What **DOES** an unexpected machine breakdown look like?

- Unplanned downtime
- Potential repair delays
- Difficulty getting parts
- Unproductive labor
- Missed deadlines
- Backlog of jobs
- Loss of contract

For tips on daily preventive maintenance for your machine tools, go to [productivity.com/pmtips](http://productivity.com/pmtips)

Productivity also offers:

- Rotary Tool Repair
- Live Tool Repair
- Machine Moving Services
- Machine Tool Sales
- Tooling & Accessories
- Advanced Supply Services
- Robotics & Automation
- Engineering Services
- Training
- Used Machines

Go to: [PRODUCTIVITY.COM](http://PRODUCTIVITY.COM)

Because **UNEXPECTED** machine failure is **NOT** an option.
Prevent machine failure before it occurs.

See WHY a Preventive Maintenance Plan Can BENEFIT Your Shop.

+ Production down time is reduced.
+ Extends the life of your machine tools.
+ Rejects, scrap, and rework are reduced due to the machine tool being maintained and in good operating condition.
+ Less time is spent on additional equipment setup and adjustments due to components wearing out.
+ Part replacement costs are reduced and can be planned and budgeted, as repairs are made on a scheduled basis.
+ Maintenance records may serve as a machine tool service history report if it is ever sold.

See WHAT Productivity's Preventive Maintenance Can DO For Your Shop.

**Flexible Service Levels**

Productivity will tailor a service program to fit your needs and budget. From a single machine to 50 plus machines, we have a plan for your shop. We can even build a plan based on our company’s ISO requirements.

**Managed Service Plans**

Productivity manages your tailored service plan by providing dedicated personnel, easy scheduling and annual service reminders.

**We Work with Your Production Schedule**

We can plan your preventive maintenance around your scheduled machine downtime so your machines are up and running when you need them to be.

**Service on Most Makes & Models**

Whether you purchased your machine from Productivity or not, we can perform service on most any machine tool.

**We Have the Tools**

Technicians arrive with tools and parts to get the job done first time.

**Experienced & Certified Technicians**

Service is performed by factory-certified, knowledgeable and courteous technicians. They even clean up once the job is done!

**Accurate Record Keeping & Reports**

Our maintenance records may serve as a machine tool service history report if ever sold.

See the list of some of the services Productivity's Standard PREVENTIVE MAINTENANCE includes below:

**Mechanical System**
- Check machine level
- Verify spindle sweep
- Check gear shift operation*
- Check spindle orientation alignment
- Change gearbox oil
- Inspect drive belt
- Inspect & adjust tool changer system
- Inspect spindle taper condition
- Inspect way cover wipers
- Check tool change operation
- Clean/lubricate tool changer
- Inspect counterbalance system
- Inspect & adjust X, Y, Z backlash
- Inspect lines, hoses and cables

**Electrical System**
- Clean electrical cabinet
- Check voltages
- Inspect connections/terminal
- Inspect grounds
- Replace or clean fan filter
- Check limit switches/safety locks
- Check motor brushes
- Keypad operation
- Check all fans

**Way Lube System**
- Clean filters
- Inspect lines and fittings
- Verify lube/pump operation

**Coolant System**
- Operation check of pump & motor
- TSC Systems*

**Air System**
- Clean filters
- Check pressure/adjust regulator
- Inspect system for leaks

**Lathe Preventive Maintenance Only**

- Verify turret/spindle alignment

**Optional Special Services:**

- Ball Bar Analysis - Tests circularity and verifies the positioning accuracy and repeatability of your machine tool.
- Vibration Analyzer - Measures and records machine vibration characteristics within the drive system. Verifies machine vibration against established criteria. Use as a benchmark for future tests.

Flexible Service Levels

Productivity will tailor a service program to fit your needs and budget. From a single machine to 50 plus machines, we have a plan for your shop. We can even build a plan based on our company’s ISO requirements.

Managed Service Plans

Productivity manages your tailored service plan by providing dedicated personnel, easy scheduling and annual service reminders.

We Work with Your Production Schedule

We can plan your preventive maintenance around your scheduled machine downtime so your machines are up and running when you need them to be.

Service on Most Makes & Models

Whether you purchased your machine from Productivity or not, we can perform service on most any machine tool.

We Have the Tools

Technicians arrive with tools and parts to get the job done first time.

Experienced & Certified Technicians

Service is performed by factory-certified, knowledgeable and courteous technicians. They even clean up once the job is done!

Accurate Record Keeping & Reports

Our maintenance records may serve as a machine tool service history report if ever sold.

Over time, preventive maintenance service pays for itself.

Glenn Miller
Preventive Maintenance Manager

Get a Quote at 763.745.1161 or pm@productivity.com