

# THE INSULATED WIRE CONDUCTOR

*More power carried by reducing the skin effect in the cable conductor*

## A Cost-Effective Solution

For the past 15 years, the Nexans EHV Insulated Wire Conductor has proven itself as a superior and dependable product.

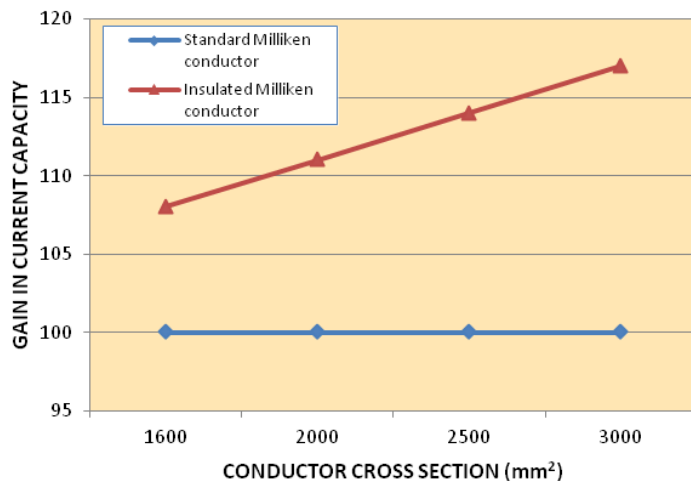
Here's why...

The 'skin effect' is the concentration of the electric current at the periphery of the conductors. As a result of this phenomenon, the effective AC resistance and Joule losses increase.

In a Milliken (segmental) conductor design, the skin effect can be reduced by insulating individual wires.

Using an insulated wire design adds approximately an entire conductor cross-section to a standard design with only bare copper wires.

*i.e. A 2500 mm<sup>2</sup> (approx. 5000 kcmil) insulated wire conductor can carry as much current as a 3000 mm<sup>2</sup> (approx. 6000 kcmil) non-insulated wire conductor.*



**ASK US ABOUT THIS EXISTING ALTERNATIVE DESIGN FOR YOUR NEXT PROJECT!**

Global Reference List for Insulated Wire Conductor							
Year	Project	Country	Max Voltage (kV)	Conductor (mm <sup>2</sup> )	Conductor (kcmil)*	Span length (m)*	Total length (m)
2013	Amprion- Raesfeld	Germany	420	2500 CU (I)	5000 CU (I)	1,280	21,600
2011	Transco N-7055 - Prysmian Abu Dhabi	UAE	420	2500 CU (I)	5000 CU (I)	730	70,000
2010	DEWA - Mamzar - Mushriff	UAE	420	2500 CU (I)	5000 CU (I)	430	58,500
2008	EDF Energy - P/P West Burton	UK	420	2500 CU (I)	5000 CU (I)	597	5,600
2006	AREVA - Gulf Interconnection	UAE	420	2000 CU (I)	4000 CU (I)	670	8,167
2003	ADWEA - Abu Dhabi Island Interconnector	UAE	420	2500 CU (I)	5000 CU (I)	500	37,500
1999	EDF - INCA	France	420	2000 CU (I)	4000 CU (I)	400	400
2013	REE - San Marti Murterar	Spain	245	2500 CU (I)	5000 CU (I)	556	5,000
2011	REE - Can Jordi	Spain	245	2500 CU (I)	5000 CU (I)	450	2,700
2011	REE - Brazatortas Puertollano	Spain	245	2500 CU (I)	5000 CU (I)	405	2,430
2011	RTE - PACA	France	245	2500 CU (I)	5000 CU (I)	870	16,000
2011	RTE - PACA	France	245	2000 CU (I)	4000 CU (I)	1,380	59,000
2010	Transpower - NAaN	NZ	245	1600 Cu (I)	3500 CU (I)	1,370	5,480
2008	TERNA- Fadalto	Italy	245	2500 CU (I)	5000 CU (I)	200	600
2008	REE - La Cereal Tre Cantos	Spain	245	2500 CU (I)	5000 CU (I)	623	22,940
2007	REE - Loeches	Spain	245	2500 CU (I)	5000 CU (I)	550	1,650
2006	REE - El Palmar	Spain	245	2500 CU (I)	5000 CU (I)	435	1,305
2006	REE - Puerto Real	Spain	245	2500 CU (I)	5000 CU (I)	292	876
2005	REE - Fausita	Spain	245	2500 CU (I)	5000 CU (I)	280	840
2003	Alstom - Dunkerque (DK6)	France	245	2000 CU (I)	4000 CU (I)	500	19,100

\*approx



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