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MACHINE TOOL VIBRATIONS | MODAL TESTING | HIGH SPEED MACHINING

Endmill Optimization: Special ½ day Introductory Session

Who:

Dr. David Dilley, owner of D3 Vibrations Inc. (D3V), is a leader in applying machine dynamic optimization techniques for improved cutting tool performance. Dr. Dilley is on the Technical Advisory board for BlueSwarf that provides endmill optimization dashboards to fine tune speeds, feeds, and depth of cuts. He also supports product enhancement for the MLI MetalMax product line. D3V/MLI/BlueSwarf has over 500 product users and over 1000 consulting customers world-wide.

Your machinists, programmers, and engineers will learn new methods and ways to apply the latest “shop floor friendly” techniques for optimizing tool parameters (RPM, Feed, DOC).

What:

1. Introduction to Cutting Tool Parameter Optimization (45 minutes)
2. Basic Spindle Analysis for bearing/machine health (1 CNC machine, 30 minutes)
3. Tool optimization using Harmonizer[®] and MetalMax[™] (2-3 mills, 1 hour)
4. Wrap-up Session showing Results (30 minutes)

Where:

Your facility on 1 of your CNC milling machines with 2-3 of your roughing or semi-finish mills (Ø3/8”-2”).

When:

2-4 weeks ARO

Why:

Most aluminum and steel milling operations at job shops, mold shops, and prototype shops are running more than 30% inefficient. Most shops tool inventory is 25% too high. Spindle life is typically 50% of designed life due to high vibration cutting. Dynamic techniques are necessary for virtually every machine capable of running over 8000 rpm to be productive.

To compete in the global market, better methods to utilize tools and machines are required.

How:

Contact David Dilley (248) 259-7808, dilley@d3vibrations.com

Cost:

\$950 for ½ day Introductory Session within 50 miles of Detroit

Cost Savings Questions:

- How many endmills do shops typical use to remove 50% of Metal for all part types? 8
- What is the average improvement using endmill optimization? 30%
- How much does a typical CNC machine cost per hour? \$100
- How much time can be saved per shift (30% * 50% * 8 hours)? 1.2 hours
- How much savings per month with 2 shifts (2*1.2*\$100*20 days)? \$4,800

You can save \$4,800/month when optimizing your 8 most utilized mills



Ask a Customer:

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