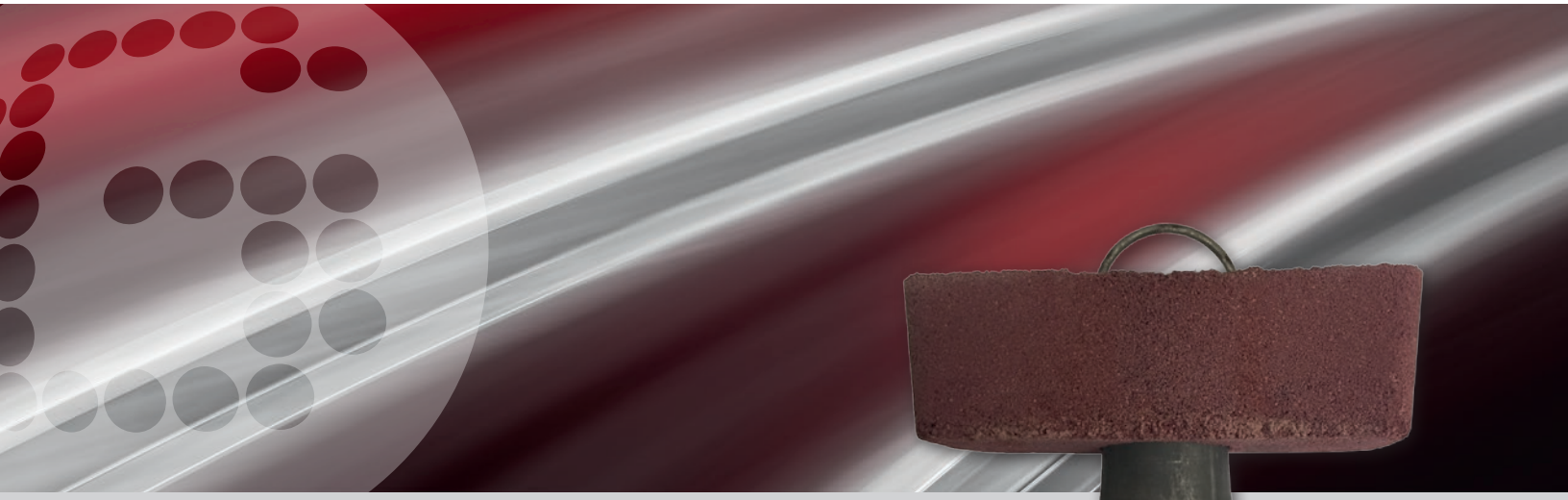


HEAD ALLOYED PLUG

THERMIT® WELDING FOR HIGH STRENGTH RAIL

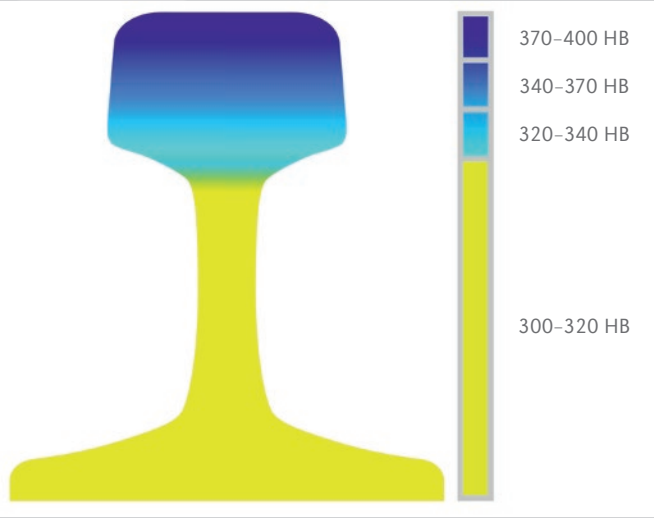
The pouring system distributes micro-alloys in the head of the rail supplied by a patented plug. It greatly improves the hardness and subsequent wear resistance of the weld on the running surface while keeping the base ductile. It can be used on AREMA High Strength rail steels, compatible with a range of common rail profiles and with any 1" Orgo-Thermit kit you currently have in stock. The achievable hardness range in the rail head is 370 BH +/- 30.

INNOVATIVE ALLOYING SYSTEM

During pouring, the capsule underneath the plug melts and the micro-alloying elements are introduced into the head region of the weld (selective alloying). The Head Alloyed Plug process involves selective alloying of the rail head region of the weld, adjusting the hardness in accordance with the rail. It can be used with standard gap widths1" + 1/8" using degradable crucible and luting sand systems. Weld batter is significantly reduced. Easy application – no additional steps or tooling required in the installation process.

OVERVIEW OF HEAD ALLOYED PLUG

Feature	Function	Benefit
Improved surface hardness and wear characteristics due to special alloying concept	Particularly suitable for the welding of head-hardened rails	Recommended welding process for requirements in heavy haul sections
For use with gap widths 1" + 1/8"	No additional training for welders required	Easy, safe and robust execution in the track
Special plug with capsule currently available for different hardness levels	Adjustment of required hardness in head area of the weld metal	Simplified and cost-saving logistics
Standard THERMIT® welding process with special plug	No additional tooling required in the installation process	Reduced storage space and improved logistics



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