

## GO GREEN WITH BLUE

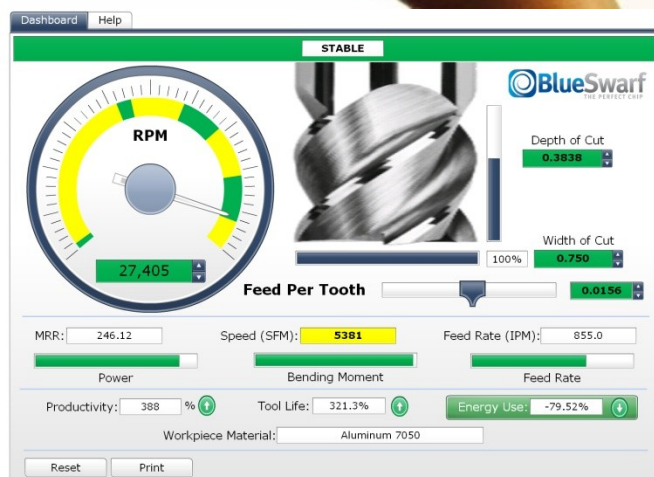
### Cut Energy Costs by up to 80%!

BlueSwarf® Tool Dashboard™ technology lowers energy consumption of CNC machining centers by up to 80%. A typical machining center consumes a total of 6700 kWh in electricity per year<sup>1</sup>, the equivalent of an average household in Maine<sup>2</sup>.



### How BlueSwarf® Saves Energy

- Unstable (chatter) machining produce instantaneous chip thicknesses that range from far greater than the program on one tooth to much smaller on another. The load on the spindle, and therefore the energy consumed, is determined by the highest single instantaneous chip thickness per revolution. BlueSwarf® allows each tooth to cut at the same programmed chip load, thus dramatically lowering energy consumption.
- The power curve on the machining center spindle are designed to provide low end torque and power for rough machining at lower speeds. As speeds increase, just like a car on the highway, it consumes less power. BlueSwarf® technology locates the highest available stable spindle speeds.
- BlueSwarf® enables deeper, more productive cuts at higher spindle speeds and feed rates, dramatically reducing energy consumed per cubic inch or meter of metal removed.
- BlueSwarf® improves quality, reducing scrap rates and secondary finishing, thus eliminating additional wasted energy consumption.
- Dashboards™ are delivered electronically, requiring no packaging or shipping costs.



### For More Information

Learn more about BlueSwarf® Dashboard™ system at [www.blueswarf.com](http://www.blueswarf.com)

<sup>1</sup> Improvement Potential for Energy Consumption in Discrete Part Production Machines  
<sup>2</sup> U.S. Energy Information Administration