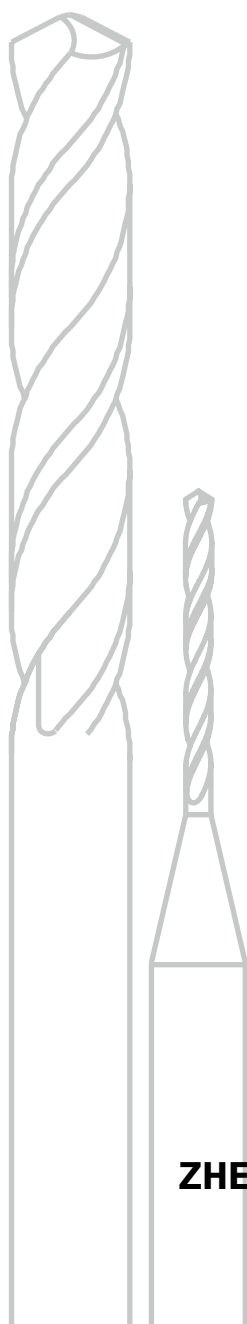




浙江鸣鸿精密技术有限公司
Zhe jiang MingHong Precision Co. Ltd

STEP DRILLS CATELOGE

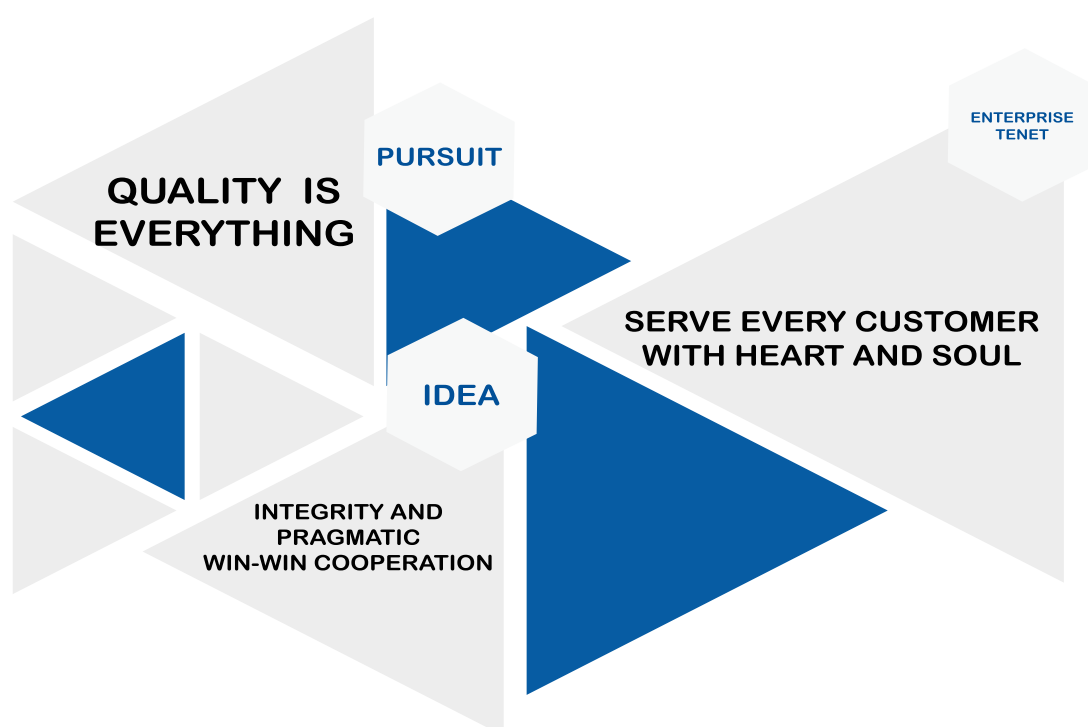
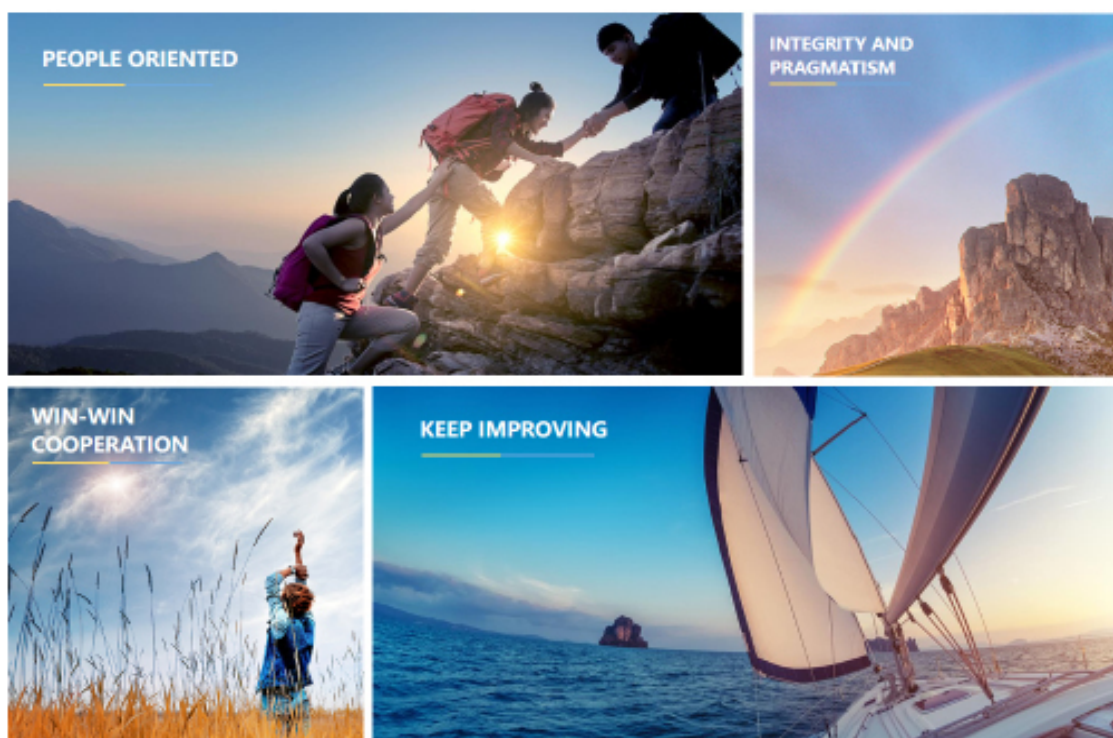


