



# INDUSTRIAL APPLICATIONS

## NEW POSSIBILITIES FOR MORE EFFICIENCY

**Since more than one century conventional busbar systems made of copper or aluminium are used in the industry. High DC currents on a low voltage level are necessary for many production technologies, for example in chemical electrolysis, aluminium smelters or steel arc furnaces. Now a new technology adds new possibilities, benefits and technical advantages to the conventional systems - Superconductors.**

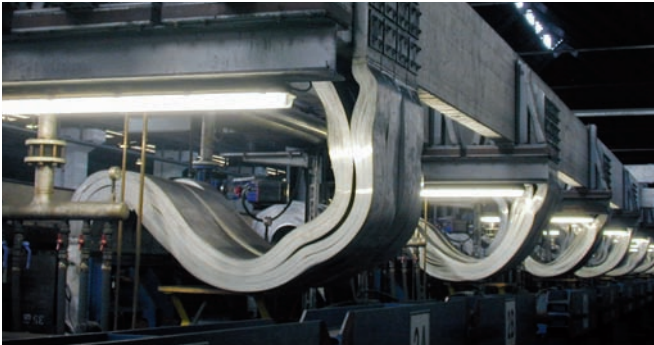
ICE®BAR - the superconducting busbar system transmits high DC and AC currents almost without any energy losses and gives essential advantages compared to conventional busbars. The system is operated at approximately - 200 °C/73K with liquid nitrogen and is capable to carry currents up to 200 kA and more.

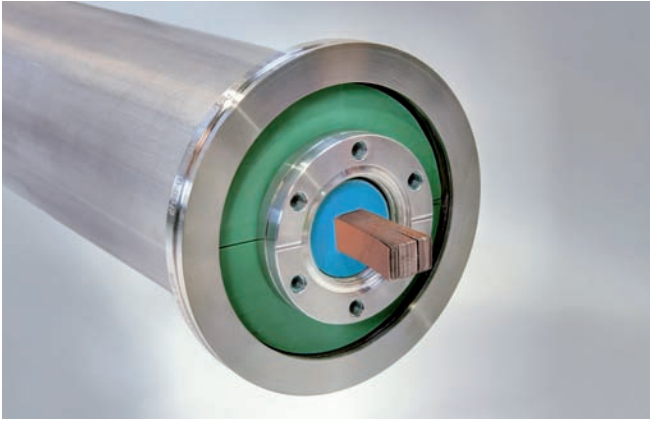
Including all costs ICE®BAR is more economical compared to conventional systems from currents of 10 kA and lengths of 30 m.

The whole system is completely encapsulated with IP68 protection degree and guarantees 100% safety for personnel and equipment, no additional protection is necessary. As a result ICE®BAR can be used to optimize production and maintenance processes.

ICE®BAR is a modular system with up to 95% reduced system dimensions and weights compared to other busbar systems. This enables you to use your existing production area more efficient, e.g. for increasing your production capacity.

**Go with us in electrical engineering towards a better future.**

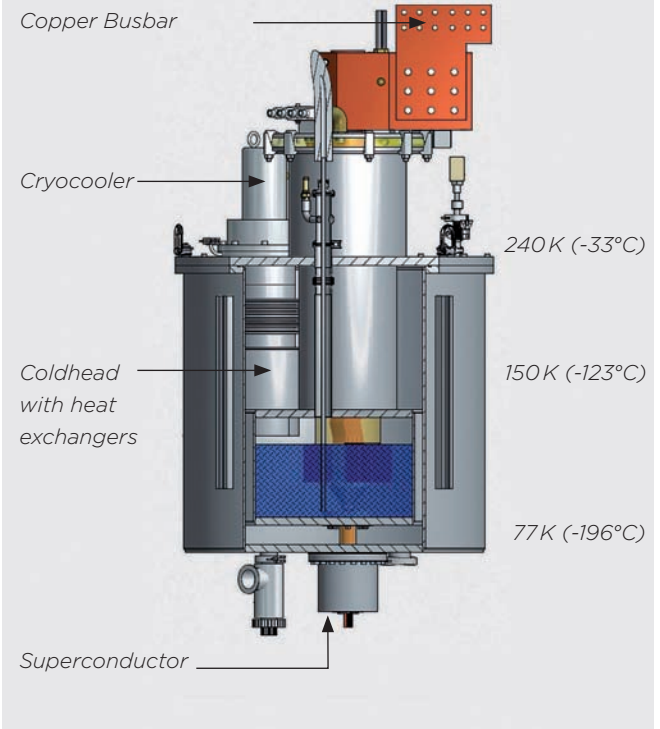




Superconductor with Cryostat, Ø 200 mm



### Construction of the multistage cooling system of ICE<sup>®</sup>BAR



## SUPERCONDUCTORS DON'T WASTE ENERGY

Below their critical temperature superconductors carry very high currents without electrical losses.

This property allows the design and construction of highly efficient, ultra compact and lightweight energy transmission systems.

Comparing an entire conventional busbar system with a superconductor system, up to 90% of the energy can be saved.

## ABOUT VISION ELECTRIC SUPERCONDUCTORS

We are pioneers in the field of efficient power transmission. We are curious, brave and sustainable.

VISION ELECTRIC SUPER CONDUCTORS is the avantgarde in the development of industrial applications based on superconductor technology. Our core competence is the loss-free and safe transport of high currents.

We take care of your whole project: starting from the design and construction to the commissioning and maintenance, we deliver turnkey solutions.

We have decades of experience in the field of plant engineering. We deliver best quality - made in Germany.



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