### **AUTOMATIC CORING MACHINE**

# **DAR810**

Various highly precise round shape processing by 1 process was archived!

Able to core it in high efficiency more speedily due to fully automatic.



Able to core it from flat plate

The concentric processing like a doughnut cut is also possible

Highly suitable for various encoders

#### **Applications Example**

#### Suitable materials

Various glass, ceramics, quarts, Si, PCB

#### Suitable products

- •Sarvo motor encoder
- ·Si high power rectifier
- Optical filter
- PZT substrates

The last fort in cutting







#### Core drill

- •Turn high-speed a cylindrical diamond blade
- ·Less chipping and quick process is achieved



## Glass processed samples

- Concentric processing is realized by double blade use
- Applicable to ceramics, Si and various type of materials

#### **DAR810** Specification

Chuck table		(mm)	200×200 (Movable range:200×180)		
X Axis	Feed speed range Index setting range Drive source	(mm/sec) (mm)	$0.1 \sim 200$ $0.001 \sim 200$ AC Servo motor (Linear scale)		
Y Axis	Index setting range Index speed Drive source	(mm/sec) (mm)	$0.001 \sim 180$ MAX 40 AC Servo motor (Linear scale)		
Z Axis	Effective stroke Z height setting Min index setting Max speed Processing speed Drive source	(mm) (mm) (mm) (mm/sec) (mm/sec)	75 0.001 ~ 75 0.001 MAX 20 0.06 ~ 20 AC Servo motor		
θ Axis	Rotation range Min resolution Drive source	(°)	110 360/2,621,440 DD Motor (15Nm)		
Spindle	Style Speed range Speed control Motor Core (Blade) size x Shank Safety interlock	(rpm) (kW) (mm)	Direct drive, ball bearing spindle 2,000 ~ 12,000 Spindle invertor 2.2 2P ODφ3.1 ~φ80 x φ20 (Shank Diame 1. Spindle stops at the waterproof 0 2. Spindle will not rotate with cover	cover open.	
Operation panel	Touch panel		Switch function Cutting data, error massage		
Auto handling system		Cassette to cassette, 2 cassettes loading			
Accuracy	Table top accuracy X axis index accuracy Y axis index accuracy Z axis index accuracy Spindle run out θAxis index accuracy	(mm) (mm) (mm) (mm) (mm)	0.02 / 200×200  Accumulative error ±0.01 / 200  Accumulative error ±0.01 / 180  Accumulative error ±0.01 / 75  Radial direction 0.003  Accumulative error 25" /360°	Repeatability ±0.005 Repeatability ±0.005 Repeatability ±0.005 Repeatability 1.3"	
Utility	Power Power consumption Air pressure Air consumption	(kVA) (MPa) (I/min)	3 phase 200V 50/60Hz 8 0.55 Driving source: 200 (A.N.R)	Air shower: 1,440 (A.N.R)	
Water Supply Unit	Coolant water pressure Coolant consumption Power consumption	(MPa) (I/min) (kVA)	0.3 30 2 (Coolant unit only)		
Spindle cooling	Power consumption	(kVA)	0.8		
Machine body size/weight		(mm) /(kg)	1,975(W) x 1,500(D) x 1,890(H) / 1,000		
Coolant unit/ weigh	t (option)	(mm) /(kg)	1,140(W) x 960(D) x 1,310(H) / 120(empty)		

The specification of this machine have a case to change for improvement. Please contact our sales for inquiry as to cutting applications.



