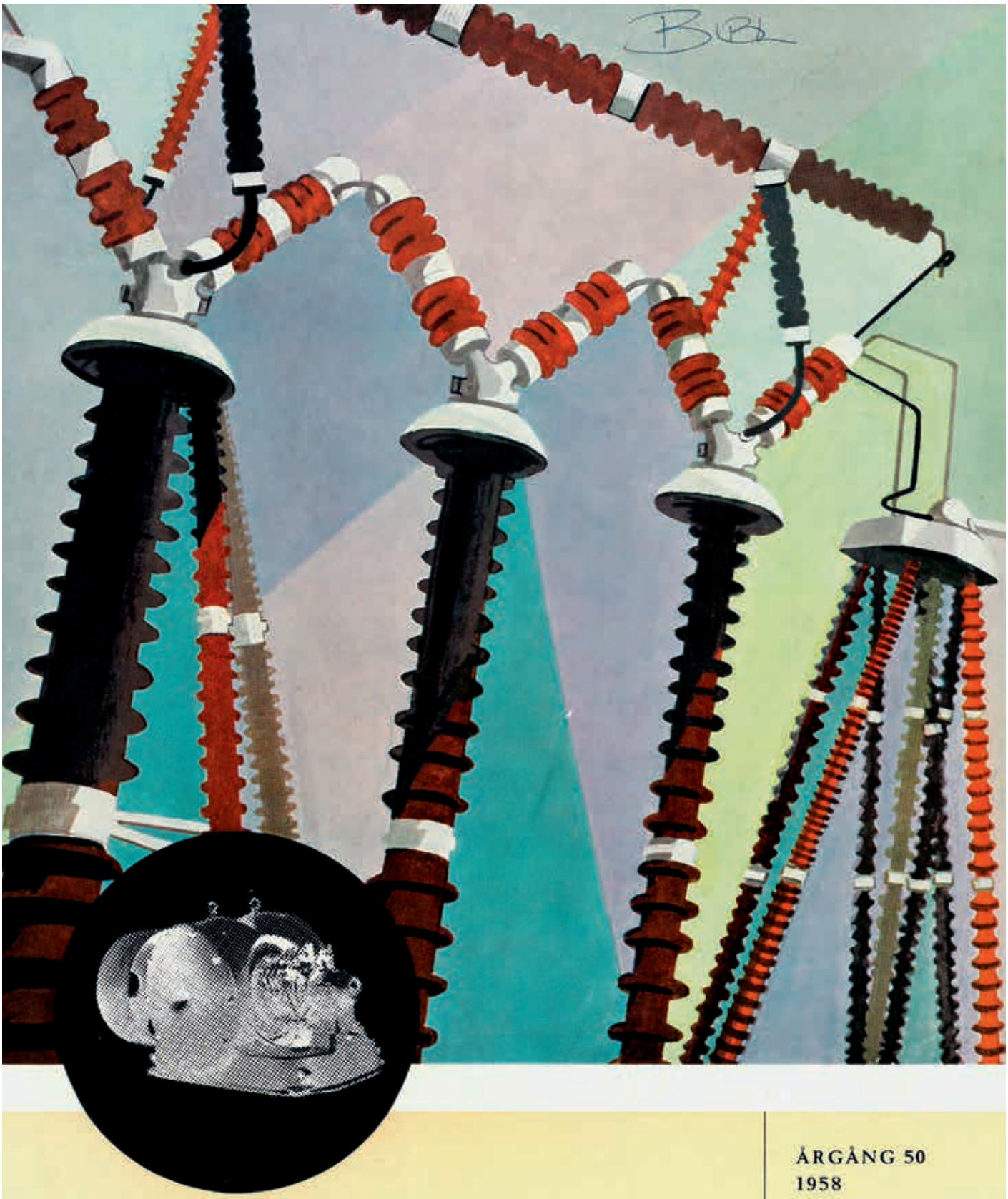

ÅRGÅNG 50
1958

ASEAs TIDNING

50 ÅR

JUBILEUMSNUMMER

1909 · 1958

From the ASEA archives

Looking back on more than a century in print

ANDREAS MOGLESTUE – The year 2014 saw a prominent focus on history in the pages of ABB Review. Several articles explored the history of different ABB technologies and issue 2/2014 featured a large section dedicated to the history of the journal itself, presenting many gems from the archives.

