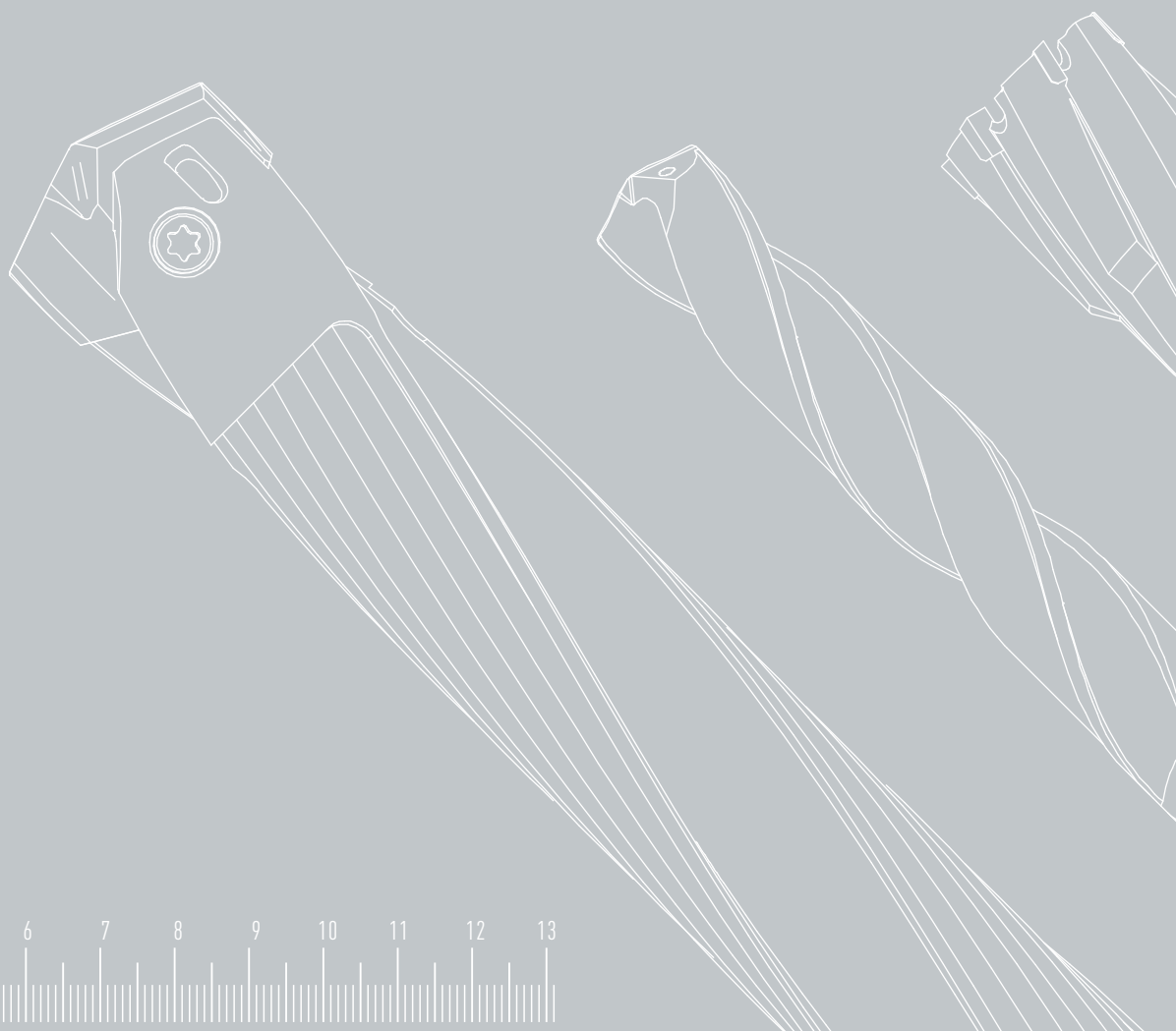


GC30  
2022/2023

STEP DRILLS

# CUTTING TOOLS

## 切削刀具 台阶钻



HIGH PERFORMANCE HOLE PROCESSING CUTTING TOOLS

**CHTOOLS® 创恒®**  
专 注 孔 加 工 技 术  
**浙江欣兴工具股份有限公司**

**30<sup>th</sup>**  
1992-2022



浙江欣兴工具股份有限公司创立于1992年,坐落在美丽的海盐南北湖畔,是一家专注于孔加工技术的高新技术企业。公司创办三十年来,秉承“利其器”理念,树立为制造业提供高效精密切削刀具的使命,始终如一的实施创新发展战略,深耕切削刀具技术,提升切削生产力。

三十年的积累,我们配备了国际领先的研发、检测装备,具备大批量专业化生产数控刀具的生产线,成为了研发、生产、销售为一体的高性能数控刀具制造商。三十年的精耕细作,公司拥有自主技术专利100余项,主导起草《钢板钻》、《内冷却可换刀片式铲钻》行业标准,获得了“国家制造业单项冠军示范企业”等荣誉,得到了来自80多个国家客户的紧密合作。

