Industrial Services and Solutions
Cement, Mining and Minerals
ABB Service and Product Guide

Measurement Products USA
- Service
- Actuators and Positioners
- Analytical Instruments
- Device Management, Fieldbus and Wireless
- Flow Measurement
- Force Measurement
- Level Measurement
- Natural Gas Measurement
- Pressure Measurement
- Process Analytics
- Recorders and Controllers
- Temperature Measurement

Control Systems
- Services
- 800xA
- Advant OCS with Master SW
- Advant OCS with MOD 300 SW
- Compact 800
- Freelance
- Safety Systems
- SATT
- Symphony DCI System Six
- Symphony Harmony INFI 90
- Symphony Melody
- Symphony Plus

Collaborative Production Management
- CPM Applications
- CPM Core

Drives, inverters and converters
- Drive Services
- DC Drives
- Drive Options
- Drive PC Tools
- Low voltage AC drives
- Medium Voltage AC Drives
- Solar inverters

Generator Circuit Breakers
- Flexible Connection Kit
- HEC 7/8
- HECPS-S
- HEC
- HECS
- HEC-R
- HVR-63

Insulation Components
- Cast Epoxy
- Generator Insulation Kits

Medium Voltage Products and Systems
- Service
- Circuit Breakers
- Compact Secondary Substations (CSS)
- Contactors
- Distributed Energy Storage Modules
- E-Houses (Application Modules)
- Fault Current Limitation & Arc Protection
- Fuses and Cutouts
- Instrument Transformers & Sensors
- OEM Switchgear Kits & Parts
- Reclosers & Sectionalizers
- Smart Voltage Components
- Surge Arresters
- Switches & Disconnectors
- Switchgear and Motor Control
- Vacuum Interrupters & Poles

High Voltage Products
- Service
- Capacitors and Filters
- Circuit Breakers
- Gas-Insulated Switchgear
- Instrument Transformers
- Surge Arresters
- Switchgear Modules
- Transformer Components
- Bushings
- Composites
- Distribution Components
- Insulation Materials
- Oil Treatment
- Power Components
- Tap Changers

Low Voltage Products and Systems
- Service
- Cable Distribution Cabinets
- Circuit Breakers
- Connection Devices
- Control Products
- Door Entry Systems
- Enclosed Switches
- Enclosures
- Fusegear
- Low Voltage Systems - IEC
- Low Voltage Systems - NEMA
- Modular DIN Rail Products
- Power Quality Products
- Software Tools
- Switches

Reactors
- Liquid-Filled

Motors and Generators
- Service
- Energy Efficiency
- High Voltage Induction Motors
- IEC DC Motors
- IEC Low Voltage AC Motors
- Motors and Generators for Explosive Atmospheres
- Servomotors
- Synchronous Generators
- Synchronous Motors
- SynRM motor and drive package
- Traction motors and generators
- Wind Power Generators

Power Protection & Automation Products
- Protection and Control
  (Distribution)
- Protection and Control
  (Transmission)
- Relion
- Substation Automation

Mechanical Power Transmission Products
- Bearings
- Conveyor Components
- Couplings
- Gearing
- PT Components

Robotics
- Service
- Application Equipment & Accessories
- Applications by Industry
- Controllers
- Robots
- Software Products

Power Cables and Cable Accessories
- Cable Accessories
- Cable System (36 kV and above)

Turbocharging
- Service
- Turbochargers

Transformer Components
- Bushings
- Composites
- Distribution Components
- Insulation Materials
- Oil Treatment
- Power Components
- Tap Changers

Transformers
- Service
- Dry-special
- Dry-type
- Liquid-filled

Synchronous Generators
- Service
- Synchronous Generators

Synchronous Motors
- Service
- Synchronous Motors

SynRM motor and drive package
- Service
- SynRM motor and drive package

Traction motors and generators
- Service
- Traction motors and generators

Wind Power Generators
- Service
- Wind Power Generators

Cement, Mining and Minerals Services and solutions guide
As a proven leader in the Cement, Mining, and Minerals Industry, and with continued investment and expansion of service products and solutions, ABB is uniquely positioned to support and optimize the performance of your production systems throughout the entire lifecycle.

