



Welding of Railway Vehicles and Components according to EN 15085-2

The Company: WEC Group

Welding Manufacturing Sites: Welding Engineering

Address: Spring Vale Road, Darwen, Lancashire, BB3 2ES

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

Field of application: EN 15085 CL1, CL2 and CL3 products, C-Mn steels, Cr-Mo steels, Q and T steels, stainless steels, nickel-chromium alloys and aluminium alloys.

Range of Certification:

Welding Process according to EN ISO 4063	Material Group according to CEN ISO/TR 15608	Material thickness range for fillet welds	Material thickness range for butt welds
111: MMA	Group 1 C-Mn steels	5mm & above	3mm – 90mm
	Group 3 Quenched and tempered steels	3mm – 7.6mm	N/A
	Group 8 Austenitic stainless steels	N/A	3mm – 30mm
	Group 10 Austenitic ferritic stainless steels	5mm & above	3mm – 20mm
	Group 11 Carbon steels with 0,25% < C ≤ 0,35%	N/A	3mm – 11.1mm
121: SAW	Group 1 C-Mn steels	3mm – 20mm	3mm – 20mm
	Group 8 Austenitic stainless steels	6mm – 15.6mm	6mm – 15.6mm
	Group 11 Carbon steels with 0,25% < C ≤ 0,35%	3mm – 20mm	3mm – 20mm
131: MIG	Group 22 & 23 Aluminium alloys	3mm – 31.7mm	3mm – 20mm
135: MAG	Group 1 C-Mn steels	1.4mm & above	1.4mm – 80mm
	Group 3 Quenched and tempered steels	3mm & above	3mm – 30mm
	Group 7 Ferritic stainless steels	1.4mm – 4mm	N/A
	Group 8 Austenitic stainless steels	1.4mm & above	1mm – 60mm
	Group 10 Austenitic ferritic stainless steels	3mm & above	3mm – 60mm
	Group 11 Carbon steels with 0,25% < C ≤ 0,35%	5mm & above	N/A
	Group 43 Nickel-Chromium alloys	3mm – 8mm	3mm – 8mm
136: FCAW	Group 1 C-Mn steels	3mm & above	3mm – 120mm
	Group 3 Quenched and tempered steels	3mm – 30mm	5mm – 20mm
	Group 5 Cr Mo steels	30mm – 120mm	N/A
	Group 8 Austenitic stainless steels	5mm & above	20mm – 80mm
	Group 10 Austenitic ferritic stainless steels	5mm & above	3mm – 70mm

141: TIG	Group 1 C-Mn steels	1.5mm – 50mm	1.5 mm – 50mm
	Group 3 Quenched and tempered steels	3mm – 12mm	7.5mm – 16.5mm
	Group 8 Austenitic stainless steels	0.75mm & above	0.75mm – 40mm
	Group 10 Austenitic ferritic stainless steels	1.6mm & above	1.6mm – 58.5mm
	Group 11 Carbon steels with 0,25% < C ≤ 0,35%	1.9mm & above	1.9mm – 11.1mm
	23.1 Heat treatable alloys: Al-Mg-Si alloys	1mm – 30mm	1mm – 30mm
	22.1 to 22.1 Aluminium-manganese alloys		
	22.2 to 22.2 ^a Aluminium-magnesium alloys with Mg ≤ 1.5%		
	22.3 to 22.3 ^a Aluminium-magnesium alloys with Mg > 1.5% ≤ 3.5%		
	22.4 to 22.4 ^a Aluminium-magnesium alloys with Mg > 3.5%		
23.1 Heat treatable alloys: Al-Mg-Si alloys welded to Non-heat-treatable alloy combinations of 22.1, 22.2 ^a , 22.3 ^a , 22.4 ^a			
Group 43 Nickel-Chromium alloys	N/A	3mm – 20mm	
^a Provided Al-Mg filler material is used			

Welding Process according to EN ISO 4063	Material Group according to CEN ISO/TR 15608	Material thickness range for LAP Joints
212: Spot-Resistance Weld	Group 1 C-Mn steels	3mm
	Group 8 Austenitic stainless steels	1.5mm – 2mm

