Industrial Services and Solutions
Oil & Gas and Petrochemical
### 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

### Motor Circuit Breakers
- Flexible Connection Kit
- HEC 7/8
- HECPS-S
- HEC
- 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

### Turbocharging
- Service
- Turbochargers

### 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

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

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

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

### Metallurgy Products
- Service
- Application Steel Strips
- Stirrers & Brakes for Steel
- Stirrers for Aluminium Furnaces

### Power Electronics
- Power Electronics Service
- Control Systems
- Energy Storage & Grid Stabilization
- Excitation Systems & Combined Solutions
- Generation
- Grid interconnection
- High Power Rectifiers
- Power Quality
- Sensors
- SYNCHROTACT® Synchronizing Products
- Traction Converters

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

### Semiconductors
- GTO
- IGBT and Diode Dies
- IGBT and Diode Modules
- IGCT
- Presspack Diodes
- Silicon Surge Voltage Suppressors
- Thyristor

### Power Cables and Cable Accessories
- Cable Accessories
- Cable System (36 kV and above)
As a proven leader in the Oil & Gas and Petrochemical Industry and with continued investment and expansion of new services and solutions. We are uniquely positioned to support your changing requirements based on our industry, process, and technical expertise.

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)

**Ask us about Consulting and Asset Centered Services:**
- Asset closure and demolition
- Data center equipment services
- Drilling drive design and installation
- Electrification and power distribution services
- Electronic shift management systems
- Energy management services
- Environmental system maintenance and reporting services
- Health, safety and environment quality assurance
- Human factors engineering services
- Industrial water care and minimization
- Maintenance management systems consulting
- Reliability services
- Specialist design services
- Subsea transformers and variable speed drives
- Third party automation services
- Third party spares parts management services

**Contents**

- Why ABB Solutions are Better ........................................ 4
- Service Offerings ......................................................... 6
  - Advanced Services .................................................. 6
  - Spare Parts and Repair ............................................... 6
  - Evolution and Retrofit Services .................................. 7
  - Engineering and Consulting ....................................... 7
  - Remote and Technical Support ................................... 8
  - Maintenance and Field Services ................................. 8
  - Training ................................................................. 9
  - Installation and Commissioning ................................ 9
  - Main Automation Contractor ..................................... 10
- Gas Processing ............................................................ 10
- Liquified Natural Gas .................................................. 11
- Onshore Production .................................................... 11
- Refining ................................................................. 12
- Terminal Automation .................................................. 12
- Gas Distribution ........................................................ 13
- Integrated Operation ................................................... 13
- Offshore Production .................................................... 14
- Pipelines ................................................................. 14
- Contact us .............................................................. 16

**About this document**
Scan this QR code, or visit http://goo.gl/2xFXY, to receive a PDF version of this document, which includes hyperlinks to additional ABB.com information.
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%


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
Proven telecom engineering capabilities

**Ask About: Telecommunications**

ABB is a highly qualified telecommunication solutions provider with extensive experience and global capabilities, specializing in turnkey telecom projects for the Oil and Gas industry. For over 25 years we have been in the forefront of developing communication solutions – focusing on efficient, safe and profitable operations for our customers.

Through the years, ABB has built a specialized telecommunications organization dedicated to the needs of the offshore, onshore, LNG and pipeline market segments. We bring a unique level of competence into each new project, and our capabilities within telecom engineering, integration and total project management and execution have been proven in some of the most demanding projects in the industry.

**Integrated, fully scalable safety systems and services**

**Ask About: Safety Systems**

ABB has over 30 years of accumulated experience in designing, implementing and maintaining fault-tolerant, programmable safety systems. Our offering includes certified safety controllers and instrumentation as well as lifecycle services; from facilitation of Safety Integrity Level (SIL) determination to certified implementation capabilities.

Through System 800xA’s common operations, engineering, and information environment for Basic Process Control Systems (BPCS) and Safety Instrumented Systems (SIS), ABB provides safety solutions that are easily scalable from a few loops to complete safety systems.

**Reliable and secure electrical power supply**

**Ask About: Power Management System**

ABB’s Power Management System keeps power flowing to your offshore platform, FPSO, refinery, LNG complex or large petrochemical process facility. The system helps secure a reliable and steady electrical power supply – despite shortages, outages, overloads or fluctuations.

Oil and gas processing plants from the Arctic Ocean to the deserts of Qatar rely on ABB’s Power Management System. It helps prevent blackouts and disturbances of operations while it controls energy costs, enhances safety and mitigates both environmental and health impacts.

