IndustrialIT for Films and Converting
Creating value through integrated solutions

ABB’s IndustrialIT for Films and Converting enables optimum performance results
Overview

The success of the enterprise depends on decisions the executives, managers and operators make. The end result is measured in the value the business brings to customers and shareholders. So when it comes to managing a facility, one needs the right solutions in place at all points in the operation. Today’s economic environment and global competitiveness leave no room for risky decisions concerning processes and assets.

ABB offers unique IndustrialIT solutions for Films and Converting to assist in meeting these significant challenges. Our automation product suites and services cover all areas of the value chain and operate together to ensure optimal efficiency and profitability.

Quality - Knowing that every unit shipped is produced at the proper specification is paramount. The ABB Quality Control and Management System forms a proven foundation from which to produce and ship with confidence.

Production Efficiency/Asset Utilization - Overall equipment effectiveness improvement is realized via informed decision making made possible through ABB’s powerful solution suite designed to work in concert. ABB’s IndustrialIT architecture makes use of information enabled building blocks throughout the entire product suite ensuring consistent high return on your assets deployed.

Customer Relationship - In a marketplace where cost pressures are increasing and quality is a requirement, the ability to deliver product on time every time is paramount. Information at all stages in the supply chain is necessary to stay ahead of the competition.

Key Performance Indicators - Gaining market share profitably is possible through the deployment of a vision that enables an organization to produce high quality products reliably and efficiently. ABB and IndustrialIT can help you succeed in that mission.
Quality

The speed and accuracy of the information you receive from your automation systems, and what you do with it sets you apart from your competition. The high quality information submitted by the sensors and the rigorous control provided by ABB serve to put you ahead.

- **Improved Control Performance**
  Machine Direction (MD) variation is rigorously updated every five seconds. The benefits include:
  - Increased MD control effective bandwidth
  - Scan speed independent control actions resulting in improvements of 70-90% over conventional methods
  - Continuous MD updates without off-sheet interruptions
  - Time-based Cross Direction (CD) profile provides separation between MD and CD variations that is better than traditional composite filtering, resulting in improved control performance

- **Lower Variability Faster**
  - ABB’s fast dynamic filtering fully isolates MD changes and builds “true CD profile”. **Benefit** = lower 2 sigma, faster
  - Upsets that occur in short time intervals (less than scan time) can be removed with MD control. **Benefit** = reduced MD variability (higher measured MD bandwidth), faster “on spec” with MD controls

- **Peace of Mind**
  - The industry’s strongest and smartest scanners
  - Provide operators, supervisors and managers peace of mind knowing that their measurement system will be on line providing critical measurement when they need it

- **Signal Processing**
  - Fast and correct profiles to the controller

- **Auto Mapping and Modeling**
  - Accurate and dynamic mapping provides sustainable results

- **CD and Response Optimization**
  - Eliminates variability in the shortest time possible

Quality management includes roll/set analysis capabilities which allows the slitter operator to know the quality of the mill roll received thus enabling operators to determine the prudent course of action.

30-90% faster control
50-90% better profiles
IndustrialIT for Films and Converting

Open Control
As a global process automation supplier ABB ranks #1 according to ARC Advisory Group

Quality Control
Over 40 years of ABB supplied quality control systems on non-paper manufacturing lines

Web Imaging
Over 300 applications of ABB web imaging solutions since 1997

Material Handling
ABB is the world leader for installed robots with over 100,000 installations

Research and Development
ABB total investment in research and order related development, according to U.S. GAAP exceeds US$ 1 billion
System Drives
ABB has more than 500 Center Winder and greater than 1,000 Inline Tension Control applications installed on webs around the world.

Collaborative Production Management
• The ARC Advisory Group named ABB the #1 CPM software supplier
• Installations of CPM software solutions exceed 150 globally
• In a recent customer test it was determined that the ABB trim optimization software for a production tonnage at that site of around 50,000, can provide annual savings around US$ 170,000

Power Technology
ABB is the worldwide leader in Medium Voltage and High Voltage technologies and Power and Distribution Transformers, as confirmed by Goulden Reports, NEMA, ZEVI and COTREL.
Production Efficiency/Asset Utilization

Squeezing every last ounce of production out of your assets isn’t anything new but it certainly is more critical now than ever before. ABB efficiency enhancing products provide the ability to increase line availability, enhance performance and improve quality.

Asset Optimizer software – part of ABB’s OptimizeIT suite, is a tool that leads to continuous improvement of plant operations and is an enabler for plant-wide adoption of predictive and proactive maintenance strategies.

ABB’s real-time integration of automation, information and maintenance systems – leads to Operational Excellence through the continuous monitoring, analysis and improvement of plant Key Performance Indicators.

What does ABB’s patented Direct Torque Control mean to you? – It means a step rise time nearly 10x better than standard flux vector control which equates to better control and higher quality for you and your customers. DTC also means power loss ride through capability that has led some to call our drive the “tripless” drive – which translates to less unplanned downtime.

ABB’s Direct Drive system – enables you to need fewer components. Gear boxes are not used thus removing cost in the form of gears, couplings, covers, gear condition monitoring and lubrication systems. Maintenance costs are dramatically reduced for the very same reasons. Also, no need for re-tuning due to mechanical wear of gearboxes. Health and Safety issues are addressed as well as noise levels are lowered and maintenance reduced.
Global Knowledge with a Singular Focus

What makes our solutions work so well together is the expertise we bring to each situation. With thousands of experts worldwide, ABB has the resources to develop and implement the best solution for your business. And, because we’re a global organization, we can tap into our vast knowledge base to deliver winning solutions regardless of your application or location.

Value of ABB Integrated Solutions

ABB knows what it takes to bring together the plant floor, control room and the business offices seamlessly. For you, the results are real-time information for better decisions, processes running at peak performance and capacity, air tight quality controls, and your entire operation running smoothly.

View it Your Way

Whatever your role is in the operation, you can create a custom view or workspace, containing all the pertinent system and device information you require. Regardless of the configuration, ABB Aspects Object™ technology maintains dynamic links to the real device, so you always have the most accurate data.

Key Performance Indicators

Every level of the organization is being driven to be more efficient and more productive. A measure of success at various levels in the enterprise is established through the use of key performance indicators (KPI). ABB’s IndustrialIT suite of solutions combine for optimum KPI results.

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Key Performance Indicators:

- **Production based**
  - Pounds/hr vs. Target Inventory Turns
  - Shortages
- **Asset based**
  - Down Time Reliability
  - Percent First Pass Quality
  - Maintenance
- **Quality based**
  - Percent First Pass Quality
  - Production
  - Reliability
- **Profit based**
  - Productivity
- **Health, Safety, Environment based**
  - Safety
  - Days No Lost Time

ABB Solutions:

| ABB Solutions | MeasureIT™ - Sensors and Scanners, ControlIT™ - Real time control, DriveIT™ - Drives and Motors, OperateIT™ - HMI | OptimizeIT™ - Asset Optimizer and Real-time Production Intelligence, SupportIT™-Services | ProduceIT™ - Quality Management System, ProfileIT™ - Profile optimization | IndustrialIT -- The suite of offerings provides a variety of ways to attain profit based KPI improvement. | SustainIT™ - Energy Management, Environmental Services, ProtectIT™ - protection of personnel |
Industrial IT Solutions from ABB

Industrial IT solutions from ABB blend the industry’s broadest portfolio of compatible knowledge components with a proven architecture for real-time enterprise automation and information.

Visit us at:

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For more information on ABB Industrial IT solutions for the Films and Converting industry, please contact your local sales representative.