未来,我们秉承“创新发展,合作共赢”理念,贯彻“提供高效精密切削刀具”这一使命,继续专注于高效切削技术的研究,力求成为您更可靠的刀具制造品牌。

Zhejiang Xinxing Tools Co., Ltd., was founded in 1992, is a high-tech enterprise focusing on hole processing technology which located near the beautiful Nanbei Lake. Since its founding 30 years ago, the company has set up the mission of providing manufacturing industry with high efficiency & precision cutting tools, consistently implement the innovative development strategy, deeply cultivate the productivity of cutting tools and technology improvement.













































Thirty years of accumulation, we are equipped with international leading R & D and testing equipment , established a production line for large number of professional CNC tools, become a high performance CNC tool manufacturer combined with R & D, production and sales .With 30 years of efforts, the company has more than 100 patents, leading the industry standards drafting of «ANNULAR CUTTER» , «Internal cooling replaceable inserts spade drill» , Won the "national manufacturing industry individual champion demonstration enterprise" and other honors, It has been closely cooperated with customers from more than 80 countries.

In the future, we will adhering to "the concept of innovative development, win-win cooperation", we carry out the mission of "providing efficient precision cutting tools", continue to focus on the research of efficient cutting technology, and strive to become a more reliable tool manufacturing brand of you.




MARKING INSTRUCTION 标识说明















材质 TOOL MATERIALS		超细颗粒 MINCRO GRAIN		粉末高速钢 POWDER MERALLURGY HSS
		硬质合金 TUNGSTEN CARBIDE		含钴高速钢 COBALT HSS
		高速钢 HSS		高性能高速钢 HIGH PERFORMANCE
表面处理 SURFACE TREATMENT		PVD涂层 PVD COATING		黑色氧化 BLACK OXIDE
切深 DEPTH OF CUT		切深 2mm DOC 2mm		切深 5/64" DOC 5/64"
		切深 4.5mm DOC 4.5mm		切深 1/2" DOC 1/2"
		切深 13mm DOC 13mm		切深 1-3/8" DOC 1-3/8"
		切深 20mm DOC 20mm		切深 1" DOC 1"
		切深 25mm DOC 25mm		切深 2" DOC 2"
		切深 35mm DOC 35mm		切深 3" DOC 3"
		切深 40mm DOC 40mm		切深 4" DOC 4"
		切深 50mm DOC 50mm		切深 6" DOC 6"
		切深 75mm DOC 75mm		满足钻削圆管的直径 MEET THE DIAMETER OF DEILLING ROUND PIPE
		切深 100mm DOC 100mm		三倍径 TRIPLOID DIAMETER
		切深 150mm DOC 150mm		五倍径 QUINTUPLE DIAMETER
		切深 3/16" DOC 3/16"		八倍径 OCTUPLE DIAMETER
柄型 SHANK TYPE		通用柄 UNIVERSAL SHANK		套式柄 SLEEVE SHANK
		直角柄 WELDON SHANK		莫氏锥柄 ISO 296 MORSE TAPER SHANK ISO296
		Φ18 快换柄 Φ18 QUICK CHANGE SHANK		侧固柄 ISO 9766 HELICAL FLUTE HOLDER WITH ONE FLAT SHANK ISO 9766
		Φ25 快换柄 Φ25 QUICK CHANGE SHANK		三角柄 TRIANGLE SHANK
		螺纹柄 THREAD SHANK		圆柱柄 CYLINDRICAL SHANK
		圆销柄 ROUND SHANK		六角柄 HEXAGONAL SHANK
		削平柄 J-TYPE WELDON SHANK		圆柱孔柄 CYLINDRICAL HOLE

刀具外形  
TOOL SHAPE

	Φ12.7 削平柄 Φ12.7 J-TYPE WELDON SHANK		SDS柄 SDS SHANK
	单孔直角柄 WELDON SHANK+1 ADDITIONAL HOLE		
	螺旋角度 HELIX ANGLE		直槽刀杆 STRAIGHT GROOVE TOOL HOLDER
	钻尖角度 90° DRILL POINT ANGLE 90°		台阶钻螺旋槽 STEP DRILL SPIRAL GROOVE
	钻尖角度 140° DRILL POINT ANGLE 140°		台阶钻直槽 STEP DRILL STRAIGHT GROOVE
	钻尖角度 130° DRILL POINT ANGLE 130°		伞形钻螺旋槽 CONICAL DRILL SPIRAL GROOVE
	三层环状切削 THREE LAYER ANNULAR CUTTING		伞形钻直槽 CONICAL DRILLING STRAIGHT GROOVE
	二层环状切削 TWO LAYER ANNULAR CUTTING		台阶钻钻尖 STEP DRILL POINT
	渐开型排屑槽 INVOLUTE CHIP CHUTE		内部中空 INNER HOLLOW
	三刃 THREE BLADES		内部实心 INNER SOLID
	螺旋槽刀杆 HELICAL GROOVE TOOL HOLDER		多刃深孔钻 MULTI BLADE DEEP HOLE DRILL