Contact us to learn more about how our services and solutions can help you to:

- **Keep production running**: Four ways to keep production running (video)
- **Maximize system performance**: How ABB service extends the lives of automated systems (video)
- **Optimize process performance**: ABB’s three step optimization process (video)
- **Deliver operational excellence**: Energy efficiency (video)
Why ABB Solutions are Better

In-depth industry expertise and support

Ask about: ABB’s ranking as number one in supplier provided services*

ABB’s broad portfolio of services for automation and power provide world-class support, the highest level of competence, and deep understanding of your systems, applications, and processes. ABB services improve equipment productivity, minimize costs throughout the complete lifecycle, and extend the useful equipment life.

The leader in control systems

Ask about: ABB’s ranking as the number one control system supplier for more than ten years

As the #1 ranked distributed control system provider in the world for over 10 years, ABB lays claim to a broad knowledge base including hardware, software, applications (continuous control, batch, QCS and DCS-based SCADA), project services (project design through project management and startup), and non-contract maintenance services. ABB Leads the market in the following key industries; number one in Oil & Gas, Pulp & Paper, Cement & Glass, Mining & Metals, Continuous Applications; and number two in Electric Power, and Batch Applications*.

The gold standard for system evolution

Ask about: Automation Sentinel, control system lifecycle support and evolution program

No one’s evolution program makes it easier and more affordable to evolve a control system. ABB system evolution makes it easy to remain competitive and position production operations for growth.

Evolution programs prepare ABB automation systems for new technology as it becomes available and continuously evolves systems to new levels of control and connectivity. Lifecycle support programs adapt to meet strategic requirements at every stage of a control system lifecycle. No other control system vendor can offer this level of flexibility.

Optimization services with documented ROI of 10% to 1,000%

Ask about: Optimization Services for Industrial Boilers, Paper Machines, Control Loops, Tuning and System Performance, Alarm/Event Management, Batch Processes, Advanced Process Control

ABB Optimization Services deliver profitability. They use proven, continuous improvement methodology, special tools, and knowledge of systems and processes, to identify and release valuable improvement opportunities.

ABB optimization engineers are creative and single-minded. They enjoy improving processes, and hold the highest level of expertise in the field.

World-class best practices for preventive maintenance

Ask About: ServicePro

ServicePro provides best preventive maintenance programs for every ABB technology, developed by ABB R&D; and refined by customers and 1,000+ experienced ABB field engineers. Maintenance processes are continuously measured, reported, and tracked then synchronized with the ServicePro database. This process ensures that the latest and best maintenance procedures are available.

The application of these best practices ensures system and process availability are improved, downtime and maintenance cost reduced and automation life extended.

Cutting-edge service-enabling technology

Ask About: ServicePort

ABB ServicePort, a software/hardware device installed on site, enables ABB experts to provide local support through remote-enabled technology. ServicePort allows ABB assistance with system configuration, process optimization, preventive and corrective maintenance, work order tracking, spare parts, diagnostics, improvement implementation, condition monitoring, and allows faster response and more cost effective access to ABB experts.

*Rankings according to ARC’s 2010 Distributed Control System Worldwide Outlook Report
Advanced Services

Plant automation provides access to valuable process, production and equipment data. The ability to analyze and utilize this data effectively is paramount to decision-making and response time. ABB Advanced Services use proven, continuous improvement methodology, specialized tools, and knowledge of the systems and processes in your operation to identify and release valuable improvement opportunities.

