



Performance

Innovation

Reliability

## Creates Improved Reliability

For over 125 years Prysmian has continued to focus on new products that create value for the markets they serve. Prysmian's newest product, **AIRGUARD®**, reaches unheard of levels of mechanical protection without the hassle of dealing with a continuously corrugated and welded (CCW) armored product. Today's industrial environments demand superior mechanical protection for the power cables that run their plants. **AIRGUARD's®** patented cable system contains a polymeric armor called Air Bag® which delivers five times the impact resistance of CCW products and two times the sidewall bearing pressure limits of CCW.



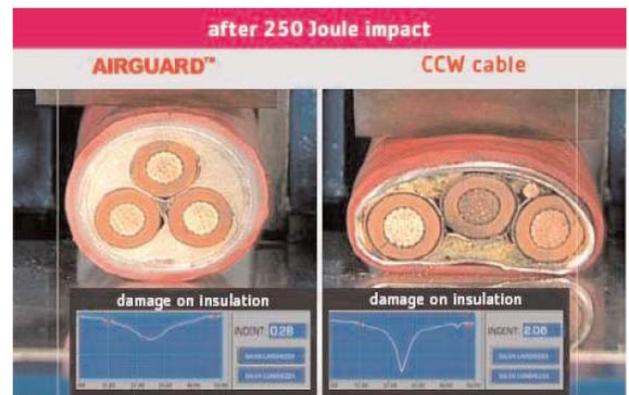
Cables, in most industrial applications, must also be protected from oil based products (hydrocarbons) as well as acids and bases that can cause electrical cables to fail over time. **AIRGUARD's®** patented Drylam™ layer which consists of an aluminum laminate and hydrocarbon resistant covering provides incredible protection that exceeds ASTM and UL standards for oil resistance.

## VFD Applications

The aluminum laminate provides electromagnetic shielding and a current carrying path for high frequency currents and harmonics, further the three symmetrical ground wires allow for the cancellation of low frequency currents, all of which can be damaging to the motor, bearings and connected equipment.

## More Installation Reliability

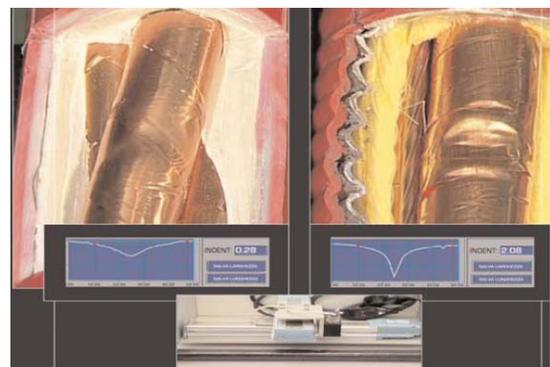
Below are the visual results of **AIRGUARD®** and CCW impact tests.



**AIRGUARD® Cable**

**CCW Cable**

Clearly the **AIRGUARD's®** polymeric armoring system provides superior resistance to impact damage (video of the test is also available at Prysmian's Website).



**AIRGUARD® Cable**

**CCW Cable**

The above photograph displays core damage to **AIRGUARD®** cable and CCW cable after impact testing.

## Impact Tests

Impact tests have been performed in order to evaluate the mechanical protection offered by the **AIRGUARD®** cable and the CCW cable designs. The tests are used to simulate potential destructive forces that can be encountered by the cables during installation and throughout the cable's life. After testing, the damage to the cores was calculated using laser measurement.

## Sidewall Bearing Pressure Testing

Direct comparisons of **AIRGUARD®** and CCW cables at an independent testing facility show that **AIRGUARD®** cables are able to withstand higher (2X—3X) lateral forces than the equivalent CCW cables. This type of test is representative of extreme forces encountered during installation.

## AIRGUARD® Hardware Accessories

Prysmian provides a complete **AIRGUARD®** cable system which includes splices, terminations and glands. The products can be packaged together on a project basis to provide the customer an easy way to manage each cable installation.



## Rated to Comply with Industry Standards

Rest assured that **AIRGUARD®** cable can be used in many applications due to its ability to meet or exceed the following industry standards.

MV Cable Ratings/ Approved Tests/ Industry Specifications	LV Cable Ratings/ Approved Tests/ Industry Specifications
☞ ICEA S-93-639/ NEMA WC 74	☞ ICEA S-95-658/NEMA WC 70
☞ UL listed Type MV-105 per UL 1072	☞ UL listed as type TC Cable
☞ Rated for CT use	☞ Passes IEEE 383 and 1202 flame tests
☞ Passes IEEE 383, 1202 and CSA FT4 flame tests	☞ Passes CSA FT4 flame tests
☞ Passes ICEA T-29-520 at 210,000 BTU/hr	☞ Meets CSA cold impact/bend at -40°C
☞ Meets CSA cold impact/bend at -40°C	☞ Single Conductor Listed as XHHW, XHHW-2
☞ Meets ASTM test for oil resistance	☞ Meets ASTM test for oil resistance
☞ Meets UL sunlight resist- ance requirements	☞ Meets UL sunlight resist- ance requirements
☞ Marine Shipboard approved	☞ Marine Shipboard approved
☞ Coast Guard/ABS approved	☞ UL listed as ER for exposed runs
☞ NEC Rated Class I Division 2	☞ NEC Rated Class I Division 2

## AIRGUARD® Cables Save Money on Installations

One of the limiting factors with CCW type industrial cables is the maximum length the cable can be pulled due to mechanical forces. This limiting factor is due to its relatively low maximum sidewall bearing pressure (SWBP); typically between 1000 pounds and 1500 pounds per radial foot. **AIRGUARD®** cables can withstand SWBP of an incredible 3000 pounds per radial foot which gives the customer outstanding reliability during long pulls. This results in fewer splices which leads to improved cable reliability and lower installation costs.

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