

FOC technology – a challenge to implement

High-voltage cable systems
Turnkey cable projects



Fibre optic cable technology in the context of high-voltage cable systems

Fibre optic cable (FOC) technology has become a standard requirement when building new high-voltage cable systems. Incorporating FOCs in cable shields is part and parcel of almost every new cable system project. By measuring temperatures (a process made possible due to FOCs) and analysing noises and vibrations within cables, operators are intending to bring about improvements in load control, operation and maintenance.

However, implementation is a challenging process – specifically when it comes to performing laying, connecting and inspecting work on the construction site, such as:

- ‘Cautiously’ transporting and laying the cable to avoid damage to any FOCs (biggest risk: mechanical stress for the wires installed in the shield)

- Checking the quality of the installation as a whole by inspecting FOCs (measuring the sheath and attenuation)
- Ensuring that FOCs are decoupled from the shield potential such that they are floating (guiding FOCs out of the shield area)
- Neatly performing splicing and OTDR measurements to comply with the overall attenuation as per customer requirements
- Incorporating FOCs in the customer’s monitoring concept

Brugg Cables has built up a wealth of experience that meets these requirements by implementing numerous projects and investing specifically in employee expertise.



Brugg Cables

Brugg Cables is an innovative cable manufacturer from Switzerland that offers an extensive range of power transmission and distribution services. Established by Gottlieb Suhner more than 120 years ago, Brugg Cables is now one of the world’s leading cable manufacturers. Throughout our history, our defining characteristics have been our strong customer focus and a highly skilled and professional workforce. Our emphasis has been on innovation and outstanding Swiss quality – since 1896.