

DS830 Precision Dicing Saw



DS830 precision dicing machine uses the DS-300 software control system, imported high-resolution lens and camera to enhance graphics alignment accuracy and efficiency. DS830 is applicable to the cutting process of silicon, PCB, ceramic, glass, lithium niobate, alumina and quartz.

Features

- Graphical and simulative display of cutting process
- Water and gas curtain employed to reduce cutting powder residue
- Multi-angle water spray
- Broken Blade Detector (BBD) option

| Specifications | | |
|-------------------------------|----------------------------------|---|
| Configuration and performance | Workpiece size | Φ200mm □180mm |
| | Groove depth | ≤4mm or customize |
| | Table flatness | ±0.005mm/150mm |
| | Alignment system | 80x straight light + ring light (40x 210x optional) |
| Spindle | Revolution speed range | 10000~50000 rpm |
| | Output power | 1.5kW(2.2kW optional) |
| X axis | Drive mode | Servo motor |
| | Max. stroke | 380mm |
| | Stroke resolution | 0.001mm |
| | Feed speed range | 0.1~400mm/s |
| Y axis | Drive mode | Step motor + grating closed-loop control system |
| | Max. stroke | 210mm |
| | Stroke resolution | 0.0005mm |
| | Single-step positioning accuracy | ≤0.003mm/5mm |
| | Index positioning accuracy | ≤0.005mm/210mm |
| Z axis | Drive mode | Step motor |
| | Max. stroke | 30mm |
| | Stroke resolution | 0.001mm |
| | Repeatability accuracy | 0.002mm |
| Θ axis | Drive mode | DD motor |
| | Max. rotating angle | 380° |
| | Angle resolution | 0.0002° |
| Basic specification | Power supply | Single phase, AC220V±10% |
| | Power consumption | 0.9kW (processing) |
| | | 0.8kW (warming up) |



| | | |
|--|--------------------------|--|
| | Compressed air | Pressure: 0.55~0.8Mpa; average flow rate: 350L/min |
| | Cleaning water | Pressure: 0.2~0.4Mpa; flow rate 3.0L/min |
| | Cooling water | Pressure: 0.2~0.4Mpa; flow rate 1.5L/min |
| | Exhaust air rate | 1.8m ³ /min (ANR) |
| | Overall dimensions W×D×H | 775mm×960mm×1650 mm |
| | Weight | 600kg |

Environmental Conditions

- Use clean, oil-free air (dew point below -15, residual oil: 0.1 ppm, and filtration rating: 0.01µm/99.5 % or more).
- Keep room temperature fluctuations within $\pm 1^{\circ}\text{C}$ of the set value (Set value should be between 20°C - 25°C), indoor humidity no more than 80% and no condensation.
- Keep cutting water and cleaning water 2°C above room temperature (fluctuations within $\pm 1^{\circ}\text{C}$). Keep temperature of cooling water the same as room temperature.
- The machines should be used in an environment, free from external vibration. Do not install machine near a ventilation opening, heat generation equipment or oil mist generating parts.
- This machine uses water. In case of water leakage, please install the machine on the floor with sufficient waterproofing and drainage treatments.
- Please follow the product manual of our company.

Wotian reserves the right to make any change in this publication without notice. The information provided is believed to be accurate and reliable as of this product sheet.



Contact us

Nanjing Wotian Technology Co.,Ltd.

Website: www.wtsensor.com

Add: 5 Wenyang Road, Binjiang Development Zone, Nanjing, 211161, China

Sales Manager: Wuzhou Lian

Email: wuzhou@wtsensor.net