## **Holland**<sup>®</sup> **REPAIR WELDING** CASE STUDY

# ECONOMICALLY FIX IT RIGHT THE FIRST TIME

### The Challenge

With ever-increasing traffic volumes, maintenance of way engineers must continually search for ways to keep track quality and safety high. Fewer and shorter work windows are making this increasingly difficult. In virtually all cases, there is a clear operational value associated with "fixing it right the first time." When railroads suffer rail service failures, or ultrasonic rail detector cars discover internal defects, historically the best solution has been to protect the defect with joint bars or install a plug with joint bars or correct the defect by making a thermite weld. None of these repair methods offer the metallurgical quality or performance longevity of an electric flash-butt weld, but flash-butt repair welding has been perceived to be cost prohibitive, except in areas of high repair density.

## SOLUTION

Holland LP, a recognized leader in electric flash-butt welding operations and technology, has developed some outstanding tools for repair welding and joint elimination at a cost that is in line with the added value provided to the railroad. All Class 1 railroads in North America have come to rely on Holland's cutting-edge technology and operational expertise to provide the most cost effective repair welding/joint elimination over the life cycle of the rail, thus helping them reduce joint and defect counts improving service reliability and transportation speed.

### **Puller-Lite**

- Over 160 tons of pulling capacity independent of the 72-ton welder head
- Reduced size and weight can be suspended together with the welder head from the same truck boom
- Improved hydraulics and puller alignment capabilities yield faster closure welding operations
- Reduction of on-track support equipment and personnel

### Low Consumption Rail Welding

- Holland's exclusive Intelliweld<sup>®</sup> control system provides unparalleled control over the flashing process and rail consumption
- Simple computer program adjustments allow us to tailor rail consumption to your requirements for localized track structures and target rail neutral temperatures
- Lab and field testing results have validated the performance of the Low Consumption Weld as little as 0.875 (7/8") inches of rail consumption. Low consumption flash butt welding was incorporated into the 2009 AREMA Electric Flash-Butt Welding Specification.
- Lower rail consumption reduces the amount of de-clipping and clipping required, improving productivity and reducing labor costs for closure welding

#### **Operational Flexibility**

Working extensively with most North American railroads, Holland has pioneered the use of both high joint density/high production repair welding crews as well as small crews for railroad subdivisions with lower joint/defect density and support crew availability.

