ENGINEERING INSPECTION SPECIALISTS LIMITED
UNIT 734 NORTHWEST BUSINESS PARK KILSHANE DRIVE, BLANCHARDSTOWN, DUBLIN 15
TEL 01 861 2011 FAX 01 861 2024 www.eisl.ie

EIS FORM No. ATCP EN 1090-2 cov.

Assessment of Thermal Cutting Process

D. KENNEDY Steel Supplies Ltd.

Tested in accordance with:	EN1090-2 (Annex D) EN ISO 9013
Type of cutting process:	Laser cutting
Manufacturer:	D. Kennedy Steel Supplies
Machine make & model	HSG – G4020H / Raycus RFL-C20000M-CE
Material thickness:	35mm
CPQR No:	36267.02 / 35mm Laser HSG

Documents included in this pack:

1. Preliminary Cutting Procedure Specification (pCPS)
2. Cutting Procedure Qualification Record (CPQR)
3. Surface Roughness, Visual and Perpendicularity Report
4. Hardness Test Report

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Preliminary Cutting Procedure Specification (pCPS)

EIS FORM No.pCPS EN 1090

pCPS No.	PRELIM-36267.02 / 35mm Laser HSG
Manufacturer of thermal cut sample:	D. KENNEDY STEEL SUPPLIES
Address	PALMERSTOWN LOWER
	DUBLIN 20
In accordance with:	EN 1090-2:2018 – Annex D
Acceptance standard:	EN ISO 9013:2017
Date of manufacture:	14/10/2025

Cutting process:	Laser
Manufacturer of the cutting machine:	HSG / G4020H / RAYCUS
Type of cut:	Vertical Cut - Straight & Contoured As per figure D.1 of EN 1090-2:2018
Designation of the cutting torch:	HSG – BCL AMP
Designation of the cutting nozzle:	HSG – D1.7E
Manufacturer of the cutting torch/nozzle:	HSG
Standard:	EN 1090-2:2018 & EN ISO 9013:2017
Material group:	1 - Steels with a specified minimum yield strength ReH ≤ 460 N/mm2
Thickness of material:	35mm
Type of plasma gas:	Oxygen
Plasma gas cutting pressure:*	11.6psi / 0.8bar
Fuel gas pressure:*	-
Cutting oxygen pressure:*	-
Adjustment of heating flame:	-
Cutting speed:	798mm/m
Cutting height:	0.3mm
Preheat temperature:	-
Angle of cut (if bevel):	-
Thermal follow up treatment:	-
Type of pre/post-heating torch:	-
Designation of heating torch:	-
Manufacturer of heating torch:	-
Type of fuel gas:	-
Oxygen / compressed air pressure:	-
Fuel gas pressure:	-

* PRESSURE MEASURED AT THE INLET OF THE TORCH

Directors: P. Dunne, M. Dunne, J. Byrne, A. Fitzgerald
Company Reg. No. 342482. Reg. Office: Unit 734, Northwest Business Park, Kilshane Drive, Blanchardstown, Dublin 15, D15 F8PW
V.A.T. No: IE 6362482U

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Cutting Procedure Qualification Record (CPQR)

EIS FORM No.CPQR EN 1090

pCPS No.:	PRELIM-36267.02 / 35mm Laser HSG	CPQR No.:	36267.02 / 35mm Laser HSG

Manufacturer of thermal cut sample:	D.KENNEDY STEEL SUPPLIES
Address:	PALMERSTOWN LOWER, DUBLIN 20
In accordance with:	EN 1090-2:2018 – Annex D
Acceptance standard:	EN ISO 9013:2017
Date of manufacture:	14/10/2025

Cutting process:	Laser	
Manufacturer of the cutting machine:	HSG / G4020H / RAYCUS	
Type of cut:	Vertical Cut - Straight & Contoured	As per figure D.1 of EN 1090-2:2018
Designation of the cutting torch:	HSG – BCL AMP	
Designation of the cutting nozzle:	HSG – D1.7E	
Manufacturer of the cutting torch/nozzle:	HSG	
Standard:	EN 1090-2:2018 & EN ISO 9013:2017	

