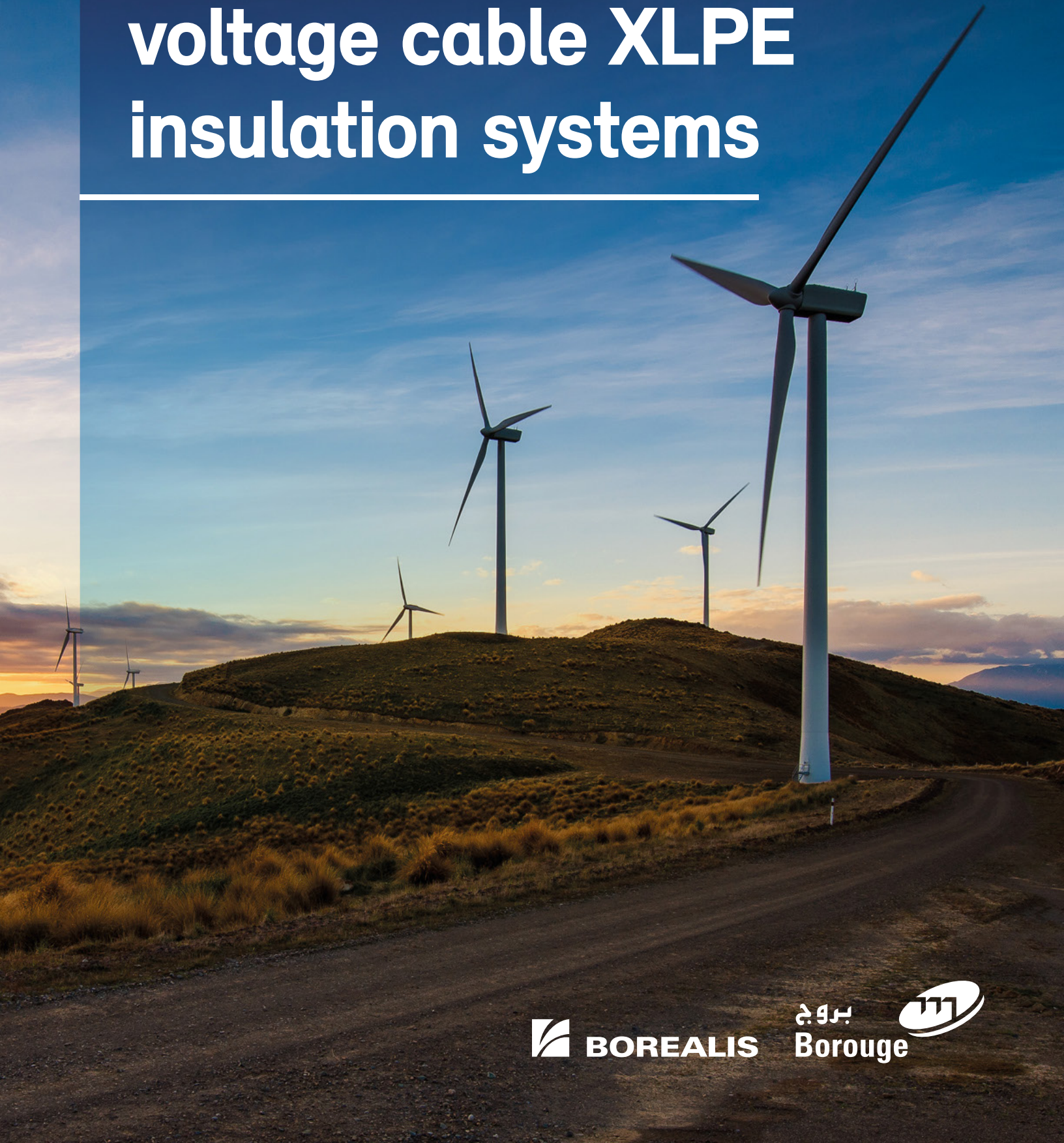

Borealis medium voltage cable XLPE insulation systems



BOREALIS

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Borouge





Introduction

Borealis offers industry-leading compounds for medium voltage power cables for utility and renewable energy applications. Our tree retardant cross-linked polyethylene (TR-XLPE) insulation (Borlink™ LE4212) has proven reliable over 20+ years of service history. Cables manufactured with Borealis insulation and semiconducting shields are in service across North America from every TR-XLPE cable manufacturer, providing reliable electricity delivery to homes and businesses, from utility grids and renewable generation sources. From our North American compounding plant in New Jersey, we offer the highest quality insulation, conductor shield and insulation shield compounds with industry-leading performance.

Applications (Utility, Wind Farm)

- Tree Retardant (TR) Insulation
- Bonded semicon
- XLPE Strippable Semicon
- EPR Strippable Semicon

Strengths – why Borealis?

Borealis Compounds Inc. is located in Port Murray, New Jersey. The site includes a medium voltage and high voltage plant, offering state of the art cleanliness and quality control for insulation grades up to 138 kV rated cables. The high voltage grade process control and quality are built into every pellet of MV insulation.

In-house semiconducting compounding lines ensure the highest quality conductor and insulation shields. This brings compound manufacturing for all layers of the cable core to one domestic production facility.

Borealis offers a wide variety of packaging options to satisfy the needs of the North American cable industry. This includes bulk railcar, bottom unloading octabins, top unloading octabins, and supersacks – with delivery managed through the onsite logistics team.

