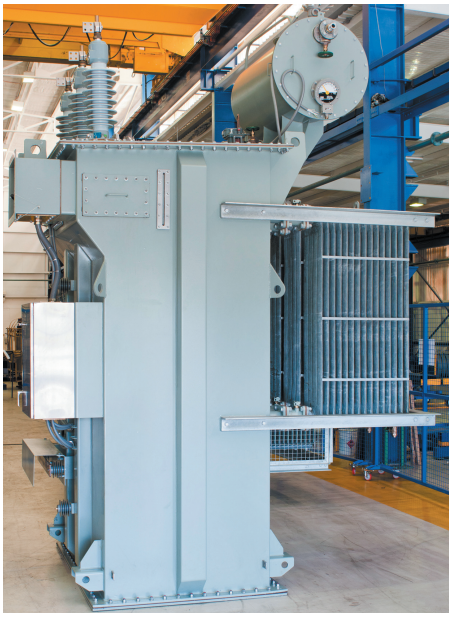
TRACTION POWER TRANSFORMERS

Tyree Industries produce traction class power transformers up to 35MVA ONAN, 132kV Class primary voltage. Tyree design philosophy is based on Westinghouse round coil, core type technology. This technology is proven technology for transformers rated from 3MVA, through 300MVA, 330kV.

Tyree utilise modern, robust winding technology that is short circuit designed and verified, and includes continuous disc and interleaved disc for high voltage windings, and helical and continuous disc featuring CTC (Continuous Transposed Conductor) for medium and low voltage windings.

Tyree is the only Australian transformer manufacturer producing in-house, customised winding conductors including tensile rated and tested high conductivity copper conductors, coated and wrapped to specific design and performance. These techniques and technologies are particularly relevant to traction duty transformers subject to frequent short circuits and voltage transients. Tyree engineers have experience in fielding such products that are capable of repetitive short circuit and switching voltage impulse.

Tyree possess circuit simulation tools enabling load transient modelling to fully modelled and



can predict the effects of load current harmonics on winding conductor for accurate thermal profiling in real-world traction environments such as rail systems and propulsion loads.

Tyree engineers utilise best in class power transformer components, sourced globally including On-Load-Tap-Changers (OLTC), Condensor and Oil filled bushings, instruments and fittings. Tyree products are Australian engineered for Australian conditions, to world class standards.

Features

- Short circuit verified Winding Design and construction
- Customised in-house designed for network substation integration.
- Transient voltage tolerant through static shielding and insulation grading technology
- World Class components
- AS and IEC Compliant Design and Performance

Benefits

- Optimal cycle cost performance through low loss core and winding designs
- Customised product based on proven design standards
- Reliable, conservative and predictable technology
- Designed and fabricated for local Australian conditions
- Locally produced to enable close consultation with site engineering and commissioning
- Compact substation designs for site integration, ease of transportability and interchange

SPECIFICATIONS:

Traction Power Transformer

Technical Specifications

- Primary voltage rating: 3.3kV to 132kV Class
- Secondary voltage rating: 3.3kV to 132kV Class
- Rating: up tp 35MVA ONAN
- Auto, Single, Three and Polyphase designs including rectifier and traction duty
- Mass: to 50T total
- Off-Circuit tapchanger, On-Load-Tap-Changer (OLTC) & regulating designs
- Free-breathing and Sealed Designs, including bagged conservator, and nitrogen blanketed

MSDS sheets available on request

Certified System
Quality
ISO 9001
SAI GLOBAL