

PROJECT CONTROL DOCUMENT – TRP 9808

PROJECT TITLE: MAG/GATE – System for Molten Metal Flow Control

PROJECT DESCRIPTION: The purpose of this project is to develop an electromagnetic flow control unit that provides active molten metal flow control to improve the quality of metal produced in a modern steel continuous caster. Active flow control can reduce turbulence, reoxidation and impurity entrapment in the steel from the tundish to the mold. Caster productivity is improved through the ability to compensate in an independent fashion for a number of adverse operational conditions such as refractory erosion and nozzle clogging.

PRIMARY RESEARCH ORGANIZATION(S):

Concept Engineering Group
Verona, PA

PRINCIPAL INVESTIGATOR(S): Richard Nathenson, P.E.

PROJECT PARTICIPANTS: Bethlehem Steel
SMS Demag
US Steel Research

PROJECT DURATION: 58 Months

PROJECT START – END DATE: 6/28/99 – 4/13/04

PROJECT BUDGET (excluding AISI Project Mgmt.): \$889,799

TECHNICAL PROJECT MANAGER: W. Obenchain – AISI Washington

KEY CONTACTS:

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