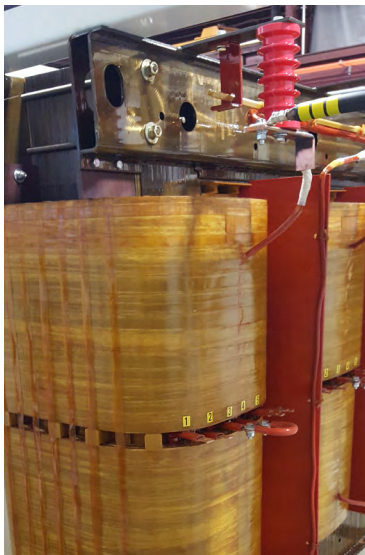


AMR PEMCO offers transformer rebuild, redesign, and remanufacturing services for any dry-type transformer up to 10MVA, and 34.5KV. The process begins with in-depth analysis of the original transformer and a failure report. Restoration only begins once the services and cost meet our customers expectations and budget. Rebuilt units from other manufacturers can often result in a better than original performance due to our 55+ years of experience in transformer manufacturing and on-staff transformer engineers.



CAN MY TRANSFORMER BE REBUILT?

Almost every transformer can be rebuilt after a failure. Many times the cause is a result of flash over, or a break-down of the insulation. The primary factor that may prevent a rebuild is damage to the transformer core itself. If you suspect core damage has occurred, simply conduct a winding to core megger test and if no resistance is measured, then the core is likely beyond repair. If in doubt, contact us for a free consultation.



WHY DID IT FAIL?

One key advantage to a rebuild is determining the cause of the failure for preventative maintenance. Our team prepares a standard failure report for every transformer, and if you would like a detailed failure analysis please let your sales representative know. In the extensive report, the transformer is fully disassembled and reversed engineered to determine if the failure was a result of design, materials, human error, or the environment. Please note that these reports could require additional information from you such as: maintenance records, post failure event log, and system layout prints to ensure the accuracy of the report.

DO I NEED A FULL REBUILD?

Many times a transformer appears to be in good condition, but in reality needs a refurbishment. A reduction in performance can be determined by a decline of megger readings, or visible dirt build-up on the coil. We will bring the transformer to our facility to test, clean, and re-process the unit. During this process, the AMR PEMCO team will review the transformer for damaged cables or broken insulators, and inform you of what needs to be done to achieve optimal results. We only make the necessary repairs in order to save you time and money.

APPLICATIONS

- Mining
- Tunneling
- Distribution Transformers
- Substation Transformers
- Furnace Transformers
- Rectifier Transformers
- PPT / Excitation duty
- Test Transformers
- Specialty Transformers
- Multi Winding Transformers

Have a different application? Give us a call!

Typical Construction

Upon the completion of an AMR PEMCO rebuild, you will receive an equal or better transformer than the original specifications. As a standard, our team replaces the old coils with copper coils using a barrel wound construction with a 220C insulation system, and UL listed insulation is available by request. These coils receive a VPE process, which consists of a VPI using a polyester resin, and a overcoat of Isonal 51 to provide additional protection. The new coils are landed on a cleaned, reinsulated core, which has been updated with new coil and bus bar supports when needed.



Advantages

Lower Repair Cost

- In the U.S., due to recent Department of Energy (DOE) regulation changes, the typical cost of a new 1000 KVA transformer has increased approximately 20%. By remanufacturing a transformer this replacement cost can be reduced by as much as 30% over the new purchase price yet achieving the same performance.

Fit / Function

- By choosing a rebuild you are ensured that the transformer will mount in the exact same space as it was removed from in the existing system. The same bus locations will be maintained, along with mounting provisions, to the base to provide a hassle free installation.
- To verify equal or better system performance, AMR PEMCO will conduct a ratio test upon arrival at our factory to determine the LV turn count. This will ensure that core losses, polarity, and impedance when reinstalled in the system have been preserved or improved.

Design Updates

- During the rebuild process, the transformer is updated to meet the latest IEEE standards. This adds additional protection to the transformer against the increased surges from modern vacuum circuit breakers. Additionally, transformers from older distribution systems are updated to handle the increased harmonics caused by modern electronics.



Accessory Updates

- If you would like to update, or add, accessories to the transformer please indicate this at the time of quotation. If you are unsure of the status of these items, a full review will be conducted upon the transformers arrival. Once this review is completed a report is submitted to you, the customer, for review with optional costs for each addition.

System upgrades

- Many times the transformer's characteristics can be adjusted to enhance system performance during the rebuild process. These can include, but not limited to, sound level, voltage, and capacity. During the quotation stage please indicate any requested changes.

Fixed Repair Cost

- Unlike the rebuild of equipment like electric motors and VFD's, the price you are told is the price you pay. Our team works to ensure you get an accurate quote that will cover the cost for both the labor and coils. In the event your unit arrives and the core is damaged beyond repair, then you will pay nothing but the cost of shipping.

Warranty

- The same as as our new transformers, the coils and craftsmanship is covered by a standard AMR PEMCO 12 or 18 month warranty. If an additional warranty is desired please let us know during the quotation process.

Lead times

- The estimated lead time for a rebuilt transformer is only 4 - 5 weeks versus 10 - 12 for a new one!



CAPABILITIES

- Volt-Amperes: 75KVA - 10,000KVA
- Input Voltage: 1 VAC - 34,500 VAC
- Basic Insulation Level: 10 - 150 KVBIL
- Drive Duty (6, 12, 18, or 24 Pulse)
- Air core reactors
- Iron core reactors



QUOTE PROCESS

To obtain a quote, please send a picture of the transformer nameplate, or supply these system details:

- KVA
- Primary / Secondary Voltage
- Primary / Secondary BIL Rating
- Temperature Rise
- Original Impedance

We will provide a budgetary quote within 72 hours. Additional supporting documents such as pictures, one-line diagrams, or transformer prints will also assist the quoting process.

