



## TWI Certification Ltd

Granta Park, Great Abington, Cambridge, CB21 6AL UK

### Welding of Railway Vehicles and Components according to EN 15085-2:2020+A2:2025

**The Company:** Responsive Engineering Ltd

**Address:** Armstrong Works, Scotswood Road, Newcastle upon Tyne, NE15 6UX, United Kingdom

Is certified to perform welding under classification level CL 1 according to EN 15085-2

**Types of activities performed:** P = Production.

**Field of application:** Fabrication and welding of carbon-manganese steels, stainless steels and aluminium / aluminium alloys in conjunction with new build of railway vehicles and components to existing drawings and customer specifications without design.

#### Range of Qualification:

| Welding process<br>(ISO 4063) | Parent material<br>(CEN ISO/TR 15608)                                                                                                                                | Dimensions   |              |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------|
|                               |                                                                                                                                                                      | Butt welds   | Fillet welds |
| MMA (111)                     | Group 1.1 Steels with specified minimum yield strength $R_{eH} 275 \text{ N/mm}^2$                                                                                   | 10mm – 40mm  |              |
|                               | Group 1.2 Steels with specified minimum yield strength $275 \text{ N/mm}^2 < R_{eH} \leq 360 \text{ N/mm}^2$                                                         |              |              |
|                               | Group 2.1 Thermomechanically treated fine grain steels and cast steels with a specified minimum yield strength $360 \text{ N/mm}^2 < R_{eH} \leq 460 \text{ N/mm}^2$ | 7,5mm – 30mm |              |
| MIG (131)                     | Group 22 Non heat treatable alloys                                                                                                                                   | 3mm – 24mm   |              |
|                               | Group 23.1 Aluminium-manganese-silicon alloys                                                                                                                        |              |              |
| MAG (135)                     | Group 1.1 Steels with specified minimum yield strength $R_{eH} 275 \text{ N/mm}^2$                                                                                   | 3mm – 80mm   |              |
|                               | Group 1.2 Steels with specified minimum yield strength $275 \text{ N/mm}^2 < R_{eH} \leq 360 \text{ N/mm}^2$                                                         |              |              |

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| Welding process<br>(ISO 4063) | Parent material<br>(CEN ISO/TR 15608)                                                                                                                                | Dimensions     |              |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------|
|                               |                                                                                                                                                                      | Butt welds     | Fillet welds |
| MAG (136)                     | Group 1.1 Steels with specified minimum yield strength $R_{eH} 275 \text{ N/mm}^2$                                                                                   | 3mm – 160mm    |              |
|                               | Group 1.2 Steels with specified minimum yield strength $275 \text{ N/mm}^2 < R_{eH} \leq 360 \text{ N/mm}^2$                                                         |                |              |
|                               | Group 2.1 Thermomechanically treated fine grain steels and cast steels with a specified minimum yield strength $360 \text{ N/mm}^2 < R_{eH} \leq 460 \text{ N/mm}^2$ | 7,5mm – 30mm   |              |
| TIG Solid Wire<br>(141)       | Group 1.1 Steels with specified minimum yield strength $R_{eH} 275 \text{ N/mm}^2$                                                                                   | 3mm – 17,42mm  |              |
|                               | Group 1.2 Steels with specified minimum yield strength $275 \text{ N/mm}^2 < R_{eH} \leq 360 \text{ N/mm}^2$                                                         |                |              |
|                               | Group 8.1 Austenitic stainless steels with $Cr \leq 19\%$                                                                                                            | 1,4mm – 9,56mm |              |
|                               | Group 8.2 Austenitic stainless steels with $Cr > 19\%$                                                                                                               |                |              |
|                               | Group 22 Non heat treatable alloys                                                                                                                                   | 1mm – 40mm     |              |
|                               | Group 23.1 Aluminium-manganese-silicon alloys                                                                                                                        |                |              |

### Responsible Welding Coordinator:

Steven Long BSc, European / International Welding Engineer, CSWIP Visual Welding Inspector (d.o.b 09.03.1989), Level A

### Deputy responsible Welding Coordinators:

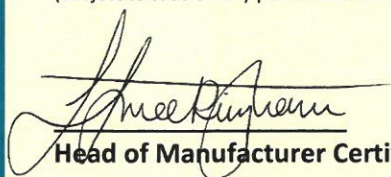
Kenneth Simpson MSc, European / International Welding Engineer (d.o.b 14.03.1961), Level A  
Harvey Johnson, European / International Welding Specialist (d.o.b 18.07.2001), Level C

**Certificate Number:** CWRVC/021/GB

**Valid Until:** 23 July 2028

(subject to satisfactory periodic surveillance)

**Issued On:** 5 May 2026



**Head of Manufacturer Certification Body, TWI Certification Ltd**

Issued by: TWI Certification Ltd, Granta Park, Great Abington, Cambridge, CB21 6AL, UK