The Borealis medium voltage cable insulation system using Borlink LE4212 has been consistently and reliably supplied from the Port Murray site for more than 20 years. The proven reliability of the materials and wide acceptance across utilities and renewable generation developers throughout North America is evidence of the Borealis dedication to the wire and cable industry.

- Local assets

- All grades made in North America

- Logistics support system

- Packaging options (bulk, box, supersack)

- History / long track record of supply

Grade slate recommendations from our Borlink™ portfolio

Cable layer	Type	Copper conductor	Aluminium conductor
Conductor shield	Conventional	LE0595-07	LE0594
	SuperSmooth	LE0500	LE0504
WTR-XLPE insulation		LE4212	
Insulation shield	Bonded	LE0595-07	
	Strippable	LE0520	
EPR Insulation semiconducting shields	Conductor shield	LE0595-07	
	Strippable insulation shield	LE0315	

Technical information



Borealis medium voltage cable insulation and semiconducting shields are qualified per

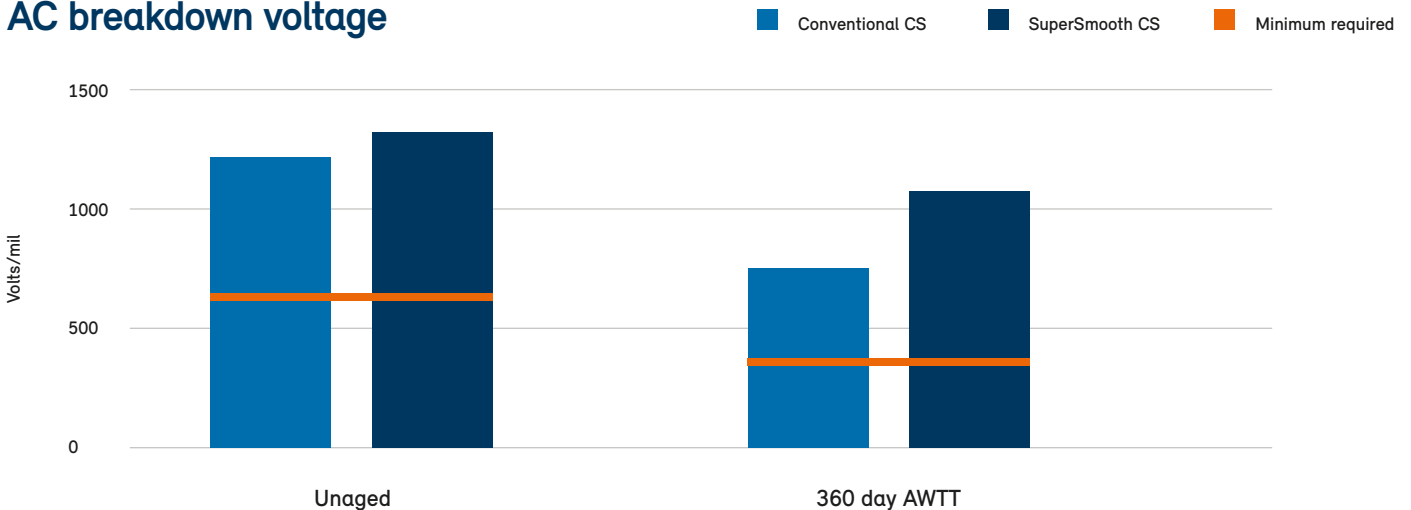
- ANSI/ICEA S-94-649 (Class II and III)
- ANSI/ICEA S-97-682
- ANSI/ICEA S-113-684
- AEIC CS8
- NMX-J-142/1-ANCE
- UL 1072; MV-90 and MV-105

TR-XLPE insulation grade Borlink LE4212 is specifically designed for demanding underground cable applications and suitable to 69 kV (phase-to-phase).

Borealis offers conventional conductor shield grades: Borlink™ LE0595-07 and LE0594, as well as supersmooth conductor shields: Borlink™ LE0500 and LE0504. Grades Borlink LE0594 and LE0504 are engineered to provide enhanced shrinkback performance on stranded or solid aluminum conductors.

Strippable insulation shield grade Borlink™ LE0520 offers outstanding performance with low strip force over a broad temperature range and clean insulation layer surface when used over Borlink LE4212.

AC breakdown voltage





Borealis and Borouge energy solutions are bringing energy all around

date of issue: September 2021

Borealis is one of the world's leading providers of advanced and circular polyolefin solutions and a European market leader in base chemicals, fertilizers and the mechanical recycling of plastics. We leverage our polymers expertise and decades of experience to offer value adding, innovative and circular material solutions for key industries. In re-inventing for more sustainable living, we build on our commitment to safety, our people and excellence as we accelerate the transformation to a circular economy and expand our geographical footprint.

With head offices in Vienna, Austria, Borealis employs 6,900 employees and operates in over 120 countries. In 2020, Borealis generated EUR 6.8 billion in sales revenue and a net profit of EUR 589 million. OMV, the Austria-based international oil and gas company, owns 75% of Borealis, while the remaining 25% is owned by a holding company of the Abu-Dhabi based Mubadala. We supply services and products to customers around the globe through Borealis and two important joint ventures: Borouge (with the Abu Dhabi National Oil Company, or ADNOC, based in UAE); and Baystar™ (with Total, based in the US).

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