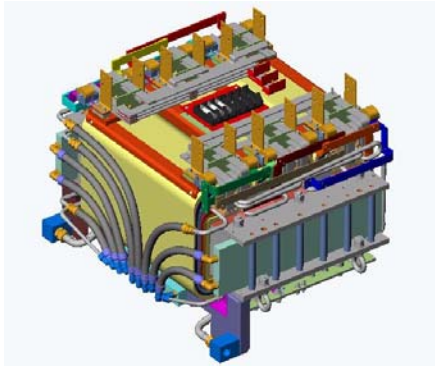


MAGNETICS

LIQUID COOLED TRANSFORMERS

- Military and Heavy Industrial Applications



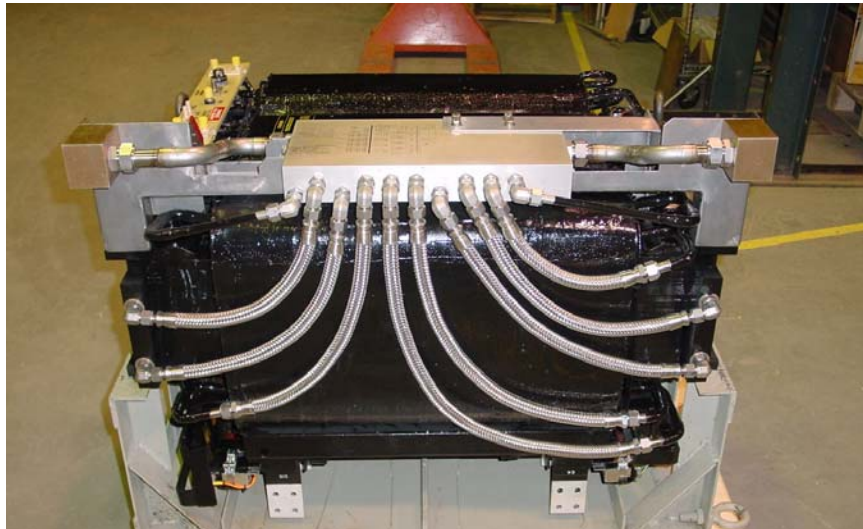
Features:

- Dry-Type Insulated (200°C)
- Low to Medium Voltage Applications (up to 15kV)
- Rating: 100kVA – 5000kVA
- Isolated/Grounded cooling system/heat exchangers
- 60% volume and weight reduction relative to comparable natural convection cooled power transformers
- Corrosion resistant fluid lines, manifolds and fittings.
- High Operating Pressure Withstand (up to 350psi)
- Low Pressure Drop design

Qualifications:

Liquid Cooled Transformers have been designed and qualified to:

- Shock Withstand: MIL-S-901D (Grade A)
- Vibration: MIL-STD-167-1
- (Shipboard)
- MIL-STD-740-1 and MIL-STD-740-2 (Airborne and Structure Borne Noise)
- IEEE C57.12.91-1998 Short Circuit Withstand.
- IEEE C57.12.91-2001 Impulse Voltage Withstand.



Espey Mfg. designs and manufactures liquid cooled power transformers for power isolation, power distribution, high voltage pulse, and rectifier converter applications.

Espey's proprietary heat exchanger design and application enable the winding current density to be increased upwardly of 2.5 times that of a conventional air-cooled unit. Volume and weight are reduced significantly without compromising power handling, or dielectric requirements.

Espey's vertically integrated facility enables each design to be manufactured, tested and qualified in-house enabling flexible, custom configurations for your unique requirements.

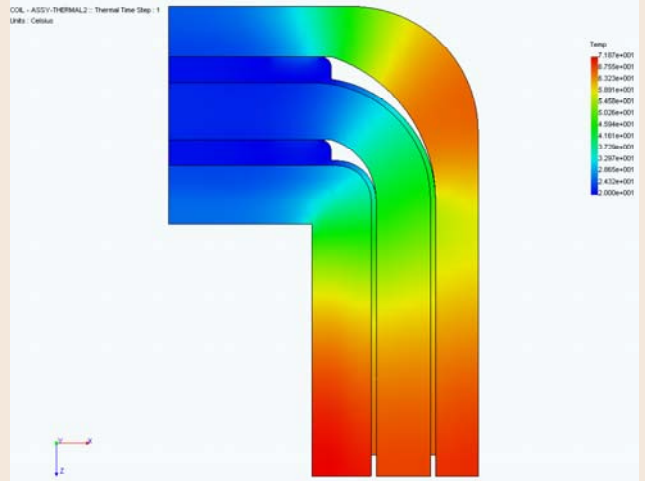
Rev. A

Design and Analysis - Thermal Modeling:

Mechanical Model – TRANSFORMER COIL



*Model Analysis
FEA – Thermal Profile*



Production – Coil Winding:

