Dear Reader,

Across the globe, ABB’s more than 7,500 engineers and scientists are working on technologies, products and services for tomorrow. Once a year, ABB Review grants its readers a peek into these labs by dedicating an issue to the theme of innovation.

ABB is a well-established leader in supplying components and systems for the delivery of electrical power, covering virtually everything between (and in some cases including) the generator at one end of the chain and the end user’s power socket at the other. The uncompromised continuity of the power supply is highly critical to many consumers. Besides contributing to this classical supply chain, the company also manufactures the UPS (uninterruptable power supplies) that bridge short interruptions. ABB Review dedicates two articles to the latest developments in UPS technology. ABB’s involvement and capability in this area is broadening with the company’s acquisition of the UPS manufacturer, Newave.

A modern industrial plant has a myriad of sensors, actuators and controllers, whose interaction is vital to the functioning of the process. At the same time, downtime is extremely costly, so on-site testing during commissioning must be reduced to a minimum. One way to reduce downtime without sacrificing the thoroughness of the test cycle is to simulate as much as possible in the factory before the equipment is installed on-site. ABB Review presents new breakthroughs in simulation for Foundation Fieldbus.

Although most of ABB’s products and services are primarily targeted at industries and utilities, ABB does also provide products for the consumer sector, enhancing the comfort of our homes. The new Busch-Welcome® system integrates the functionality of the doorbell, door control and audio and video transmission, coming in an appealing and award-winning design, taking intuitive interaction to a new level. It can use existing doorbell wiring, allowing it to be easily retrofitted to existing buildings.

Further articles look at SafeLink CB switchgear for secondary distribution, a traction transformer that is lighter and more energy efficient, integration in automation and a case study of the effective application of ABB’s Extended Automation System 800xA in pharmaceuticals.

Continuing with the journal’s look at barriers to energy efficiency in industry, the third and final article in the “Frugal manufacturer” series investigates the effects of regulatory issues on energy efficiency.

Whatever your interests, I trust that this issue of ABB Review will grant you fascinating insights into the company’s innovation process.

Enjoy your reading.

Claes Rytoft
Chief Technology Officer
ABB Ltd