

New Technologies

OPTical Ground Wire



INTEGRATED SOLUTION

OPTical Ground Wire

Design / Research and Develop Department

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ABSTRACT

De Angeli Prodotti and his partner have developed this new product for OHL costumers and for communications costumers.

INTRODUCTION

Generally OPGW provide a dual role in the transmission overhead lines. The first one is the conventional role as electrical ground wire, the second one is to create a communication system by its optical fibre.

Both operators and power utilities recognize that OPGWs have become a key factor in telecommunication networks.

ENGINEERING

De Angeli Prodotti and his partner have developed this technology to satisfy the costumers requests. The optical fibre are inside a stainless steel tube. The fibre are protected inside the tube by a special thixotropic gel which works to the standard temperature requested for this type of ground wire. ACS (Aluminium Clad Steel), aluminium alloy and aluminium commercially pure wires should be used as conductive layer, stranded on the tube in order to achieve the mechanical and electrical characteristics required.

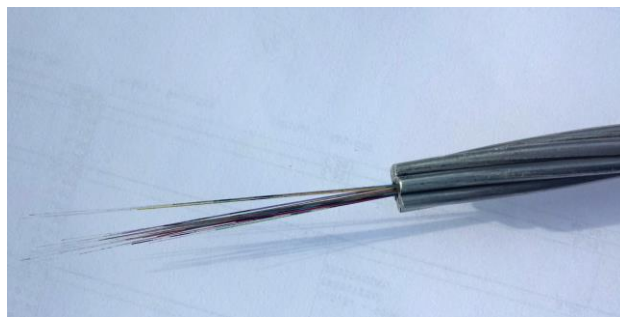
The optical fibre should be single-mode (SM) or multi-mode (MM) composed by pure silica or doped silica, according to the international standards.

ADVANTAGES

Which are the advantages of this technology?

The stainless steel tube technology for OPGW guarantees a compact design and it's **cheaper!**

The design of this product is thought for giving the maximum protection to the optical fibre.



CONCLUSIONS

De Angeli Prodotti has developed this new product for OHL operators.

This technology is well known for us and the costumers satisfaction for this product is very high!