ABB Review revisited its history in 2014 because that year marked the anniversary of the first publication of one of its predecessor journals, BBC Review. The centenary edition was produced as a collectible issue ➔ 1. The lead article of that issue pointed out that ABB Review has another – even older – predecessor journal. This article takes a closer look at that journal.

> ASEA, one of ABB's predecessor companies, launched the magazine ASEAs Tidning in 1909.

In 1909 ASEA launched a magazine called ASEAs Egen Tidning[1] (later ASEAs Tidning), which had a mixture of technical papers and more general articles intended for external and internal readerships and was published in Swedish. In 1924 it was joined by a second publication aimed at an external readership. This was ASEA Journal, which was published in English from the beginning.

When ASEA and BBC merged in 1988, the editorial activities of ASEA Journal and BBC Review were also combined and the journal was renamed ABB Review. The following pages present a selection of items from the pages of ASEA Tidning and ASEA Journal ➔ 2 – 6.

ABB Review's celebration of its history is not confined to the centenary. For many years now, the journal has been publishing articles with a history perspective in its "Perpetual Pioneering" series ➔ 7. The editors intend to continue this series in the future by exploring further aspects of the company's rich history.

Many thanks to Mikael Dahlgren for searching for this material in the ASEA archives.

Title picture
Cover of the 50th anniversary issue of ASEAs Tidning (1958)

Footnote
1 Translation: ASEA's Own Journal

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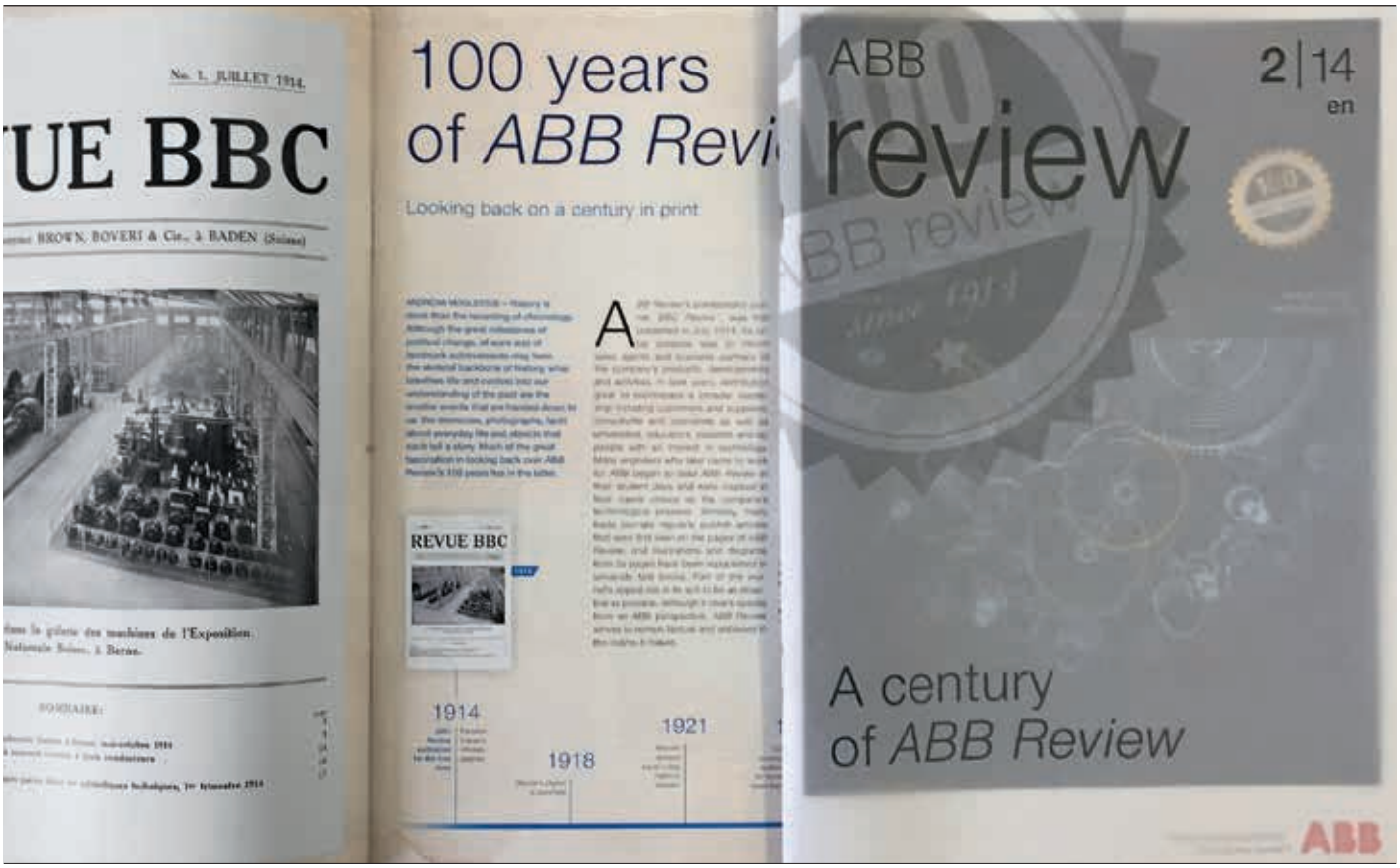
1 The print edition of ABB Review's 2014 collectible centenary edition



