## 100 years of ABB Review



Claes Rytoft

## Dear Reader,

History often holds the key to understanding the present. Its study can at times humblingly reveal that ideas we erroneously classify as recent have been around for much longer than we imagine. On the other hand it can upliftingly remind us how quickly breakthroughs can totally transform large parts of the industry.

2014 is a year of several landmark anniversaries for ABB. As you have probably gathered from the cover of this edition, *ABB Review* is 100 years old this year. We are marking the anniversary by dedicating an entire section to the centenary (and are also planning other events during the course of 2014).

A single issue of *ABB Review* is insufficient to even skim the surface of the wealth of material available in the archives. We hope, nevertheless, that our small selection will give you a taste of the breadth of development the journal witnessed in its long history. For reasons of space, even these few selected articles had to be shortened in the print edition, but readers of the tablet version of can enjoy them in full length.

The two other great anniversaries of this year relate to robotics and HVDC. Forty years ago, in 1974, ASEA launched the IRB 6, the world's first commercially available microprocessor-controlled and all-electric robot. Virtually all industrial robots in use today fall into this category while also

taking up the IRB 6's anthropomorphic configuration.

Sixty years ago, ASEA delivered the world's first commercial HVDC link, transmitting power from the Swedish mainland to the island of Gotland. The line delivered 20 MW over 98 km at 100 kV. These figures may appear but small fry compared to later HVDC projects, but this pioneering link was trendsetting in more respects than one: Its underwater cables, for example, also introduced concepts still valid today.

Both of these anniversaries are covered by dedicated articles in this issue.

Further articles cover trends in fields as varied as pumped storage, motor design, power electronics, sensors, UPS and simulation.

I trust that this anniversary edition of *ABB Review* with its insights of past, present and future developments will inspire you (as it did us) in the discovery and rediscovery of both known and unknown sides of ABB.

Enjoy your reading.

Claes Rytoft

Chief Technology Officer and Group Senior Vice President

ABB Group