刀具应用  
TOOL APPLICATIONS

	高速切削 HIGE SPEED CUTTING		磁座钻 MAGNETIC DRILL MACHINE
	高性能切削 HIGE PERFORMANCE CUTTING		钢轨 RAIL
	双螺旋孔中心出水 DOUBLE SPIRAL INTERNAL COOLING		90° 90°
	双直孔中心出水 DOUBLE STRAIGHT INTERNALLY COOLING		120° 120°
	手枪钻 ELECTRIC HAND DRILL		60° 60°
	台钻 BENCH DRILL		82° 82°

参照标准  
REFERENCE STANDARDS

	参照DIN 6537标准 REFER TO DIN-6537 STANDARD		参照DIN 335-C标准 REFERS TO DIN-335-C STANDARD
	柄部参照DIN 6535HA标准 SHANKS REFER TO DIN-6537 STANDARD		参照DIN 335-D标准 REFERS TO DIN-335-D STANDARD

其它  
OTHERS

	磨加工面 GRINDING SURFACE		孔精度 HOLE ACCURACY
---	--------------------------	---	----------------------

# STEP DRILLS

台阶钻



## 简介

1. 用高速钢、超硬高速钢等材料制成, 适用于钢、不锈钢、铝合金等各种板材钻孔;
2. 有直槽与螺旋槽两大类排屑槽系列;
3. 用CNC精密工具磨床磨削, 拥有良好的刃口质量;
4. 可进行TIN、TIALN等涂层处理, 升级性能。

## INTRODUCTION

1. Made of HSS, HSS-E and other materials, it is applicable to drilling of various materials, such as Steel,Stainless Steel, Aluminum Alloy.
2. The chip flue includes straight flute and spiral flute.
3. Grinding with CNC precision tool grinder,with excellent quality of cutting edge.
4. TiN, TiAlN and other coating are available, can improve performance.

# STEP DRILLS 台阶钻

## I-SSHS 三角柄直槽台阶钻(英制)

06

I-SSHS STEP DRILL WITH STRAIGHT FLUTE AND TRIANGLE SHANK (IMPERIAL)

## SSHS 三角柄直槽台阶钻

07

SSHS STEP DRILL WITH STRAIGHT FLUTE AND TRIANGLE SHANK

## C-SSHS 三角柄直槽台阶钻

08-09

C-SSHS STEP DRILL WITH STRAIGHT FLUTE AND TRIANGLE SHANK

## C-SSAS 三角柄螺旋槽台阶钻

10-11

C-SSAS STEP DRILL WITH SPIRAL FLUTE AND TRIANGLE SHANK

## C-SSHI 六角柄直槽台阶钻

12

C-SSHI STEP DRILL WITH STRAIGHT FLUTE AND HEX SHANK

## C-SSAI 六角柄螺旋槽台阶钻

13

C-SSAI STEP DRILL WITH SPIRAL FLUTE AND HEX SHANK

## SIHS 三角柄直槽伞形钻

14

SIHS CONICAL DRILL WITH STRAIGHT FLUTE AND TRIANGLE SHANK

## SIAS 三角柄螺旋槽伞形钻

15

SIAS CONICAL DRILL WITH SPIRAL FLUTE AND TRIANGLE SHANK

## SET SERIES 套装系列

16

## APPLICATION 应用

17-20

# STEP DRILLS MODEL INSTRUCTIONS













## 台阶钻型号说明

# C I - SS H S - 101

C	I -	SS	H	S -	101
附加码 ADDITIONAL CODE		类别 TYPE	功能码 FUNCTION CODE		规格代码 SPEC CODE
C - 技术码 缺省 - 标准	I - 英制 缺省 - 公制	SS - 台阶钻 SI - 伞形钻	H - 直槽 A - 螺旋槽	S - 三角柄 I - 六角柄	
C - Technical Code Default - Standard	I - Imperial Default - Metric	SS - Step drill SI - Conical drill	H - Straight flute A - Spiral flute	S - Triangle shank I - Hex shank	

# APPLICABLE MATERIAL

## 适用材质

											
型钢 Section steel	钢板 Steel plate	管材 Pipe	不锈钢 Stainless steel	铝 Aluminum	铜/锡 Copper/tin	塑料/ 有机玻璃 Plastic/ plexiglass	铸铁 Cast iron	叠层材料 Laminate material	石墨 Graphite	钢轨 Rail steel	木 Wood
<1400N	-	-	<900N	-	-	-	-	-	-	-	-
●	●	●	○	○	●	●	○	-	-	-	○

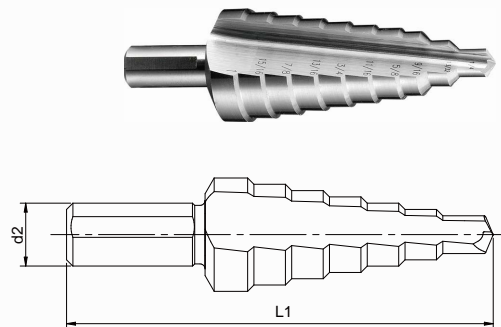
●: 非常适用 ○: 适用

●: very applicable ○: applicable

# I-SSHS STEP DRILL WITH STRAIGHT FLUTE AND TRIANGLE SHANK (IMPERIAL)

## 三角柄直槽台阶钻(英制)


- 优质高速钢, 精细热处理, 硬度HRC63.5~HRC65.5
- CNC磨削, 出色的刃口质量
- 大圆弧槽型兼顾强度与锋利
- 可PVD涂层, 升级性能
- 可按客户要求定制各种规格组合
- High quality HSS, fine heat treatment, hardness HRC63.5~HRC64.5
- CNC grinding, excellent edge quality
- The design of large arc flute ensures strength and sharpness
- PVD coating is available, can improve performance
- Various specifications can be customized according to customer requirements



