



! Every 3,000 Miles?

A car is your means of getting to work, but your work is your livelihood — it's what puts food on the table. So, you should treat the machines at work with the same care that you do your car. Most machining centers have ways and balls that should be lubricated at least every 4-5 months with Teflon grease. Teflon grease can usually be purchased locally or is available from Datron for \$35.00 per 300ml can (which should last about 3 years).

Another Tip: Warming up the spindle each morning prior to production will extend the life of the bearings. If possible, run your spindle at a low RPM for 5-10 minutes prior to the workday.



Not 2 Late 2 Update.

Datron has introduced a Windows® Control Software with improved networking, multi-tasking and advanced new features. Machines now ship with this software and older Datron systems running DOS can be upgraded for \$5,500. A trial version can be downloaded at www.datron.de/datroncnc. (Username: datroncnc, Password: m2m3m4m5). Please call 603-672-8890 with questions.



DATRON Dynamics is a distributor for DATRON Electronics. Makers of the awe-inspiring 60,000 RPM CNC Machine Centers. 454 Route 13 • Milford, New Hampshire 03055 • USA
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Lights Out on the China Syndrome.

There's no shame in saying it, all American manufacturers know it ... Asia is eating our lunch. And it doesn't take log rhythms, rocket science or even a solar-powered calculator to figure out why. Plain and simply, labor is cheap over there. But labor is only half of the production equation and savvy machining manufacturers are starting to catch on and find a way around "The China Syndrome."

Based on an 8-hour day, labor costs about \$0.40 a minute and a machine costs about \$0.20 a minute to operate. So, if you tie an operator to the machine with one-up production, your total cost will be \$0.60 a minute. If you were to run two shifts, the machine would cost only \$0.10 a minute, while the labor cost remains the same. Although it's a savings, it falls short of maximizing the impact on your bottom line ... and more can actually be saved. By empowering the machine to work for one shift without operator intervention the reduction in the labor cost brings the machine cost as low as \$0.05 a minute.

Here's how it works. Ideally, a full batch should have a cycle time that coincides with an operator's shift and large machine beds that hold sizable blanks facilitate this. The operator places a batch on the machine in the morning and attends to other duties during the day while the automated machine works all day producing the needed pieces. At the end of the shift, the operator removes the completed batch, sweeps down the machine, and sets up another batch to run all night. When the operator returns to work the next morning, he removes the batch that the machine produced overnight and starts up another one. This gets two shifts' worth of work out of one operator. This is the principle of "lights out" production and it's the best way to turn the Lights Out on the China Syndrome.

All Rev'd Up!

The term high-speed machining can't be found in Webster's, but one generally excepted definition is machining with spindle speeds of 25,000 RPM or more. If you have a real need for feed or want superior detail, try 60,000 RPM on for size!