



HPW – HIGH PERFORMANCE WELD

ALUMINOTHERMIC WELDING PROCESS FOR HEAVY HAUL AND HEAD HARDENED RAIL

- » Weld metal in the rail head has hardness to match the parent metal for low wear
- » Weld metal in the weld foot is less alloyed to provide increased ductility and fracture toughness
- » Uses standard SkV-Elite equipment and consumables therefore reducing cost
- » Mould is shaped to guide the molten metal into the weld cavity while the alloy plug melts and diffuses into the weld metal
- » Meets the requirements of AS1085.20-2006 for the welding of steel rail

BENEFITS

- » Selective and controlled alloying of the head of the rail to provide optimum hardness on the running surface while maintaining maximum ductility and toughness in the foot
- » Welding process is suitable for heavy haul applications and welding of head hardened rails, all rail grades and profiles
- » Specialised plug with alloying elements available for head hardened rails (R350HT, R370HT or R400HT)
- » Only one grade of Thermit portion is required with desired hardness reached by using different HPW plugs

RAIL JOINING

RAIL SERVICES

MEASUREMENT

TOOLS & MACHINES

EQUIPMENT

MEMBER OF  **GOLDSCHMIDT**
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