



# Process, Application and Consulting Services

## Productivity Improvement Projects

Companies today are looking for creative ways to make their existing equipment more efficient while reducing operating costs. ABB has designed a methodology through which we can identify the business issues that may be challenging our customers and implement solutions with a quantifiable return on investment (ROI).



### Services Offered

The following services provide the building blocks to provide our customers true productivity improvement solutions.

- **Asset Management Audits & Assessments** – Regular audits are the backbone of a successful maintenance or continuous improvement program. In order to better understand how specific corrective or preventive actions can improve the Overall Equipment Effectiveness (OEE) of a process, we can analyze four key areas of your operations:

- Operational status of equipment
- Individual process performance
- Personnel performance and productivity
- The physical environment in which you operate

We collect and analyze the data and prepare detailed reports that include prioritized recommendations for improvement. ABB can provide audits that specifically examine key operational issues such as:

- Lean manufacturing techniques
- Review of software programs, backup procedures and frequency
- Check of drawings and manuals to ensure accuracy in relation to actual installation
- Downtime analysis and collection of relevant information from service logs
- Review of preventive maintenance documentation, procedures and frequency
- Evaluation of machine program and cycle time for maximum efficiency
- Simulation of the process in order to test and prove changes before they are put in to production
- Analysis of production bottlenecks and recommendations for improvement
- Individual meeting with operators, service personnel, and management about key areas of concern in system performance
- Evaluation of quality metrics such as FTQ, FTC, defects, re-work, etc. and recommendations for improvement
- Information technology constraints and opportunities
- Evaluation of adherence to relevant safety and environmental regulations and procedures



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- **Implementation Services** – ABB specializes in the project management and execution of its audit recommendations. Process and productivity experts are readily available for press automation, body in white, power train assembly, paint process automation, dispensing, welding, material handling, material removal and packaging systems. ABB also offers expertise in lean manufacturing techniques and industrial information technology.
- **System Reconfiguration** – System reconfiguration can be performed to adapt your existing systems to new production requirements:
  - Layout changes
  - Modifications – driven by new products/materials
  - Adaptation to changing safety/environmental requirements
- **Real Time Production Data Collection & Analysis** – ABB offers Real Time Production Intelligence (RTPI) as a dedicated software application for on-line production data collection, efficiency calculation and root cause analysis. The application is designed to assist in maximizing the value of manufacturing assets by providing awareness of equipment uptime, performance and quality rates to help “tune” your productive capabilities to increase throughput, reduce bottlenecks, decrease breakdowns, and improve quality.
- **Financing Solutions** – ABB provides creative finance solutions to support the upgrade and enhancement of existing equipment.
  - Lease programs to finance the total cost of an enhancement or upgrade
  - Zero capital investment, shared savings programs.



### Why ABB?

As a complete system solutions provider, ABB offers many advantages other manufacturers simply cannot:

- **Original Equipment Manufacturer** – As an OEM, ABB has full access to complete engineering drawings and documentation for the purpose of upgrading and improving existing systems.
- **Expertise** – ABB has broad expertise in all automation systems and manufacturing processes.
- **Methodology** – ABB has developed consulting methodologies that draw on principles of lean manufacturing and focus on improvement of Overall Equipment Effectiveness (OEE).
- **Project Management** – As one of the top engineering company's in the world, ABB has a culture of project management excellence and offers the infrastructure and support to execute both large and small scale projects.
- **Partnerships** – ABB boast partnerships with other leading innovative companies such as Microsoft, Accenture and Intel.
- **Industrial<sup>IT</sup>** – The unique portfolio of ABB Industrial<sup>IT</sup> solutions offers an unparalleled suite of software and hardware solutions for total integration of information from the plant floor to the plant manager.