	Test Piece Details	Range of Approval
Material group:	1 (ReH ≤ 460 N/mm2	1 - 1a, 2b (except 1.4)
Thickness of material:	6mm	6 – 35mm (in conjunction with 36267.01)
Type of plasma gas:	Oxygen	-
Plasma gas cutting pressure:*	11.6ps / 0.8 bari	Automatic processes
Fuel gas pressure:*	-	+/- 5%
Cutting oxygen(air) pressure:*	-	+ 0% / - 15%
Adjustment of heating flame:	-	-
Cutting speed:	798mm/m	+10% / -0%
Cutting height:	0.5mm	+/- 10%
Preheat temperature:	-	+/- 10%
Angle of cut (if bevel):	-	-
Thermal follow up treatment:	-	-
Type of pre/post-heating torch:	-	-
Designation of heating torch:	-	-
Manufacturer of heating torch:	-	-
Type of fuel gas:	-	-
Oxygen / compressed air pressure:	-	-
Fuel gas pressure:	-	-

* PRESSURE MEASURED AT THE INLET OF THE TORCH

Type of test	Performed and acceptable	Report number
Surface Roughness Test	Yes	10029
Perpendicularity and Angularity Tolerance	Yes	10029
Visual Inspection of Sharp corner & Curved Samples	Yes	10029
Hardness Test on Flame Cut Edges	Yes	10030

This record confirms that the manufacturing of the thermal cut sample was satisfactorily prepared, produced and tested according to the requirements of 6.4.3 & 6.4.4 of EN 1090-2:2018 Exc Class 2

Place & Date of issue:	Dublin 14/10/2025	Manufacturer:	R.W.C.	Signed:	
Examining Body:	Engineering Inspection Specialists	Examiner:	Niall O'Brien	Signed:	

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Cutting Procedure Inspection Report

EIS FORM No.CPTR 001

Test Report No.:	10029	Date:	16/10/2025
EIS Job No.:	36267		

Manufacturer:	D. KENNEDY STEEL SUPPLIES
Address:	PLAMERSTOWN LOWER, DUBLIN 20
Manufacturers pCPS No.:	PRELIM 36267.02 / 35mm Laser HSG
Manufacturers CPQR No.:	36267.02 / 35mm Laser HSG

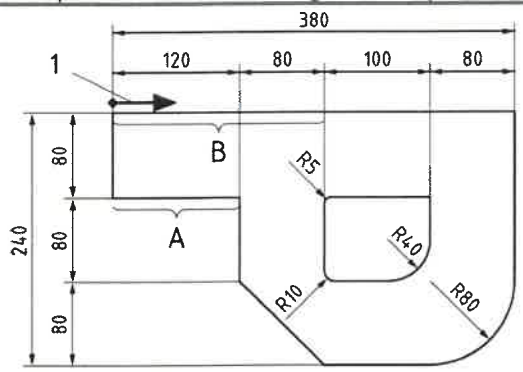
Procedure No.:	In Accordance with:	Acceptance Criteria
Procedure for Checking Capability of Thermal Cutting Process	EN 1090-2:2018 Annex D	EN ISO 9013:2017 (Range 4 & 5)

Test Equipment Used			
Surface Roughness Equipment			
Surface Roughness Test Unit	Diavite AG	Unit Serial No.	01608
Probe / Tracer Type:	SH-00/10/90/5	Probe Serial Number:	9958
Calibration Block Type Settings:	Ra=3.00 / Sm=100 / Rz=9.46	Calibration Block Serial Number:	2423
Visual Inspection & Measurement Equipment			
Digital Calipers:	Accu Inside 1108	Measurement Reticule:	0.1mm Increments

Cutting Machine Details	
Machine Manufacturer:	HSG / RAYCUS
Model:	G4020H / RFL-C20000M-CE
Serial Number:	12012501035
Material Thickness:	35mm
Material Grade:	S355

Test Results

Test Piece Shape & Dimensions - Figure D.1 (EN 1090-2:2018)