2 Diesel-powered motor coach for Swedish Railways, published in ASEAs Egen Tidning, June 1914

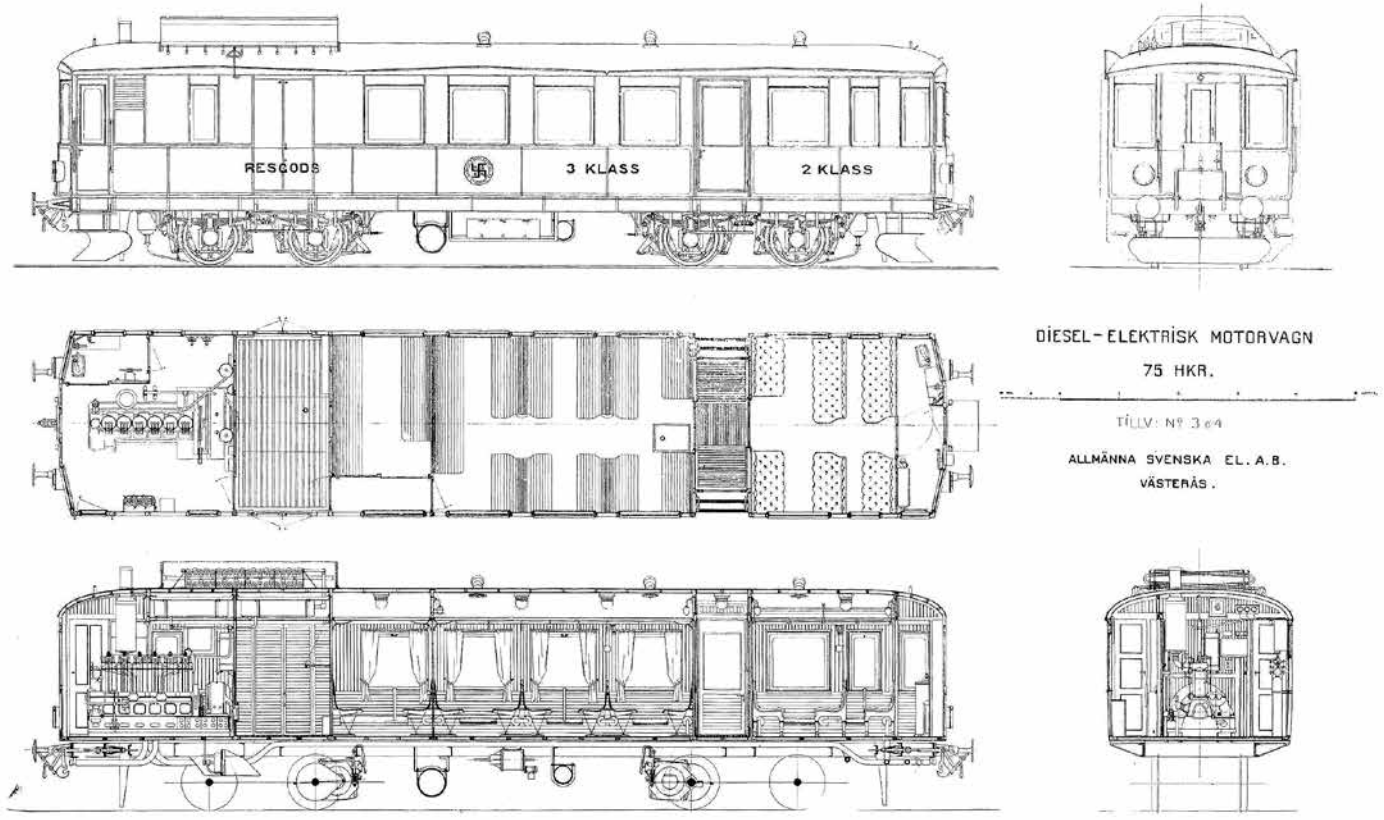
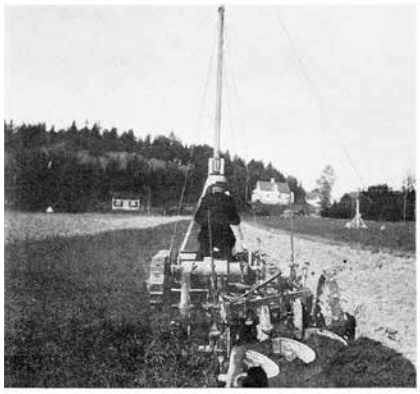