Responsible Welding Coordinator:
Mr Vasyi Kruk, IWE (d.o.b 10th January 1980) Level A

Responsible Welding Coordinator:
Mr William Barr IEng MWeldI, IWE / EWE, HNC, CSWIP 3.2.1 Senior Welding Inspector, (d.o.b 2nd March 1985) Level A

Deputy Responsible Welding Coordinator:
Mr Tyler Atkinson EngTech TechWeldI, HNC, CSWIP 3.1 Welding Inspector, NVQ Level 3 (d.o.b 29th August 1999) Level B

Deputy Responsible Welding Coordinator:
Mr Wayland Sutton, CSWIP 3.1 Welding Inspector (d.o.b 4th August 1958) Level C

Certificate Number: CWRVC/027/GB

Valid Until: 15/09/2023
(subject to satisfactory periodic surveillance)

Issued On: 09/11/2021


Head of Manufacturer Certification Body, TWI Certification Ltd

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



Welding of Railway Vehicles and Components according to EN 15085-2

The Company: WEC Group

Welding Manufacturing Sites: Laser Engineering UK

Address: Britannia House, Junction Street, Darwen, Lancashire, BB3 2RB

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

Field of application: EN 15085 CL1, CL2 and CL3 products, C-Mn steels, Cr-Mo steels, Q and T steels, stainless steels, nickel-chromium alloys and aluminium alloys.

Range of Certification:

Welding Process according to EN ISO 4063	Material Group according to CEN ISO/TR 15608	Material thickness range for fillet welds	Material thickness range for butt welds
111: MMA	Group 1 C-Mn steels	5mm & above	3mm – 90mm
	Group 3 Quenched and tempered steels	3mm – 7.6mm	N/A
	Group 8 Austenitic stainless steels	N/A	3mm – 30mm
	Group 10 Austenitic ferritic stainless steels	5mm & above	3mm – 20mm
	Group 11 Carbon steels with 0,25% < C ≤ 0,35%	N/A	3mm – 11.1mm
121: SAW	Group 1 C-Mn steels	3mm – 20mm	3mm – 20mm
	Group 8 Austenitic stainless steels	6mm – 15.6mm	6mm – 15.6mm
	Group 11 Carbon steels with 0,25% < C ≤ 0,35%	3mm – 20mm	3mm – 20mm
131: MIG	Group 22 & 23 Aluminium alloys	3mm – 31.7mm	3mm – 20mm
135: MAG	Group 1 C-Mn steels	1.4mm & above	1.4mm – 80mm
	Group 3 Quenched and tempered steels	3mm & above	3mm – 30mm
	Group 7 Ferritic stainless steels	1.4mm – 4mm	N/A
	Group 8 Austenitic stainless steels	1.4mm & above	1mm – 60mm
	Group 10 Austenitic ferritic stainless steels	3mm & above	3mm – 60mm
	Group 11 Carbon steels with 0,25% < C ≤ 0,35%	5mm & above	N/A
136: FCAW	Group 43 Nickel-Chromium alloys	3mm – 8mm	3mm – 8mm
	Group 1 C-Mn steels	3mm & above	3mm – 120mm
	Group 3 Quenched and tempered steels	3mm – 30mm	5mm – 20mm
	Group 5 Cr Mo steels	30mm – 120mm	N/A
	Group 8 Austenitic stainless steels	5mm & above	20mm – 80mm
	Group 10 Austenitic ferritic stainless steels	5mm & above	3mm – 70mm