Picture of Test Piece & Test Location

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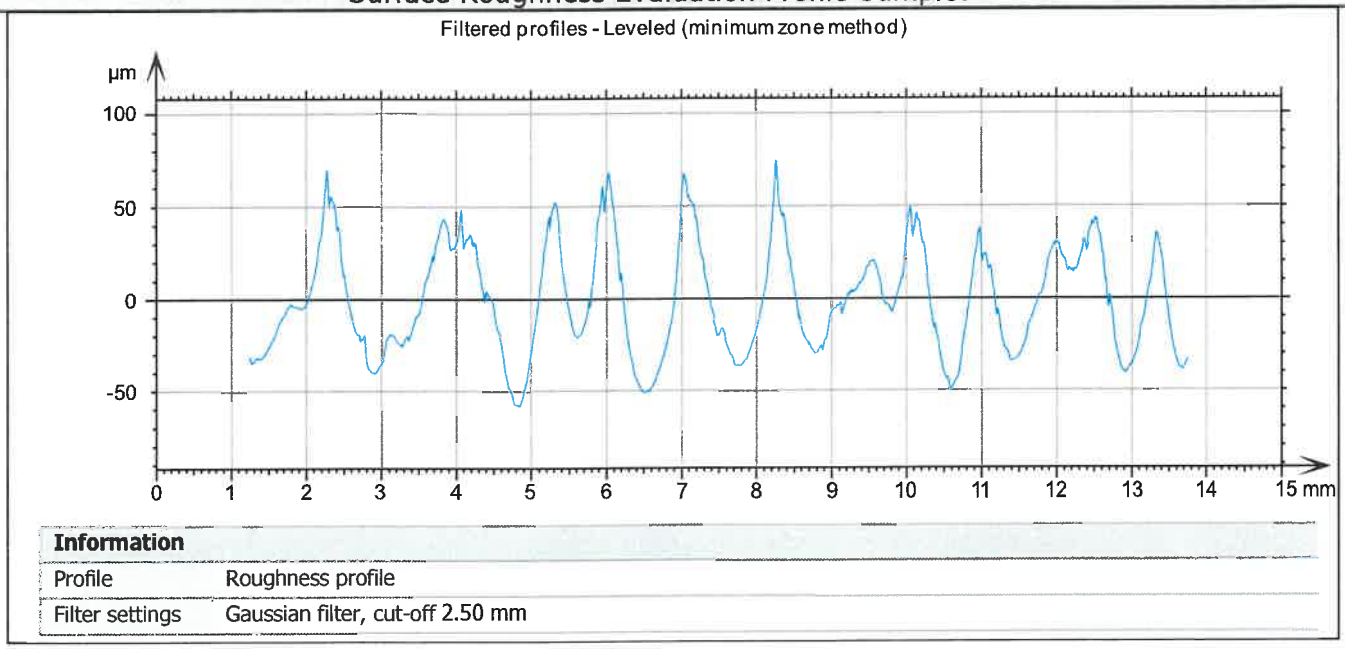
Cutting Procedure Inspection Report

EIS FORM No.CPTR 001

Test Report No.:	10029	Date:	16/10/2025
EIS Job No.:	36267		

Manufacturer:	D. KENNEDY STEEL SUPPLIES
Address:	PLAMERSTOWN LOWER, DUBLIN 20
Manufacturers pCPS No.:	PRELIM 36267.02 / 35mm Laser HSG
Manufacturers CPQR No.:	36267.02 / 35mm Laser HSG

Surface Roughness Evaluation Profile Sample:



Element:	Zt1	Zt2	Zt3	Zt4	Zt5
Element Profile µm	112	108	122	115	109

Item / Description	Result / Data	Pass Yes	Pass No	Pass N/A
Plate Thickness	35mm	☐	☐	☒
Thickness Reduction Δa	1.5mm	☐	☐	☒
Allowable Mean Height Profile	170.3µm	☐	☐	☒
Measured Mean Height Profile Rz5	113.2µm	☒	☐	☐
Allowable Perpendicularity Tolerance	2.3725mm	☐	☐	☒
Actual Perpendicularity Value	0.3mm	☒	☐	☐
Visual Inspection Sharp Corner	Acceptable	☒	☐	☐
Visual Inspection Curved Sample	Acceptable	☒	☐	☐

TECHNICIAN:	NIALL O'BRIEN	QUALIFICATION:	PCN LEVEL II	DATE:	16/10/2025
SIGNATURE:		FIRM OFFICAL STAMP:			
INSPECTION AUTHORITY:	EN ISO 1090-2:2018 (Annex D) & EN ISO 9013:2017				
CLIENT WITNESS / R.W.C.:					

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Cutting Procedure Inspection Report - Hardness

EIS FORM No.CPTR 002

Test Report No.:	10030	Date:	16/10/2025
EIS Job No.:	36267		

Manufacturer:	D. KENNEDY STEEL SUPPLIES
Address:	PLAMERSTOWN LOWER, DUBLIN 20
Manufacturers pCPS No.:	PRELIM 36267.02 / 35mm Laser HSG
Manufacturers CPQR No.:	36267.02 / 35mm Laser HSG

