

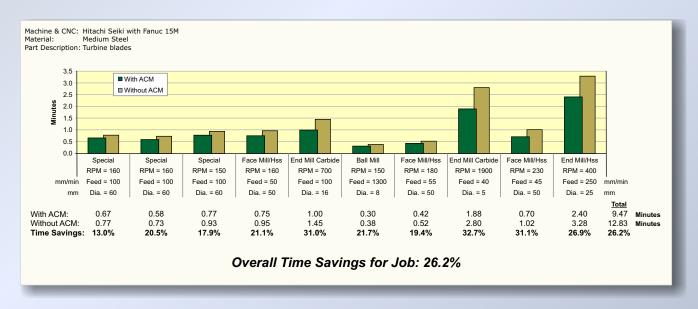


# **ACM** Adaptive Control and Monitoring

The only metal cutting optimization system that can save up to 40% on machining operations resulting from:

- Cycle time savings
- ▼ Tool life extension
- Increased machine availability

- Increased productivity
- Reduced machining costs
- Consistently high workpiece quality



Control feed rate

Monitor tools

Get reports on key machining parameters

The **ACM** system adapts machining to *your* needs and *your* production goals. ACM can operate in two modes:

- Adaptive Control ACM optimizes the programmed feed rate speeding up cutting when the path is obstacle-free and slowing down when geometry, material hardness, or tool conditions demand caution.
- Monitoring Tools, spindles, and parts are monitored for breakage, overload, missing tools, repeated runs of the same part, etc. Dangerous conditions are detected and corrected before damage occurs.

The ACM system deals with the harmful effects of constantly changing and unpredictable cutting conditions, things the NC program cannot compansate for. Using ACM means more efficient machining!



## **ACM Reporting and Analytics**

Shopfloor managers benefit from the informative reports the ACM produces; they contain the data and insight needed to improve overall machining operations. Reports on machine and tool utilization, actual feed rate, time savings, tool wear, tool life, and more are available for each machine equipped with the ACM.



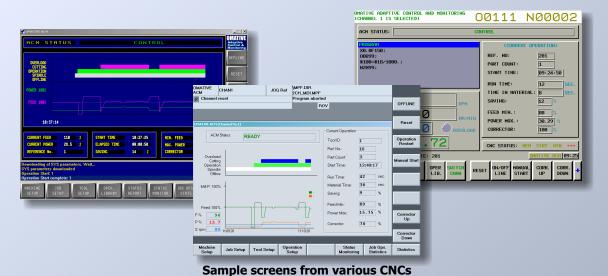
Sample report: Machine utilization over a 30 minute production period

# **ACM Use Promotes Sustainable Machining**

- Reduces energy consumption due to shorter cycle times
- Reduces coolant use due to shorter cycle times
- Extends tool life, avoiding tool breakage and preserving tools for recycling
- Reduces metal waste due to extended tool life and fewer damaged workpieces

#### Implementing ACM - All CNCs Can Benefit

Virtually all new and old CNC machines can be equipped with ACM technology. Depending on the CNC type, different configurations are available. The ACM system's two main components are the HMI and the real-time control, which automatically performs monitoring and optimization functions.



## **About OMATIVE**

**OMATIVE Systems** products are used worldwide throughout the metal cutting-industry, and have been increasing productivity, saving time and money, and protecting tools since 1993.