141: TIG	Group 1 C-Mn steels	1.5mm – 50mm	1.5 mm – 50mm
	Group 3 Quenched and tempered steels	3mm – 12mm	7.5mm – 16.5mm
	Group 8 Austenitic stainless steels	0.75mm & above	0.75mm – 40mm
	Group 10 Austenitic ferritic stainless steels	1.6mm & above	1.6mm – 58.5mm
	Group 11 Carbon steels with 0,25% < C ≤ 0,35%	1.9mm & above	1.9mm – 11.1mm
	23.1 Heat treatable alloys: Al-Mg-Si alloys	1mm – 30mm	1mm – 30mm
	22.1 to 22.1 Aluminium-manganese alloys		
	22.2 to 22.2 ^a Aluminium-magnesium alloys with Mg ≤ 1.5%		
	22.3 to 22.3 ^a Aluminium-magnesium alloys with Mg > 1.5% ≤ 3.5%		
	22.4 to 22.4 ^a Aluminium-magnesium alloys with Mg > 3.5%		
	23.1 Heat treatable alloys: Al-Mg-Si alloys welded to Non-heat-treatable alloy combinations of 22.1, 22.2 ^a , 22.3 ^a , 22.4 ^a		
Group 43 Nickel-Chromium alloys	N/A	3mm – 20mm	
^a Provided Al-Mg filler material is used			

Welding Process according to EN ISO 4063	Material Group according to CEN ISO/TR 15608	Material thickness range for LAP Joints
212: Spot-Resistance Weld	Group 1 C-Mn steels	3mm
	Group 8 Austenitic stainless steels	1.5mm – 2mm

Responsible Welding Coordinator:
Mr Vasyi Kruk, IWE (d.o.b 10th January 1980) Level A

Responsible Welding Coordinator:
Mr William Barr IEng MWeldI, IWE / EWE, HNC, CSWIP 3.2.1 Senior Welding Inspector, (d.o.b 2nd March 1985) Level A

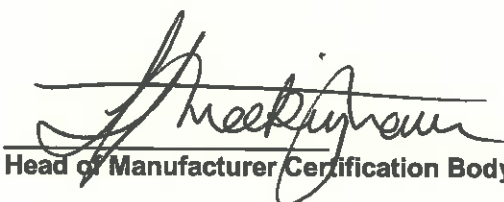
Deputy Responsible Welding Coordinator:
Mr Tyler Atkinson EngTech TechWeldI, HNC, CSWIP 3.1 Welding Inspector, NVQ Level 3 (d.o.b 29th August 1999) Level B

Deputy Responsible Welding Coordinator:
Mr Wayland Sutton, CSWIP 3.1 Welding Inspector (d.o.b 4th August 1958) Level C

Certificate Number: CWRVC/059/GB

Valid Until: 15/09/2023
(subject to satisfactory periodic surveillance)

Issued On: 09/11/2021



Head of Manufacturer Certification Body, TWI Certification Ltd

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



Welding of Railway Vehicles and Components according to EN 15085-2

The Company: WEC Group

Welding Manufacturing Sites: Special Projects

Address: Britannia House, Junction Street, Darwen, Lancashire, BB3 2RB

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

Field of application: EN 15085 CL1, CL2 and CL3 products, C-Mn steels, Cr-Mo steels, Q and T steels, stainless steels, nickel-chromium alloys and aluminium alloys.

Range of Certification:

Welding Process according to EN ISO 4063	Material Group according to CEN ISO/TR 15608	Material thickness range for fillet welds	Material thickness range for butt welds
111: MMA	Group 1 C-Mn steels	5mm & above	3mm – 90mm
	Group 3 Quenched and tempered steels	3mm – 7.6mm	N/A
	Group 8 Austenitic stainless steels	N/A	3mm – 30mm
	Group 10 Austenitic ferritic stainless steels	5mm & above	3mm – 20mm
	Group 11 Carbon steels with 0,25% < C ≤ 0,35%	N/A	3mm – 11.1mm
121: SAW	Group 1 C-Mn steels	3mm – 20mm	3mm – 20mm
	Group 8 Austenitic stainless steels	6mm – 15.6mm	6mm – 15.6mm
	Group 11 Carbon steels with 0,25% < C ≤ 0,35%	3mm – 20mm	3mm – 20mm
131: MIG	Group 22 & 23 Aluminium alloys	3mm – 31.7mm	3mm – 20mm
135: MAG	Group 1 C-Mn steels	1.4mm & above	1.4mm – 80mm
	Group 3 Quenched and tempered steels	3mm & above	3mm – 30mm
	Group 7 Ferritic stainless steels	1.4mm – 4mm	N/A
	Group 8 Austenitic stainless steels	1.4mm & above	1mm – 60mm
	Group 10 Austenitic ferritic stainless steels	3mm & above	3mm – 60mm
	Group 11 Carbon steels with 0,25% < C ≤ 0,35%	5mm & above	N/A
	Group 43 Nickel-Chromium alloys	3mm – 8mm	3mm – 8mm
136: FCAW	Group 1 C-Mn steels	3mm & above	3mm – 120mm
	Group 3 Quenched and tempered steels	3mm – 30mm	5mm – 20mm
	Group 5 Cr Mo steels	30mm – 120mm	N/A
	Group 8 Austenitic stainless steels	5mm & above	20mm – 80mm
	Group 10 Austenitic ferritic stainless steels	5mm & above	3mm – 70mm