ZHEJIANG MINGHONG PRECISION TECHNOLOGY CO., LTD



浙江鸣鸿精密技术有限公司
Zhe jiang MingHong Precision Co. Ltd

CORE VALUES



ABOUT MINGHONG

Zhejiang Minghong Precision Technology Co., Ltd. is a high-tech enterprise integrating independent research and development and production of high-precision cutting tools, headquartered in Linping District, Hangzhou City, Zhejiang Province, China.

The company is committed to the advancement and development of industry technology, and has more than 10 years of experience in the production of high-precision cutting tools. In 2022, the company officially launched the factory direct sales business to provide global customers with overall solutions for precision cutting tools.

The company's products are widely used in 3C consumer electronics, molds, graphite, automobiles, medical equipment and other processing and manufacturing fields. Customers are located in China, South Korea, Japan, Russia and other countries and regions, and strive to build a dedicated, professional and dedicated modern enterprise.

All the staff of the company adhere to the tenet of strict requirements and innovation, pay attention to every commitment, focus on every detail, keep improving, produce excellent products, and win unanimous praise from many customers.



ISO9001 Certification

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ABOUT MINGHONG

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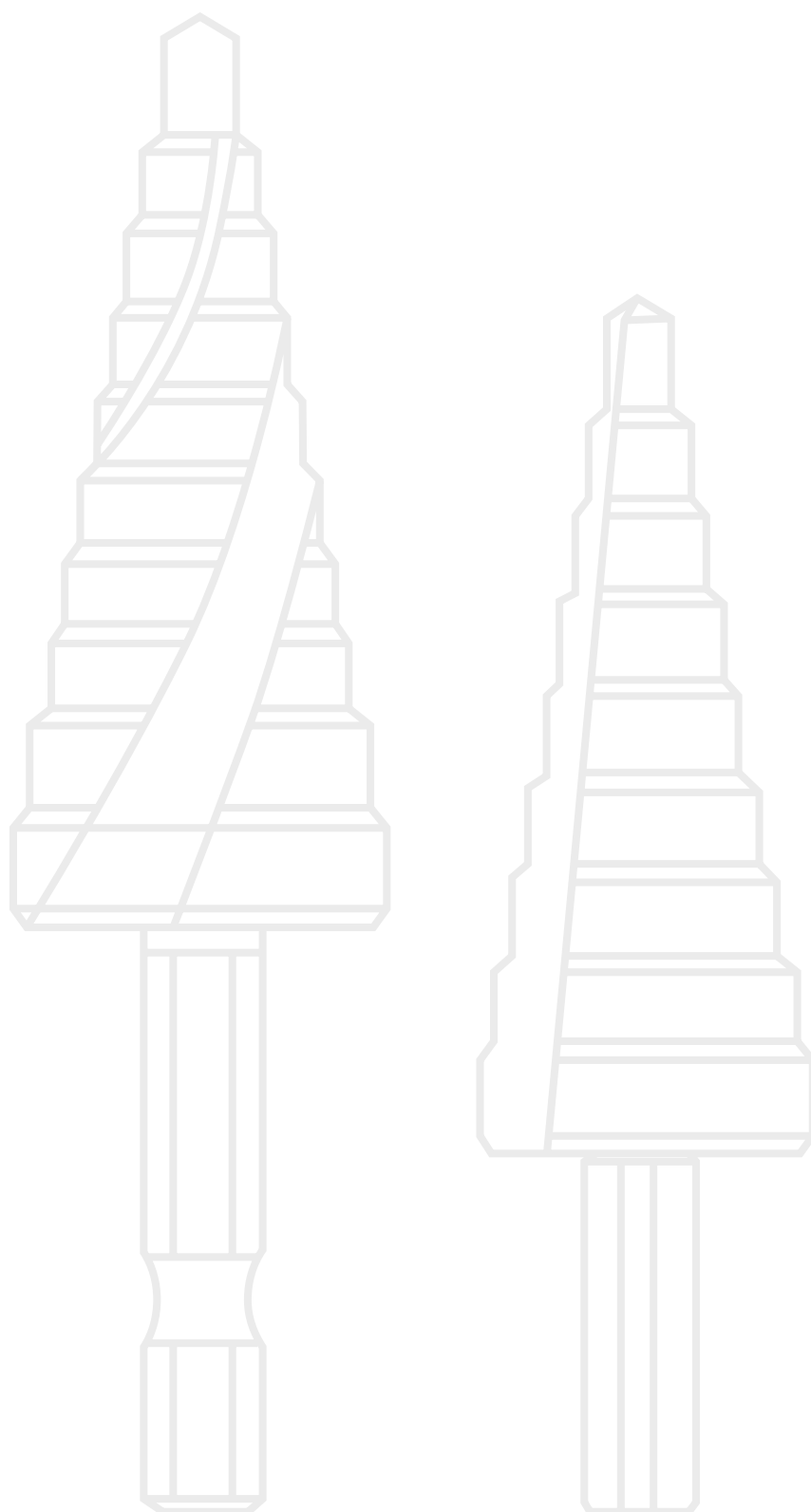
