

INTRODUCTION

Spade drill is a modular high performance replaceable insert drill launched by **ECOCUT**.

Spade drill can be used in traditional machine tools and CNC machine tools, direct insert replacement, no need of regrinding, higher drilling speed and other characteristics can greatly improve the efficiency of the drilling, especially compared with twist drill, the efficiency has been greatly improved, and has become the best choice for traditional machine tools and CNC machine tools to improve the quality and efficiency of hole processing.

Spade drill consists of tool holder and insert, and with a set of oil rings to convert the cooling system of the traditional machine tool from external cooling to internal cooling. The tool holder made of high strength heat-resistant alloy steel after heat treatment and precision machining. The insert is made of powder metallurgy high speed steel and cemented carbide.

Insert diameter ranges from Φ 9.5 mm to 114 mm, can be used in steel, stainless steel, alloy steel, cast iron, aluminum alloy materials etc.

SPADE DRILLS

FEATURES

1. High wear resistant material, top-level coating and precision grinding technology, 50% ~ 200% more efficient than traditional twist drill;
2. The simple and convenient interchangeable insert structure can make inserts replacement on the machine tool directly;
3. With powder high speed steel and cemented carbide two materials, have More widely used;
4. With Morse taper and Lateral fixation type shank, it can be used for both traditional machine tools and CNC machine tools;
5. Only 16 holders can cover inserts $\phi 9.5$ - $\phi 114$ mm;
6. The holder internal cooling design has excellent chip removal performance and cooling effect.

SPADE DRILL SELECTION

The spade drill is composed of a tool holder and insert. The center of the tool holder is designed with internal cooling. One kind of holder can be adapted to several inserts of different specifications to reduce the purchase cost of it. The inserts have two series of imported powder high-speed steel and

SPADE DRILL HOLDER MODEL INSTRUCTIONS

S G H - 00 - M K 020 - 40N

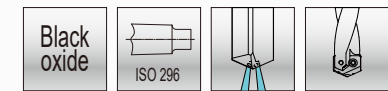
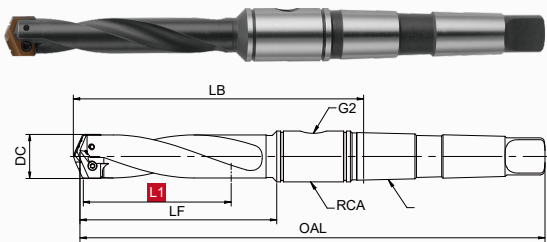
<u>S</u>	<u>G</u>	<u>H -</u>	<u>00 -</u>			<u>M</u>	<u>K</u>	<u>020 -</u>	<u>40N</u>	
BIG TYPE	SMALL TYPE	FLUTE TYPE	CONNECTOR CODE			METRIC AND INCH	SHANK TYPE	SHANK DIAMETER	LENGTH	
			CONNECTOR	METRIC	INCH					
S-spade drill	G-holder	H - helical flute S - straight flute	Y0	9.5 ~11.49	0.374"~0.452"	M-metric	K-one flat shank M - morse taper shank	016 - 16mm	10N - ultrashort 20N - short series 30N - intermediate 40N - standard 50N - extend length series 60N - lengthening series 70N - extra length series 90N - ocerlength series	
			Z0	11.5~12.97	0.453"~0.511"			020 - 20mm		
			00	12.98~15.49	0.511"~0.61"			032 - 32mm		
			05	15.5 ~17.85	0.61"~0.703"	I-INCH		040 - 40mm		
			10	17.86~21.99	0.703"~0.866"			075 - 3/4"		
			15	22.0~ 24.6	0.866"~0.969"			063 - 5/8"		
			20	24.61~29.99						

SGH-*-MM

HELICAL FLUTE HOLDER WITH TAPER SHANK



- The inner cooling structure of holder has excellent cooling effect and chip removal performance;
- Interchangeable insert structure can make inserts replacement on the machine tool directly.



