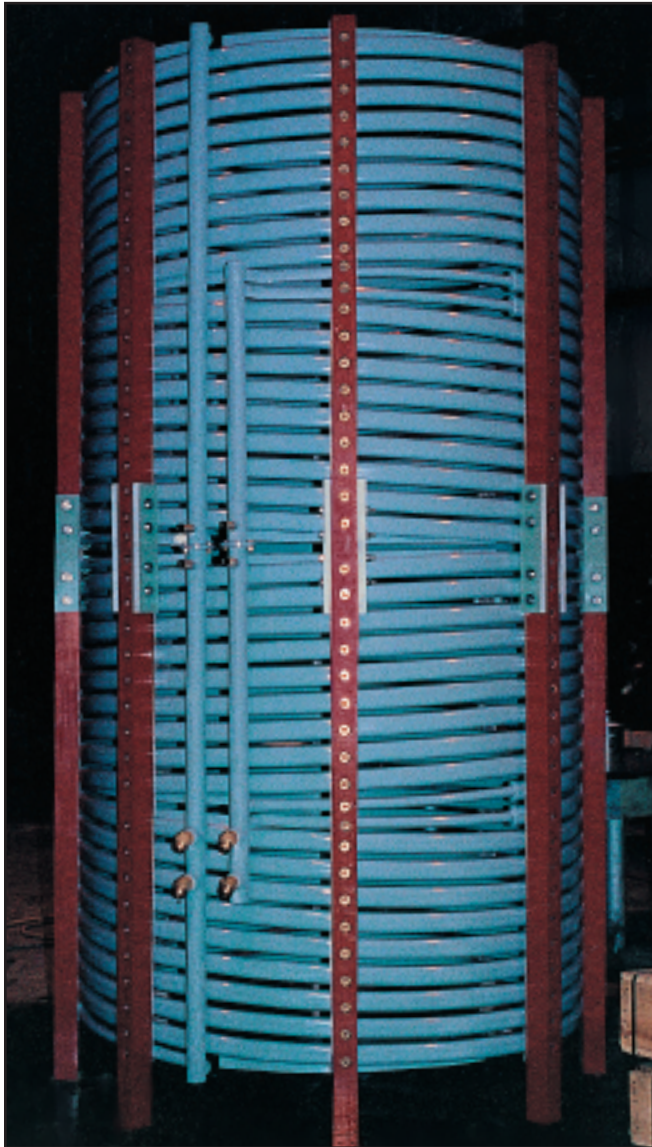


HOTLINE



EMSCO High Voltage Insulation



New technology and materials offer improvement for the high voltage melting coils requiring special insulation.

As technology has changed, the old design criteria and standards for insulating high-voltage coils are no longer satisfactory. With higher power densities and higher volts-per-turn ratios improved insulating materials, techniques and procedures are required.

EMSCO researched various materials and their electrical and mechanical properties. Rigorous tests of epoxies, polyesters and varnishes were conducted to determine their optimum dielectric and temperature properties. As a result, EMSCOAT 6644 was designed for use with high-voltage coils.



BULLETIN M04/1M/0408

High Voltage

This is a specially designed durable, high dielectric insulating material, which replaces old style epoxies and flex-coat insulation systems. Application of these materials is crucial. This is why special heating equipment to properly cure the insulation is required with these materials.

Special care is used to apply the material to provide uniformity of application. Great care is taken to insure that the first layer of insulation is applied to just the right thickness and properly cured before the second coat is applied. If the first application is too thick or not properly cured, "outgassing" can occur, causing turn to turn arcing and premature failure of the coil.

Special high-voltage electrical tests are carried out on the entire coil to insure the integrity of the insulation. EMSCOAT 6644 has been heated to 450°F and subjected to high voltage non-destructive tests [up to 7000 Volts DC] with no indication of failure.

As an alternative to EMSCOAT 6644, **EMSCO** can also supply our unique heat sensitive insulation system [EMSCOAT 2000] on all vacuum and high voltage applications.

For coils requiring high-temperature supports, **EMSCO** selects from a wide range of special fiber-reinforced, non-combustible materials for use as support boards.

Because field applications and needs vary, **EMSCO** can customize a repair by recommending the proper insulating material and techniques for any situation.



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

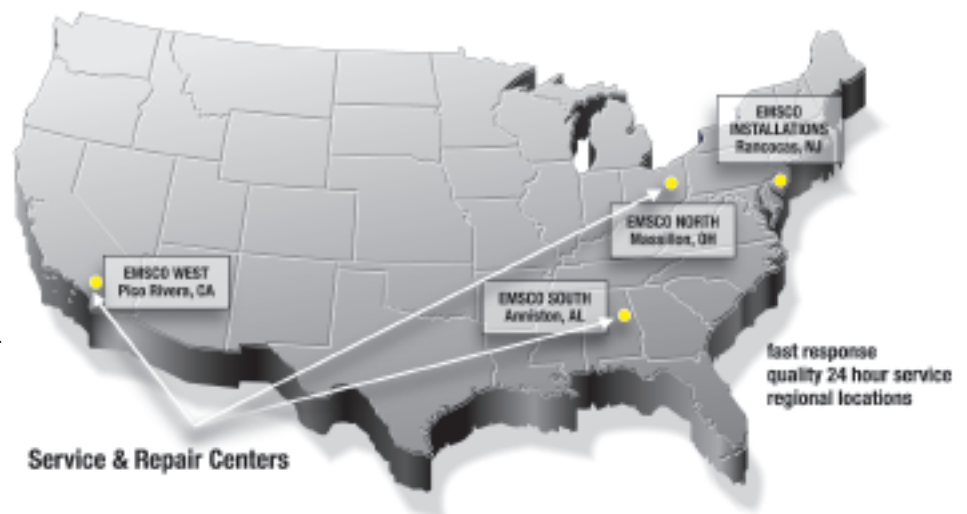
EMSCO's Commitment to you

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