

# ABB Full Service® – Executive Briefing

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## Introduction

After years of downsizing and emphasizing core competencies, manufacturers can no longer rely solely on internal staff to meet the demands of designing, implementing, maintaining and optimizing their manufacturing infrastructure. Innovative partnerships that emphasize shared risk, common objectives, and business benefits tied to operating results are emerging to redefine supplier / client relationships. As technology differentiation becomes less important in purchasing decisions, producers are beginning to hold suppliers accountable for industry-specific solutions that impact overall operational efficiency including cost, productivity and quality.

## ABB Performance Services

In response to the expanded role suppliers must take in assuring the economic and operational success expected by our clients, ABB has developed a portfolio of performance-based services designed to produce measurable business results. With an installed base of automation systems and solutions in excess of \$100 billion, ABB Performance Services reflects the collective experience of more than 20,000 service professionals delivering on contracts in over 40 countries worldwide. The resulting best-in-class methodologies, benchmarks, tools, and processes have been incorporated in our systems, training and methodologies to form the basis of the Performance Services business.

ABB Performance Services include a wide range of programs from life-cycle support contracts for ABB products and systems up ABB Full Service agreements to maintain entire production facilities. Regardless of size or scope, every Performance Service agreement is designed to align with the client's business objectives, core competencies, asset base, and organizational culture. During the initial discovery process, ABB works closely with the client to understand these business drivers and develop the appropriate service strategy. The result is a service program with a clearly defined scope, financial justification, implementation plan, and Key Performance Indicators. (KPIs)

## ABB Full Service®

ABB Full Service is a maintenance and reliability outsourcing program that has turned routine maintenance activities into a profit source for over 150 clients worldwide. Bringing together world-class maintenance and reliability methodologies, parts and logistics management, online tools, and domain expertise, ABB Full Service increases asset effectiveness while keeping tight control of costs.

## Scope

- Maintenance Concept
  - Reliability Engineering
  - Maintenance Management Systems (CMMS)
- Maintenance Operations
  - Maintenance Management
  - Planning & Scheduling
  - Maintenance Execution
  - Turnaround Management
- Equipment Performance Improvement
  - Improvement Engineering
- Supply Chain Management
  - Inventory and stores management
  - Subcontracting management
- Technical Documentation



## Benefits of Full Service

Performance and financial impact – Each contract is measured against Key Performance Indicators (KPIs) developed with the client. Productivity, quality, environmental, safety and cost objectives are all potential targets for a Full Service agreement. To demonstrate our commitment to the client’s success, ABB includes risk / reward sharing in our Full Service contracts, linking ABB’s financial outcome directly to the client’s performance.

**Performance Scorecard**

	Site	World Class
Manufacturing Added Value/Employee \$	338	640
Adherence to Production Plan %	80	98
Product Rate %	86	90
Defects per Million Opportunity (DPMO)	23	3
Scheduled downtime - % of capacity	8	3
Unscheduled downtime - % of capacity	10	2
Availability %	82	95
Maintenance cost ratio	1.9	2
Process Capability Cpk	0.4	>2.0
Inventory Turns	25.2	24
Overall Equipment Effectiveness (OEE)	60.8	85

- Based on client’s KPIs
- Quantified economic benefit
- Online performance monitoring
- Risk / Reward sharing
- Proven at sites worldwide

**Reliability and life-cycle management** – By extending the life of existing equipment and increasing Overall Equipment Effectiveness capital expenditures can be delayed or avoided. This combination of capital efficiency and increased volume from productivity gains directly impacts balance sheet metrics such as Return on Capital Employed (ROCE) and Return on Net Assets. (RONA)

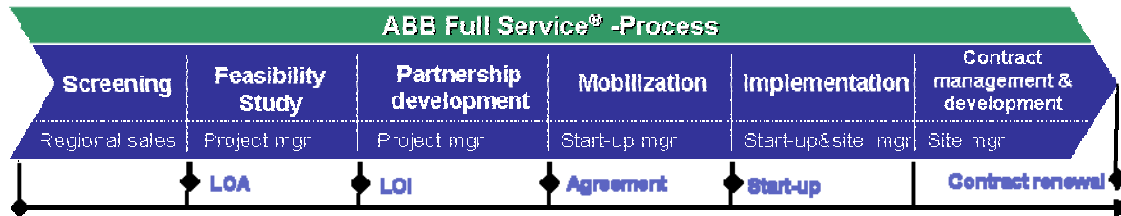
**Maintenance managed as a business** – A detailed feasibility study and maintenance management master plan are developed before signing a Full Service contract. This provides the customer and ABB a clear picture of the current state of the assets and allows costs to be accurately forecast and managed over a multi-year contract. As production levels increase or decrease, maintenance costs can be scaled accordingly allowing benefits to be calculated on a per-unit basis and eliminating the need to allocate significant fixed costs over variable production levels.

**Creating a service mindset and culture** – The transformation to a service-minded culture is guided by a change management program that includes HR processes, orientation for new and existing employees and ongoing communications to keep stakeholders informed and committed. Frequent reporting against KPIs along with open and honest exchange of information ensures organizational focus on meeting business objectives.

**Access to ABB Know-how** – Reliability technology is a core competency at ABB and we are uniquely positioned to develop and evaluate emerging technologies and apply them as they become commercially viable. In addition, our large client-base and early exposure to new technologies allows ABB to maintain a highly skilled workforce that is able to implement and maintain specialized solutions.

## Full Service Methodology

Developing a Full Service agreement is a collaborative effort between ABB and the client. During the process, a core team of ABB and client resources follows a proven methodology to collect and analyze information in a stage-gate process that balances investments in time and resources against the data needed to make sound business decisions. At the conclusion of each stage, there is a review where ABB and the client discuss progress and reach agreement on how to proceed.



**Screening** – Scope and boundaries, desired outcomes, resource requirements, executive sponsorship, and schedule are evaluated and documented in this step to guide the team through the engagement. A letter of Authorization is signed to approve the Feasibility Study

**Feasibility Study** – Functional requirements are developed, benchmarking and gap analysis is completed, current / future states are identified, expected benefits and costs (value proposition) are identified, and a preliminary decision and risk analysis is conducted. A letter of intent is signed to proceed to Partnership Development.

**Partnership Development** – The Maintenance Management Master Plan is developed to set the strategy for maintenance and reliability at the site. Due diligence is performed for HR, legal, health and safety, and technical issues. KPIs are defined and the mobilization and transition plan is created. A Maintenance Alliance Agreement is signed to initiate mobilization.

**Mobilization** – Systems and networks are installed, the new maintenance organization is announced, implementation plans are finalized for HR, facilities, supply management, and accounting. A communication plan is developed to facilitate change management and identify issues early in the program.

**Implementation** –Program execution begins with start-up and training occurs, new processes are introduced.

**Contract management and development** – The alliance management process governs the relationship and continuous improvement programs are introduced to increase performance at the site.

## Summary

ABB Full Service provides the process and manufacturing industries with a structured program to improve and sustain the performance of production assets. The best of these arrangements occurs when the client and ABB work together as team to jointly develop a business model that supports the client’s top-level strategy by providing world-class reliability and maintenance services. A risk / reward performance mechanism ensures that continuous improvement opportunities are identified and captured over the life of the contract and reinforces the strategic intent of the Full Service agreement.

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