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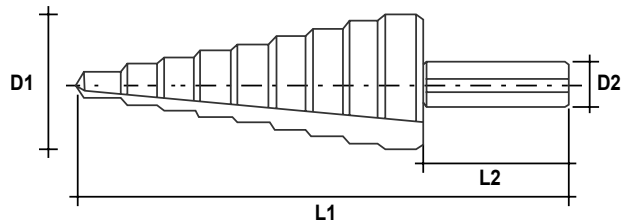
P14



Straight Flute Step Drills (Metric)



Point thinning according to DIN 1412 C
Thinning point in cutting edge
Right hand cutting
Spiral grooved
118° pointed angle
90° stepped angle
Absolute smooth operation
Surface without discolouration
High performance steel
The cone simplifies the retracting through bored sheet metals



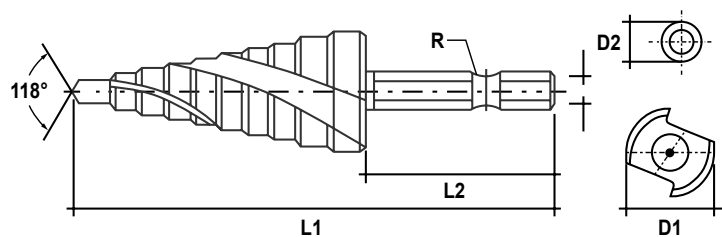
Size	Number of Steps	Total Length	Shank Length	Cutting Dia.	Shank Dia.
		L1(mm)	L2(mm)	D1 (mm)	D2 (mm)
4-12	5	62	22	12	6
4-12	9	68	22	12	6
4-20	9	71	22	20	8
4-22	10	73	22	22	8
4-30	13	95	22	30	10
4-32	14	102	22	32	10
4-39	13	77	25	39	10
5-35	13	73	25	35	13
4-40	16	103	25	40	12
10-45	9	98	25	45	13

Custom-tailor would be available against customers' requirements.

Spiral Flute Step Drills (Metric)



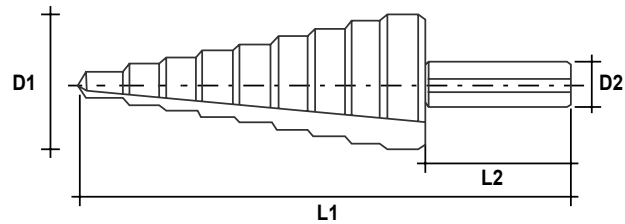
Point thinning according to DIN 1412 C
Thinning point in cutting edge
Right hand cutting
Spiral grooved
118° pointed angle
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Surface without discolouration
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Size	Number of Steps	Total Length	Shank Length	Cutting Dia.	Shank Dia.
		L1(mm)	L2(mm)	D1 (mm)	D2 (mm)
4-12	5	62	22	12	6
4-12	9	71	22	12	6
4-20	9	71	22	20	8
4-22	10	85	22	22	8
6-30	13	93	22	30	10
4-32	14	99	23	32	10
4-39	13	108	25	39	10
5-35	13	73	25	35	13
10-45	9	98	25	45	13
6-60	12	113	25	60	13

Custom-tailor would be available against customers' requirements.

