

| CORE DRILLING · PRECISION

# ANT-SCDM 450/500/550

## Core Drilling Machine

Dedicated machine for **ID and OD machining** of Sapphire, Silicon, and Quartz ingots. **High-rigidity cast iron (GC300) structure** for easy maintenance, with N.C Control-based precision achieving **coring thickness deviation within  $\pm 0.1\text{mm}$** .



**Max  $\varnothing$  600 x 500 mm**

WORK RANGE

**GC300 Cast Iron**

HIGH-RIGIDITY STRUCTURE

**$\pm 0.1$  mm**

THICKNESS TOLERANCE

### KEY FEATURES

- 01** **Work range Max  $\varnothing$  600 x 500 mm**  
large-diameter ingot support
- 02** **High-rigidity cast iron (GC300) structure**  
for easy maintenance
- 03** **N.C Control**  
(FANUC Oi-MF) precision control
- 04** **ID/OD top/bottom coring thickness deviation  $\pm 0.1\text{mm}$**
- 05** **Metal and electroplated Diamond Wheel (#80~120 mesh)**

## COMPATIBLE MATERIALS

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

## TECHNICAL SPECIFICATIONS — ANT-SCDM 450/500/550 · Standard specs · custom design available

<b>WORKPIECE</b>	
Work Size	Max Ø 600 × L 300 / 400 / 500 mm
Coring Thickness Variance	± 0.1 mm (ID, OD, top & bottom)
<b>TOOL — METAL DIAMOND WHEEL</b>	
Diameter	To be decided per process
Length	L + 50 mm
Mesh Range	#80 ~ #120 (Metal - Electroplated)
<b>SPINDLE UNIT</b>	
R.P.M.	0 ~ 1,000 (Variable)
Motor	5.5 kW × 4P × 220 V × 50 / 60 Hz
Servo Option	4.4 kW SERVO Motor (Option)
<b>Z-AXIS FEED UNIT</b>	
Stroke	L + 100 mm
Motor	4 kW AC Servo Motor, 3,000 rpm
Reduction	Reducer 1/10, Pulley 1/2
Ball Screw	Ø 63 × Lead 20
<b>COOLANT &amp; UTILITY</b>	
Coolant Tank	250 L
Coolant Pump	170 L/min
Main Air	5 kg/cm <sup>2</sup>
Main Power	AC 220 V × 3-phase × 60 Hz
Control Power	AC 220 V, DC 24 V
<b>FOOTPRINT</b>	
Installation Area (W × L × H)	2,310 × 2,550 × 3,000 mm
<b>CONSTRUCTION</b>	
Frame	GC300 high-rigidity casting
Controller	N.C — FANUC Oi-MF

## 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](#)

TEL [+82 70-7791-7058](tel:+827077917058)

EMAIL [info@sae hannanotech.com](mailto:info@sae hannanotech.com)

WEB [en.sae hannanotech.com](http://en.sae hannanotech.com)