

# MOBILE SUBSTATION POWER TRANSFORMERS

Tyree Power division is specifically facilitated for small power transformers from 3MVA specifically suited to Mobile Substation applications. These products are designed and manufactured with the same reliable, robust construction to larger MVA products, but arranged to enable compact integration for transportation, skid mounting and site erection. Tyree provide open air and enclosed termination systems, free-breathing and sealed designs, integrated and separable radiators/coolers.

Tyree's 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 including continuous disc and interleaved disc for high voltage windings, 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. The Tyree team utilise modern step-lap, mitre cut core design, featuring Hi-B low loss core steel including laser scribed grades.

Tyree Power Transformers feature in-house produced radiators. This enables rapid production of custom cooling configurations for ONAN and ONAF ratings. Tyree radiator designs feature welded header, self draining in cold-rolled and stainless steel. Tyree Power transformer tanks are boiler designed and fabricated, featuring Australian Standard tropical and marine rated surface treatments.

Tyree engineers utilise best in class 3D, parametric CAD tools enabling accurate design integration by file sharing during Mobile Substation design. Tyree are Australian engineered for Australian conditions, to world class standards.

## Features

- Short circuit verified Winding Design and construction
- Customised in-house designed for mobile substation integration.
- Transient voltage tolerant through static shielding and insulation grading technology
- World Class components, tap-changers, bushings, instruments and fittings.
- 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:

### Mobile Substation Power Transformer



### Technical Specifications

- Primary voltage rating: 3.3kV to 36kV
- Secondary voltage rating: 250V to 22kV
- Rating: up to 5000kVA ONAN
- Single, Three and Polyphase designs
- Fully sealed and free-breathing designs
- Off load tap changers

MSDS sheets available on request

