FAST. EXACT. RELIABLE. CNC SPINDLE SERVICES

REPAIR | REBUILD | REPLACEMENT

Mazak



SAY GOODBYE TO DOWNTIME

Part of the Mazak North American Headquarters in Florence, Kentucky, our ISO 9001:2008-certified spindle repair, rebuild and replacement facility specializes in the unexpected.

So, when you have a down machine tool spindle, our fast, exact and reliable services get you back to cutting precision parts in no time. And, if you're unsure of how to best handle the situation, our spindle experts are ready to provide you with free technical assistance.

We also offer the highest quality new and remanufactured index tables, ATC shifters, gearboxes, live tooling and milling turrets.

FAST. We complete spindle repairs and rebuilds within 3-5 days of receipt. Same-day shipment is available for new or refurbished spindles that are in stock.

EXACT. Our certified, highly meticulous technicians ensure that every spindle leaving our facility performs to exact factory specifications.

RELIABLE. We understand the negative effects of a down or poor performing spindle and go the extra mile to offer the highest quality services and fastest turnaround times in the industry.



HOW THE REPAIR/REBUILD PROCESS WORKS

1. FAILURE ANALYSIS

A thorough analysis takes place to determine the root cause of your spindle's failure.

2. SPINDLE INSPECTION

All spindle components are examined for signs of wear, improper fit and size. Components are only replaced when absolutely necessary to help minimize your costs.

3. QUOTE

A free, no obligation quote is provided in a timely manner. Work begins immediately following your approval of service.

4. PART REPLACEMENT & RECONDITIONING

Parts are replaced or re-conditioned to their original specifications.

- Housings are sleeved and machined in-house
- Tapers are ground in-house to ensure quality and improved delivery
- Components are checked using ISO-certified equipment
- All spindle bearings are replaced with factory parts
- All spindle seals, o-rings and gaskets are replaced
- Motors are tested and rewound back to Mitsubishi OEM specifications

5. REASSEMBLY

Under clean, climate controlled conditions, the spindle is reassembled, balanced and undergoes 12 hours of test stand runoff. Spindle bearing temperatures are measured and a vibration analysis is performed to ensure long, reliable spindle life.

6. RETURN

Your repaired or rebuilt spindle is returned within 5 days of receipt. 1-year or 4,000-hour warranty on rebuilt spindles with installation.

7 Ways to Minimize Spindle Repair

No manufacturer wants to see part production come to a screeching halt due to a down machine tool spindle, especially if it involves a repair that could have been avoided through proper maintenance.

Here are 7 simple maintenance tips to help keep your operations running smoothly.

- 1. Lubrication is key to a spindle's performance and longevity. Therefore, it's important to keep your lubricating fluids clean and at safe operating levels. You should also adhere to the machine tool OEM's recommended lubrication schedule. If you have an air/oil spindle be sure to service the air-intake filters on a regular basis.
- 2. Check spindle runout every 6 months and/or after any crash via a ground and calibrated spindle test bar. Also monitor your spindle's spring force with a draw bar pull force test. Pull force is what secures tool holders in the spindle and a sizable drop in force could lead to vibration and runout, which can damage both your spindle and part.
- **3.** Keep a constant watch on spindle vibration levels. If your machine has built-in vibration sensing technology, don't ignore any of the triggered alarms. Worn spindle bearings are usually the cause of increased vibration, so be sure to replace them when necessary.
- **4. Maintain spindle-bearing lubrication.** While closed-unit spindles are typically factory lubricated for life, large spindle headstocks, such as those on big turning machines, need to have their bearings lubricated with oil baths. As such, it's important to maintain the oil levels of these baths.
- **5.** If you have a high-speed spindle with a cooling system, always make sure the chiller unit is running properly. A rise in chiller system output temperature usually indicates a spindle problem. If this occurs, have a certified technician thoroughly check the system.
- **6.** Always re-install any machine covers that have been removed due to routine maintenance or any other reason. These covers protect the spindle area, keeping contaminants from infiltrating the spindle, spindle motor and other components.
- 7. When your spindle requires a repair or rebuild, it's best to have the machine tool OEM perform the services to ensure the use of factory-certified parts and that all repairs reflect the equipment's original specifications.

Contact us at 888-462-9251 or email us at Spindles@mazakcorp.com for more information.



www.MazakUSA.com

MAZAK CORPORATION CNC SPINDLE SERVICES

8025 Production Drive, Florence, KY 41042 Spindles@mazakcorp.com Tel: (888) 462-9251