Straight Flute Step Drills (Inch)

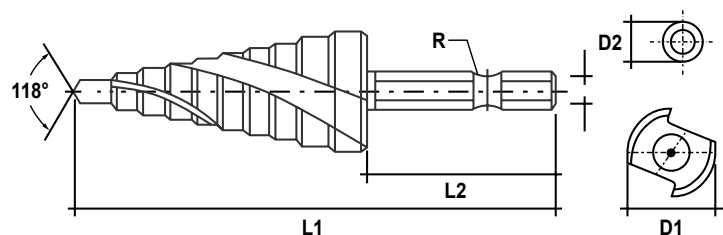


Point thinning according to DIN 1412 C
Thinning point in cutting edge
Right hand cutting
Spiral grooved
118° pointed angle
90° stepped angle
Absolute smooth operation
Surface without discolouration
High performance steel
The cone simplifies the retracting through
bored sheet metals

Size	Number of Steps	Total Length	Shank Length	Cutting Dia.	Shank Dia.
		L1(mm)	L2(mm)	D1	D2
3/16-1/2	6	56	22	3/16-1/2	1/4
1/8-1/2	13	72	22	1/8-1/2	1/4
1/4-3/4	9	71	23	1/4-3/4	3/8
3/16-7/8	12	76	22	3/16-7/8	3/8
1/4-1-3/8	10	75	22	1/4-1-3/8	3/8
7/16-1-1/8	12	71	22	7/16-1-1/8	3/8
9/16-1"	8	77	22	9/16-1"	3/8
13/16-1-3/8	10	76	22	13/16-1-3/8	3/8

Custom-tailor would be available against customers' requirements.

Spiral Flute Step Drills (Inch)

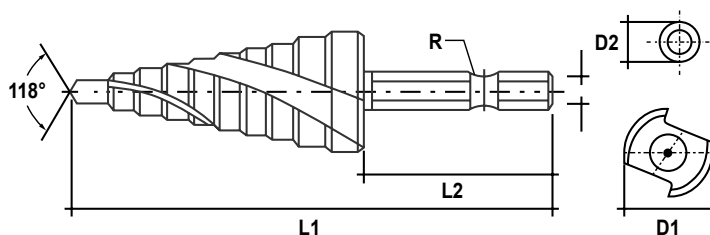


Point thinning according to DIN 1412 C
Thinning point in cutting edge
Right hand cutting
Spiral grooved
118° pointed angle
90° stepped angle
Absolute smooth operation
Surface without discolouration
High performance steel
The cone simplifies the retracting through
bored sheet metals

Size	Number of Steps	Total Length	Shank Length	Cutting Dia.	Shank Dia.
		L1(mm)	L2(mm)	D1	D2
3/16-1/2	6	67	22	3/16-1/2	1/4
1/8-1/2	13	74	22	1/8-1/2	1/4
1/4-3/4	9	71	22	1/4-3/4	3/8
3/16-7/8	12	76	22	3/16-7/8	3/8
1/4-1-3/8	10	75	22	1/4-1-3/8	3/8

Custom-tailor would be available against customers' requirements.

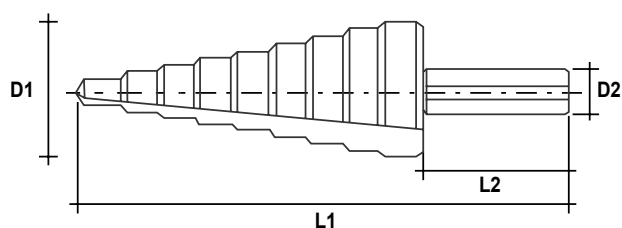
Japanese Step Drills



Size	Number of Steps	Total Length	Shank Length	Cutting Dia.	Shank Dia.
		L1(mm)	L2(mm)	D1 (mm)	D2
3-12	9	81	32	12	1/4
4-12	9	81	32	12	1/4
6-18	10	71	32	18	1/4
4-20	9	82	32	20	1/4
4-22	10	84	32	22	1/4
6-24	13	86	32	24	1/4
3-13	11	70	30	13	1/4
6-25	7	82	30	25	1/4
6-35	13	102	30	35	1/4

Custom-tailor would be available against customers' requirements.