**Design of safe, efficient and effective control room environments**

**Ask About: Control Room Design**

The control room is the most important room in an oil and gas facility, yet many are poorly designed. In addition to potentially contributing to operator error, badly-planned control rooms will fail to attract the caliber of operator needed to run today’s highly integrated process facilities.

A total control-room environment, focused on operator needs, promotes fast, safe and correct decision making. It gives operators easy access to the information they need through fully interactive displays and allows them to quickly exchange critical information with colleagues. In such an environment, operators stay alert, engaged and proactive at all times, in full control of routine tasks and ready to tackle the unexpected.
Service Offerings

Advanced Services

Analyzing and utilizing automation data effectively is paramount to decision-making and response time. ABB process and asset optimization services use a proven, continuous improvement methodology, special tools, and knowledge of the systems and processes in your operation to identify improvement opportunities.

- Asset optimization:
  - Loop Performance Service
  - Optimization Implementation
- Fingerprints Diagnostics:
  - Alarm Management
  - Industrial Boiler
  - Loop Performance
  - 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
  - NIDS/HIDS management
  - User management
  - Virus removal
  - Support creation of a security organization
  - Support security policy creation
- Operational excellence reliability
  - Service environment
  - Management of underpinning contracts
  - Plant integrity support
  - System ownership support, technical account management
  - Criticality classification

Spare Parts and Repair

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
- Preventive Maintenance Kits
- Parts kits
- Extended warranty time
Evolution and Retrofit Services

The ABB lifecycle management model provides the framework used to develop and provide 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 the product lifecycle, we work to provide solutions that expand the functionality and extend the lifecycle of your equipment, while maintaining your core investment.

- 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
  - REUSE OGP Library
  - Software license maintenance, software upgrade agreement
- Software management
- Retrofits
- Hardware upgrades
- Parts Kits

Engineering and Consulting

ABB offers consulting services to identify key 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 practices in the Oil, Gas and Petrochemical industry, whether you have a single or a comprehensive technical/organizational issue.

- Green machine
- Polymer recovery solution
- Wellsite WetMeter package
- 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
- Operational excellence
  - Reliability Fingerprint
- Telecommunications
- Environmental Consulting
- Safety
- Advanced process control
- Automation systems
- Control system manufacturing
- Engineering, design and drafting
- Health, safety and environment quality assurance
- Integrity management - pRIME
- Operational improvement
- Reliability and plant performance improvement
- Project management, EPCI delivery for EICT
- Validation Consulting
- Application engineering
Remote and Technical Support

The rapid advancement of automation and information technology in the oil and gas industry requires a high level of expertise in maintaining and managing resources. ABB also understands the importance of ensuring security and optimization at all times. The ABB Service Environment™ has been developed specifically to meet these challenges.

- Service Environment for oil and gas
- 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 high value for your maintenance investment. Maintenance solutions such as condition monitoring help to predict equipment failure and prevent costly downtime.

- Power quality and grounding audit
- Remote condition monitoring
- Life Expectancy Analysis Program for motors
- 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
  - Disposal and recycling
  - Resale
  - SF6 reclaim and recycling
Training

A skilled and efficient workforce is a plant’s most valuable asset. We help to increase workforce knowledge, providing more productive 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, who understand your process and system, deliver expert on-site Installation and Commissioning services for ABB products and systems. Services range from self-maintenance support to consulting, support and full project management and complete outsourcing solutions.

- Field Services
- Meter Proving Services
Main Automation Contractor/ Main Electrical Vendor

Manufacturers and plant operators are turning to automation and electrical product developers to provide industrial solutions that meet the technical and execution requirements of their complex facilities. This approach requires product developers to shift from an equipment supplier to a role in which they are providing engineered solutions. ABB defines this role as a Main Automation Contractor (MAC) or Main Electrical Vendor (MEV).

Advantages of this approach include:
- Complete project deliveries
- Single point of contact
- Best-in-class product portfolio

Products and Solutions:
- FEED Stage
  - Cost Estimate
  - Scope of Work
  - Schedule and Reporting
  - System Architecture
  - Functional Specifications
  - Third-party Interface Requirements

  Detailed Engineering
  - Detail Design
  - Procurement
  - Manufacturing
  - Factory Acceptance Tests (FATs)

  Site Completions
  - Installation and Power-up Support
  - Training
  - Commissioning/Start-up Support
  - Documentation

Gas Processing

Our solutions allow real-time access to gas processing operations and performance with minimum cost of investment, operation and maintenance.

Products and Solutions:
- Advanced Control & Optimization
- Control Systems
- Generators, Motors, Drives & Power Electronics
- Oil & Gas Measurement
- SCADA
- Analyzers & Analytical Solutions
- Electrical/Integrated Project Solutions
- Instrumentation
- Safety Systems
- Telecommunications
- Control Room Design
- Power Management Systems
Liquified Natural Gas

ABB provides total automation, electrification and telecommunication solutions that ensure safe, environmentally friendly and profitable LNG operations.

