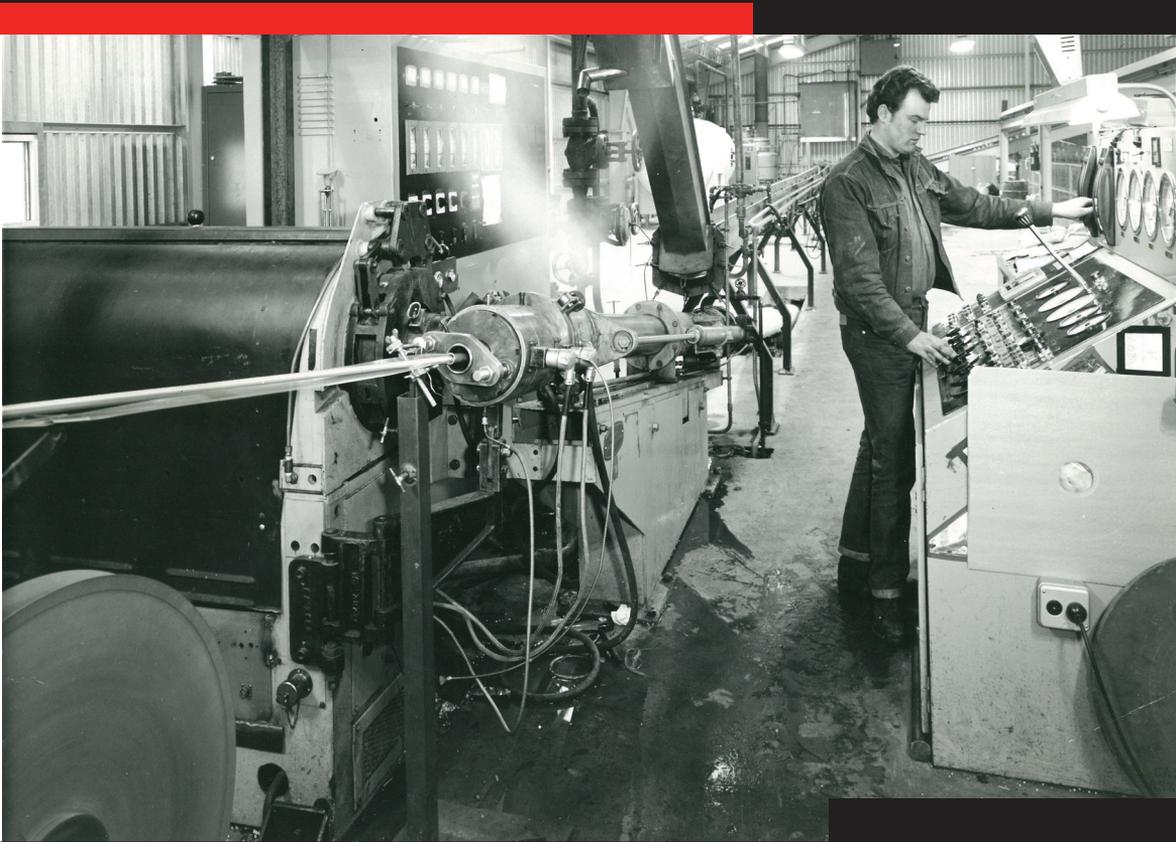
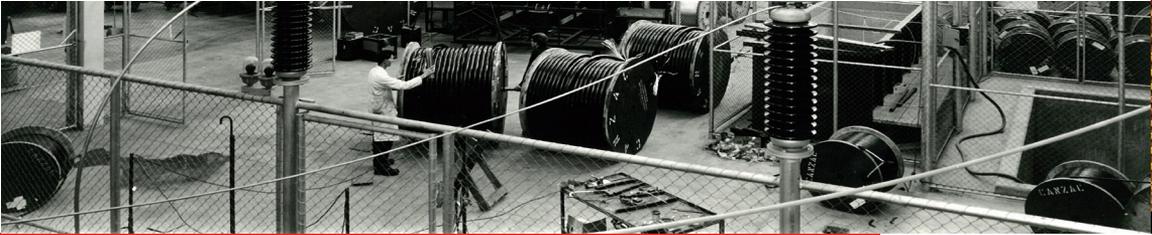


MEDIUM VOLTAGE

# LONG-LIFE CABLES





## Why Nexans Long-life Medium Voltage Cable?

Nexans has an impressively long history as a pioneer in the design and manufacture of quality medium voltage (MV) cables in New Zealand. We are the largest power cable manufacturer in NZ and have a state of the art facility in New Plymouth, established in 1967. We pride ourselves on delivering MV cable that has a life expectancy in excess of 50 years.



### We know our cable

Nexans was the first to manufacture crosslinked polyethylene (XLPE) cables in the Southern Hemisphere and again was the first to replace taped semi-conductive screens with electrically superior extruded layers. Our technical experts have been with us from the start, and our experience is what you can trust when it comes to long-life cables.

### Don't take a chance on the unknown!

We have collaborated with our compound suppliers for over 50 years to provide the best tree retardant crosslinked polyethylene (TR-XLPE) material available on the market today. We have thorough standards for our other raw materials as well.