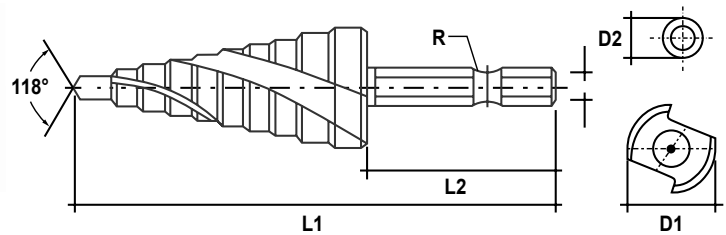
Square Shank Step Drills



Size	Number of Steps	Total Length	Shank Length	Cutting Dia.	Shank Dia.
		L1(mm)	L2(mm)	D1 (mm)	D2 (mm)
3-13	11	86	39	13	10
6-25	7	94	39	25	10
6-35	13	116	39	35	10

Custom-tailor would be available against customers' requirements.

Three Flute Step Drills

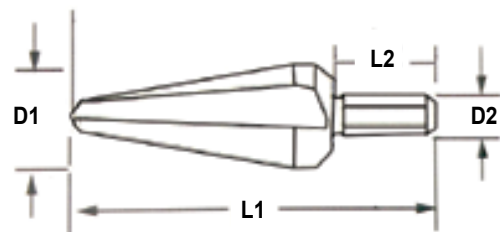


Point thinning according to DIN 1412 C
Thinning point in cutting edge
Right hand cutting
Spiral grooved
118° pointed angle
90° stepped angle
Absolute smooth operation
Surface without discolouration
High performance steel
The cone simplifies the retracting through
bored sheet metals

Size	Number of Steps	Total Length	Shank Length	Cutting Dia.	Shank Dia.
		L1(mm)	L2(mm)	D1(mm)	D2 (mm)
4--12	5	62	22	12	6
4--12	9	68	22	12	6
4--20	9	71	22	20	8
4--22	10	73	22	22	8
4-30	13	95	22	30	10
4-32	14	102	22	32	10
4-39	13	97	25	39	10
5-35	13	73	25	35	13
4-40	16	103	25	40	12
10-45	9	98	25	45	13

Custom-tailor would be available against customers' requirements.

Conical Drills

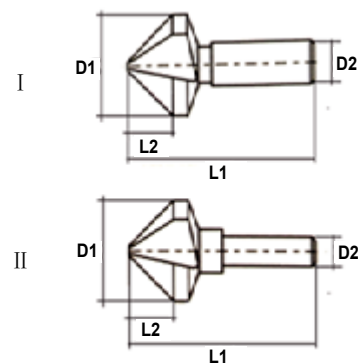


Point thinning according to DIN 1412C
Thinning point in cutting edge
Right hand cutting
118° pointed angle
20-30 cone angle
Absolute smooth operation
High cutting
Surface without discolouration
High performance steel

Size	Total Length	Shank Length	Cutting Dia.	ShankDia.
	L1(mm)	L2(mm)	D1(mm)	D2(mm)
3-14	58	20	22	14
5-20	71	22	20	8
16-30.5	76	22	30.5	10
4-30	103	22	30	10
20-50	86	25	50	10

Custom-tailor would be available against customers' requirements.

Countersink 倒角刀



Flute Countersinks

Description: used for parts of 60°, 90° hole chamfer or taper cutting machining.

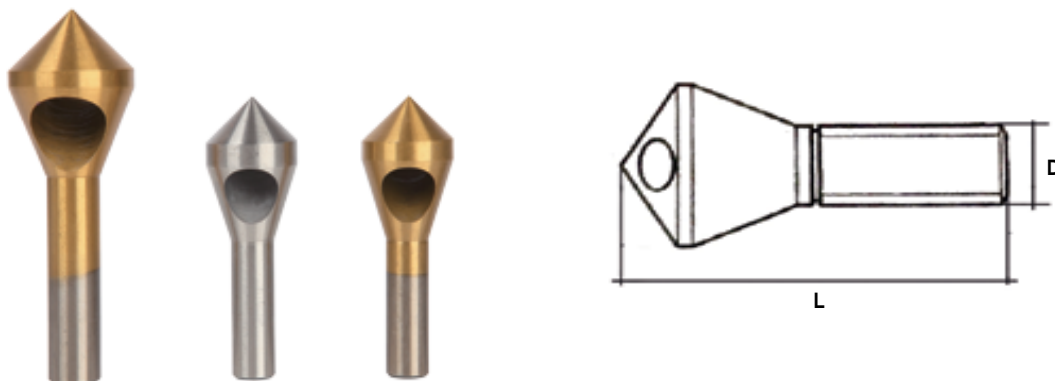
Features: provide the lead in for a second machining operation, complete the cone of the processing times for the small amount