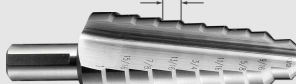
单位(Unit): inch

	型号 MODEL	规格 SIZE	d2	L1
	I-SSHS-101	3/16", 1/4", 5/16", 3/8", 7/16", 1/2"	1/4"	3-1/8"


最大切深深度 8 mm Maximum cutting depth 8 mm

	型号 MODEL	规格 SIZE	d2	L1
	I-SSHS-102	1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"	3/8"	2-3/4"


最大切深深度 4 mm Maximum cutting depth 4 mm

	型号 MODEL	规格 SIZE	d2	L1
	I-SSHS-103	1/4", 13/32", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1"	3/8"	3-1/4"

最大切深深度 4.5 mm Maximum cutting depth 4.5 mm

	型号 MODEL	规格 SIZE	d2	L1
	I-SSHS-104	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"	3/8"	3-1/4"

最大切深深度 3.5 mm Maximum cutting depth 3.5 mm

	型号 MODEL	规格 SIZE	d2	L1
	I-SSHS-105	3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8"	3/8"	3-1/4"

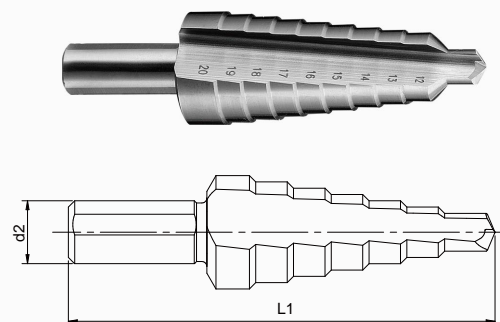
最大切深深度 4 mm Maximum cutting depth 4 mm



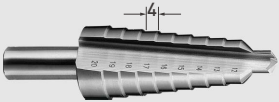
# SSHS STEP DRILL WITH STRAIGHT FLUTE AND TRIANGLE SHANK

## 三角柄直槽台阶钻

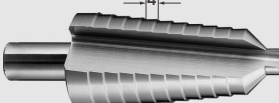
- 超硬高速钢, 精细热处理, 硬度HRC65~HRC67
- CNC磨削, 出色的刃口质量
- 大圆弧槽型兼顾强度与锋利
- 可PVD涂层, 升级性能
- 可按客户要求定制各种规格组合
- High quality HSS, fine heat treatment, hardness HRC65~HRC66
- CNC grinding, excellent edge quality
- The design of large arc flute ensures strength and sharpness
- PVD coating is available, can improve performance
- Various specifications can be customized according to customer requirements



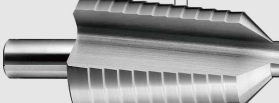
单位(Unit): mm

	型号 MODEL	规格 SIZE	d2	L1
	SSHS-132	12, 13, 14, 15, 16, 17, 18, 19, 20	9	75


最大切深深度 4 mm Maximum cutting depth 4 mm

	型号 MODEL	规格 SIZE	d2	L1
	SSHS-133	20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30	12	88


最大切深深度 4 mm Maximum cutting depth 4 mm

	型号 MODEL	规格 SIZE	d2	L1
	SSHS-134	30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40	13	97

最大切深深度 4 mm Maximum cutting depth 4 mm

	型号 MODEL	规格 SIZE	d2	L1
	SSHS-135	40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50	13	112

最大切深深度 4 mm Maximum cutting depth 4 mm

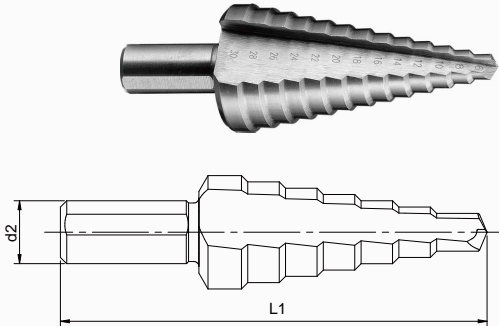
	型号 MODEL	规格 SIZE	d2	L1
	SSHS-136	50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60	13	120

最大切深深度 4 mm Maximum cutting depth 4 mm

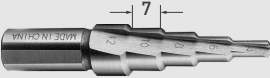
# C-SSHS STEP DRILL WITH STRAIGHT FLUTE AND TRIANGLE SHANK

## 三角柄直槽台阶钻


- 优质高速钢
- CNC磨削, 出色的刃口质量
- 可PVD涂层, 升级性能
- 可按客户要求定制规格组合
- High quality HSS
- CNC grinding, excellent edge quality
- PVD coating is available, can improve performance
- Various specifications can be customized according to customer requirements




