32,544	1 9/32	334	185	4		•			
32,60		334	185	4		•			
33,00		334	185	4		•			
33,338	1 5/16	334	185	4		•			
34,00		339	190	4		•			
34,925	1 3/8	339	190	4		•			
35,00		339	190	4		•			

P0-Bright • P1-Steam tempered • P2-Bronze • P3-Moc • P4-Nitrided lands • P5-TiN • P6-TiCN • P7-HY • P8-TiAlN • P9-TiB



1

3-Fluted Core Drills with taper shank, DIN 343

Product Range					25
Type					Std. Helix
List-No.					17000
Material					HSS
Cutting direction					right
Web thinning					
Surface					P1
d	d	l1	l2	MTS	Availability
mm	ins	mm	mm		
35,60		344	195	4	•
36,00		344	195	4	•
36,513	1 7/16	344	195	4	•
36,60		344	195	4	•
37,00		344	195	4	•
37,60		349	200	4	•
38,00		349	200	4	•
38,100	1 1/2	349	200	4	•
38,60		349	200	4	•
39,00		349	200	4	•
40,00		349	200	4	•

5

6

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12

P0-Bright • P1-Steam tempered • P2-Bronze • P3-Moc • P4-Nitrided lands • P5-TiN • P6-TiCN • P7-HY • P8-TiAlN • P9-TiB