Technical parameters

Size	Total Length	Shank Length	Cutting Dia.	Shank Dia.	Type
	L1(mm)	L2(mm)	D1 (mm)	D2 (mm)	
6.3×60°	45	6.3	6.3	5	I
8×60°	50	8.0	8	6	
10.4×60°	50	8.0	8	6	
12.5×60°	56	11.2	12.5	8	
16×60°	63	14	16	10	
20×60°	67	17	20	10	
25×60°	71	21.5	25	10	
30×60°	73	26	30	12	
31×60°	73	27	31	12	
35×60°	82	31	35	12	
40×60°	92	36	40	12	II
50×60°	100	45	50	12	
60×60°	120	54	60	12	I
4.3×60°	40	3.5	4.3	4	
5×90°	40	4	5	4	
5.3×90°	40	4	5.3	4	
5.8×90°	45	4.5	5.8	5	
6×90°	45	4.5	6	5	
6.3×90°	45	5.0	6.3	5	
7×90°	50	5.0	7	6	
7.3×90°	50	5.0	7.3	6	
8×90°	50	5.6	8	6	
8.3×90°	50	5.6	8.3	6	
9.4×90°	50	6.7	9.4	6	
10×90°	50	7.1	10.4	6	
10.4×90°	50	7.1	10.4	6	
11.5×90°	56	7.5	11.5	8	
12.4×90°	56	8	12.4	8	
13.4×90°	56	8.5	13.4	8	
15×90°	60	9	15	10	
16.5×90°	60	10	16.5	10	
19×90°	63	11.2	19	10	
20.5×90°	63	12.5	20.5	10	
23×90°	67	12	25	10	
25×90°	67	15	25	10	
26×90°	67	15	26	10	
28×90°	71	16	28	12	
30×90°	71	18	30	12	
31×90°	71	18	31	12	
35×90°	82	21	35	12	II
40×90°	92	23	40	12	
50×90°	100	28.5	50	12	
60×90°	120	33.8	60	12	

Custom-tailor would be available against customers' requirements.

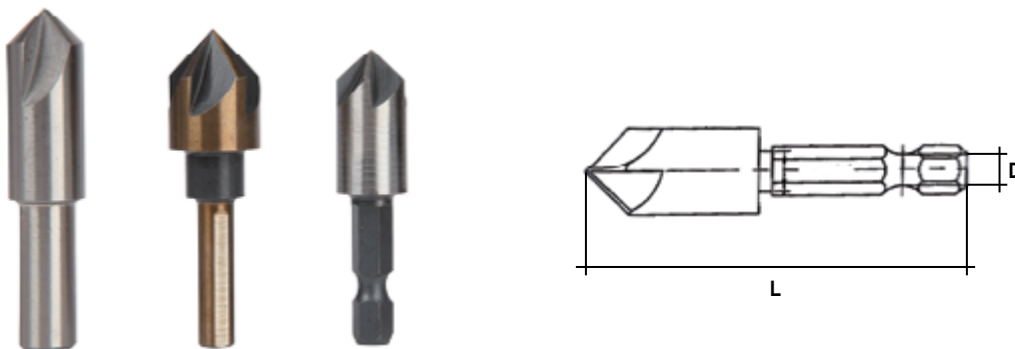
Countersink 斜孔倒角器



Size	Total Length	Shank Dia.
	L(mm)	D(mm)
1-4	40	4
2-5	45	6
5-10	48	8
10-15	65	10
15-20	85	12
20-25	102	15
25-30	115	15
30-35	127	15

Custom-tailor would be available against customers' requirements.

Countersink 铤钻



Size	Total Length	Shank Dia.
	L	D
3/16"	3/16"	1-1/2"
1/4"	1/4"	1-1/2"
5/16"	1/4"	1-5/8"
3/8"	1/4"	1-3/4"
1/2"	1/4"	2"
5/8"	3/8"	2-1/4"
3/4"	1/2"	2-5/8"
7/8"	1/2"	2-3/4"
1"	1/2"	2-3/4"
1-1/4"	3/4"	3"
1-1/2"	3/4"	3-1/4"
2"	3/4"	3-1/2"

Custom-tailor would be available against customers' requirements.

Set Series

Type	Graphical Representation	Order NO	Contents
3 Pieces Step Drills With Wooden Box Set		YY--01001	4-12 4,6,8,10,12 4-20 4,6,8,10,12,14,16,18,20 4-32 4,6,8,10,12,14,16,18,20,22,24,26,28,30,32
4 Pieces Step Drills With Wooden Box Set		YY--01002	4-12 4,6,8,10,12 4-20 4,6,8,10,12,14,16,18,20 4-32 4,6,8,10,12,14,16,18,20,22,24,26,28,30,32 4-39 4,6,9,12,15,18,21,24,27,30,33,36,39
4 Pieces Step Drills With Wooden Box Set		YY--01003	3-12 3,5,7,9,12 4-12 4,5,6,7,8,9,10,11,12 4-20 4,6,8,10,12,14,16,18,20 4-42 4,6,9,12,15,18,21,24,27,30,33,36,39,42
3 Pieces Step Drills With Wood Box Set		YY--01004	4-12 4,6,8,10,12 4-12 4,5,6,7,8,9,10,11,12 4-20 4,6,8,10,12,14,16,18,20
6-60 Step Drill With Wood Box Set		YY--01005	6-60 6,10,15,20,25,30,35,40,45,50,55,60

