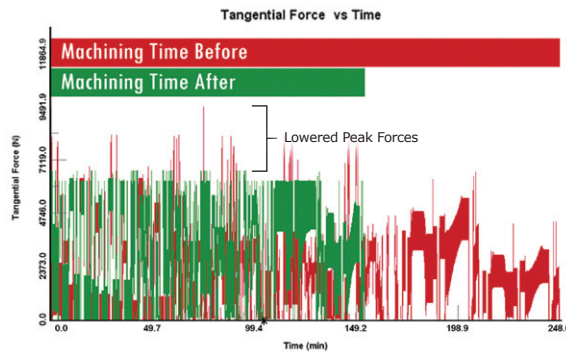
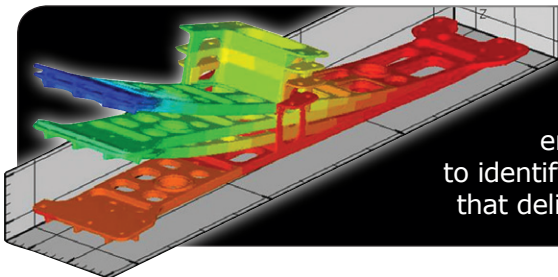


A DYNAMIC USER INTERFACE simulates the part being machined and displays tool position with corresponding forces, power consumption, and more — helping users better understand their machining processes and identify opportunities for improvement.

NC PROGRAM OPTIMIZATION is one of the unique and cost-saving features found in Production Module. With the click of a button users can balance tool loads, reduce cycle time and peak forces, and maximize machine usage.



BY PREDICTING PART DISTORTION Production Module empowers manufacturers to identify machining parameters that deliver optimal part quality.



Production Module is NC program optimization software integrating physics-based material models, CAD/CAM inputs, tooling and workpiece geometries, and machine dynamics. The technology empowers users to make better informed decisions on tooling and toolpath strategies, creating processes that machine dramatically faster while improving tool life and part quality.

How it Works

1. User defines or imports tool geometries
2. User defines or imports stock workpiece and select material
3. User imports toolpath
4. User sets machining optimization limits
5. Production Module balances tool loads
 - » Analyzes each toolpath line, calculating forces, spindle power, temperature, etc.
 - » Compares calculated outputs to optimization limits
 - » Raises/lowers feeds to attain optimal machining performance
6. User implements optimized toolpath for machining

Benefits

- » Reduced cycle times
- » Maximized machine utilization
- » Improved tool life
- » Increased productivity



THIRD WAVE SYSTEMS

Production Module Product Specifications

Software and Minimum System Requirements	<ul style="list-style-type: none"> • Windows® XP, 7 • 200 MB of disk space for installation; extra space required for each project • 3.0 GHz processor (3.8 GHz recommended) • 1 GB of RAM (2 GB recommended)
Processes	<ul style="list-style-type: none"> • Milling • Turning • Drilling
Inputs	<ul style="list-style-type: none"> • Machine tool characteristics • Cutting tool descriptions • Workpiece material and geometry • Toolpath
Features	<ul style="list-style-type: none"> • Library of 130+ workpiece material models • STL/STEP workpiece and tool import • MetalMAX™ data import • VERICUT® setup import • NX® interface • CATIA® interface • ESPRIT® interface
Outputs	<ul style="list-style-type: none"> • Optimized NC programs incorporating new feeds and speeds • Process data including cutting forces, temperatures, spindle power, tool engagements, stability analysis, distortion, deflection, etc. • Interactive plots highlighting the correlation between cutting loads and tool position within the toolpath