141: TIG	Group 1 C-Mn steels	1.5mm – 50mm	1.5 mm – 50mm
	Group 3 Quenched and tempered steels	3mm – 12mm	7.5mm – 16.5mm
	Group 8 Austenitic stainless steels	0.75mm & above	0.75mm – 40mm
	Group 10 Austenitic ferritic stainless steels	1.6mm & above	1.6mm – 58.5mm
	Group 11 Carbon steels with 0,25% < C ≤ 0,35%	1.9mm & above	1.9mm – 11.1mm
	23.1 Heat treatable alloys: Al-Mg-Si alloys	1mm – 30mm	1mm – 30mm
	22.1 to 22.1 Aluminium-manganese alloys		
	22.2 to 22.2 ^a Aluminium-magnesium alloys with Mg ≤ 1.5%		
	22.3 to 22.3 ^a Aluminium-magnesium alloys with Mg > 1.5% ≤ 3.5%		
	22.4 to 22.4 ^a Aluminium-magnesium alloys with Mg > 3.5%		
23.1 Heat treatable alloys: Al-Mg-Si alloys welded to Non-heat-treatable alloy combinations of 22.1, 22.2 ^a , 22.3 ^a , 22.4 ^a			
Group 43 Nickel-Chromium alloys	N/A	3mm – 20mm	

^aProvided Al-Mg filler material is used

Welding Process according to EN ISO 4063	Material Group according to CEN ISO/TR 15608	Material thickness range for LAP Joints
212: Spot-Resistance Weld	Group 1 C-Mn steels	3mm
	Group 8 Austenitic stainless steels	1.5mm – 2mm

Responsible Welding Coordinator:
Mr Vasyi Kruk, IWE (d.o.b 10th January 1980) Level A

Responsible Welding Coordinator:
Mr William Barr IEng MWeldI, IWE / EWE, HNC, CSWIP 3.2.1 Senior Welding Inspector, (d.o.b 2nd March 1985) Level A

Deputy Responsible Welding Coordinator:
Mr Tyler Atkinson EngTech TechWeldI, HNC, CSWIP 3.1 Welding Inspector, NVQ Level 3 (d.o.b 29th August 1999) Level B

Deputy Responsible Welding Coordinator:
Mr Wayland Sutton, CSWIP 3.1 Welding Inspector (d.o.b 4th August 1958) Level C

Certificate Number: CWRVC/058/GB

Valid Until: 15/09/2023
(subject to satisfactory periodic surveillance)

Issued On: 09/11/2021



Head of Manufacturer Certification Body, TWI Certification Ltd

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



Welding of Railway Vehicles and Components according to EN 15085-2

The Company: HTA Group Ltd (Part of WEC Group)

Welding Manufacturing Sites: N/A

Address: 7040-7060, Middlemarch Business Park, Siskin Pkwy E, Coventry, CV3 4PE

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

Field of application: EN 15085 CL1, CL2 and CL3 products, C-Mn steels, Cr-Mo steels, Q and T steels, stainless steels, nickel-chromium alloys and aluminium alloys.

