

Power and automation solutions



ABB is the technology leader in two crucial areas of industry: electrical power and automation. In this issue of *ABB Review*, our quarterly magazine reporting on ABB technology, we look at some of the latest developments in these two core areas and at how they impact different industries.

Take automation: Communication within process automation systems relies on time-critical data exchange and time synchronization so precise as to be measured in microseconds. But how do you guarantee your systems are synchronized with that kind of accuracy? ABB's answer is to build high-precision time synchronization into its latest generation of automation equipment.

Or power: How do you ensure a constant supply of electricity to industry at an unvaryingly high quality? New products, like our High Speed Transfer System, or the powerful static var compensators we have installed in Namibia's 400-kV AC network – both described in this issue – are the answer.

With our power and automation technologies, we develop solutions for a broad customer base. Industry segments like utilities, consumer goods, pulp and paper, or metals and mining, are just some of the areas in which our power and automation technologies are firmly established. Another is the oil, gas and petrochemicals industry.

Here, for example on offshore platforms, space constraints, emissions requirements and a high dependence on reliability and efficiency call for special automation and power solutions. One, recently implemented on a North Sea platform, combines two new ABB technologies – Motorformer™ and HVDC Light™ – in a compact electric drive system that uses power generated onshore to drive the compressors.

Deep down inside an oil or gas well is hardly the place you would expect anyone to place complex electronics. But that is exactly what ABB is doing to measure critical parameters and ensure efficient and reliable well production. ABB intelligent well technology is today widely deployed, and a major contributor to profitable field development.

ABB is also developing new concepts for the ultra-deep water exploitation of oil and gas reservoirs. The NuDeep™ Deepwater Production System is one example, and the subject of an article in this issue.

Another of our articles shows that ABB automation and power technology also has much to offer the oil and gas downstream industry. Our ethylene technology, for example, includes a whole set of

new solutions that significantly increase the efficiency, and with it the operating margins, of olefins plants.

While continuing to focus on its core business of developing power and automation solutions for the oil, gas and petrochemicals industry, ABB will transfer its primary equipment and system supply business to companies in which the potential for synergy is greater. ABB is proud to have been able to serve customers in the oil and gas industry with highly innovative technology products and solutions of high repute over the past decades.

We are confident that the new, even stronger focus on our core competencies of power and automation, combined with our specific experience, will further establish ABB as the preferred partner for the oil, gas and petrochemical industry.

Markus Bayegan
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