

| SEMICONDUCTOR · MICRO HOLE DRILLING

ANT-BSSD500

Both-Side Drilling Machine

The world's first **simultaneous dual-spindle** micro hole drilling machine. Two spindles drill from both faces at once — eliminating the workpiece reversal that causes **concentricity defects** in conventional drilling.



≤ 20 μm
CONCENTRICITY

L/D 30
MAX ASPECT RATIO

Ø 0.30 mm
MIN DIAMETER

KEY FEATURES

- 01 Both-side simultaneous drilling**
 concentricity within 20μm
- 02 Horizontal structure**
 natural chip evacuation, L/D 30
- 03 2~3x throughput**
 vs vertical type — extended unattended run time

COMPATIBLE MATERIALS

Si (Silicon)	SiC (Silicon Carbide)	SiO ₂ (Quartz)
AlN	Alumina	Sapphire
Graphite	Green Ceramic	Rare Earth Permanent Magnet

TECHNICAL SPECIFICATIONS — ANT-BSSD500 · Standard specs · custom design available

MACHINE CAPACITY	
Max Stroke (X, Y, Z1, Z2 Axis)	480 × 480 × 140 × 140 mm
Max Speed — X, Y Axis	6 m/min
Max Speed — Z1, Z2 Axis	8 m/min
Work Size	Max Ø400 mm, Max t 20.0 mm
FEED UNIT	
Z1, Z2 Axis Motor	1.4 kW AC Servo Motor
X, Y Axis Motor	2 kW AC Servo Motor (Brake)
SPINDLE UNIT (FISCHER, GERMANY)	
R.P.M.	4,000 ~ 25,000 RPM
Tool Holder	HSK-E25
Output Power	1 kW
Drill Diameter Range (PCD)	Min Ø0.30 mm ~ Max Ø3.0 mm
Tool Change	Shank — Manual Change
COOLANT	
Tank · Pump	220 L, 30 L/min
Spindle Coolant Unit	2,500 kcal
CONTROLLER	
CNC Controller	FANUC-OiMF-PLUS
UTILITY	
Main Power	220 V ± 10 V
Air (Dry Clean Air)	5 ± 0.5 bar, 120 L/min
Room Temperature	22 ~ 26 °C / Humidity ≤ 60%
FOOTPRINT	
Machine Size (W × L × H)	1,900 × 2,900 × 2,700 mm
Installation Space	3,200 × 4,200 × 3,000 mm
Weight	6,200 kg

ABOUT SAEHAN NANOTECH

Precision machining equipment for hard & brittle materials — built in Korea, delivered worldwide

Korean manufacturer of precision machining equipment for hard & brittle materials, serving the **semiconductor, display, defense, rare earth permanent magnet, and battery** industries. Manufactured in **Changwon, Korea**, exported to **USA, China, Vietnam, and Malaysia**. Full lifecycle support — from independent R&D and custom design through installation, training, and after-sales service.

READY TO TALK? | [Request a Quote or Machining Test](#)

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