单位(Unit): mm

	型号 MODEL	规格 SIZE	d2	L1
	C-SSHS-101	4, 6, 8, 10, 12	8	65
	C-SSHS-109		10	
	C-SSHS-120		10	50

最大切深深度 7 mm Maximum cutting depth 7 mm

	型号 MODEL	规格 SIZE	d2	L1
	C-SSHS-111	6, 8, 10, 12, 14, 16, 18	10	68

最大切深深度 5 mm Maximum cutting depth 5 mm

	型号 MODEL	规格 SIZE	d2	L1
	C-SSHS-102	4, 5, 6, 7, 8, 9, 10, 11, 12	8	65
	C-SSHS-110		10	67
	C-SSHS-114		10	75
	C-SSHS-103	4, 6, 8, 10, 12, 14, 16, 18	8	75
	C-SSHS-115		10	75
	C-SSHS-121		12	69.5

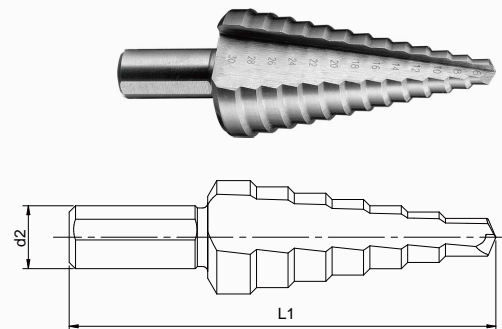
最大切深深度 4 mm Maximum cutting depth 4 mm



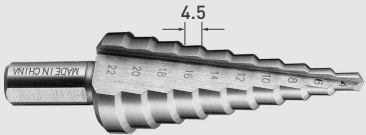
# C-SSHS STEP DRILL WITH STRAIGHT FLUTE AND TRIANGLE SHANK

## 三角柄直槽台阶钻

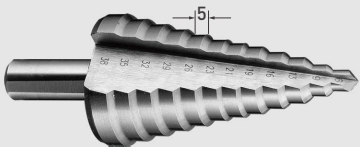
- 优质高速钢
- CNC磨削, 出色的刃口质量
- 可PVD涂层, 升级性能
- 可按客户要求定制规格组合
- High quality HSS
- CNC grinding, excellent edge quality
- PVD coating is available, can improve performance
- Various specifications can be customized according to customer requirements



单位(Unit): mm

	型号 MODEL	规格 SIZE	d2	L1
	C-SSHS-112	4, 6, 8, 10, 12, 14, 16, 18, 20, 22	10	81

最大切深深度 4.5 mm Maximum cutting depth 4.5 mm

	型号 MODEL	规格 SIZE	d2	L1
	C-SSHS-104	6, 9, 13, 16, 19, 21, 23, 26, 29, 32, 35, 38	10	100
	C-SSHS-123		12	88

最大切深深度 5 mm Maximum cutting depth 5 mm

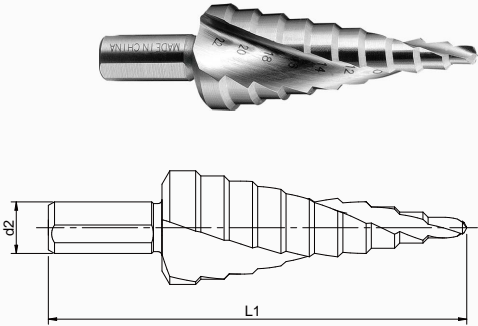
	型号 MODEL	规格 SIZE	d2	L1
	C-SSHS-113	5, 7.5, 10, 13, 16, 19, 21, 23, 26, 29, 31, 33, 35	10	104
	C-SSHS-105	6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30	13	98
	C-SSHS-116		10	96
	C-SSHS-122		12	89

最大切深深度 4 mm Maximum cutting depth 4 mm


# C-SSAS STEP DRILL WITH SPIRAL FLUTE AND TRIANGLE SHANK

## 三角柄螺旋槽台阶钻

- 优质高速钢
  - CNC磨削, 出色的刃口质量
  - 可PVD涂层, 升级性能
  - 可按客户要求定制规格组合
- High quality HSS
  - CNC grinding, excellent edge quality
  - PVD coating is available, can improve performance
  - Various specifications can be customized according to customer requirements



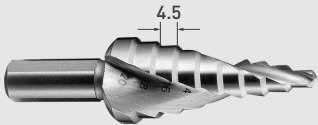
单位(Unit): mm

	型号 MODEL	规格 SIZE	d2	L1
	C-SSAS-101	4, 6, 8, 10, 12	8	65
	C-SSAS-111		10	

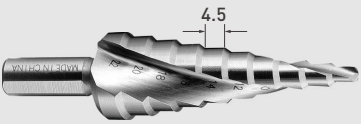
最大切深深度 7 mm Maximum cutting depth 7 mm

	型号 MODEL	规格 SIZE	d2	L1
	C-SSAS-113	6, 8, 10, 12, 14, 16, 18	10	68

最大切深深度 5 mm Maximum cutting depth 5 mm

	型号 MODEL	规格 SIZE	d2	L1
	C-SSAS-102	4, 5, 6, 7, 8, 9, 10, 11, 12	8	65
	C-SSAS-112		10	67
	C-SSAS-103	4, 6, 8, 10, 12, 14, 16, 18, 20	10	75

