Transformer Service

Factory repair and remanufacturing
An economical alternative to buying new, while reducing downtime and risk

As critical assets, transformers are in jeopardy without a service plan in place. Unexpected events or failures can interrupt production causing lost revenue and increased repair costs. Backed by the largest original design database, ABB’s Transformer Service team can help increase reliability and performance with asset health management, preventative care repair and remanufacturing solutions.

Reducing downtime
Transformers are critical assets in an electrical system. If a service plan of action is not in place before an unexpected failure occurs, then reducing system downtime becomes a critical factor.

ABB transformer repair facilities are equipped with expert personnel, resources and equipment to promptly get your unit back in service. The process starts with an assessment of the situation before the failed unit even leaves the site. As the owner of the most extensive OEM database in the transformer industry ABB is capable of pulling the original design drawings on more than 70% of the installed base in North America.

This means that cycle times can be reduced since engineering and fabrication of parts can begin before the unit physically arrives at the repair facility. New windings and components can be ready for installation shortly after the unit has been dismantled. Complete in-house diagnostics and testing further ensure that remanufactured units leave ready for installation.

Minimizing risk
Companies routinely operate with similar sized units throughout their system (including spares), whether located at a single site or spread across multiple locations. As a fleet continues to age, a structured replacement program may be a traditional approach, but a remanufacturing program may prove more economical. Proactively remanufacturing ‘at risk’ transformers avoids the impact of a failure before it occurs and extends the life of a fleet at reduced cost and time.
Remanufacturing vs. repair
These words have been used interchangeably. Repairing a transformer simply means the unit will be returned to the customer in-kind and perform to its original electrical, mechanical, and thermal design. This can include, but is not limited to, re-winding of the coils, re-insulating the core, tap changer work, bushing replacement, re-gasketing, cooler refurbishment, relay installation, and control cabinet work.

On the other hand, remanufacturing a transformer means a change to a unit’s electrical, mechanical, and thermal design. This may include, but is not limited to, re-designing the coils to increase MVA, kV and/or improve short circuit strength, core modifications to address heating issues or to improve cooling, and tap changer retrofits.

Repair/remanufacturing focused factories
• >30 years experience
• Access to ABB global technology support
• Dedicated “State-of-the-art” remanufacturing facilities
• Dedicated engineering, drafting, and manufacturing resources
• “Cutting Edge” technology that meets and exceeds present day new transformer standards
• Remanufacturing takes advantage of design enhancement & capacity upgrade possibilities
• Reverse engineering capabilities
• Transformer life renewal/extension by replacing organic materials and reusing materials that do not age
• Advance design, material ordering, and manufacturing capabilities
• ABB engineers can assist in providing data for the repair versus replace decision
• Understanding of all OEM designs through hands-on experience
• Established quality plans