Range of Certification:

Welding Process according to EN ISO 4063	Material Group according to CEN ISO/TR 15608	Thickness range for fillet welds	Thickness range for butt welds
131: MIG	Group 22.1 Al-Mg alloys	1.5mm – 31mm	3mm – 20mm
	Group 22.2 Al-Mg alloys with Mg ≤ 1.5%		
	Group 22.3 Al-Mg alloys with 1.5% < Mg ≤ 3.5%		
	Group 22.4 Al-Mg alloys with Mg > 3.5%		
	Group 23.1 Al-Mg-Si heat treatable alloys		
135: MAG solid wire	Group 1 C-Mn Steels $R_{eH} \leq 360N/mm^2$	≥1.4mm	0.8mm – 80mm
	Group 3 Quenched & Tempered steels	2.1mm – 32mm	3mm – 32mm
	Group 8 Austenitic stainless steel with Cr ≤19%	≥1.5mm	1.5mm – 40mm
	Group 10 Austenitic ferritic stainless steels with Cr ≤24%	≥3mm	3mm – 60mm
	Group 43 Nickel Chromium alloys		6mm – 24mm
136: MAG with flux cored wire	Group 1 C-Mn Steels $R_{eH} \leq 360N/mm^2$	3mm – 18mm	3mm – 64mm
	Group 3 Quenched & Tempered steels		5mm – 20mm
	Group 8 Austenitic stainless steels with Cr ≤19%	≥5mm	20mm – 90mm
	Group 10 Austenitic ferritic stainless steels with Cr ≤24%		3mm – 70mm

141: TIG solid wire	Group 1 C-Mn Steels $R_{eH} \leq 360N/mm^2$	1.4mm – 50mm	3mm – 6mm
	Group 3 Quenched & Tempered steels	3mm – 12mm	N/A
	Group 8 Austenitic stainless steel with Cr $\leq 19\%$	$\geq 0.7mm$	0.75mm – 20mm
	Group 10 Austenitic ferritic stainless steels with Cr $\leq 24\%$	1.6mm – 6mm	1.6mm – 90mm
	Group 11 C-Mn steels with $0.30 < C \leq 0.35$	1.9mm – 11.08mm	
	Group 22.1 Al-Mg alloys	0.75mm – 10mm	1mm – 10mm
	Group 22.2 Al-Mg alloys with Mg $\leq 1.5\%$		
	Group 22.3 Al-Mg with $1.5\% < Mg \leq 3.5\%$		
	Group 22.4 Al-Mg with Mg $> 3.5\%$		
Group 23.1 Al-Mg-Si heat treatable alloys			
784: Short cycle drawn arc stud welding	Group 1 C-Mn Steels $R_{eH} \leq 360N/mm^2$	$\geq 2.5mm$	
	Group 8 Austenitic stainless steels with Cr $\leq 19\%$	1.5mm – 6mm	
212: Direct spot welding	Group 1 C-Mn Steels $R_{eH} \leq 360N/mm^2$	3mm	

Responsible Welding Coordinator:

Mr Vasyi Kruk, IWE (d.o.b 10th January 1980) Level A

Responsible Welding Coordinator:

Mr William Barr IEng MWeldI, IWE / EWE, HNC, CSWIP 3.2.1 Senior Welding Inspector, (d.o.b 2nd March 1985) Level A

Deputy Responsible Welding Coordinator:

Mr Tyler Atkinson EngTech TechWeldI, HNC, CSWIP 3.1 Welding Inspector, NVQ Level 3 (d.o.b 29th August 1999) Level B

Deputy Responsible Welding Coordinator:

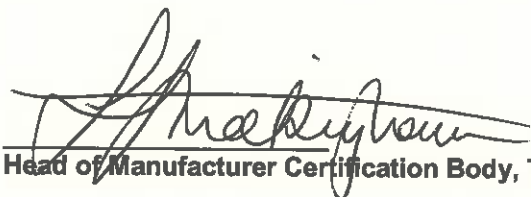
Mr Wayland Sutton, CSWIP 3.1 Welding Inspector (d.o.b 4th August 1958) Level C

Certificate Number: CWRVC/024/GB

Valid Until: 18/05/2023

(subject to satisfactory periodic surveillance)

Issued On: 09/11/2021



Head of Manufacturer Certification Body, TWI Certification Ltd

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