



CroCo: HTS COMPOSITE CONDUCTORS

THE SOLUTION FOR FUSION

PIONEERS IN
ELECTRIC POWER

VISION® ELECTRIC
Super Conductors

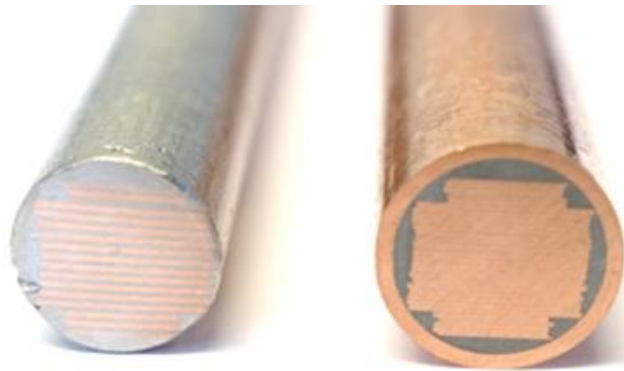


THE CHALLENGE

Building electro-magnets for plasma confinement is a challenging undertaking.

High currents, fields and forces create unique conductor requirements.

Make your life easier by choosing conductors that were made to solve these problems.



THE SOLUTION – CroCo (Cross Conductor)

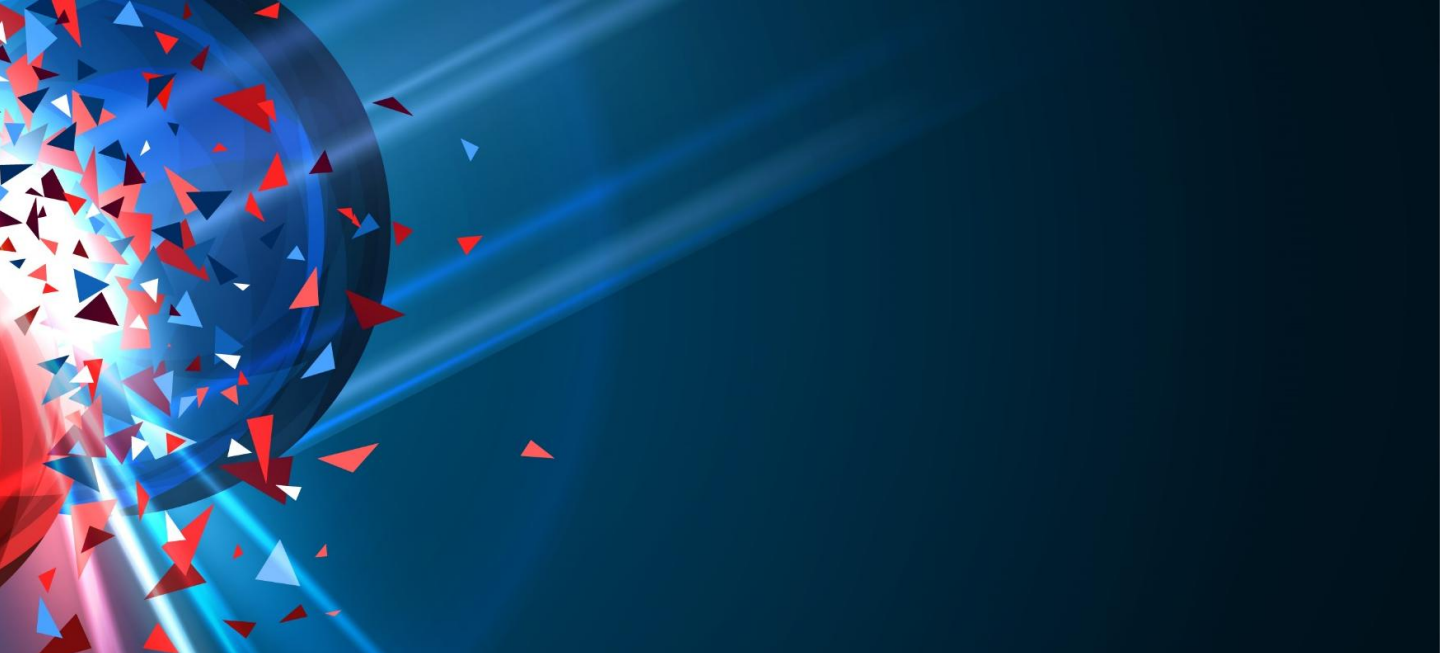
The **CroCo** is a HTS conductor developed and patented by KIT (Karlsruhe Institute of Technology).

It is exclusively licensed and produced by Vision Electric Super Conductors.

The **CroCo** conductor features a unique cross-sectional design of HTS tapes stacked and encased in copper and solder. By utilizing tapes of different widths, we maximize conductor capacity while creating the recognizable cross-shaped structure.

Engineered for high current capacity and exceptional strength, **CroCo** is designed to withstand extreme forces—making it an ideal choice for demanding fusion applications.

Discover the future of fusion with **CroCo Conductors**



YOUR BENEFITS

MULTIPLE DEGRESS OF FREEDOM

The conductor is tailored to specific current, temperature and magnetic field requirements. The composition and geometry of the conductors can be adapted to suit a wide range of operating scenarios.

This makes the CroCo conductor a versatile solution for all **HTS magnets**!

SAVE TIME AND MONEY

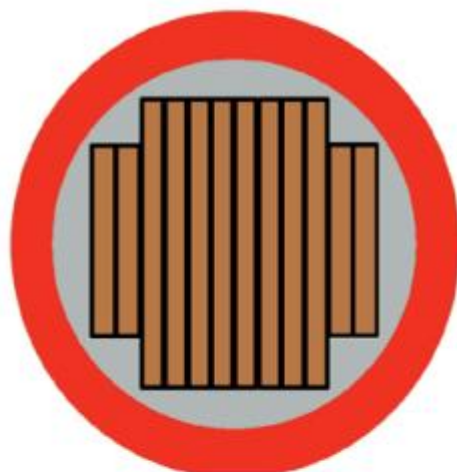
Reduce the development time and cost of your project with proven CroCo conductors. Predefined structures and a controlled production process reduce your time-to-market.

HIGH SCALABILITY

Our optimized production process enables rapid scaling and fast ramp-up to meet growing demand.

SLEEP WELL

No need to worry about Lorentz forces, reliability or safety concerns. We take care of the challenges so you can focus on innovation.



ABOUT VISION ELECTRIC SUPER CONDUCTORS

We are pioneers in the field of efficient power transmission.

VISION ELECTRIC SUPER CONDUCTORS is leading in the development of industrial and energy applications based on superconductor technology.

We have decades of experience in high-power engineering.

We deliver the best quality, made in Germany.

SUPERCONDUCTORS SAVE ENERGY AND COSTS

Superconductors conduct currents without electrical losses.

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

Save up to 90 % of the energy needed by conventional systems through a superconductive system and reduce your operational expenses.



OUR VALUE TO YOU



Fast development cycles reduce time-to-market



Reduce material costs and scope 3 emissions



Increase efficiency and decrease CO₂ footprint



Reduce operating costs and lower total cost of ownership

SERVICE AND KNOW-HOW FOR YOUR PROJECT

We deliver the following services for all high current, high power and superconductor systems!

- Basic, design and detail engineering
- Temperature, stress and force modelling
- Cross-section optimization and thermal load calculation
- Definition of materials and equipment
- Installation and creation of operating manuals
- Risk analysis, assessment and remedy measures
- Tender specifications
- Maintenance and operational supervision