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You Call – We Haul

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Tram Electric Winding Process

FORM WOUND
2500 HP, 444 RPM Form Wound Stator windings were shorted in several spots due to insulation degradation.

MUSH WOUND
400 HP, Mush Wound Stator windings with single phase short were rewound using the Samatic Automated Rewind Machine.

Vacuum Pressure Impregnation System (VPI)

Vacuum Pressure Impregnation (VPI) is a system in which vacuum and pressure are used to assist the penetration of liquids into various devices. It is often used to impregnate electrical apparatus with insulating resins (electrical varnishes), because it can provide a virtually void free insulation with only one VPI cycle.

VPI produces a better insulation system than can be obtained by conventional methods, better environmental protection and superior chemical and moisture resistance. The removal of air void from the windings assures longer electrical life and less opportunity for corona. In addition, more solid fill means heat will be conducted to the outside more efficiently, better thermal endurance, lower hot-spot temperatures, and lower temperature rise.

Tram Electric utilizes Dolph's CC-1118-LV Class H one part, low viscosity, thixotropic (the property exhibited by certain gels of becoming fluid when stirred or shaken and returning to the semisolid state upon standing), impregnating epoxy compound. This compound is unique for use where higher voltage, low corona, chemical resistance and electrical insulation properties at elevated temperatures are required. Motors processed in a single cycle with Dolph's CC-1118-LV Epoxy Resin have successfully passed submersion testing by the U.S. Navy, MIL-M-17060E specifications.

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