

GSI

Westwind Air Bearings

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For over 40 years, Westwind has been a world leader in air bearing technology. Westwind technology has been applied across a broad industry spectrum, from PCB drilling to pre-press imagesetting, working closely with OEMs to match solutions to application and business needs.



Product Center
Poole, Dorset, UK



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Westwind – Printed Circuit Board (PCB) Drilling



Westwind is the major provider of drilling spindles to the PCB industry. In today's PCB industry, there are more Westwind drilling spindles in use than any other.

- ▶ Customer specific spindles designed to meet emerging demands of PCB drilling, with speeds in excess of 250,000 rpm for microvia production
- ▶ Worldwide network of sales and service support. Services include precision spare parts and extensive repair services



Westwind – Semiconductor

Primarily working with OEMs, Westwind plays a leading role in the evolution of air bearing spindles for the semiconductor equipment market, providing new solutions by working closely with clients on customised designs.

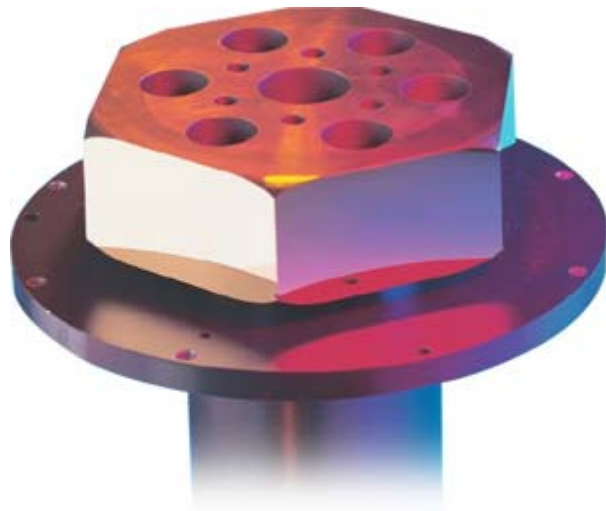


- ▶ High stiffness linear air bearings for single wafer ion implantation
- ▶ Ultra smooth wafer dicing and wafer back grinding spindles
- ▶ High speed wafer edge and notch grinding spindles
- ▶ Custom designs for CMP, spin cleaning and wafer inspection



Westwind – Rotary Scanning

Westwind is the leading supplier of rotary laser scanning spindles for internal drum rotary scanning, CTP imagesetting & direct imaging OEMs.



- ▼ Key features:
 - High speed
 - High accuracy movement
 - Ideal for imaging applications

- ▼ Westwind can offer the complete package, including the air bearing spindle, motor, drive, encoder and optic

- ▼ Standard and customised spindles for monogon and polygon optics

- ▼ Aerodynamic and aerostatic bearing designs, speeds from 1,000 rpm to 90,000 rpm



Westwind – Rotary Spraying



Westwind produces a range of standard air bearing spindles for coating applications. Customised versions can be supplied to suit the exact space envelope and rotary atomiser configuration required by the customer.

- ▶ Over 30 years of technology leadership
- ▶ Applications:
 - Electrostatic paint spraying in the automotive industry
 - White goods coatings
 - Other high precision atomisation applications
- ▶ Spindle speeds up to 80,000 rpm

The logo for GSI, consisting of the letters "GSI" in a bold, white, sans-serif font, set against a blue triangular background that points downwards and to the right.

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Westwind – Hard Disk (HDD) Writing & Verification



Westwind provides unique solutions to the disk media test spindle market. For conventional head and disk test spinstand systems, Westwind's series of stand alone spindles can be used as drop-in replacements.

- ▶ Unique spindle solutions for out-of-drive media writing
- ▶ Patented disk holding chucks
- ▶ Shaft non-repetitive runouts below 0.3 microinch



Westwind – Precision Machinery



Westwind industrial air bearing spindles have proved successful even in the harshest of manufacturing environments around the world, with spindle speeds up to 180,000 rpm.

- ▼ Engraving and light milling
- ▼ High speed internal and external grinding
- ▼ Diamond turning
- ▼ Grinding of hard materials