

Innovation



Claes Ryttoft

Dear Reader,

The front cover of this issue of ABB Review depicts ABB's new dual-armed YuMi robot. You may be wondering whether ABB's engineers have looked too much at the robots of popular culture, but there is a very sound reason to produce a robot with two arms. Humans can position an object with one hand while working on it with the other. They do this for countless tasks ranging from peeling a potato to using apps on smartphones – and there are numerous assembly and handling tasks for which this robot presents similar advantages.

Advanced robots are just one example of the co-development of software and hardware and the increasing role of such products in industry. Further articles look at how the ever-increasing flood of data from the myriad sensors across a plant can be harnessed to deliver real gains in productivity and how this is redefining the automation pyramid. Continuing with this automation focus, ABB Review discusses how emulation can reduce system testing and how service tools can leverage productivity.

But it is not only industrial automation systems that can look forward to improvements in efficiency and productivity. An article on building automation highlights some of the impressive innovations this area is seeing. The journal also looks at a smarter scheduling for process heat to reduce peak power demand.

Not all intelligent solutions have software at their core. ABB's new QCap capacitor introduces several design features that assure higher reliability, longer life and a safe mode of failure.

Last year, ABB Review celebrated the centenary of one of its predecessor journals, BBC Review. The present issue looks at the publication's other predecessor magazine, ASEA Journal (which traces its origins to 1909), and presents some early gems from the archives. But it is not only on the occasion of anniversaries that ABB Review looks at the past. The journal publishes history articles on a regular basis, frequently using the perspective of the past to explain present and future trends. Twenty-two such articles have been published since 2007. Readers can explore these and other past articles (going back to 1996) by visiting ABB Review's web page www.abb.com/abbreview. The web page also provides readers with an option to sign up for ABB Review's email alert and be informed of new editions. In addition to the print and pdf versions, ABB Review is also available as a tablet app, which is also accessed from the above web page.

Enjoy your reading.

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