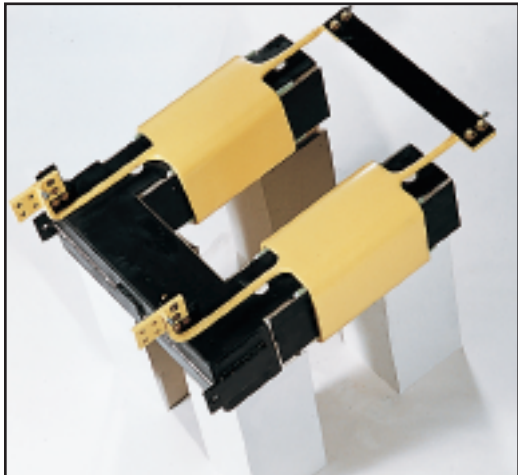


# HOTLINE



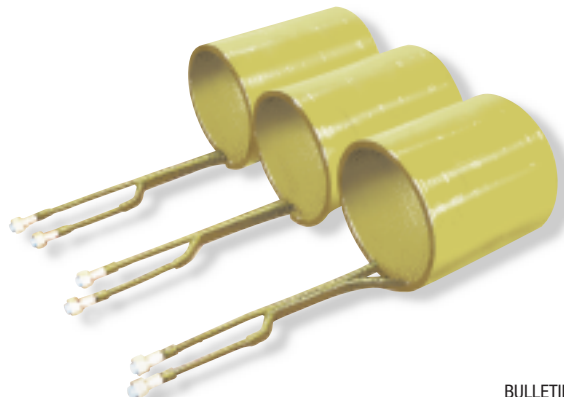
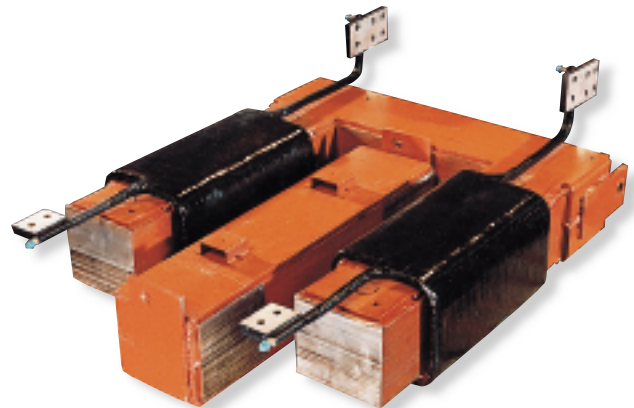
## EMSCO Channel Furnace Rebuilds



### Technology and superior materials increase life of channel furnaces.

Starting up a channel furnace is a big investment...in time, labor and money. Anyone who is responsible for the operation and maintenance of one can attest to the costliness of lining a channel furnace. It is no wonder then that the premature failure of the lower case is dreaded and must be guarded against.

Unlike the refractory system in a coreless furnace, the channel furnace lining is meant to run considerably longer. Starting with the choice of equipment, through employee training on the proper use of the equipment, proper installation of the lining, choice of scrap, slagging techniques and including preventive maintenance...each step is crucial to keeping a channel furnace up and running.



BULLETIN M01/1M/0408

Choosing **EMSCO** to perform your scheduled or unscheduled repairs is a hedge against lost production. **EMSCO** knows that aside from operator error, the main cause of premature failure of a channel inductor is a breakdown of the insulation due to excessive heat and dirt. For this reason, **EMSCO** has studied the dielectric and mechanical properties of various insulating materials. The best materials were chosen. The investment is too great to cut corners.

## Core

Only insulating materials with the highest dielectric and mechanical ratings are used on the re-insulation of cores. The core is measured and electrically tested at various times during the repair process to insure the integrity of the materials and the workmanship. Because excessive heat can weaken any material, fine thread, high quality bolts with high tensile strength are used to limit stretching and yielding.

## Channel Coil

A channel coil may not always need a full repair. Sensitive to budget restraints, **EMSCO** conducts water flow, pressure tests, and has invested in sophisticated electrical testing equipment to determine the extent of the repair necessary. Helium testing can detect the smallest pinhole in the tubing. Termination alignment and concentricity are checked against industry specifications. Only then can sound recommendations be made as to the extent of repair required to warrant against premature failure.

## Bushings

The bushing is exposed to the same excessive heat and dirt as the core and coil. Once again, the type of testing procedures, the choice of insulating materials and the quality of workmanship will determine if the bushing performs according to design. **EMSCO** gives the bushing the same thorough treatment it gives the core and the coil. **EMSCO** specializes in rebuilding and repairing induction furnace equipment regardless of the OEM. Whether it's an Ajax, ABB, Inductotherm, Junker, Lindberg or Whiting channel furnace, **EMSCO** has the technical expertise and workmanship to repair or rebuild it. And when time is of the essence, 24-hour service and exclusive pick-up are available.



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

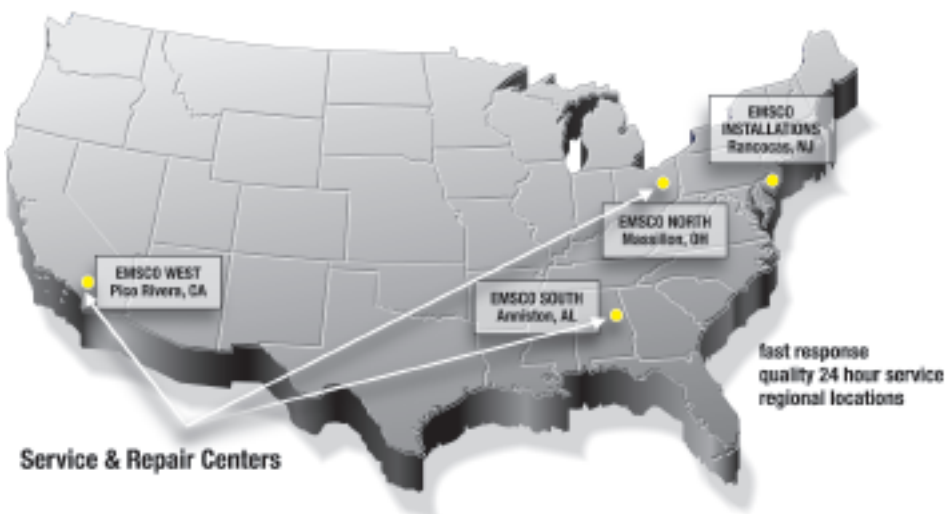
### EMSCO's Commitment to you

**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](http://www.emsco.com)