最大切深深度 4.5 mm Maximum cutting depth 4.5 mm

	型号 MODEL	规格 SIZE	d2	L1
	C-SSAS-114	4, 6, 8, 10, 12, 14, 16, 18, 20, 22	10	81

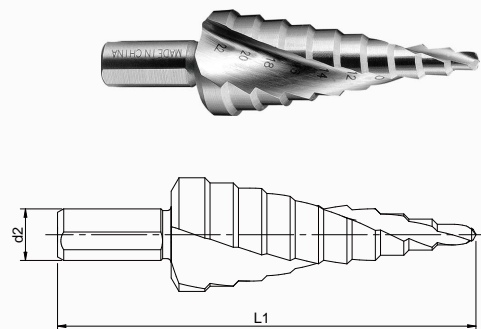
最大切深深度 4.5 mm Maximum cutting depth 4.5 mm



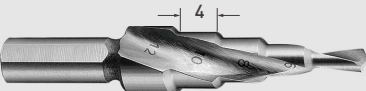
# C-SSAS STEP DRILL WITH SPIRAL FLUTE AND TRIANGLE SHANK

## 三角柄螺旋槽台阶钻

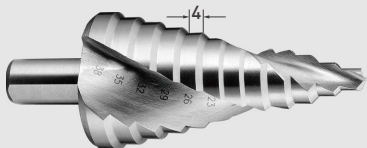
- 优质高速钢
- CNC磨削, 出色的刃口质量
- 可PVD涂层, 升级性能
- 可按客户要求定制规格组合
- High quality HSS
- CNC grinding, excellent edge quality
- PVD coating is available, can improve performance
- Various specifications can be customized according to customer requirements



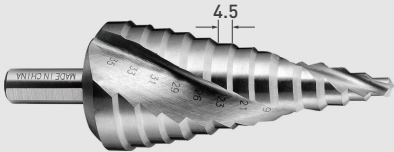
单位(Unit): mm

	型号 MODEL	规格 SIZE	d2	L1
	C-SSAS-110	5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25	10	85

最大切深深度 4 mm Maximum cutting depth 4 mm

	型号 MODEL	规格 SIZE	d2	L1
	C-SSAS-104	6, 9, 13, 16, 19, 21, 23, 26, 29, 32, 35, 38	13	100

最大切深深度 4 mm Maximum cutting depth 4 mm

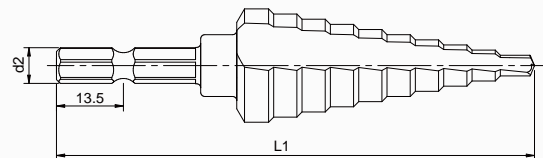
	型号 MODEL	规格 SIZE	d2	L1
	C-SSAS-105	6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30	13	98
	C-SSAS-115	5, 7.5, 10, 13, 16, 19, 21, 23, 26, 29, 31, 33, 35	10	104

最大切深深度 4.5 mm Maximum cutting depth 4.5 mm

# C-SSHI STEP DRILL WITH STRAIGHT FLUTE AND HEX SHANK

## 六角柄直槽台阶钻

- 优质高速钢
- CNC磨削, 出色的刃口质量
- 可PVD涂层, 升级性能
- 可按客户要求定制规格组合
- High quality HSS
- CNC grinding, excellent edge quality
- PVD coating is available, can improve performance
- Various specifications can be customized according to customer requirements



单位(Unit): mm

	型号 MODEL	规格 SIZE	d2	L1
	C-SSHI-102	4, 6, 8, 10, 12	6.35	78

最大切深深度 7 mm Maximum cutting depth 7 mm

	型号 MODEL	规格 SIZE	d2	L1
	C-SSHI-103	6, 8, 10, 12, 14, 16, 18	6.35	80

最大切深深度 5 mm Maximum cutting depth 5 mm

	型号 MODEL	规格 SIZE	d2	L1
	C-SSHI-101	4, 6, 8, 10, 12, 14, 16, 18, 20, 22	6.35	93

最大切深深度 4.5 mm Maximum cutting depth 4.5 mm

	型号 MODEL	规格 SIZE	d2	L1
	SSHI-501	4, 6, 8, 10, 12, 14, 16, 18, 20, 22	6.35	93

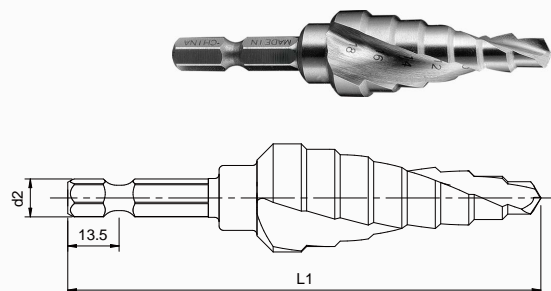
最大切深深度 4.5 mm Maximum cutting depth 4.5 mm



