



EXECUTIVE SUMMARY

FINAL REPORT ARTI-21CR/605-20030-01 APPLICATION OF HIGH-TEMPERATURE MOLD MATERIALS TO DIE CAST COPPER MOTOR ROTOR FOR IMPROVED EFFICIENCY

The objective of the following study, *Application of High-Temperature Mold Materials to Die Cast Copper Motor Rotor for Improved Efficiency*, was to support the Copper Development Association (CDA) in its effort to design, fabricate and demonstrate mold technologies designed to withstand the copper motor rotor die casting environment for an economically acceptable life. The anticipated result from the compiled data and tests were to (1) identify materials suitable for die casting copper, (2) fabricate motor rotor molds and (3) supply copper rotor motors for testing in actual compressor systems. Compressor manufacturers can apply the results to assess the technical and economical viability of copper rotor motors.