



# 1 INCH SKV WELD

## THERMIT® WELDING PROCEDURE

The SkV welding method has been used successfully all over the world for many years. Because it can be completed in a short time, the aluminothermic welding process is used as the standard method for joining steel rails for heavy haul as well as high speed transit railroads.

We are introducing the new THERMIT® 2.0 portion, with superior properties, designed for Pearlitic High Strength steel rails of > 370 BHN.

**New  
THERMIT®  
portion with  
superior  
properties**

## RELIABLE AND ROBUST

Due to our extensive experience with the SkV welding procedure you now have a choice of two different welding portions, depending on the BHN of the rail to be THERMIT® welded: our Intermediate Hardness (IH) THERMIT® portion or our THERMIT® 2.0 portion; both can be used with our 1 inch gap, degradable crucible SkV Thermit welding process. The short execution time ensures the highest track availability while maintaining the highest reliability.

RAIL JOINING

RAIL SERVICES

MEASUREMENT

TOOLS & MACHINES

EQUIPMENT

MEMBER OF



**GOLDSCHMIDT**  
THERMIT GROUP

## OVERVIEW OF 1 INCH GAP SKV WELD

Feature	Function	Benefit
Designed for AREMA standard, intermediate strength and high strength steel rails	Reliable process suitable for all steel grades	Improved mechanical strength and ductility with excellent fatigue properties and surface wear resistance
Available for our 1 inch welding gap process with our degradable crucible system	Hardness adjustable to rail grade	Enhanced slow bend bending properties
Working range: Pearlitic High Strength rail steels 370 BHN minimum	Extremely stable weld metal chemistry	Reduced vulnerability for defects (Hot cracks, web fractures)

### TYPE OF TEST: RAIL SLOW BEND TEST

CUSTOMER: Orgo-Thermit

PROJECT NO.: RDC-3151

RAIL NO. OR I.D.	RAIL/WELD TYPE	RAIL WEIGHT	OFFSET	SECTION MODULUS	MAXIMUM LOAD	DEFLECT	MODULUS OF RUPTURE
#16807	136 New RE HH Thermit	136	0	28.30	449418	0.619	142924
#16810	136 New RE HH Thermit	136	0	28.30	476263	0.767	151462
#16817	136 New RE HH Thermit	136	0	28.30	465129	0.699	147921

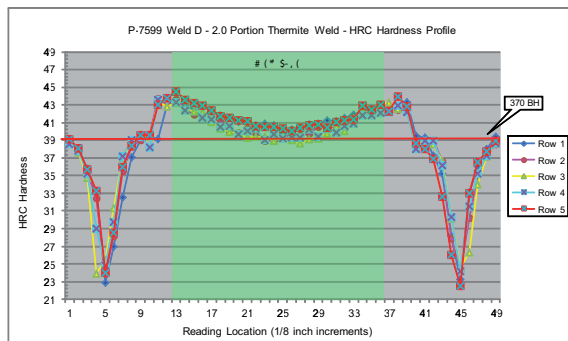


Figure 2 Hardness profiles of 2.0 Portion Weld D



RAIL JOINING

RAIL SERVICES

MEASUREMENT

TOOLS & MACHINES

EQUIPMENT

MEMBER OF



**GOLDSCHMIDT**  
THERMIT GROUP

### Orgo-Thermit Inc.

3500 Colonial Drive North  
Manchester, NJ 08759 USA  
Phone (732) 657-5781, Fax (732) 657-5899  
info@orgothermit.com, www.orgothermit.com