- LifeCycle Index for Cement
- Fuel Optimization
- Asset optimization:
  - Loop Optimization Service
  - LoopScan and LoopTrack
- Fingerprint Diagnostics:
  - Cement Fingerprint
  - Hoist Fingerprint
  - Alarm Management
  - Industrial Boiler
- Energy efficiency
- Production optimization
- Power quality and grounding audit
- Microsoft patch management
- Cyber security:
  - Antivirus management
  - System backup/restore management
  - Control system security validation
  - Risk assessment
  - Remote monitoring and operations room
- Operational excellence reliability
  - Service environment
  - Management of underpinning contracts
  - Plant integrity support
  - System ownership support, technical account management
  - Criticality classification

Spare Parts and Repair Services

ABB’s global logistics network is strategically positioned to provide fast parts and repair service throughout the world, 24 hours a day. Our organization uses standardized processes, tools and metrics to ensure that components are delivered efficiently to your site.

- Parts Repair Service
- Parts Refurbishment Service
- Remote Troubleshooting
- Corrective maintenance
- Parts inventory management
  - Parts Fingerprint
  - Inventory Access Program
  - Lease to own spare parts
  - Parts contracts
- Pre-Owned Parts
- Parts Test Service
- Emergency Parts Service
- Parts exchange services
  - Business OnLine
  - Parts maintenance, repair, and overhaul (MRO)
  - Spare Parts Service
  - Parts kits
  - Preventive Maintenance Kits
  - Extended warranty time
Service Offerings

Evolution and Retrofit Services

The ABB lifecycle management model provides framework used to develop evolutionary services that maximize availability and performance throughout the life of ABB equipment. This model enables ABB to provide optimum support to end-users and a smooth transition to new software and equipment when a product reaches the end of its lifecycle. Most ABB products provide useful service for twenty years or more, throughout that lifecycle, we work to provide solutions that expand the functionality and extend the lifecycle of your equipment.

- AC/DC Drives Retrofit for Shovel/Draglines
- Automation Sentinel
- System Extensions for System 800xA
- Control System Evolution Services
- 800xA Lifecycle Simulator
- Software upgrades
  - Software Graphic Conversion Service for Harmony
  - Software Graphic Conversion Service for Advant OCS with MOD300
  - Software license maintenance, software upgrade agreement
- Hardware upgrades
  - Mine Hoist Systems Brake Card Upgrade Kit
  - Mine Hoist Systems - Hydraulic Station Valve Block Upgrade Kit
  - ECCOS -Electronic compact starter for wound rotor drives
- Software management
- Retrofits
- Parts Kits

Engineering and Consulting

ABB offers consulting services to identify potential for improvement in the areas of industrial asset management, production processes and operations’ infrastructure. Our highly qualified experts have an in-depth knowledge of the needs as well as best practice your industry, whether you have a single or a comprehensive technical/organizational issue.

- Installation and commissioning
- Engineering services
  - Engineering configuration
  - Engineering planning and specifications
  - Lifecycle Analysis
  - Site Audit
  - Site Survey
- Industrial Energy Efficiency
- Energy efficiency improvements
- Maintenance management systems consulting
- Reliability consulting
  - Reliability Fingerprint
- Telecommunications
- Environmental Consulting
- Integrity management - pRIME
- Operational improvement
- Safety
- Advanced process control
- Reliability and plant performance improvement
- Automation systems
- Control system manufacturing
- Engineering, design and drafting
- Health, safety and environment quality assurance
- Project management, EPCI delivery for EICT
- Validation Consulting
- Application engineering
Remote and Technical Support

The rapid advancement of automation and information technology in the cement and mining industry requires a high level of expertise in maintaining and managing resources. The ABB Service Environment™ has been developed specifically to meet these challenges.

Advanced remote technology delivers higher service value and performance. Remote Services extend assistance for a wide range of support needs. From telephone and self-service web support to direct and secure system interaction, remote services provide real-time access to technical specialists globally, and service experts 24 hours a day.

