CASE STUDY: Aerospace Structure

Applied Engineering specializes in high speed milling of aluminum components to close tolerances. They provide major cost savings through their efficient machining processes, which allows Applied to quickly produce the parts customers need to get to market faster.

In 2014, Applied Engineering began optimizing their processes with Production Module on three aluminum aerospace structure parts. Almost immediately, engineers began seeing significant savings in machine hours, reduced cycle times and tool consumption.

**Part:** Center Partition (aluminum aerospace structure component)

**Approach:**
- Implement the optimization of three aluminum aerospace structure parts, including the Center Partition

**Software:**
- Third Wave Systems NC optimization product, Production Module

**Results:**
- 25% reduction on 300-500 parts machined per month
- 55% reduction in amount of tools used
- Overall, Applied Engineering saw more than **4,250 machine hours in added capacity** (nearly 80% of one machine) due to optimizing processes with Production Module.

**BEFORE PRODUCTION MODULE**
Cycle time: 37 minutes/part

**AFTER PRODUCTION MODULE OPTIMIZATION**
Cycle time: 28 minutes/part, freeing up 540 machine hours