

## DS820 Precision Dicing Saw



DS820 precision dicing saw can be widely used for a variety of processing requirements. DS820 uses DS-200 software control system, touch screen control and GUI interface so that the image alignment of workpiece is simple and convenient. DS820 has stable performance and low failure rate. DS820 is applicable to the cutting process of blue glass, silicon, GaAs, PCB, ceramic, sapphire, crystal, lithium niobate, alumina and quartz.

### Features

- Available for workpiece with the dimension of 210 x 210mm
- Available for cutting large-size square-chip and small size multi-chip materials
- Cutting range can be adjusted based on needs to improve production efficiency
- Reasonable structure
- Low failure rate
- Convenience for maintenance

Specifications		
Configuration and performance	Workpiece size	Φ200mm   □180mm
	Groove depth	≤4mm or customize
	Table flatness	±0.005mm/100mm
	Alignment system	70x straight light + ring light (210x optional)
Spindle	Revolution speed range	10000~50000 rpm
	Output power	1.5kW
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	360°
	Angle resolution	0.0005°
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 <sup>3</sup> /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  $20^{\circ}\text{C}$  -  $25^{\circ}\text{C}$ ), indoor humidity no more than 80% and no condensation.
- Keep cutting water and cleaning water  $2^{\circ}\text{C}$  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](http://www.wtsensor.com)

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

Sales Manager: Wuzhou Lian

Email: [wuzhou@wtsensor.net](mailto:wuzhou@wtsensor.net)