Set Series

Type	Graphical Representation	Order NO	Contents
3 Piece Step Drills With Bag Set		YY--01006	4-12 4,6,8,10,12 4-20 4,6,8,10,12,14,16,18,20 4-32 4,6,8,10,12,14,16,18,20,22,24,26,28,30,32
3 Piece Step Drills With Bag Set		YY--01007	1/4 shank 3/16-1/2 3/16 ,1/4 , 5/16 , 3/8 ,7/16 ,1/2 1/4-3/4 1/4, 5/16, 3/8, 7/16, 1/2, 9/16,5/8, 11/16,3/4 1/8-1/2 1/8, 5/32, 3/16, 7/32, 1/4, 9/32, 5/16,11/32, 3/8, 13/32, 7/16, 15/32, 1/2
3 Piece Step Drills With Bag And Pvc Set		YY--01008	1/4 shank 3/16-1/2 3/16 ,1/4 , 5/16 , 3/8 ,7/16 ,1/2 1/4-3/4 1/4, 5/16, 3/8, 7/16, 1/2, 9/16,5/8, 11/16,3/4 1/8-1/2 1/8, 5/32, 3/16, 7/32, 1/4, 9/32, 5/16,11/32, 3/8, 13/32, 7/16, 15/32, 1/2
3 Piece Step Drills With Pvc Set		YY--01010	4-12 4,6,8,10,12 4-20 4,6,8,10,12,14,16,18,20 4-32 4,6,8,10,12,14,16,18,20,22,24,26,28,30,32
1 Piece Step Drills With Pvc		YY--01011+(size)	—

Set Series

Type	Graphical Representation	Order NO	Contents
1 Piece Step Drills With Pvc		YY--01012+(size)	3-13 3,4,5,6,7,8,9,10,11,12,13 6-25 6,8,10,12,14,16,18,20,22,25 6-35 6,8,10,12,16,18,20,22,25,28,30,32,35
2 Piece Step Drills With Pvc Set		YY--01013	3/16-7/8 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 13/16, 7/8 1/3- 1 3/8 1/4, 25/64, 35/64, 11/16, 13/16, 7/8, 1", 1-1/8, 1-7/32, 1-1/4, 1-3/8
3 Piece Step Drills With Iron Box Set		YY--01014	4-12 4,6,8,10,12 4-20 4,6,8,10,12,14,16,18,20 4-32 4,6,8,10,12,14,16,18,20,22,24,26,28,30,32
3 Piece Step Drills With Aluminum Box Set		YY--01015	4-12 4,6,8,10,12 4-20 4,6,8,10,12,14,16,18,20 4-32 4,6,8,10,12,14,16,18,20,22,24,26,28,30,32
3 Piece Step Drills With Aluminum Box And Pvc Set		YY--01016	4-12 4,6,8,10,12 4-20 4,6,8,10,12,14,16,18,20 4-32 4,6,8,10,12,14,16,18,20,22,24,26,28,30,32

Set Series

Type	Graphical Representation	Order NO	Contents
6 Piece Step Drills With Aluminum Box Set		YY--01017	1/4 shank 3/16-1/2 1/8-1/2 3/16-1/2, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2 1/8-1/2 1/8, 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 3/8 shank 1/4-3/4 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4 3/16-7/8 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 13/16, 7/8 1/4-13/8 1/4, 25/64, 35/64, 11/16, 13/16, 7/8, 1", 1-1/8, 1-7/32, 1-1/4, 1-3/8
5 Piece Step Drills With Aluminum Box Set		YY--01018	1/4 shank 3/16-1/2 1/8-1/2 3/16-1/2, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2 1/8-1/2 1/8, 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 3/8 shank 1/4-3/4 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4 3/16-7/8 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 13/16, 7/8 1/4-13/8 1/4, 25/64, 35/64, 11/16, 13/16, 7/8, 1", 1-1/8, 1-7/32, 1-1/4, 1-3/8
5 Piece Step Drills With Aluminum Box Set		YY--01019	1/4 shank 4-12 (5 steps) 4,6,8,10,12 4-12(9 setps) 4,5,6,7,8,9,10,11,12 3/8 shank 6-18 6,8,10,12,14,16,18 4-22 4,6,8,10,12,14,16,18,20,22 6-35 6,8,10,13,16,19,21,23,26,29,31, 33,35
5 Piece Step Drills With Aluminum Box Set		YY--01020	1/4 shank 3/16-1/2 1/8-1/2 3/16-1/2, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2 1/8-1/2 1/8, 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 3/8 shank 1/4-3/4 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4 3/16-7/8 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 13/16, 7/8 1/4-13/8 1/4, 25/64, 35/64, 11/16, 13/16, 7/8, 1", 1-1/8, 1-7/32, 1-1/4, 1-3/8
9 Piece Step Drills With Aluminum Box Set		YY--01021	1/4 shank 3/16-1/2 1/8-1/2 3/8 shank 1/4-3/4 3/16-7/8 1/4-1 3/8 7/16-1-1/8 1/8-7/8 9/16-1 3/16-1-3/8