Fig 4.

3 Electric tractor with overhead cable, ASEA Tidning, December 1920

ELEKTRISK PLÖJNING MED ASEA-MOTOR.



Från plöjningsarbetet å Hamra gård.

Utnyttjandet av den elektriska kraften för utförande av lantbrukets fältarbeten är ett problem, som i samband med lantbrukets elektrifiering länge varit och ännu är föremål för många försök och experiment.

I det system för elektrisk kraftöverföring till rörlig traktor, som Electro-Agricultur A. B. i Stockholm under de senaste åren utarbetat, äro tre huvudelement erforderliga: a) transformatorn, som medelst en vanlig stolpkontakt står i förbindelse med högspänningsledningen, b) kabelvagnen, som medelst isolerad kabel mottager strömmen från transformatorn, samt genom reglerbar blank luftledning överför den vidare till c) traktorn eller "Electro-tanken", som bogserar jordbearbetningsmaskinen (plog, harv, gödselspridare etc.).

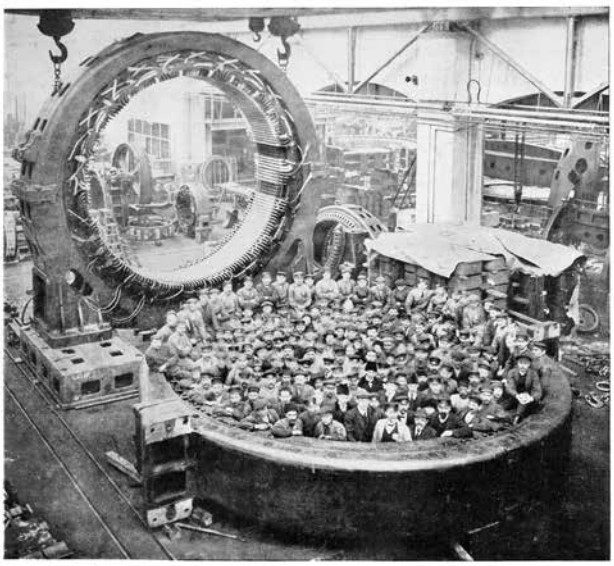
Vår bild är tagen vid plöjningsarbete å Hamra gård utanför Stockholm med en dylik traktor av tanktyp, försedd med motor- o. apparatutrustning av Aseas tillverkning.

