

// OPTO

OPTO helps you achieve **rapid, affordable** productivity gains by significantly improving your machining processes.

We've assembled some of the industry's leading machining experts to help you:

- // Design new processes
- // Optimize programming, set-up and tooling
- // Prove out new parts

// Troubleshoot production for hidden inefficiencies

// Fast-track employee skills

Our experts have worked with hundreds of manufacturers, giving you unparalleled access to best practices.

They've earned a reputation for results – from cutting cycle times to tackling the most complex production challenges.

OPTO is a fresh pair of eyes and a source of new ideas. An insurance

policy against rapidly changing technology and processes.

“This was one of the easiest, highest payback investments we've ever made. We've earned multiple, multiple times back on what we spent.”

Jay Bachman, III
Vice President, Wayne Automation

Get ahead of the curve – Get OPTO.



// PHILLIPS PERFORMANCE EVALUATION (PPE)

Next time we're on site, consider scheduling the **Phillips Performance Evaluation (PPE)**. This valuable streamlined inspection includes:

VIBRATION ANALYSIS



DRAWBAR TEST



LEVEL CHECK



BALL BAR TEST



SPINDLE SWEEP



ELECTRICAL CHECKS



Adding a Phillips Performance Evaluation (PPE) to our service call is a fast, easy way to protect your Haas investment and prevent costly disruptions down the line.

// CHAMP (THE CERTIFIED HAAS ANNUAL MAINTENANCE PROGRAM)

Minimize downtime and maximize productivity with our most comprehensive annual inspection.

The Certified Haas Annual Maintenance Program, (CHAMP), pays for itself by detecting problems early and keeping your machines running at optimal efficiency. Inspections performed by our Haas factory-certified service engineers include:

MECHANICAL SYSTEM

- Check machine level
- Verify spindle sweep
- Check gear shift operation*
- Check spindle lube and air blast
- Check spindle orientation alignment
- Check shot pin operation*
- Change gearbox oil
- Check backlash in X, Y and Z-axis

- Inspect drive belt
- Inspect and adjust tool changer system
- Inspect spindle taper condition
- Inspect way cover wipers
- Check draw bar height

WAY LUBE SYSTEM

- Clean filters
- Inspect lines and fittings

- Check operation
- Verify lube/pump operation

COOLANT SYSTEM

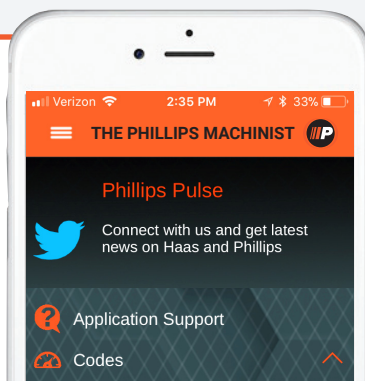
- Remote/Check pump and motor

AIR SYSTEM

- Replace filters
- Check pressure/adjust regulator
- Inspect system for leaks

ELECTRICAL SYSTEM

- Check voltages
- Inspect connections/terminals
- Replace connections/terminals
- Replace tool change relays
- Inspect grounds
- Check limit switches/safety locks



GET OUR FREE APP!

Everything you need to be the total machinist, in one place. Codes, calculators, tips tricks and manuals. Plus live application support. **Download it now!**

