

Certificate

Certification number SP TH 018

This is to certify that the aluminothermic welds

- Filler mould: 54E1 (UIC 54) SoW-5
- Filler metal: 54 / Z90 SoW-5(-E)

produced by:

**Elektro-Thermit GmbH & Co. KG
Halle (Saale), Germany**

has been approved for normal gap butt joints in:

54E1 R260Mn to 54E1 R350HT

in accordance with the specification:


RLN00451-2, d.d. 01 Oct 2021.

Details are mentioned in annex 1 and 2.

Original Approval : November 2006
Current Certificate : June 2023
Certificate Expiry : June 2026

On behalf of DEKRA Rail


ir. A.J.P. Verweij
Manager Certification


E. Groen
IWT nr.: 1479

Welding Qualification Approval Record – Certificate

Nummer: SP TH 018
Number: Annex 1

Kenmerk:
Designation: See DeltaRail/06/60095/006

Keuringsinstantie:
Test body: DEKRA Rail B.V.

Opdrachtgever:
Employer: Elektro-Thermit GmbH & Co. KG

Datum van uitgifte:
Date of issue: June 2023

Adres:
Address: Chemiestraße 24
D-06132 Halle (Saale), Germany

	Details van de proeflas Weld test details	Geldigheidsgebied Range of approval	
Lasproces Welding process		Thermietlassen (71) Alumino-thermic (71)	
Spoorstaaf type Rail type	54E1 to 54E1	54E1 to 54E1	
Soort verbinding Joint type		Stomplas Butt weld normal gap	
Basismateriaal groep(en) Parent metal group(s)	R260Mn to R350HT	R260Mn to R350HT	
Lasmal type Filler mould type	54E1 (UIC 54) SoW-5	54E1 (UIC 54) SoW-5	
Lastoevoegmateriaal Filler metal designation	54 / Z90 SoW-5(-E)	54 / Z90 SoW-5(-E)	
Type beschermgas / poeder Shielding gas / flux	n.v.t. n.a.	n.v.t. n.a.	
Overige middelen Auxiliaries	Zie rapport: See report	DeltaRail/06/60095/006	
Lasmachine/Bedieners identificatie Welding machine/Operators identification	n.v.t. n.a.	n.v.t. n.a.	
Laspositie Welding position	n.v.t. n.a.	n.v.t. n.a.	
Voorbehandeling Gouging / backing	n.v.t. n.a.	n.v.t. n.a.	
Aard van de beproeving Type of testing	Acceptabele criteria Acceptation criteria	Acceptabel / Niet vereist Acceptable / Not required	Opmerkingen Remarks
Visueel Visual		Acceptable	Handleiding voor het Thermiet snellasproces SoW-5, rev:01/ (22 mei 2023)
Geometrie Geometrically		Acceptable	
Ultrasoon onderzoek Ultrasonic testing		Acceptable	
Magnetisch onderzoek Magnetic particle inspection		Not required	
Buig/breuktest Bend/Break test	Zie rapport: DeltaRail/06/60095/006	Acceptable	
Vermoeingsproef Fatigue test		Acceptable	
Hardheidsmetingen Hardness measurements		Acceptable	
Macro-onderzoek Macro- examination		Acceptable	
Mirco-onderzoek Micro-examination		Acceptable	
Chemische analyse Chemical analysis		Not required	

Vakkennis = Job knowledge
 Acceptabel = Acceptable
 Niet beoordeeld = Not tested
 Aparte bladen toegevoegd indien vereist = Append separate sheet(s) if required
 JA / Yes
 NEE / No

Aanvullende informatie beschikbaar op: Zie rapport:
Additional information is available on: See report

Kwalificatie geldig tot: June 2026
Validity of approval until:

DeltaRail/06/60095/006 d.d. 39022
DR/19/170307/008 (Smart Weld Jet) d.d. 03 April 2019

Datum:
Date:
06-06-2023

Handtekening:
Signature:

E. Groen IWT nr.: 1479

Verlenging door beoordelaar met 3 jaar
Authorized prolongation for the following 3 years

Herkwalificatie
rapportnummer:
Re-qualification
report number:

Datum:
Date:

Handtekening:
Signature:

Functie of titel:
Position or title:

Herkwalificatie
rapportnummer:
Re-qualification
report number:

Datum:
Date:

Handtekening:
Signature:

Functie of titel:
Position or title:

DeltaRail/08/80370.007/001 DeltaRail/08/80370.007/005	18 September 2008 10 Oktober 2008		DR/18/180004.003/008 DR/18/180004.003/011	23 February 2018 29 March 2018	
DeltaRail/10/10234.013/001 DeltaRail/10/10234.013/002	30 September 2010 18 November 2010		DR/20/190224/009 DR/20/190224/011	14 April 2020 15 May 2020	
Investigation Report -P03/11 Rev. 1-, DeltaRail/11/110531/002, DeltaRail/12/110531/007	September 2011, September 2011, July 2012		DR/23/230142.182 DR/23/230142.183	02-06-2023 06-06-2023	
DeltaRail/12/110165.032/005 DeltaRail/12/110165.032/006	18 Oktober 2012 21 November 2012				
Plurel/14/130497.003/011 Plurel/14/130497.003/012	08 April 2014 02 June 2014				
DR/16/150541.003/009 DR/16/150541.003/011	29 March 2016 31 May 2016				