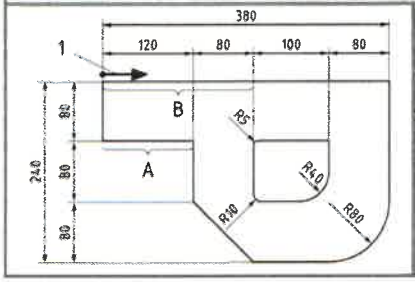
Procedure No.:	In Accordance with:	Acceptance Criteria
Procedure for Checking Capability of Thermal Cutting Process	EN 1090-2:2018 Annex D / EN 9015-1:2011 / EN 6507-1:2018	-

Test Equipment Used			
Hardness Tester Make	NewSonic	Unit Serial No.	778
Hardness Tester Model:	SonoDur2		

Cutting Machine Details	
Machine Manufacturer:	HSG / RAYCUS
Model:	G4020H / RFL-C20000M-CE
Serial Number:	12012501035
Material Thickness:	35mm
Material Grade:	S355

Test Locations

Test Piece Shape & Dimensions - Figure D.1 (EN 1090-2:2018)

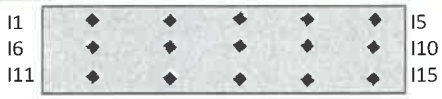


Hardness test carried out on surfaces A & B
Position of readings as per EN1090-2:2018 figue D.4 & table D.1

t ≤ 5

Indent Numbers

t > 5



Indent Numbers

Test Results

Free Surface	Hardness Type	Tested in Accordance with:
A	Vickers HV10	EN ISO 6507-1:2018 & EN 1090-2:2018 Annex D
B	Vickers HV10	EN ISO 6507-1:2018 & EN 1090-2:2018 Annex D

Please see the following tables for all hardness reading taken.

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Cutting Procedure Inspection Report - Hardness

EIS FORM No.CPTR 002

Test Report No.:	10030	Date:	16/10/2025
EIS Job No.:	36267		

Manufacturer:	D. KENNEDY STEEL SUPPLIES
Address:	PLAMERSTOWN LOWER, DUBLIN 20
Manufacturers pCPS No.:	PRELIM 36267.02 / 35mm Laser HSG
Manufacturers CPQR No.:	36267.02 / 35mm Laser HSG

Free Edge Surface - A

Plate Thickness:	35mm	Total Indents Required:	15

Indent Number	Required (Y/N)	Hardness HV	Position on Free Edge Surface (Cut Surface)
I1	Y	411	Upper side of plate
I2	Y	408	Upper side of plate
I3	Y	416	Upper side of plate
I4	Y	402	Upper side of plate
I5	Y	409	Upper side of plate
I6	Y	413	Centre of plate
I7	Y	401	Centre of plate
I8	Y	404	Centre of plate
I9	Y	414	Centre of plate
I10	Y	409	Centre of plate
I11	Y	417	Lower side of plate
I12	Y	411	Lower side of plate
I13	Y	416	Lower side of plate
I14	Y	409	Lower side of plate
I15	Y	418	Lower side of plate

Free Edge Surface - B

Plate Thickness:	35mm	Total Indents Required:	15

Indent Number	Required (Y/N)	Hardness HV	Position on Free Edge Surface (Cut Surface)
I1	Y	409	Upper side of plate
I2	Y	416	Upper side of plate
I3	Y	407	Upper side of plate
I4	Y	403	Upper side of plate
I5	Y	418	Upper side of plate
I6	Y	413	Centre of plate
I7	Y	419	Centre of plate
I8	Y	423	Centre of plate
I9	Y	414	Centre of plate
I10	Y	402	Centre of plate
I11	Y	398	Lower side of plate
I12	Y	409	Lower side of plate
I13	Y	419	Lower side of plate
I14	Y	411	Lower side of plate
I15	Y	407	Lower side of plate

TECHNICIAN:	NIALL O'BRIEN	QUALIFICATION:	PCN LEVEL II	DATE:	16/10/2025
SIGNATURE:		FIRM OFFICAL STAMP:			
INSPECTION AUTHORITY:	EN ISO 1090-2:2018 (Annex D) & EN ISO 9013:2017 & EN ISO 6507-1				
CLIENT WITNESS:					