Making optimization part of your manufacturing process will help you achieve significant cycle time reductions and improve tool life. Avoid purchasing a new machine or utilizing overtime to meet capacity needs by implementing toolpath optimization from Production Module and/or utilize AdvantEdge for in-depth tooling simulations to compare simulations results to optimize cutting conditions or tool geometries.

Third Wave Systems has partnered with the AMRC to provide two complimentary workshops to give a more complete understanding of both Production Module and AdvantEdge. During the AdvantEdge workshop, learn how to quickly setup simulations and compare the effect of tooling geometry changes or process parameters on tool life and chip formation. The Production Module workshop highlights the use of CAM interfaces including Siemens NX, Mastercam and CATIA to easily analyze toolpaths and optimize cycle time.

Sign up for one or both workshops to get a hands-on understanding of how these softwares can help you improve tool life and reduce cycle times at your company today! Laptops and lunch will be provided.

AdvantEdge

User-Friendly FEA for metal cutting and improving tool life

9:00am-9:30am: Registration & badge pick-up
9:30am-12:00pm: AdvantEdge Workshop
12:00pm-1:00pm: Lunch
12:30pm-1:30pm: 1:1 Project Discussions with TWS (by appointment)

Production Module

Implement toolpath optimization and reduce cycle time by +20%

12:00pm-1:00pm: Registration & badge pick-up
12:00pm-1:00pm: Lunch
1:00pm-3:30pm: Production Module Workshop
3:30pm-4:30pm: 1:1 Project Discussions with TWS (by appointment)

What you will receive

» Classroom-style instruction with step-by-step examples and applications
» Setup a project and evaluate “what-if” scenarios
» Achieve cycle time savings, reduce tool costs and improved tool design
» Hands-on training to optimize your process with expert engineering staff
» A 30-day trial license of Production Module and/or AdvantEdge including full technical support
» Bring your CAM files to get started at the workshop!

Date & Location

December 7, 2017 | 9:30am - 4:30pm
AMRC Knowledge Transfer Centre
Brunel Way, Catcliffe, Rotherham
S60 5WG, United Kingdom

Register for the workshops by visiting https://www.thirdwavesys.com/events/
**PRODUCTION MODULE**

**How it works**
User defines/import tool geometries, stock workpiece, selects materials and imports toolpath to run analysis. Then, Production Module takes over to:

- Balance tool loads
- Analyze each toolpath, calculate forces, temperature, spindle power, tool stress, etc.
- Compare calculated outputs to optimization limits
- Raise/lower feed rates

---

**ADVANTEDGE**

**Broad Industry Support**
140+ Validated Material Models
- Turning, Milling, Drilling & More
- Aerospace, Automotive, Medical & Energy

**Increase Tool Performance**
- Lower Tool Stresses & Temperatures
- Improve Material Removal
- Reduce Tool Wear

**How it works**
User defines tool geometry parametrically or import from CAD program, select tool and workpiece materials, input cutting conditions, run simulations and compare the simulation results to optimize cutting conditions or tool geometries by analyzing:

- Temperature and stress profiles to gauge reductions in tool wear
- Chip formation to predict improved chip evacuation and chip breakage
- Force plots to lower cutting forces and power consumption

---

**Easy To Use**
- Designed for NonFEA Experts
- Process Specific Inputs
- Automatic Meshing

**Get To Market Faster**
- Reduce Design Iterations
- Fast Results
- Automated Analysis

**Test New Ideas**
- Run Simulations Simultaneously
- Quick Decision Making
- Reduce Prototyping

---

Third Wave Systems develops and sells premier materials based modeling software and services for machining solutions. Innovative manufacturing companies implement these solutions to dramatically reduce costs of machined components, accelerate design cycles, improve part quality and get to market faster.