

IS NZI PORCELAIN BETTER?

No surprise here --- yes, we contend that NZI porcelain products are the best available. And we think the advantages of NZI porcelain justify our clients paying a small price premium.

Porcelain insulators in New Zealand are either made here, by NZI in Temuka, or are imported from China. We're asking clients to look past today's spot price, to choose trusted NZI products which last the distance.

The purpose of this page is to assist Network Asset Managers and Procurement Staff within the 27 Networks to identify the advantages of specifying NZI-brand porcelain insulators:

PRODUCT CHARACTERISTICS

1. NZI's Kakahu Blend

For at least the past 50 years, NZI insulators have been made using our own 'Kakahu Blend'. Kakahu is the valley 30km west of Temuka where we own an open-cast mine. The Kakahu Blend is a confidential mix of seven ingredients - clays, sands and mixing agents. They combine to create what Kiwis know is incredibly durable porcelain product. Linesmen taking down 60 year old NZI insulators know this. NZI porcelain has genuine, trusted mechanical strength.

2. Lighter but Stronger

Like-for-like, a porcelain insulator made by NZI in Temuka is typically about 15% lighter than the import products currently on offer. This is an advantage for Asset Managers and Linesmen, striving to limit the weight of line hardware needing to be installed on overhead poles. NZI product is lighter yet stronger.

3. Tested at 7 Stages

Porcelain insulators made in Temuka are quality tested at seven specific stages throughout the manufacturing process, including a live HV flashover test and/or a mechanical strength test for each and every NZI insulator. NZI does have a reject rate, it's just that we weed them out before they reach the field. Can you confidently assume that the same testing regime is rigidly applied in other factories?

4. Quality System Operated with Expertise

Our insulators are milled, blunged, blended, filter pressed, pugged, matured, turned, dried, glazed, branded, fired, viewed, tested, assembled and inspected – by expert practitioners, in South Canterbury. Every stage of the NZI manufacturing process is documented and quality controlled to a certified ISO9001 standard. The most recent ISO site audit was successfully completed in March 2024. And we have half of NZI's staff with more than 10 years service, including ten in our 25 year club.

5. Chemical Consistency

Expertise however is no substitute for science. NZI has two staff fulltime in our lab – testing raw materials, recipe control, blend control, glazes, fired bodies and instrument calibration. Our recipes and procedures are maintained and audited with strict adherence to ISO9001, and our laboratory staff are fully trained in the specialist skills required to maintain the high quality standard we pride ourselves on. NZI porcelain is consistent because we are testing our own outputs, all day every day.

6. High Voltage Development Laboratory

NZI Insulators hosts an impressive German-built 300kV High Voltage Test Laboratory. This specialist rig allows us to develop new insulator designs, while performing in-house testing according to AS2497. Our trained personnel can use this specialist gear to perform diagnostics on a wide range of products.

COMMERCIAL CONSIDERATIONS

7. 25 Year Replacement Warranty

We stand by our product, replacing any Temuka made insulator that hasn't lasted the Network its expected life (conditions do apply). And with your support, we'll be here in 25 years to have that discussion if needed. Please ask David or Chris to provide written detail of the NZI Warranty.

8. Use-It-or-Lose-It

Supporting NZI will future-proof your choices. Our factory is a rare use-it-or-lose-it facility, and we think NZ's Electricity Networks will benefit greatly by retaining a local manufacturing capability. But to keep NZI in the game, we don't need encouragement, we need tangible support - purchase orders for stock products.

9. Short Runs

Keep New Zealand Insulators viable (by specifying NZI brand) and those small and often problematic project orders for specific insulators are available economically, at speed. Where offshore factories are interested only in mass production volumes, we thrive on short runs.

10. Safe Haven

Yes, imported insulator prices are low today, but only with the US\$ cross rate so high, and only until China is dominant enough to pass on the inflating costs of their porcelain manufacturing. Fast forward five years - prices are unlikely to be so friendly. However NZI is not exposed to global currencies and we think NZI can act as a safe-haven price insurance policy for NZ's electricity networks, well into the future.

11. Compliance

Unlike some imported product (from countries seemingly allowed to do entirely as they choose) NZI the company and NZI the brand complies with all environmental, safety, employment and intellectual property regulations.

12. Recycling

What's more, used NZI insulators can be recycled into new product. To evaluate this NZI Recycling Service, download the Request Form from the home page of www.nzinsulators.co.nz