- Remote troubleshooting
- Technical Telephone Support: SupportLine
- Wireless remote diagnostic solution for analytical instruments
- Remote Access Link Connectivity
- Drive Monitor: Remote enabled service for MV Drives
- ServicePort Service Delivery Device
- Remote condition monitoring

Maintenance and Field Services

Effective predictive, preventive and corrective maintenance practices maximize the performance of your automation and production equipment. ABB service personnel are trained in the latest diagnostic, repair and maintenance practices to ensure adequate ROI. Maintenance solutions such as condition monitoring help to predict equipment failure and prevent costly downtime.

- Life Expectancy Analysis Program for motors
- Remote condition monitoring
- Power quality and grounding audit
- Resident engineer program
- Resident field service engineer for analytical instruments
- ServicePro 3.0 Service Management System
- Predictive maintenance
- Preventive Maintenance
- Maintenance Contracts
- Mid-Life Refurbishment
- MACHsense-P condition monitoring for motors
- Inspection and diagnostics
- Diagnostics and Condition Assessments
- ABB Full Service®
- Service agreements
- End-of life services
  - GMD Service Agreement
  - Disposal and recycling
  - Resale
- Benchmarking and audits
  - Conveyor Scan
  - Predictive maintenance
  - Hoist Scan
- Preventive Maintenance
  - ServicePRO for Mine Hoist Systems
  - ServicePRO for Shovels
Service Offerings

Training

A skilled and efficient workforce is a plant’s most valuable asset. We help to increase workforce knowledge, providing a more proactive response to system and process challenges. Our training programs for engineers, programmers, maintenance, and operations personnel provide comprehensive and up-to-date technical expertise for existing and new products, processes, and technology advances. Training is available on-site at ABB training facilities, or locally, at your plant site.

- ABB University
- Discount programs
- Coaching services
- Classroom training
- On-site training
- E-Learning
- Authorization process training (expert FSE)
- Maintenance and Operator Training

Installation and Commissioning

ABB service engineers understand your process and system to deliver expert on-site installation and commissioning services for ABB products. Services range from self-maintenance support to consulting, support and full project management and outsourcing solutions.
Cement Solutions

ABB is a world leading provider for the Cement Industry. ABB’s deliveries include complete plant electrification, integrated process control and optimization solutions, motors and drives systems as well as instrumentation and analyzer systems. ABB offers innovative solutions and services for the whole production chain.

Our offering:
- Automation
- Instrumentation
- CPM Solutions
- Electrification
- Motors and Drives
- Service

Open Pit Mining Solutions

ABB is an experienced and reliable partner for electrical equipment and automation of systems for open pit mining and material handling.

Regardless of whether the reconstruction of existing systems or initial installation is involved, we develop individual solutions. We accompany the process from planning, installation, commissioning, field-testing through to service during regular operation.

Our offering:
- Automation
- Instrumentation
- Service
- Collaborative Production Management (CPM)
- Motors and Drives
Underground Mining Solutions

ABB is the only supplier of complete mine hoists, both mechanical and electrical.

Mine Hoist Solutions: By working closely with customers, ABB has introduced a number of technological breakthroughs for mine hoisting such as state-of-the-art drive and control systems, hydraulic disc brakes, controlled braking, Rope Oscillation Control, etc. ABB has delivered more than 600 new hoists and modernized hundreds of existing plants.

Electric Trucks: ABB supplies electrical systems for underground mine trucks. In comparison with diesel trucks, the electric truck can maintain a higher speed, resulting in greater productivity as well as lower operating and maintenance costs while substantially improving the underground environment.

Mine Automation Solutions: To meet the increased demand for higher productivity, enhanced safety and a better underground environment, ABB can provide Mine Automation Solutions based on Industrial IT System 800xA, including haulage systems, crushers, conveyor belts, hoisting, ventilation fans, etc.

Our offering
− Complete Mine Hoists
− Mine Automation
− Electric Trucks

Minerals Solutions

ABB is offering comprehensive packages of competencies, products and services for the complete primary production chain in the mining and minerals processing. Our experience is unmatched, with a track record of supplying complete electrification for more than 60 plants worldwide.