4 Generator stator for Oxelösunds Järnverks A.-B.

Utkommer varannan månad. Prenumeration hos redaktionen.

ÅRGÅNG 9. 1917. | Ansvarig utgivare: J. S. EDSTRÖM. Redaktör: A. W. HENNING. | APRIL N:o 2.

ETT PAR AV ASEA:s MASKINJÄTTAR I EMAUSVERKSTADEN.



Den liggande statorn, som rymmer 153 personer, är för en av generatorerna till Untraverken.
Den stående statorn för Trollhättans kraftverk.

5 Advertisement for ASEA radio receiver (1924)

Västerås 1924. Västmanlands Allehandas A.-B:s Tryckeri

6 Presenting the world's first commercial HVDC link (Gotland)

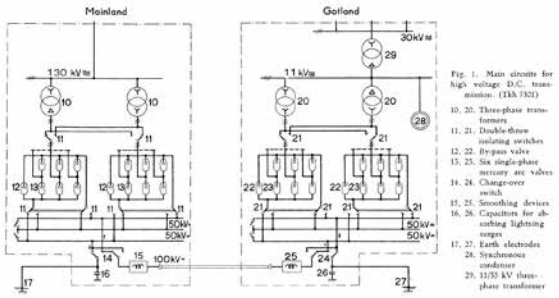


Fig. 1. Main circuits for high voltage D.C. transmission. (Ikh 7321)
10, 20. Three-phase transformers
11, 21. Double-throw isolating switches
12, 22. By-pass valve
13, 23. Six single-phase mercury arc valves
14, 24. Change-over switch
15, 25. Smoothing devices
16, 26. Capacitors for absorbing lightning surges
17, 27. Earth electrodes
28. Synchronous condenser
29. 11/53 kV three-phase transformer

The Convertor Transformers

As in the case of the other plant components which are connected to the high voltage direct current, the valve windings of the convertor transformers are insulated according to an A.C. standard for 80 kV nominal voltage. The clearance between the A.C. phases belonging to the same valve group is however designed according to an A.C. standard for 40 kV.

The convertor transformers in Västervik station are three-winding transformers (1 and 3 in fig. 3). The windings for connecting to the 130 kV network are star-connected with isolated star-point. The valve winding on transformer 1 is delta-connected, and on transformer 3 it is star-connected. As a consequence of this phase shifting of the valve windings by 30 degrees, the two series-connected six-pulse convertors thus affect the A.C. and D.C. networks in a similar manner to that of a twelve-pulse convertor. The third transformer winding is supplied with an on-load tap-changer and feeds a series transformer (2 and 4 in fig. 3), the secondary winding

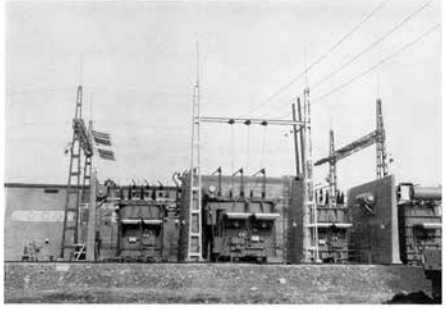
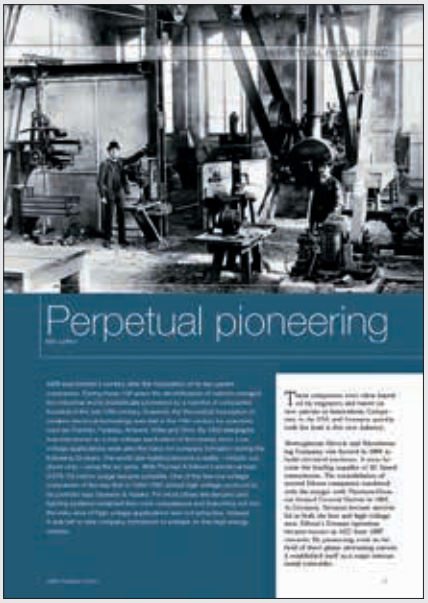


