

Better overhead performance from NZI

When it comes to securing electricity supply through New Zealand's overhead power lines, the humble porcelain insulator has proved to be the most reliable means of protection for many generations.

Manufactured in New Zealand by New Zealand Insulators (NZI), the quality of the local product is a result of years of manufacturing expertise built up by the company and the unique Kakahu blend of clays, sands and mixing agents from which all NZI-branded porcelain insulators are made in Temuka.

Coated with glaze that helps to prevent flash-overs by promoting self-cleaning and enhancing mechanical strength, NZI insulators have built a reputation for reliability and durability, so it shouldn't have come as a surprise to the company when its insulators were considered for the design and construction of a series of massive communication towers in China, says general manager Chris van der Werff.



Chinese government officials selected NZI insulators for their new communications towers



New Zealand Insulators supplies a range of overhead accessories for nearly everything needed up a pole

"Over recent years Chinese-made porcelain insulators have entered the New Zealand market encouraged by the high New Zealand dollar. As the world's low-cost production centre for many types of manufacturing, we were challenged by China's incursion into our porcelain insulator market, but we stuck to our quality commitments in the hope that lines companies would continue to want the best possible insulators protecting their networks."

Van der Werff says NZI is grateful for the positive response from their customers who continued to buy from NZI and kept the doors of the recovering Kiwi manufacturer open. But what van der Werff didn't anticipate this year was the endorsement of their superior insulator quality by the Chinese government when their engineers selected NZI insulators for their vital communications towers.

"We are very pleased that after considerable testing NZI insulators came through as

the preferred product over local Chinese manufacturers."

Van der Werff says the wisdom of choosing performance over price is borne out by international research which shows that the price of porcelain insulators is typically only three percent of the cost of installing a new overhead line, but 90 percent of the faults likely to occur on that line will be caused by insulator failure.

"The only way to minimise this is to ensure you use insulators with the highest quality manufacturing practices and the highest quality glazing. Our glaze enhances the performance of our porcelain, which has been designed to last under all New Zealand conditions.

Electricity will find its way along any conductive track from accumulated dust and surface moisture or from a manufacturing deficiency. The Chinese government knew what it was looking for to prevent this, and found it not from its own manufacturers in China but from a Kiwi factory in Temuka."



Chris van der Werff and David Glackin

New direction

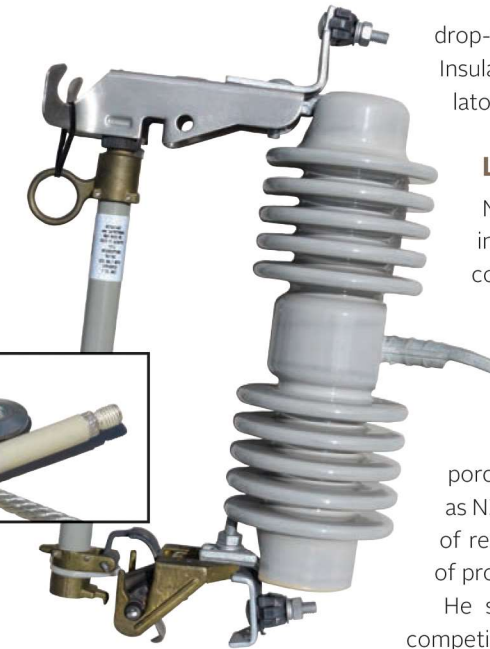
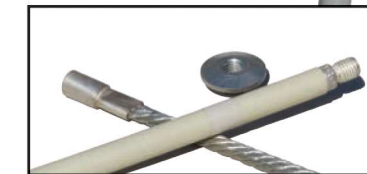
With many years' experience in the electricity industry, van der Werff says NZI has come a long way over the last few years following a management change under Greg Howell which set the company on a new direction with a renewed attitude of helpfulness and support for its customers.

This can be seen in re-investment in plant, ISO9001-certified quality manufacturing systems, expanded product ranges now distributed by NZI from manufacturers around the world, along with the willingness to support customers with customisation where needed. Staff numbers have more than doubled since 2011.

Network owners have benefitted from this resurgence, and also from NZI's specialist skills in 72 to 110 kV sub-station refurbishment, where owners can now achieve considerable time and cost savings having NZI refurbish bushings instead of replacing them.

"Or we can go back to our original drawings and supply the right porcelain bushings

NGK Stanger EDO dropouts and Bussmann fuse links combine for network safety



the following day despite the fact that their last purchase of these was 15 years ago. Our records go back 90 years so producing another batch is easy, and we also carry stock from years of production runs in our sprawling factory the size of three rugby fields."

Wider range

Now supplying almost everything needed for new overhead lines and upgrades, NZI has applied a little innovation to its wider range of products. Partnering with Bussmann in the development of a universal range of expulsion fuse links using a crimped cable adapter produced by NZI, the company now offers 15 different sizes ranging from two to 100 amps that can be used on every type of EDO fuse carrier used in New Zealand.

Van der Werff says Bussmann, now an Eaton company, has carried out all the testing on the new designs, confirming their speed and reliability. NZI bags the fuse links individually and colour-codes them so line mechanics can see at a glance the amperage they want for a fast and reliable installation.

Taking care of much of what you want up a power pole are a raft of products now supplied by NZI, with polymer strains, polymer line posts, polymer surge arrestors from DTR (Korea) and ECW1 wedge clamps and earth rods from Fulton Industries in Australia.

PAYER Preforms from Canada provide deadends, armour rods and line guards and splices, while NGK Stanger from Australia supply LV isolators, HV disconnects and EDO

drop-outs. NZI also represents the Global Insulator Group supplying glass disc insulators for distribution and transmission.

Lines companies supported

NZI sales director David Glackin acknowledges the significant contribution lines companies and their contractors have played in restoring NZI as a trusted supplier of quality overhead equipment. He says confidence in NZI and the long-lasting benefits of its porcelain insulators has been renewed as NZI responds to an increasing number of requests for its more complete range of products.

He says NZI's improved service, more competitive pricing and greater range of products including the time-saving assistance the company provides in the bundling of components for line crews.

"Where network contractors used to bundle assemblies, we now provide pre-packaged assemblies such as pre-fitting insulators into U-shackles to make it easier for line crews in the field – and less inventory for contractors to manage."

Down south at Alpine Energy's contracting group Netcon, procurement manager Brendan McNeice says they are happy to support NZI as a local business but, with service second to none, it is a pleasure engaging with NZI.

"We recently completed a project in Nauru and received valuable assistance from NZI. They made sure the urgent project went ahead without a hitch in the supply chain. It really helped having Chris van der Werff working with our Tony Scott who managed the project.

"The job was an infrastructure rebuild and because Chris has worked for a lines company he understands what it is like to be a customer and took care of everything. The NZI people know what they are doing and always go the extra mile." ■

For further information:
New Zealand Insulators
 HQ/Factory - Temuka 03 687 8100
 Auckland Branch - 09 412 5941
 E: sales@nzinsulators.co.nz
 W: www.nzinsulators.co.nz