(Unit): mm

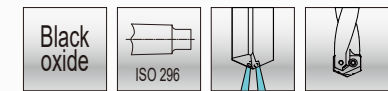
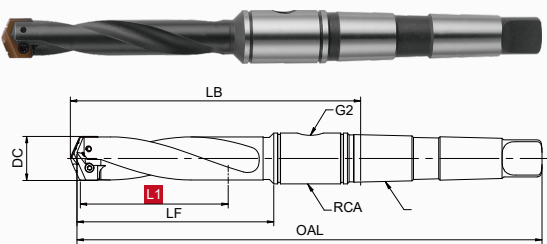
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SGH-*-MM

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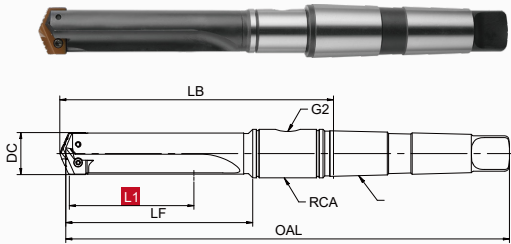
(Unit): mm

TYPE	CONNECTOR
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SGS-***-MM** STRAIGHT FLUTE HOLDER WITH TAPER SHANK



- The inner cooling structure of holder has excellent cooling effect and chip removal performance;
- Interchangeable insert structure can make inserts replacement on the machine tool directly.



(Unit): mm

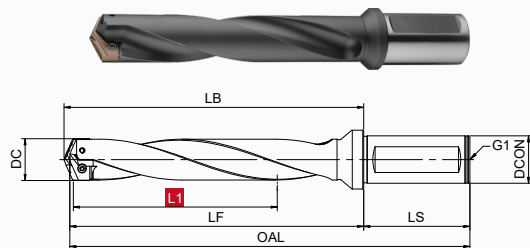
TYPE	CONNECTOR
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SGH-*-MK

HELICAL FLUTE HOLDER WITH ONE FLAT SHANK



- The inner cooling structure of holder has excellent cooling effect and chip removal performance;
- Interchangeable insert structure can make inserts replacement on the machine tool directly.



(Unit): mm

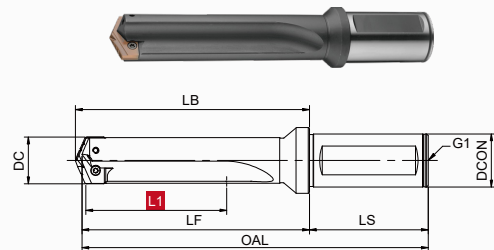
TYPE	CONNECTOR
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SGS- *-MK

STRAIGHT FLUTE HOLDER WITH ONE FLAT SHANK



- The inner cooling structure of holder has excellent cooling effect and chip removal performance;
- Interchangeable insert structure can make inserts replacement on the machine tool directly.



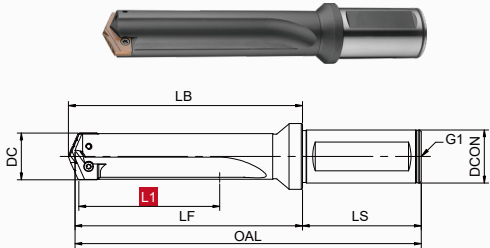
(Unit): mm

TYPE

SGS-***-MK** STRAIGHT FLUTE HOLDER WITH ONE FLAT SHANK



- The inner cooling structure of holder has excellent cooling effect and chip removal performance;
- Interchangeable insert structure can make inserts replacement on the machine tool directly.



(Unit): mm

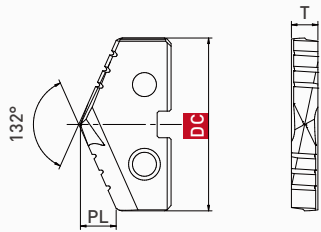
TYPE	CONNECTOR
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SP-***-50SC**

CARBIDE INSERT OF SPADE DRILL

EcoCut

- Diameter range: 9.5~35.0 mm.
- Drilling accuracy: IT10~IT11.



PRECAUTIONS

Drilling process for holders with long drilling depth [50 & 70&90]

1	2	3	4
