

Cables with smooth welded aluminum sheath.

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Most HV cable systems are custom designed to suit also the specific environmental parameters and operating requirements of a particular route and loading conditions.

The metallic sheath plays a key role in the design of High Voltage underground cable systems, as it must satisfy essential electrical and mechanical functions to ensure the correct operation of a cable.

Cables with lead alloy sheath provide all necessary guarantees in terms of technical characteristics. However, the main disadvantages of cables with a lead alloy sheath are weight.

On the other hand, cables with corrugated aluminum sheath have a significantly reduced weight when compared with cables having a lead alloy sheath. But, they have the disadvantages of not only a lower transmission capacity, due to the presence of an air gap under the corrugations, but also a larger diameter and accordingly shorter delivery lengths.

Because of that, we developed and manufacture the mass of cables having smooth welded aluminum sheath.

It is minimized their disadvantages, resulting in a cable with lighter weight, reduced diameter and bending radius with a comparative longer length. Also guarantees excellent electrical and mechanical performance, full fluid tightness and compliance with even the strictest environmental requirements.

The smooth welded aluminum sheath consists of an aluminum tape, longitudinally applied over the cable core, shaped around it and welded.

The application and welding of the aluminum tape, and the extrusion of the polyethylene are carried out through a special process on the same line, which undergoes continuous video recorded inspection ensuring effective quality control.

Extensive tests have proven that the water tightness and resistance to corrosion of the smooth welded aluminum sheath cable meets the most stringent standards.

Depending on the short circuit requirements, the welded aluminum sheath can be complemented with copper wires.

The ILJIN Electric is characterized by a competent and experienced approach to turnkey total solution.

We have always a guarantee for the supply of products and services based on quality standards.