# C-SSAI STEP DRILL WITH SPIRAL FLUTE AND HEX SHANK

## 六角柄螺旋槽台阶钻

- 优质高速钢
- CNC磨削, 出色的刃口质量
- 可PVD涂层, 升级性能
- 可按客户要求定制规格组合
- High quality HSS
- CNC grinding, excellent edge quality
- PVD coating is available, can improve performance
- Various specifications can be customized according to customer requirements



单位(Unit): mm

	型号 MODEL	规格 SIZE	d2	L1
	C-SSAI-503	6, 8, 10, 12, 14, 16, 18	6.35	80

最大切深深度 5 mm Maximum cutting depth 5 mm

	型号 MODEL	规格 SIZE	d2	L1
	C-SSAI-104	4, 5, 6, 7, 8, 9, 10, 11, 12	6.35	80

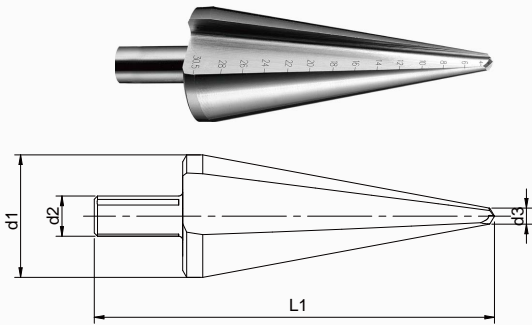
最大切深深度 4 mm Maximum cutting depth 4 mm



# SIHS CONICAL DRILL WITH STRAIGHT FLUTE AND TRIANGLE SHANK

## 三角柄直槽伞形钻

- 优质高速钢
  - CNC磨削, 出色的刃口质量
  - 可PVD涂层, 升级性能
  - 根据钻孔直径选择伞形钻的规格位推荐钻削厚度≤5mm
  - High quality HSS
  - CNC grinding, excellent edge quality
  - PVD coating is available, it can improve performance
  - Choose the SPEC position of conical drill according to the diameter of drilling
- Recommended cutting speed ≤5mm



单位(Unit): mm

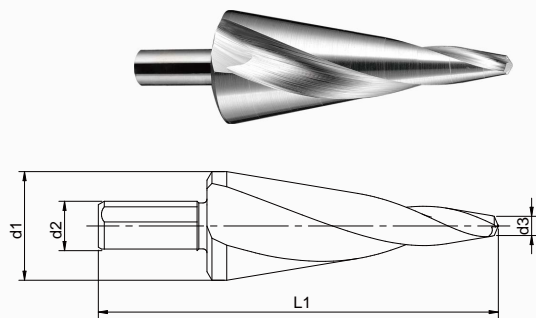
	型号 MODEL	规格 SIZE	d3	d1	d2	L1
	SIHS-105	3*14*6*60	3	14	6	60
	型号 MODEL	规格 SIZE	d3	d1	d2	L1
	SIHS-101	8*20*8*62	8	20	8	62
	型号 MODEL	规格 SIZE	d3	d1	d2	L1
	SIHS-102	16*30.5*10*72	16	30.5	10	72
	型号 MODEL	规格 SIZE	d3	d1	d2	L1
	SIHS-103	4*30.5*10*100	4	30.5	10	100
	型号 MODEL	规格 SIZE	d3	d1	d2	L1
	SIHS-104	26*40*12*83	26	40	12	83



# SIAS CONICAL DRILL WITH SPIRAL FLUTE AND TRIANGLE SHANK

## 三角柄螺旋槽伞形钻

- 优质高速钢
  - CNC磨削, 出色的刃口质量
  - 可PVD涂层, 升级性能
  - 根据钻孔直径选择伞形钻的规格位推荐钻削厚度 $\leq 5\text{mm}$
  - High quality HSS
  - CNC grinding, excellent edge quality
  - PVD coating is available, it can improve performance
  - Choose the SPEC position of conical drill according to the diameter of drilling
- Recommended cutting speed  $\leq 5\text{mm}$



单位(Unit): mm

	型号 MODEL	规格 SIZE	d3	d1	d2	L1
	SIAS-501	4*20*8*71	4	20	8	71

	型号 MODEL	规格 SIZE	d3	d1	d2	L1
	SIAS-502	5*31*10*103	5	31	10	103



# SET SERIES STEP DRILLS SET 套装系列

## SSAS-T002 HSS STEP DRILL WITH SPIRAL FLUTE 高速钢螺旋槽台阶钻



型号 MODEL	数量 QUANTITY
SSAS-101 5-4*12*8*65	1
SSAS-103 9-4*20*10*75	1
SSAS-105 13-6*30*13*98	1

## SSHS-T002 HSS STEP DRILL WITH STRAIGHT FLUTE 高速钢直槽台阶钻



型号 MODEL	数量 QUANTITY
I-SSHS-501 3-1/8"*1/2" *1/4"*76.3	1
I-SSHS-502 6-3/16"*1/2" *1/4"*90.9	1
I-SSHS-503 9-1/4"*3/4" *3/8"*76.1	1

