

WACO MANUFACTURING DEPARTMENT GUIDE

STEP 01 WAREHOUSE

The Warehouse is responsible for the receipt, storage, and management of raw materials and components supplied by various vendors.

Warehouse Associates play a critical role in ensuring that the necessary parts are accurately and promptly delivered to the appropriate manufacturing departments in accordance with production schedules.

STEP 03 WINDING

The Winding Department is responsible for manufacturing transformer coils by precisely winding the conductor and insulation in accordance with engineering specifications.

This process ensures the correct number of turns, appropriate clearances, and proper insulation are achieved. The coils serve as the transformer "brain," playing a critical role in ensuring the transformer's performance, reliability, and long-term durability.

STEP 05 CORE & COIL ASSEMBLY

The Core and Coil Assembly Department is responsible for assembling switches, leads, and busbars, and routing them to their designated terminals in accordance with design specifications.

Following this, the complete core and coil assembly is transferred to the drying oven, where controlled heating is applied to remove moisture from the insulation system. This process also activates the epoxy adhesive on the insulation paper within the windings, enhancing structural integrity and electrical performance.

STEP 07 TESTING

The Testing Department conducts a series of industry standard tests to verify that the transformer operates within specified performance parameters and complies with all applicable quality and standards.

STEP 02 WELDING

The Welding Department is responsible for the fabrication and welding of various accessories and components onto the transformer tank, in accordance with engineering specifications and quality standards.

STEP 04 LACING

The Lacing Department is responsible for the installation of the electrical core steel into the pre-wound coils. This process involves the precise alignment and secure fastening of the coils to ensure structural stability and accurate positioning within the transformer assembly.

Proper execution of this step is critical to completing the magnetic circuit, thereby ensuring the transformer operates efficiently and reliably.

STEP 06 TANKING

The Tanking Department is responsible for installing the core and coil assembly into the transformer tank, followed by the installation of bushings and other essential components.

Once assembly is complete, the tank is vacuum-filled with dielectric fluid to ensure proper insulation and cooling performance.

STEP 08 FINAL FINISH

The Final Finish Department is responsible for installing various instruments, gauges, control enclosures, monitoring devices, labels, and nameplates on the transformer. Additionally, this department ensures that the transformer is fully prepared for final inspection and delivery.