

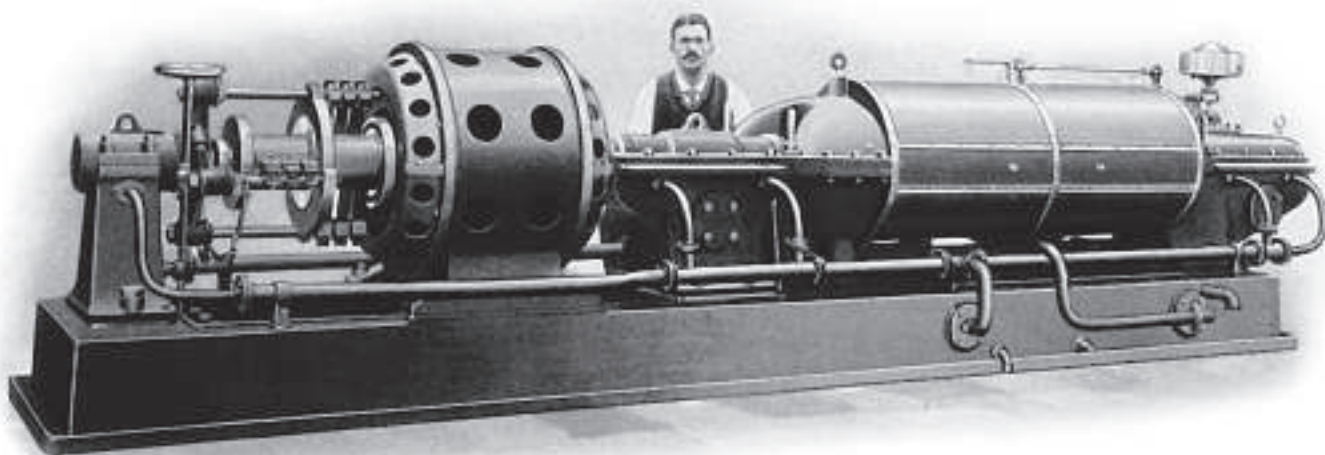
Power technology was born just over two hundred years ago when Volta first demonstrated the greatest of his inventions – the voltaic pile. The technology then progressed so fast that, by the 1890s, BBC and Asea, ABB's parent companies, were marketing relatively advanced power generation products. And how much has changed since: If Volta, or even the BBC and Asea founders, could see how their pioneering efforts have been elaborated upon, they would

be astounded at the lengths to which humans have gone in their struggle to become masters of the electron.

The ingenuity that has been applied to harnessing electrical power and the scale and complexity of its manifestations are truly remarkable. And so are the benefits that power technology has brought to humanity: From the simplest electric water pump in a remote village to the automated pharmaceutical plant

producing life-saving medicines, the lives of billions are improved and enriched by man's creative manipulation of the invisible electron.

In our next edition, we'll look at how ABB, as a technology company that has been intimately involved in power technology for over a century (see picture), is progressing in various disciplines, such as power electronics, material science and software, and making power engineering cheaper, simpler and better.



ABB's involvement with power technology goes back well over a century. In 1883 Ludvig Fredholm founded Elektriska Aktiebolaget in Stockholm in order to manufacture electrical lighting and generators, merging it in 1890 with Wenströms & Granströms Elektriska Kraftbolaget, to form what later became Asea. In 1891 Charles E. L. Brown and Walter Boveri established Brown, Boveri & Cie in Baden, Switzerland. Shortly afterwards, BBC became the first company to transmit high-voltage AC power. In 1893 Asea built the first three-phase transmission system in Sweden. The ABB Group was formed in 1988 with the merger of Asea and BBC.

This steam turbine, built by BBC in 1901 for the Market and Refrigeration Hall company in Berlin, had a rated capacity of 150 hp. The turbine was connected directly to a direct current generator. By 1906, BBC had built 110 turbosets with an output totaling 133 megawatts.

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