Set Series

Type	Graphical Representation	Order NO	Contents
3 Piece Step Drills With Rose Box Set		YY--01022	4-12 4,5,6,7,8,9,10,11,12 4-20 4,6,8,10,12,14,16,18,20 6-30 6,8,10,12,14,16,18,20
3 Piece Conical Drills With Iron Box Set		YY--01023	3-14 5-20 16-30.5
3 Piece Conical Drills With Aluminum Box Set		YY--01024	3-14 5-20 16-30.5
4 Piece Hss Multi Function Drill With Iron Box Set		YY--01025	1×HSS Step drill bit 4-12 1×HSS Tapered cone drill bit 5-20 1×HSS Drill saw bit 6.0 1×HSS Countersink bit 12.4
4 Piece Hss Multi Function Drill Set		YY--01026	1×HSS Step drill bit 4-12 1×HSS Tapered cone drill bit 5-20 1×HSS Drill saw bit 6.0 1×HSS Countersink bit 12.4

Set Series

Type	Graphical Representation	Order NO	Contents
6 Pieces Countersink 90 With Pvc Set		YY--01027	6.3 8.3 10.4 12.4 16.5 20.5
6 Pieces Countersink 90 With Iron Box Set		YY--01028	6.3 8.3 10.4 12.4 16.5 20.5
6 Pieces Countersink 90 With Rose Box Set		YY--01029	6.3 8.3 10.4 12.4 16.5 20.5
4 Pieces Countersink 90 With Iron Box Set		YY--01030	2-5 5-10 10-15 15-20
4 Pieces Countersink 90 With Rose Box Set		YY--01031	2-5 5-10 10-15 15-20

Set Series

Type	Graphical Representation	Order NO	Contents
5 Pieces Countersink 82 With Iron Box Set		YY--01032	1/4, 3/8, 1/2, 5/8, 3/4
8PC 118° Split-point Set		YY--01033	9/16 5/8, 11/16, 3/4, 13/16, 7/8, 15/16 1"
6PC Saw Drills		YY--01034	3mm, 4mm, 5mm, 6mm, 6.5mm, 8mm

Cutline

Materials

HSS 4241	HSS 434	HSS 6542/M2	HSS M35	HSS M42
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Colour

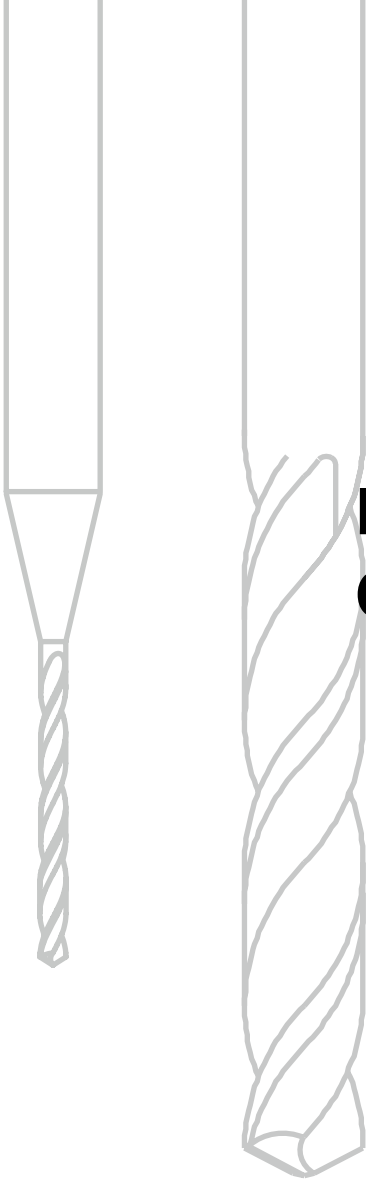
Yello	Brown With Co	Black	Tin	Bright	Black And Yello
					

Shank

1/4	7/8	Triangle Shank	Round Shank	Square Shank	1/4 (双 R)	1/4 (Japanese)
						



浙江鸣鸿精密技术有限公司
Zhejiang MingHong Precision Co. Ltd

Two line drawings of micro drills are positioned on the left side of the page. The drill on the left is shorter and has a standard double-flute design. The drill on the right is longer and features a more complex, multi-fluted design. Both are oriented vertically.

MICRO DRILLS CATELOGE

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