Fig. 2. The convertor station on Gotland. From left to right: Convertor transformer for valve group 2, network transformer, convertor transformer for valve group 1, D.C. reactor. (44012)



Most articles in ABB Review look at present, emerging or future products, technologies and trends. But the journal has not forgotten the company's past. It is often through the exploration of history that present developments are explained and achievements placed in context. For many years, ABB Review has published its ongoing history series, "Perpetual pioneering," which is dedicated to the histories and background stories of ABB technologies or fields of activity. An overview of articles published so far is provided below.

PDFs of these articles are also available for download from www.abb.com/abbreview

Perpetual pioneering
(lead article of series)
Nils Leffler, ABB Review 1/2007, pages 73–74

Thirty years in robotics
Brian Rooks, ABB Review Special Report Robotics, 2005, pages 6–9

The circuit breaker
A showcase of industrial product development
Fritz Pinnekamp, ABB Review 1/2007, pages 75–78

ABB turbochargers – history and milestones
Malcolm Summers, ABB Review 2/2007, pages 85–90

Transforming history
The ABB power transformer story
Thomas Fogelberg, Åke Carlsson, ABB Review 3/2007, pages 80–86

100 years
ABB celebrates a century of presence in China
Franklin-Qi Wang, ABB Review 4/2007, pages 74–77

125 years running
From the very beginning, ABB has been a pioneer in electrical motors and machines
Sture Eriksson, ABB Review 1/2008, pages 81–86

Success story
Looking back at ABB's contribution to industrial robotics
David Marshall, Christina Bredin, ABB Review 2/2008, pages 56–62

The winning chips
History of power semiconductors at ABB
Hansruedi Zeller, ABB Review 3/2008, pages 72–78

HVDC
ABB – from pioneer to world leader
Gunnar Asplund, Lennart Carlsson, ABB Review 4/2008, pages 59–64

Compact and reliable
Decades of benefits: Gas-insulated switchgear from 52 to 1,100 kV
Lothar Heinemann, Franz Besold, ABB Review 1/2009, pages 92–98

High-voltage bushings
100 years of technical advancement
Lars Jonsson, Rutger Johansson, ABB Review 3/2009, pages 66–70

Electrifying history
A long tradition in electric railway engineering
Norbert Lang, ABB Review 2/2010, pages 88–94

From mercury arc to hybrid breaker
100 years in power electronics
Andreas Moglestue, ABB Review 2/2013, pages 70–78

The world of high-voltage power
A concise history
Fredi Stucki, ABB Review Special Report High-voltage products, 2013, pages 6–10

In harmony
Looking back on a fruitful history of co-development of high power rectifiers and semiconductors
ABB Review 1/2014, pages 65–70

100 years of ABB Review
Looking back on a century in print
Andreas Moglestue, ABB Review 2/2014, pages 7–23

Rise of the robot
Celebrating 40 years of industrial robotics at ABB
David Marshall, Nick Chambers, ABB Review 2/2014, pages 24–31

60 years of HVDC
ABB's road from pioneer to market leader
Andreas Moglestue, ABB Review 2/2014, pages 32–41

Semiconductor generations
ABB looks back on 60 years of progress in semiconductors
Christoph Holtmann, Sven Klaka, Munaf Rahimo, Andreas Moglestue, ABB Review 3/2014, pages 84–90

Entering a new epoch
A brief history of the electric power supply
Jochen Kreusel, ABB Review 4/2014, pages 46–53

Distribution evolution
Medium-voltage distribution technology is a key part of the power network
Gerhard Salge, ABB Review Special Report Medium-voltage products, 2014, pages 7–10

High impact
60 years of HVDC has changed the power landscape
Bo Pääjärvi, Mie-Lotte Bohl, ABB Review Special Report 60 years of HVDC, 2014, pages 12–17

From the ASEA archives
Looking back on more than a century in print
Andreas Moglestue, ABB Review 1/2015, pages 63–66