NZ Insulators rises to new challenge

Built to outlast the lines they protect, porcelain insulators have been the unsung heroes of network reliability for generations of linesmen.

Crafted in Temuka, New Zealand-made 'NZI' insulators have played a silent role ensuring distribution companies seldom let their clients down and power is available to every city, town and rural customer throughout the country.

The proven characteristics underpinning the performance of these insulators come from a special blend of clay and sand found at NZI's open-cast mine in the Kakahu Valley, 20 km west of Temuka.

The properties of this blend produce the most du-

rable porcelain available to the electricity industry, says Greg Howell, manager of New Zealand Insulators Ltd (NZI).

Fashioned from the earth into insulators designed to keep electricity a safe distance from it, the 'Kakahu Blend' defines the durability of locally-made insulators and outperforms imported porcelain product, says Howell.



Greg Howell



A new management approach at New Zealand Insulators makes it possible for the power industry to retain a strategic local supply of medium voltage porcelain insulators

But while New Zealand Insulators maintains a competitive advantage on quality for its customers, the company is having to work harder to compete with Chinese imports on price.

Howell says New Zealand Insulators is a low-cost regional manufacturer but these efficiencies pale when up against a rising Kiwi dollar.

"The problem we face affects all New Zealand manufacturers trying either to export or compete with imports. A high exchange rate makes imports cheaper, putting pressure on local producers. If customers shift their purchases to imported product, New Zealanders lose jobs and New Zealand manufacturers close their production lines.

"Once the local capability is gone, when the exchange rate moves the other way and the price advantage switches back to local production, it's too late. We go from being price makers to price takers from then on and this will inevitably mean higher prices and a loss of local control." Howell is now asking the electricity industry and in particular medium voltage customers, to support locallymade NZI insulators as the best way to ensure network companies and contractors retain the security of a local manufacturing capability.

"We're asking clients to look past today's spot price and choose trusted NZI products which last the distance. We will stand beside any company that puts their faith in NZI porcelain insulators."

Changes

Howell says New Zealand Insulators has been through a series of changes in the last two years and is now working to an ambitious manufactur-

ing-centric business plan.

"We have retained highly skilled staff in our production facility and we are matching that with a management approach that is more customer-focused. This is reflected



NZI says its boxed New Zealandmade insulators 'stack up' better than porcelain imports

in the breadth of product range in our latest catalogue and our willingness to respond to requests for any particular solution."

Howell says he hopes NZI is now an easy company to do business with and for the past two years has worked hard to improve the NZI product range, quality and market credibility.

"We have diversified our offer and now also provide a range of polymer insulators. But the primary value still comes from the porcelain products because we do that exceptionally well."

He says a porcelain insulator made by NZI in Temuka is typically lighter than the equivalent import products currently on offer from China.

"This is an advantage for asset managers and linesmen. Despite the glaze, strength and durability of NZI porcelain, ours are typically lighter. If you are trying to limit the weight of line hardware on overhead poles, NZI insulators will achieve this for you."

All insulators bearing the NZI brand are made in Temuka, South Canterbury, says Howell.

"They are milled, blunged, blended, filter pressed, pugged, matured, turned, dried, glazed, branded, fired, viewed, tested, assembled and inspected by expert practitioners. Every stage of the NZI manufacturing process is documented and quality controlled to a certified ISO 9001 standard.

"Each NZI insulator is tested at seven specific stages throughout the manufacturing process, including a live HV flashover test

and/or a mechanical strength test. Not only do we make a superior product, we actually test every insulator to be 100 percent sure. Can importers give such an assurance?

"That's why we offer a 25-year replacement warranty and, unlike Chinese imports, our warranty is tied to a local manufacturer, factory and a location."

Long lasting

Network contractor Electrix is well satisfied with the quality of NZI insulators. Technical manager Graeme Johnson says he is part of the Electrix team that assesses products for use on lines projects.

"I have no issues whatsoever with the quality of the NZI product. I have seen the insulators being manufactured in Temuka and watching them pass through each stage of production has given me a good understanding of the effort that goes in to make a very reliable product.

"After 20 years in the industry I know that if NZI insulators are installed correctly they will perform faultlessly and that's why we continue to use them and are prepared to pay a slightly higher price for the quality assurance of a proven reliable product."

Johnson says this doesn't mean Electrix is opposed to the use of polymer solutions, but confines their use to the safe treatment of terminations.

Ready availability

With a recently-established North Island warehouse in Kumeu. West

Auckland, contractors like Electrix now have easier access to the NZI range and the additional line hardware supplied by New Zealand Insulators, says Greg Howell.

This includes the polymer products manufactured by DTR in Korea and the new AX brand of spindles and clevis thimbles.

"We now have a brand new range of premium AX spindles re-engineered to our specification. Like our insulators, they also come in stackable wooden boxes.

"From Canada we are importing Payer preforms. We offer ancillary hardware for line maintenance and projects and we also



Skilled NZI handcrafting turns clay and sand into network reliability



Baked-in strength and seven-stage testing produce insulators that will last for decades

have a full porcelain line post offer so whatever you need, you can get from NZI."

Howell says part of the new approach NZI now brings to market is the company's willingness to produce customised solutions.

"For example, in July a specific network wanted 120 x 22 kV line posts with a longer 200 mm stud. With the porcelain components already in stock, we were able to assemble the insulators, caps with special studs and deliver the order the very next week.

"With a Kiwi factory supported by our industry we can continue to provide short-run manufacturing to ensure every contractor and asset owner can get exactly the insulators they want.

"We have made progress recently and we're fighting our way back. Our factory tonnage is up 39 percent as at the end of July, with increased demand helping us restore 15 badly-needed jobs in Temuka. If our clients help us retain a New Zealand manufacturing capability, we'll be able to support the industry for many years to come."

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