

# POWER TRANSFORMERS FOR TRANSMISSION & DISTRIBUTION NETWORKS

Wilson Transformer Company provides transformer solutions for transmission & distribution networks in Australia and around the world.



THE TRANSFORMER  
PEOPLE

## KEY FEATURES

- > Reliable Performance
- > Custom Design, Manufacture & Test Capability
- > Whole of Life Value
- > Fast Track Delivery
- > Safety in Design
- > Compliance to Australian & International Standards



BUILT SMART

FOR LIFE

Wilson Transformer Company's Power Transformer Business Unit produces customised power transformers ranging in size from 3MVA up to 550MVA 400kV. These products form a critical part of the electrical infrastructure in the power generation, transmission and sub-transmission networks, ensuring reliable supply of electricity.

Our power transformers are designed and manufactured for each specific customer requirement. Standard proven design methodologies and extensive simulation tools are both used to prove the product design and ensure superior product performance in the field. The products are then manufactured in our state of the art facility with the latest technology equipment, systems and processes incorporating strict quality control gates.

All transformers are subjected to comprehensive routine and specified type tests, in accordance with the customer's requirements, relevant standards and Company procedures. All high voltage tests are performed in a Faraday cage test laboratory which is electrically and acoustically isolated from the main assembly building. Test equipment includes impulse generators rated up to 1,600kV and 160kJ for full and chopped wave impulse tests, partial discharge measurement equipment and precise digital instrumentation for accurate measurement of losses.

Thousands of our power transformers are in service around Australia and other parts of the world, including Africa, China, Fiji, India, Indonesia, Malaysia, New Zealand, Papua New Guinea, Saudi Arabia, Thailand, United Arab Emirates, the United Kingdom, the United States of America and Vietnam.

## YOUR REQUIREMENTS

We understand that most customer requirements are different, which is why we pride ourselves on being flexible in our approach. From a comprehensive range of products, services and support to state of the art manufacturing facilities and compliance, we offer our customers the confidence of working with our organisation that has proven itself over 80 years of excellence with many satisfied customers around the world.

## WORLD CLASS CAPABILITIES

Within our product range, our state of the art facilities located in Victoria, Australia are equal to the best the world has to offer. By using the latest design software, analytics and manufacturing technology we engineer and manufacture our products in clean work environments incorporating strict quality control measures in all critical processes.

Between 2009 and 2012, we completed a major upgrade of our power transformer facility that has provided increased capacity and capability, improved quality, and higher standards of productivity and safety.

Through our world class capabilities, specialist knowledge, proven reliability, and effective supply chain management, our customers can be assured of a quality outcome.

## CASE STUDIES

### Richmond Terminal Substation, Australia (1 x 150MVA)

Located in Mary St, Richmond, the Richmond Terminal Station is an integral part of Victoria's electricity infrastructure. It is one of several high voltage electricity terminal stations that serve inner Melbourne, subsequently providing the area with a reliable supply of high voltage electricity. Over the years, WTC has provided AusNet Services and its predecessors many 150MVA 220kV power transformers commencing in 1984.

### Bankside Substation, United Kingdom (2 x 90MVA)



Although the Bankside Power Station ceased operation several decades ago, the substation continued to operate and remains an important part of London's electricity network. The £60 million refurbishment of the substation included many substation upgrades, 6 power transformers from Wilson Transformer Company in Australia and an engineered heat reclamation system that used the losses of the transformers to supplement the heating and hot water requirements of the adjacent Tate Modern.

It was the first time UK Power Networks (formerly EDF Energy) provided this service for a customer. The innovative project, delivered by UK Power Networks in partnership with Tate Modern, Arup and Wilson Transformer Company, won the 'Infrastructure' award at the Royal Institution of Chartered Surveyors London regional award ceremony. The project also won a 'Re-engineering London' award at the Institution of Civil Engineers London Awards.

## REFERENCE LIST

Below are some of our reference projects for Transmission and Distribution networks.

### Transmission networks

MVA	kV	Project
550/490/60	330/132/22	Muja Power Station, Australia
150/200/260	220/110/11	Chapel Street Substation, Australia
120/240	275/132/33	EPE Reyrolles, Malaysia
135	220/13.8	Meridian Energy, New Zealand
100	110/11	Thomastown Terminal, Australia
150/200/260	220/110/11	Transend Networks, Australia
120	132/66/11	Transgrid Transmission, Australia

### Distribution networks

MVA	kV	Project
15	33/11	SEWA, UAE
90	132/33	EPE Reyrolles, Malaysia
25	33/11	Fiji Electricity Authority, Fiji
37.5	132/11	Kurnell Substation, Australia
20/33	66/22/6.6	Dromana Zone Substation, Australia
75	110/66/11	Transpower, New Zealand
90	132/33	Scottish & Southern Energy, UK
120	132/33/11	Ausgrid, Australia
Various ratings from 15MVA to 120MVA, 11/33/66/110/132kV		Energex - Strategic partnership, period contracts (15+ years), Australia

For information about other projects, please visit :

<http://www.wtc.com.au/your-requirements/proven-track-record/>

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