



MV NETWORK UPDATE MARCH 2021

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

Manufactured in Temuka South Canterbury by New Zealand Insulators (NZI) since 1924. The quality of our local NZ made products are the result of 97 years of manufacturing expertise built up by our NZ owned company.

All NZI branded porcelain insulators are made of the unique Kakahu blend of clays, sands and mixing agents sourced direct from our "owned and operated" open cast mine located in South Canterbury.

All NZI insulators are manufactured with a glaze that helps to prevent flash-overs by promoting self-cleaning and also enhancing mechanical strength. All medium voltage insulators are supplied standard with the additional high specification blue "Radio Silence" glaze to assist the reduction in radio interference.

NZI has built up a reputation for reliability and durability since 1924 and we continue to re-invest in the Temuka factory with retained accreditation of ISO 9001:2015. Certified quality manufacturing systems, including the manufacturing process and procedures, and an extreme focus on our environmental management system, which is aligned with ISO 14001-2015, guides our focus on the environmental aspects and impacts associated with the activities we undertake. This includes managing the total lifecycle of insulators that we manufacture and as part of this we continue to offer recycling of NZI porcelain (free of charge) in our Temuka factory. This of course greatly assists the reduction of traditional waste and dumping in landfills across New Zealand (please contact us for details).

The wisdom of choosing performance and quality over price is supported by years of international research. This research indicates that insulators comprise only 3% to 5% of the capital cost of line construction but are accountable for 70% of line interruptions and 50% of maintenance costs.

It is therefore obvious that to minimise the risk and reduce total life costs, utilising insulators with the highest quality manufacturing practices and the highest quality glazing is the way forward. NZI provides this surety and more by offering a 25-year warranty on our NZI manufactured porcelain. This includes the total lifecycle management/recycling of NZI porcelain insulators.

NZI, Temuka South Canterbury is the only porcelain insulator manufacturer in the Southern Hemisphere. This combined with our 97-year history, our New Zealand ownership, our focus on the environment and sustainability

associated with the lifecycle of our manufacturing and recycling, then it's no wonder that our customers agree that NZI is a great value proposition for the sourcing of insulators for their needs and a proposition that can't be duplicated.

OUR MANUFACTURING AND PRODUCTION PROCESSES

Here we provide a little insight into the processes carried out onsite at our Temuka factory.

We start with raw materials "won" from our own mine in Kakahu and finish with a completely New Zealand made insulator. These, of course, are 100% individually electrically or mechanically tested and delivered to our customers with a NZI 25-year warranty.

These photos are a summary and of course there are many more processes involved. At NZI we always welcome visitors on site where we can explain in more detail the intricacy and high specification we manufacture our NZI products to.



1. Kakahu clay and sand prepared for clay production.



2. Clay blanks being loaded on to a stillage after undergoing the pugging process.



3. Turning (forming an insulator using a lathe) an 11kV Pin Insulator.



4. Glazing a post insulator (glazing forms a barrier to water ingress and gives strength to the insulator).



5. Fired 11kV insulators on a kiln truck.



6. Flashover testing of a 33kV Insulator.

New Zealand Insulators proudly made in Temuka, South Canterbury, New Zealand.

Contact us now for information on our products, to receive samples, and/or request a quote on any of our NZI or agency products.

Check out the NZI website www.nzinsulators.co.nz



NEW ZEALAND INSULATORS



TEMUKA

Chris van der Werff General Manager | +64-27-7066205 | chris@nzinsulators.co.nz

David Glackin Sales Director | +64-27-7460634 | david.glackin@nzinsulators.co.nz

Ian Clark Technical Director | +64-27-2211828 | ian.clark@nzinsulators.co.nz

Sales +64-3-6878100 | +64-27-NZI SALE (+64-27-6947253)
sales@nzinsulators.co.nz

Thomas St, PO Box 5, Temuka 7948

T +64-3-6878100 | **F** +64-3-6158125 | **W** nzinsulators.co.nz