ABB is committed to the success of your investment. Our expert engineering, supply, construction and management services, and our in-depth experience of the production process ensure results. Our approach treats the plant and its requirements as single fully integrated entity. So, whether you need a single critical component or a complete turnkey electrification system, look to ABB as your single source.

Our offering
− Automation
− Motors & Drives
− Electrification
− Instrumentation
− CPM Solutions
− Service
Primary Aluminium

A broadest range of electrical and control equipment for switching and distributing electrical power.

Our expert engineering, supply, construction and management services, and our in-depth experience of the production process ensure results. Our approach treats the plant and its requirements as single fully integrated entity. So, whether you need a single critical component or a complete turnkey electrification system, look to ABB as your single source.

As a world leader, we accept our responsibility to deliver the best deal within your time, money and compliance with your project needs. We seek to involve you in our expert engineering, supply, construction and management services to improve your solutions and return on investment.

Our offering
- Automation Control Arch
- Motors & Drives
- Optimization/Info Mgmt
- Electrification
- Instrumentation
- Service
Contact us

1 800 HELP 365
(1 800 4357 365)
Outside USA/Canada: +1 440 585 7804

Telephone menu options

1 Robotics:
- Paint
- Powertrain
- Body-in-White
- Flexpicker
- Press Automation
- Weld.
  1 Technical Support or Field Service
  2 Parts
  3 Training
  4 Field Service

2 Process Control and Network Management Systems:
- Network Management Systems: EMS/SCADA, DMS, BMS.
  Service for Control Systems
  1 Field Service
  2 Parts
  3 Technical Support
  4 Training

3 Instrumentation and Process Analytics:
- Service for Measurement Products
  1 Field Service
  2 Parts
  3 Technical Support
  4 Training

4 Drives, Motors:
- Service for drives, inverters and converters
  Field Service, Parts, Tech Support, Training.
  1 Field Service
  2 Parts
  3 Technical Support
  4 Training

5 Quality Control Systems (QCS):
- Quality Control Systems: Advant/
  Master, Accuray, 1180, 1190, ULMA, Measurex.
  1 Field Service
  2 Parts
  3 Technical Support
  4 Training

6 Low Voltage Products and Systems (≤480V):
- Circuit & Motor protection
- Electronic Controls, PLCs, Panel Switches, Capacitors, Relays, Soft.
  Brands Include: SSAC, Entrelec, SACE.
  Service for Low Voltage Products and Systems

7 Power Products (>600V–800kV):
- Medium and High Voltage Products:
  Transformers, Relays, Switchgear, Breakers, Capacitors, Switches.
  Brands Include: ASEA, Westinghouse, BBC, ITE, BerMac.
  Service for Medium Voltage Products and Systems
  Service for High Voltage Products
  Service for Transformers

8 Substation Automation:
- PCM, ComBiflex, IED, Protection
  Relays, Microscada, RTU Controls.

9 Power Generation and Water Utilities:
- Field Service, Parts, Tech Support,
  Training.

0 ABB Help Desk (General Assistance):
  1 SupportLine
  2 Subscriptions
  3 New Products
  4 Account Support
  0 Speak to Representative

E-mail

Field Service:
USServiceRequest@us.abb.com

Parts and Repair:
PartServices@us.abb.com

Technical Support:
AutomationSupportLine@us.abb.com

ABB University:
ABBuniversity@us.abb.com
ABBuniversity@ca.abb.com

Help Desk:
ABB.HelpDesk@us.abb.com

Web

General Services:
www.abb.com/service

Parts and Repair:
http://online.abb.com

On-line Product Support:
http://SolutionsBank.abb.com

ABB University:
www.abb.com/abbuniversity

Other service links and contacts

Motors and Generators
sales.us@baldor.com

Power Electronics
Daniel Peters: 262 785 3440

Turbocharging
Tel (24/7): 281 930 8383

Metallurgy Products

Power and productivity for a better world™