POWER TRANSFORMERS MADE IN USA
THE ALLIANCE OF VTC AND GTC HAS CREATED NATION’S LARGEST TRANSFORMER BUSINESS BY CAPACITY

PRODUCT RANGE
- Up to 400 MVA 525 kV
- BIL 1675 kV
- LTC / DETC
- Medium Power Transformers
- Large Power Transformers
- GSU Transformers
- Auto-Transformers
- Padmount Transformers
- Traction Transformers
- Rectifier Transformers

KEY PRODUCT FEATURES
- Torqued bolts with pre-compressed washers to maintain contact pressure
- Selection of pressure points on the end ring to apply uniform pressure on the coil
- Coil compression using Hydraulic isostatic
- Robotic Welding
- Leak free nitrogen system
- Polyurethane on Epoxy Paint systems
- Lifting eyes and jacking pads protection from paint damage
- Checking contact resistance of crimps
- Touch up paint for incidental use
- Installation video
- Winding tension for short circuit strength
- VCM to monitor moisture and Hydrogen – sends signals for diagnosis / lifetime assessment
- All metal edges are rounded
- Corona shields on bolt heads
- Testing of DETC and switches for ease of turning - not binding
- Securing the shaft of DETC from disengaging
- Lifting lug designed with safety factor 5
- Laser assembly of core and coil to maintain alignment for clearance uniformity
- End rings are designed to absorb short circuit force
- Oil moisture PPM and dielectric assurance

OUR FOUR PLANTS

CHIHUAHUA, MX
- 15 MVA 115 kV
- 0.5 MVA 4.1 kV

ROANOKE, VA
- 30 MVA 138 kV
- 5 MVA 34.5 kV

POCATELLO, ID
- 100 MVA 230 kV
- 12 MVA 69 kV

RINCON GA
- 400 MVA 525 kV
- 30 MVA 115 kV

47,000 MVA ANNUAL CAPACITY

Since 1971
Since 1950 (as Efacec)
OUR FACILITIES

VTCR - Roanoke, VA

- Headquarters for Virginia Transformer
- Nearly 50 years of reliable, high quality custom small and medium power transformers
- Environmentally controlled, positive pressure winding room
- Soenen core cutting machine
- Robotic welding of tanks
- Vapor Phase Drying
- Test room is capable of testing 2 units simultaneously up to 750 KV BIL
- Paint operations offers a full spectrum of paint options for all environments

GTC - Rincon, GA

- CNC centers for insulation components – 5 axis machine room
- Vertical and horizontal computer controlled winding machines
- Astronics core cutting machine with fully automated & integrated E-stacker
- Coil Phase drying with Vapor Phase technology to achieve .5% moisture
- Air cushion transportation to move all heavy components
- Multi-point bridge cranes with varying capacities (up to 400 metric tons)
- Shipping/rail siding area equipped with special gantry cranes
- Computer controlled oil processing and filling system
- Vapor Phase Drying of complete core and coil assembly
- HV Test Lab with capabilities to 2,050 KV BIL & 765 kV (computer integrated)
- Fully air conditioned 250,000 sq. ft. building for dryness and personal comfort

VTCU - Pocatello, ID

- Medium and large power transformers
- Equipped with its own rail siding spur to plant
- Winding rooms are climate and environmentally controlled
- Isolated metal fabrication
- Insulation cutting and fabrication shop
- Vapor Phase Drying
- Two separate core cutting lines, computer controlled for low loss step lap cutting producing burrs of less than .001" (1,000 millimeter)
- Two complete testing stations – 1200 kV Impulse Generator
- Testing equipment: moisture in oil and insulation, oil in BDV, particles in oil and air, optical burr measurement

VTCW - Chihuahua, MX

- One of the most modern transformer manufacturing plants in North America
- Environmentally controlled winding and manufacturing areas
- Robotic Welding
- Automated test equipment with digital instrumentation
- 500 kV Impulse Generator
- Automatic Test Data Acquisition equipment

KEY BENEFITS

- No delay in start up - Savings ($$)
- No failure due to internal defects - Savings ($$)
- Can offer 5, 10, 15 year warranty (Peace of Mind)
- Prompt, Hassle-free warranty service - Savings ($$)
- Expect 60 years of service - Savings ($$)

FIELD SERVICE

Field installations, maintenance and repairs for electrical substations supported by experienced design engineers and service specialists

TESTING

A full array of tests including inspection, analysis and recommendations for peak operation is available