Have you ever considered why some cable products are so much cheaper than others? Raw materials make up the majority of the cost; if the price looks too good to be true, it almost certainly is.

Our test procedures, highly experienced team and specialised equipment all combine to ensure that applicable AS/NZS standards are met. Investing in our cable gives you the very best of design, materials, refined manufacturing processes and quality test systems.

1967



CANZAC cables produce the first-generation cross-linked polyethylene (XLPE) cable in the Southern Hemisphere

1973

CANZAC is again the first in the Southern Hemisphere to bring in extruded semi-conductive screens/shields to replace the taped version

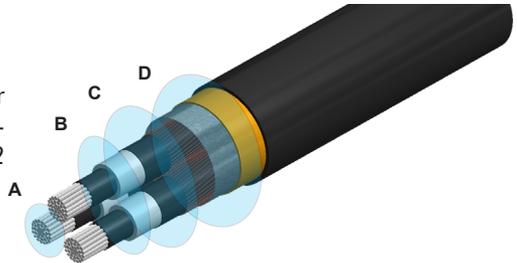


## Indicative Cost Comparison

	Nexans	Unbranded
MDPE Sheath		-2%
PVC Sheath		-1%
Aluminium		-0%
Copper		-0%
Fillers		-0%
Certified TR-XLPE Insulation		-6%
Semi-Conductive Screen		-5%
<b>Cost</b>		<b>-14%</b>
<b>Life Expectancy</b>	<b>50 Years</b>	<b>?</b>

## Constructing Long-Life Cable

**A** We use the highest grades of copper and aluminium and the latest stranding technology in manufacturing over 2 million metres of compacted MV conductors per year.



**B** Utilising our state of the art triple extrusion line, raw materials are conveyed from a pressurised clean room to ensure the extruded compounds are free from voids and contaminants. The 3-layer insulated core is monitored in-line, using x-ray technology, to measure key parameters such as wall thickness and concentricity.

**C** Expertly controlled metallic screening and cabling processes ensure the cable meets our individual customer's various fault rating requirements.

**D** Sheathing layers are applied on our thermoplastic extrusion lines where electronic diameter controllers again provide highly accurate in-process control.

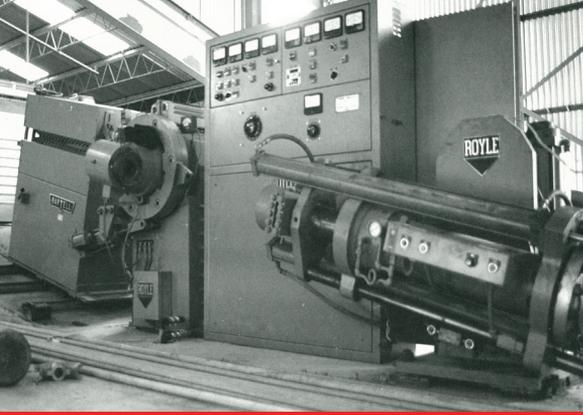
1990

**OLEX**CABLES

Olex Cables upgrades from steam to dry-cured triple extrusion and introduces the first generation tree-retardant cross-linked polyethylene (TR-XLPE) in New Zealand

1998

An X-ray 8000 dimensional controller is installed to the MV line which scans through three layers of polymer to accurately measure layer thicknesses for consistency



## Testing Long-Life Cable

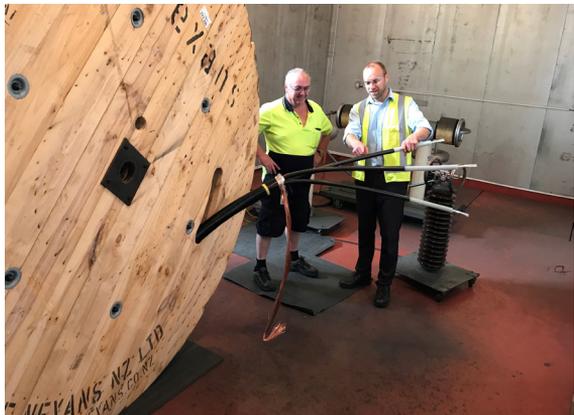
During manufacturing, we carry out comprehensive in-process tests in our IANZ accredited laboratory. This ensures our cable meets the critical requirements of the cable construction from the core to the final outer-sheath.

Once the cable's completed, we perform electrical tests\* such as spark test on sheath, conductor examination, resistance, high voltage a.c. testing and partial discharge (PD).

All testing is carried out using specialised equipment to ensure that our MV cables are free from voids and contamination within the insulation for a life expectancy of over 50 years.

\*A comprehensive list of our sample and type tests is available on request.

**Freephone 0508 NEXANS**  
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2005

After an improvement on the compound which was trialed in 1998, Olex Cables goes into full production of the second-generation TR-XLPE reducing tree-growth even further. A new advanced high tech X-ray is installed.

2017



Nexans Olex trials the next generation of TR-XLPE in 2011 and goes into full production in 2017, making Nexans NZ leaders in long-life cable