## SSAS-T006C HSS STEP DRILL WITH SPIRAL FLUTE 高速钢螺旋槽台阶钻



型号 MODEL	数量 QUANTITY
SSAS-101C 5-4*12*8*65	1
SSAS-103C 9-4*20*10*75	1
SSAS-105C 13-6*30*13*98	1



# CUTTING PARAMETERS 切削参数

## 1.RECOMMENDED CUTTING SPEED OF HSS STEP DRILL

### 1.高速钢台阶钻切削速度推荐表

rpm

切削速度 CUTTING SPEED Vc m/min	40	35	20	15	12	45
直径 DIAMETER	铝 ALUMINUM	铜 COPPER	普通钢 COMMON STEEL	不锈钢 STAINLESS STEEL	合金钢 ALLOY STEEL	非金属材料 NON-METALLIC MATERIAL
12	1062	929	531	398	318	1194
13	980	857	490	367	294	1102
14	910	796	455	341	273	1024
15	849	743	425	318	255	955
16	796	697	398	299	239	896
17	749	656	375	281	225	843
18	708	619	354	265	212	796
19	670	587	335	251	201	754
20	637	557	318	239	191	717
21	607	531	303	227	182	682
22	579	507	290	217	174	651
23	554	485	277	208	166	623
24	531	464	265	199	159	597
25	510	446	255	191	153	573
26	490	429	245	184	147	551
27	472	413	236	177	142	531
28	455	398	227	171	136	512
29	439	384	220	165	132	494
30	425	372	212	159	127	478
31	411	360	205	154	123	462
32	398	348	199	149	119	448
33	386	338	193	145	116	434
34	375	328	187	141	112	422
35	364	318	182	136	109	409
36	354	310	177	133	106	398
37	344	301	172	129	103	387
38	335	293	168	126	101	377
39	327	286	163	122	98	367
40	318	279	159	119	96	358
41	311	272	155	117	93	350
42	303	265	152	114	91	341

## 1.RECOMMENDED CUTTING SPEED OF HSS STEP DRILL(CONTINUED TABLE)

## 1.高速钢台阶钻切削速度推荐表(续表)

rpm

直径 DIAMETER	铝 ALUMINUM	铜 COPPER	普通钢 COMMON STEEL	不锈钢 STAINLESS STEEL	合金钢 ALLOY STEEL	非金属材料 NON-METALLIC MATERIAL
43	296	259	148	111	89	333
44	290	253	145	109	87	326
45	283	248	142	106	85	318
46	277	242	138	104	83	312
47	271	237	136	102	81	305
48	265	232	133	100	80	299
49	260	227	130	97	78	292
50	255	223	127	96	76	287
51	250	219	125	94	75	281
52	245	214	122	92	73	276
53	240	210	120	90	72	270
54	236	206	118	88	71	265
55	232	203	116	87	69	261
56	227	199	114	85	68	256
57	223	196	112	84	67	251
58	220	192	110	82	66	247
59	216	189	108	81	65	243
60	212	186	106	80	64	239

注:按最大台阶规格选择转速

NOTE: SELECTING ROTATION SPEED AS PER MAX.STEP SPECIFICATION



# CUTTING PARAMETERS 切削参数

## 2.RECOMMENDED CUTTING SPEED OF HSS CONICAL DRILL

## 2.高速钢伞形钻切削速度推荐表

切削速度CUTTING SPEED Vc m/min		-	-	40	35	20	15	12	45
规格范围 SPECIFICATION RANGE		最小直径 MIN. DIAMETER	最大直径 MAX.DIAMETER	铝 ALUMINUM	铜 COPPER	普通钢 COMMON STEEL	不锈钢 STAINLESS STEEL	合金钢 ALLOY STEEL	非金属材料 NON-METALLIC MATERIAL
直槽 STRAIGHT FLUTE	8*20	8	20	637	557	318	239	191	717
	16*30.5	15	30.5	418	365	209	157	125	470
	4*30.5	4	30.5	418	365	209	157	125	470
	26*40	26	40	318	279	159	119	96	358
	3*14	3	14	910	796	455	341	273	1024
螺旋槽 SPIRAL FLUTE	4*20	4	20	637	557	318	239	191	717
	5*31	5	31	411	360	205	154	123	462

注:按最大直径选择转速

NOTE:SELECTING ROTATION SPEED AS PER MAX DIAMETER



+86-573-86566666

高性能切削刀具制造商

www.ch-tools.com

提高切削生产力  
INCREASE CUTTING PRODUCTIVITY

浙江欣兴工具股份有限公司  
ZHEJIANG XINXING TOOLS CO.,LTD.

中国 浙江 海盐县 澈浦镇六里堰山路699号  
No.699,yanshan Road.Ganpu,Haiyan,Zhejiang,China

电话 (TEL): +86-573-86566666(国内) +86-573-86565898(International)

电话 (FAX): +86-573-86560201

邮箱 (E-MAIL): zhm@ch-tools.com(国内) yqj@ch-tools.com(International)  
Technique@ch-tools.com(技术/Tech)