

HOTLINE



EMSCO European Style Rebuilds

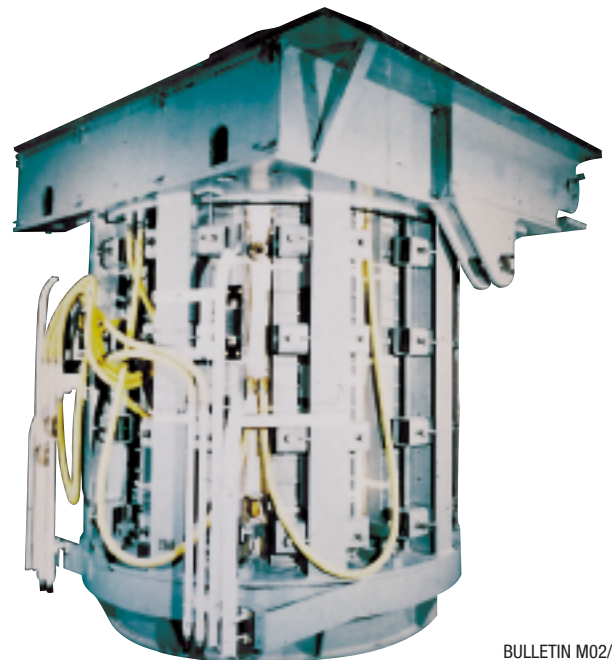


Innovative solutions and attention to details enhance life of ABB and other European style coils

EMSCO has been repairing and supplying new ABB and other European style coils since 1977, offering total capabilities in engineering, testing and assembly of ITM's, IT's, ISNG's, SCC's, ITP's, FS, and IFM type coil assemblies and furnaces. Coils can be repaired or totally remanufactured to **EMSCO's** high quality standards in less time than ever before.

EMSCO's procedures and choice of materials reflect our understanding of the stresses and strains imposed on a coil during melting. The insulating segments in compression are subjected to vibrate and to the heat generated from refractory lining.

The very best high temperature, high dielectric, high compressive material is used. Computer controlled machining systems with special tooling can manufacture spacers to the exact radius required for each coil diameter.



BULLETIN M02/1M/0408



All EMSCO rebuilds include a new set of turn segments. Because a poor insulation system can cause premature coil failure, the best high temperature dielectric material available is used. Since even the best material if not applied

properly is worthless, great care is taken to insure that the first layer of insulation is applied to just the right thickness and is properly cured before the second coat is applied. If the first application is too thick and not properly cured, "outgassing" can occur and cause turn to turn arcing.

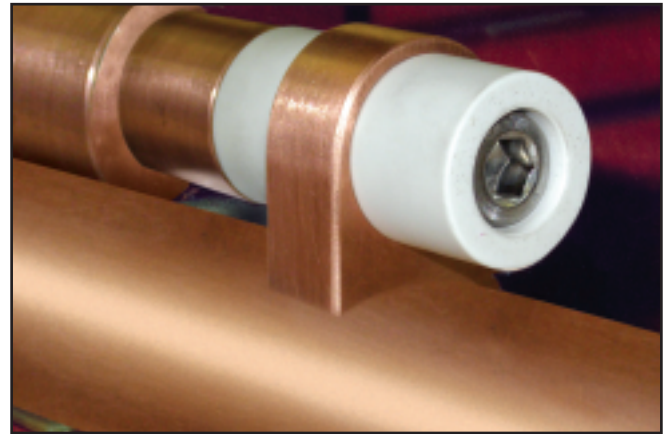
Before any insulation is applied to the coil, it is sandblasted to bright metal to inspect for damage. The radial geometry of the coil is measured to check for enlargement or distortion due to refractory expansion, bath pressure or other forces.

Flow tests will reveal a scale build-up. A variety of helium tests are conducted including a sophisticated helium analyzer cell [mass spectrometer], and an helium sniff test to uncover even the smallest pinhole in the tubing.

Concentricity, perpendicularity, inside diameter and the orientation of the power terminals, hose taps and insulation pads are compared with original specifications. All repairs or corrections are made as needed.

EMSCO also offers its innovative ceramic tie-bolt assembly, developed to insure maximum strength and resistance to heat. Rated in excess of 1000°F, this more than doubles the maximum operating temperature of the standard materials used by others. Failure of the upper and lower tie bolt assemblies is a primary reason that coils are prematurely taken out of service. A custom grout installation depending on your lining removal system is also available.

Fittings, insulation repair kits, and yoke insulation are part of well-stocked regional inventories. The use of high-performance materials and highly skilled methodology has set **EMSCO** apart from the rest. Add to this, the dedication of responding quickly and efficiently to a customer-in-need, and you have a winning and unbeatable combination.



EMSCO is ready when you need us...every day.

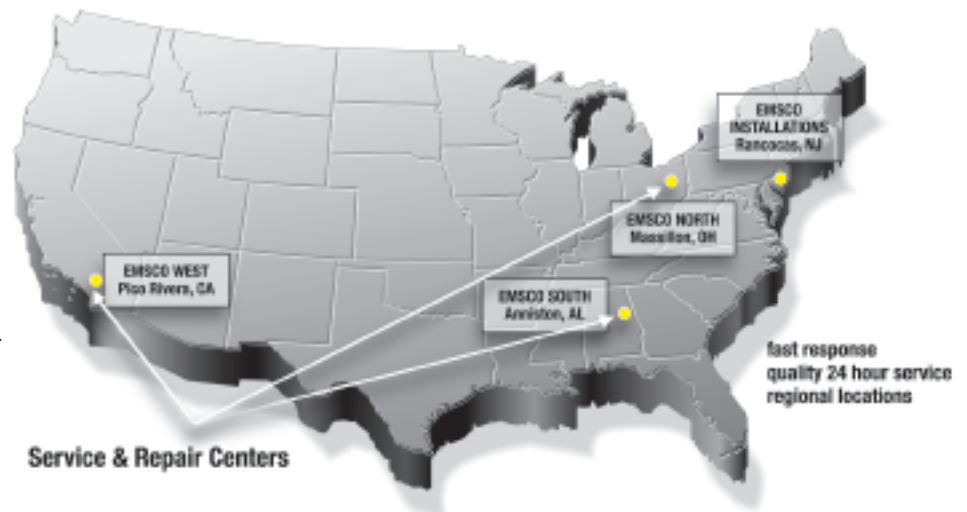
EMSCO's Commitment to you

KNOWLEDGE: EMSCO will begin each project with a customer-focused understanding of the problem to be solved and a soundly engineered approach to the solution.

COST: EMSCO will, when possible, offer more than one level of service and will explain the costs and compromises associated with each. Every option we propose will meet industry standards for safety.

QUALITY: EMSCO will understand and meet the quality expectations agreed to at the start of the project. Warranties will be explained and will set the standard for the industry.

OUR GOAL: EMSCO will provide quality services at reasonable prices so that our customers have the competitive edge in their markets.



NATIONWIDE TOLL-FREE NUMBERS

Repair Centers - 877.77.EMSCO (773.6726) | Installations - 800.858.7030

www.emsco.com