Products & Solutions:
- Advanced Control & Optimization
- Control Systems
- Generators, Motors, Drives & Power Electronics
- Oil & Gas Measurement
- Analyzers & Analytical Solutions
- Electrical/ Integrated Project Solutions
- Instrumentation
- Safety Systems
- Telecommunications
- Control Room Design
- All Electric Compressor Drive Systems
- Power Management Systems

Onshore Production

We have worldwide engineering centers located in over 40 countries with over 4,500 dedicated engineers and project managers. We understand the needs of your industry and use our global technology resources to meet them.

Products and Solutions:
- Control Systems
- Generators, Motors, Drives & Power Electronics
- Remote Measurement, Custody Transfer, RTUs, BTU Analyzers
- SCADA
- Analyzers and Analytical Solutions
- Electrical/Integrated Project Solutions
- Instrumentation
- Telecommunication
- Control Room Design
- Power Management Systems
Refining

ABB offers a full spectrum of services to the refining industry, including a fully integrated package of advanced refining process technologies – solutions for blending components, reformulated fuels, hydroprocessing and bottoms upgrading.

**Products & Solutions:**
- Advanced Control & Optimization
- Control Systems
- Generators, Motors, Drives & Power Electronics
- Oil & Gas Measurement
- Analyzers and Analytical Solutions
- Electrical/Integrated Project Solutions
- Instrumentation
- Safety Systems
- Telecommunications
- Control Room Design
- Power Management Systems

Terminal Automation

Our terminal solutions allow real-time access to terminal operations and performance with minimum cost of investment, operation and maintenance.

**Products & Solutions:**
- Control Systems
- Enhanced Terminal Automation
- Generators, Motors, Drives & Power Electronics
- Oil & Gas Measurement
- Analyzers & Analytical Solutions
- Electrification
- Instrumentation
- Safety Systems
- Telecommunications
- Control Room Design
- Power Management Systems
ABB is a leading provider of products & solutions for the gas distribution segment. We have extensive experience, provide global capabilities, and specialize in turn-key projects. ABB focuses on efficient, safe and profitable operations for our customers.

**Products & Solutions:**
- Control Systems
- Generators, Motors, Drives & Power Electronics
- Remote Measurement, Custody Transfer, RTUs, BTU Analyzers
- Analyzers & Analytical Solutions
- Electrical/Integrated Project Solutions
- Instrumentation
- SCADAvantage
- Telecommunications

According to Statoil ASA, one of our main customers, Integrated Operations is a whole new approach to solving the challenges of having personnel, suppliers and systems offshore, onshore and in different countries. Furthermore, Integrated Operations involves using real-time data and new technology to remove the divides between disciplines, professional groups and companies.

Statoil ASA claims that some of the benefits of Integrated Operations are as follows:
- Improved HSE
- More efficient drilling operations
- Better placement of wells
- Production optimization
- Increased recovery
- Better reservoir and production control
- Better monitoring of equipment and more efficient maintenance
- Better resource exploitation
- Increased regularity (uptime)

**Products & Solutions:**
- Asset Management & Condition Monitoring
- Information & Alarm Management Applications
- Operation & Collaboration Centers
- Flow Assistance & Production Optimization
- I.T. Topology & Infrastructure
- Performance Solutions & Services
Offshore Production

Focusing on the needs and challenges of our customers, ABB provides innovative electric power, automation and telecommunication solutions to the offshore Oil and Gas industry.

Products & Solutions:
- Advanced Control & Optimization
- Control Systems
- Generators, Motors, Drives & Power Electronics
- Oil & Gas Measurement
- Analyzers & Analytical Solutions
- Electrical/Integrated Project Solutions
- Instrumentation
- SCADAvantage
- Safety Systems
- Telecommunications

Pipelines

Our experience as a turn-key supplier includes compressor stations, pumping stations, block valve stations, scraper stations, metering stations, pressure reduction facilities among others.

Products & Solutions:
- Control Systems
- Generators, Motors, Drives & Power Electronics
- Remote Measurement, Custody Transfer, RTUs, BTU Analyzers
- Analyzers & Analytical Solutions
- Electrical/Integrated Project Solutions
- Instrumentation
- SCADAvantage
- Telecommunications
Contact us

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

Telephone menu options

1 Robotics:
  1 Technical Support or Field Service
  2 Parts
  4 Training
  5 General Inquiries

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:
Field Service, Parts, Tech Support, Training.
Service for drives, inverters and converters

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, Softs.
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 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
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