

## ABB is the right Solution Provider

### **Collaboration: Working jointly with others.**

In the world of technology, “*Collaboration*” is defined as applications and methods that connect and control all aspects of business processes. This not only means the plant floor but encompasses every system within the organization. In today’s business arena this includes information being distributed across global communities.

What does collaboration offer? Better communication; improved decision making; and the ability to perform asynchronous activities. All three are invaluable in the competitive market today.

In a 2001 ARC publication (Collaborative Production Strategies) the features of a good solution provider were not only their experience in implementing Collaborative Production Management systems but also experience with leading edge technologies. But that was not all; a key component is the ability to provide the **complete** system scenario.

Providing “best in class” solutions is not based solely on automation providers’ internal projects looking at in-house products or solutions. It is investigating the technology market for solutions that fit the need, complement one another and complete the design.

This is what ABB has to offer, the knowledge to work with the technology that is needed, and the successful associations to build a team whose collective offering provides you with specific cost effective business solvers. ABB also has the proven reputation of successful start-ups and ongoing support.

The first component is the software technology experience. ABB developers are proficient in:

- ◆ Windows NT /2000
- ◆ Object Oriented Design and Programming
- ◆ Component software development
- ◆ COM/DCOM and Windows DNA
- ◆ Visual C++
- ◆ Visual Basic
- ◆ Microsoft Access
- ◆ Microsoft SQL Server
- ◆ Microsoft Transaction Server (MTS)
- ◆ Microsoft Internet Information Server (IIS)
- ◆ Visual Interdev and Active Server Page (ASP) development
- ◆ HTML and Dynamic HTML
- ◆ XML
- ◆ VB and Java Scripting
- ◆ OPC (DA), (HDA), (AE)

Our programmers also develop interfaces to many systems available throughout the process control market. For instance:

- ◆ Fisher Provox
- ◆ Allen Bradley, GE, Modicon PLC's
- ◆ Daniel Fiscal Metering Systems
- ◆ Moore ICI's
- ◆ Motorola
- ◆ Procal Emissions Systems
- ◆ Kistler-Morse Tank Gauges
- ◆ Fisher DCS

The second component is our team building skills. ABB has worked with many technology suppliers, integrators, consultants and of course customer teams while designing and implementing solutions. With today's fast technology pace it makes sound business sense to collaborate bringing strong skill sets and expertise together. Providing a designated team with a clear understanding of solution responsibilities enables the customer to have one point of contact and the reassurance that the system will perform as designed.



As for reputation, it speaks for itself. ABB has worked with many companies implementing systems and providing services on small projects such as PLC interfaces, to projects that encompass not only interfaces and plant control systems, but complete production management solutions.

## Testimonials

The *Greater Vancouver Regional District* project was a new automation system that was built as part of a major upgrade of their treatment facilities (50 operator consoles, 48 process control units, Information System). Our team worked closely with the GVRD personnel and built a control system that not only helped with daily operations but also provided reports. The reports detailed information on plant performance, predictive maintenance and equipment operation. Other reports told supervisors when chemical inventory needed re-stocking, or the costs per day or per unit enabling them to tweak the system to reduce overall costs and improve performance.

“One of the items that we recognized at the start of the project was that there was an opportunity to provide “meaningful data” or information from the control world processors to the regular work place desktop. The fact is that if historical collection criteria are intelligently assigned, access to data through ABB’s tag wizard tool is a breeze. This tool truly turns data into information that is actually used.” *Michael Kennett GVRD*

The *Sable Offshore Energy Project (SOEP)* constructed three natural gas reservoirs with future plans to develop three more. The fields contain approximately 85 billion cubic metres of recoverable gas reserves. Exxon Mobil Oil Canada, Shell Canada, Imperial Oil Resources and Nova Scotia Resources jointly own the project that required both onshore and offshore facilities for production, transmission and processing of the natural gas.

ABB was selected as a member of the SOEP Facilities Alliance responsible for the design and construction of the project. SOEP’s “best in class” alliance philosophy enabled ABB to be directly involved in the front-end engineering. The team was charged with designing a project with a view to lowest lifecycle costs rather than just lower initial capital costs.

As the automation partner ABB was responsible for all automation aspects of the project. This included the specification designs as well as evaluating and procuring third party applications/systems. Key integrated control packages included: process control systems, safety shutdown systems, fire and gas detection systems, all telecommunications, simulator and simulator training and process information management.

Our role as the automation partner enabled ABB to manage the integration of all production platform systems into a single complete system that was delivered on time and under budget.

ABB drew on its vast experience in information systems and business knowledge to develop an *Oil Production Information System (OPIS)* for the *Terra Nova Floating Production Storage and Offloading (FPSO)* vessel. The Terra Nova field is the second largest oil field off the coast of Canada. Comprised of three fault blocks they will be averaging 129,000 barrels of oil per day. Once again ABB was a key factor providing the

open control system, safety shutdown systems, fire and gas detection systems, simulator and simulator training and OPIS.

The OPIS automates the collection, organization, storage, presentation, and applications of real time and historical FPSO processes and operational data in the vessel. This data comes from a variety of sources; ABB's open control system, a calculation facility, a manual data entry application and through external data links such as the hull stress monitoring system, production allocation and weather system.

“The full integration of all data from all systems in OPIS was a key benefit for Terra Nova. It is key for operations and all personnel to have access to all real time and historical information from one system to make informed decisions and help them do their jobs more effectively.

We needed a way to take all of this process and other information from down-hole pressures and temperatures to advanced weather system warnings, vibration monitoring for maintenance, shuttle tanker off loading and add to the value chain of our operations. We will get better diagnosis of problems, more informed operators coming onto shift and remote troubleshooting capabilities that will serve well through our critical operations phase. “ *Tim Fischer Terra Novas OPIS Process/Integration Lead in Operations.*

It is systems like the examples above that reflect on ABB's abilities and dedication to providing solutions that fully meet our customer's needs.

Solutions like the Collaborative Production Management, an integration of hardware, software and services, that provides a framework for the flow of information between the process, plant control and business systems. The instantaneous access to real time and historical information enables users to make informed decisions about day today activities as well as long-term operations.

Ultimately the solution provides a decision support tool that leads to improved process operations through enhanced process understanding.