

Play it cool cut your losses

Bezinox®

Benefits

- 1 Effective energy transmission
- 2 Prolonged lifetime of the cable
- 3 Advanced design optimisation

Why choose Bekaert?

The wire drawing and coating specialist

With more than 130 years of experience in coating technology and steel wire transformation, Bekaert has the flexibility and technical know-how to create any steel wire no matter what shape, composition or mechanical characteristic.

Experience in producing offshore applications

Bekaert has longstanding experience in providing a wide range of products for the offshore industry. Whether it concerns power transmission, oil extraction, gas mining, or even telecommunications, Bekaert products are key contributors to sustainable, safer and more cost-effective operations.

Continuous innovation

Bekaert is continuously investing in state-of-the-art equipment to allow its project teams to develop and innovate. To support the development of new coatings and technologies Bekaert has an in-house engineering department which develops its own machinery and process equipment as well as pilot production lines.

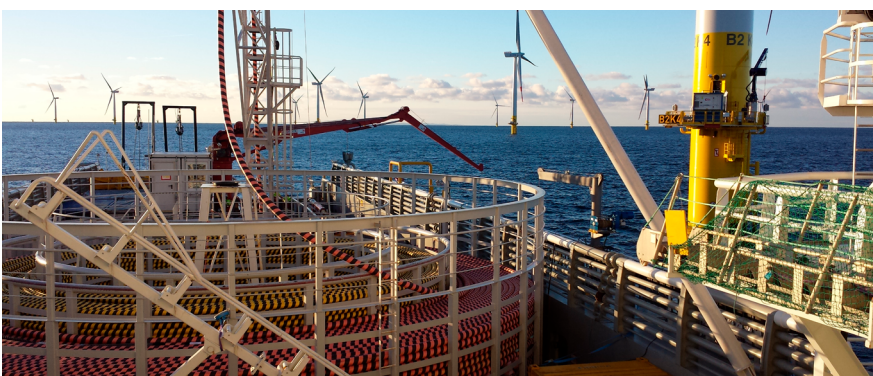
Reduction of energy losses and failures

Bezinox® is galvanised austenitic stainless steel wire which has several important benefits. The most important ones are non-magnetic behavior and increased corrosion resistance. Austenitic stainless steel has a low permeability which reduces energy losses in the armoring by the cable's magnetic field thus overheating of the cable.

Consequently, this property significantly increases the power cable's efficiency and lifetime of the cable without needing to interfere with the cable design as is the case with other armoring solutions.



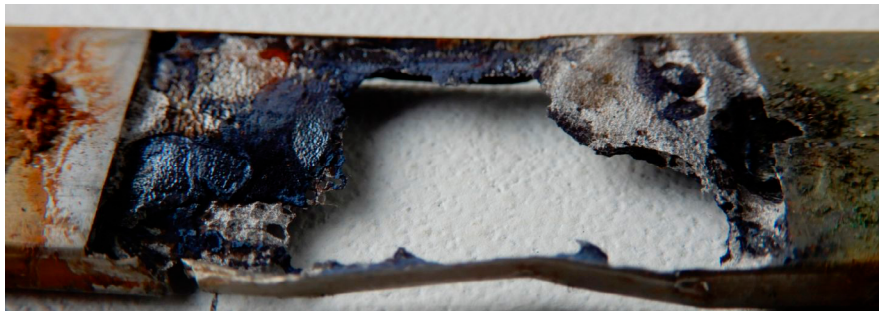
Bezinox® wire



Protecting your investment

The importance of crevice and pitting corrosion protection

Crevice corrosion usually occurs in gaps a few micro meters wide, in which circulation of the corrosive medium (electrolyte) is not possible. Operating conditions like crevices and stagnant sea water can accelerate the crevice and pitting corrosion of uncoated stainless steel. Once the steel gets affected, the dissolution sets in rapidly, as re-passivation is almost impossible in this oxygen poor environment.



Non-coated 316L stainless steel flat wire, 6 months submerged in daily refreshed seawater at ambient temperature with CrevCorr crevice former.

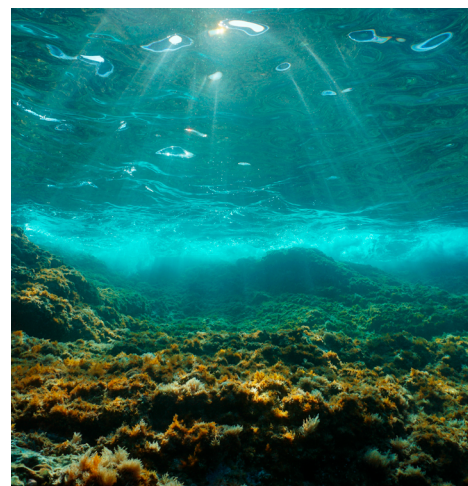
The benefits of galvanised austenitic stainless steels

A heavy zinc layer on austenitic steel offers an excellent resistance to pitting and crevice corrosion, making it perfect for marine applications. The combination of these features offers a much more predictable and reliable coating lifetime and performance compared to uncoated austenitic stainless steel solutions. Even when the zinc layer gets damaged, the surrounding zinc will sacrifice itself serving as a sacrificial anode, protecting the underlying stainless steel. That is why Bezinor[®] armouring wire offers superior corrosion protection in marine environments than regular hot dip galvanised low carbon wires.

Good processability and optimal shape

Thanks to the zinc coating, low carbon wires and Bezinor[®] wires can be welded together without changing equipotential surface differences with positive impact on the lifetime of the joints. As Bezinor[®] wire protects the cable from overheating, the same design can be used for the whole length of the cable (offshore and the last mile onshore).

What is more, Bezinor[®] wire is also suitable for marine protected areas (MPAs) and can be offered in round or flat shapes depending on the final application. For more technical details see the Bekaert Bezinor[®] data sheet.



Bezinor[®] wire eliminates heat dissipation in the armouring of the subsea power cable which also makes it suitable for MPAs.

More
information?

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