

Annual Assessment of Thermal Cutting Process 2023



D. KENNEDY Steel Supplies Ltd.

Tested in accordance with:	EN1090-2 (Annex D) EN ISO 9013
Type of cutting process:	Plasma Cutting
Manufacturer:	D. Kennedy Steel Supplies
Machine make & model	Ermaksan Plasma – Hypertherm XPR300
Material thickness:	6mm
CPQR No:	24167.01 / 6mm Plasma Ermaksan
Documents included in this pack:	<ol style="list-style-type: none">1. Surface Roughness, Visual and Perpendicularity Report2. Hardness Test Report

Cutting Procedure Inspection Report

EIS FORM No.CPTR 001

Test Report No.:	10015	Date:	24/04/2023
EIS Job No.:	30774		

Manufacturer:	D. KENNEDY STEEL SUPPLIES
Address:	PLAMERSTOWN LOWER, DUBLIN 20
Manufacturers pCPS No.:	PRELIM 24167.01/6mm PLASMA ERMAKSAN
Manufacturers CPQR No.:	24167.01/6mm PLASMA ERMAKSAN

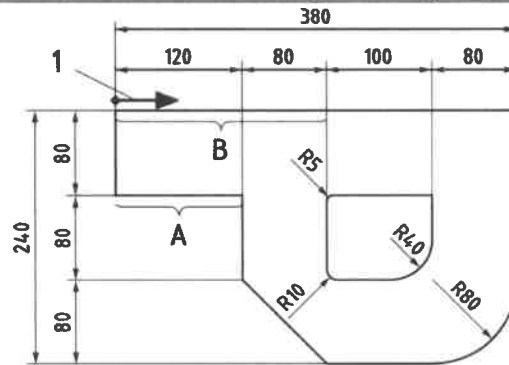
Procedure No.:	In Accordance with:	Acceptance Criteria
Procedure for Checking Capability of Thermal Cutting Process	EN 1090-2:2018 Annex D	BS EN ISO 9013:2017 (Range 4 & 5)

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:	ERMAKSAN
Model:	HYPERTHERM XPR300
Serial Number:	000303
Material Thickness:	6mm
Material Grade:	S275

Test Results

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



Picture of Test Piece & Test Location





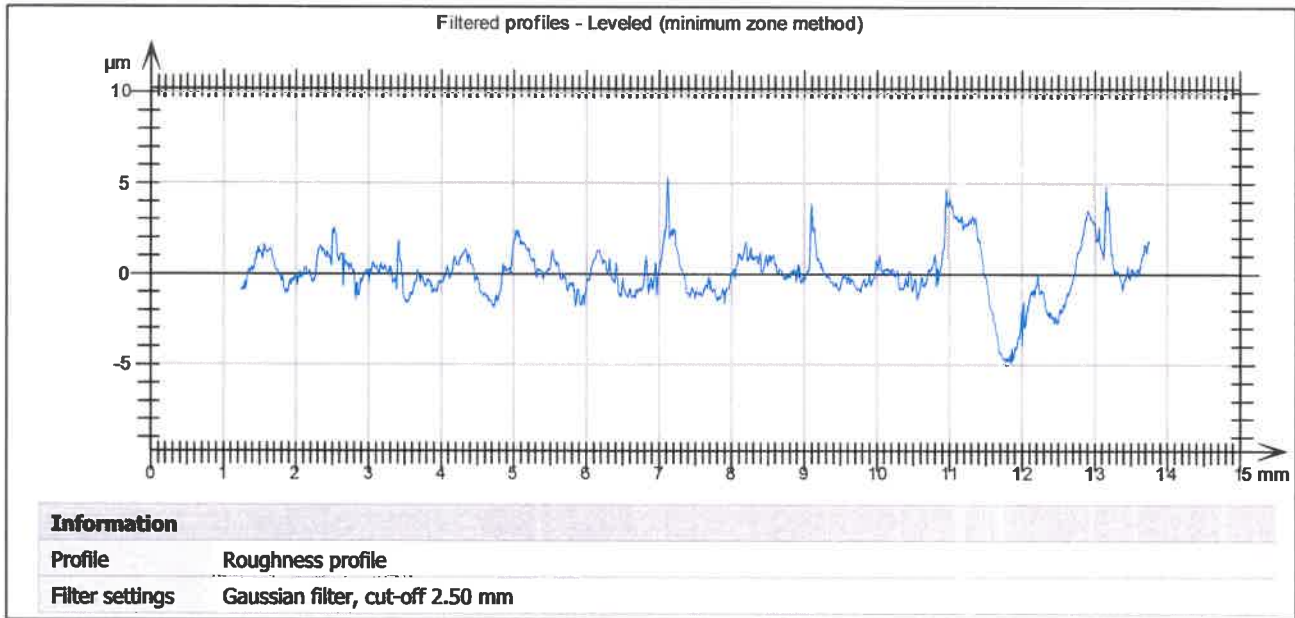
Cutting Procedure Inspection Report

EIS FORM No.CPTR 001

Test Report No.:	10015	Date:	24/04/2023
EIS Job No.:	30774		

Manufacturer:	D. KENNEDY STEEL SUPPLIES
Address:	PLAMERSTOWN LOWER, DUBLIN 20
Manufacturers pCPS No.:	PRELIM 24167.01/6mm PLASMA ERMAKSAN
Manufacturers CPQR No.:	24167.01/6mm PLASMA ERMAKSAN

Surface Roughness Evaluation Profile Sample:



Element:	Zt1	Zt2	Zt3	Zt4	Zt5
Element Profile µm	5.1	7.1	4.9	9.8	7.6

Item / Description	Result / Data	Pass		
		Yes	No	N/A
Plate Thickness	6mm	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Thickness Reduction Δa	0.3mm	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Allowable Mean Height Profile	120µm	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Measured Mean Height Profile Rz5	6.9µm	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Allowable Perpendicularity Tolerance	1.39mm	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Actual Perpendicularity Value	0.4mm	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Visual Inspection Sharp Corner	Acceptable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Visual Inspection Curved Sample	Acceptable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

TECHNICIAN:	NIALL O'BRIEN	QUALIFICATION:	PCN LEVEL II	DATE:	24/04/2023
SIGNATURE:		FIRM OFFICIAL STAMP:			
INSPECTION AUTHORITY:	BS EN ISO 1090-2:2018 (Annex D) & BS EN ISO 9013:2017				
CLIENT WITNESS / R.W.C.:					



Cutting Procedure Inspection Report - Hardness

EIS FORM No.CPTR 002

Test Report No.:	10016	Date:	24/04/2023
EIS Job No.:	30774		

Manufacturer:	D. KENNEDY STEEL SUPPLIES
Address:	PLAMERSTOWN LOWER, DUBLIN 20
Manufacturers pCPS No.:	PRELIM 24167.01/6mm PLASMA ERMAKSAN
Manufacturers CPQR No.:	24167.01/6mm PLASMA ERMAKSAN

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:	ERMAKSAN
Model:	HYPERTHERM XPR300
Serial Number:	000303
Material Thickness:	6mm
Material Grade:	S275

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 figure D.4 & table D.1						
	<table border="1"> <tr> <th>$t \leq 5$</th> <th>$t > 5$</th> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td>Indent Numbers</td> <td>Indent Numbers</td> </tr> </table>	$t \leq 5$	$t > 5$			Indent Numbers	Indent Numbers
	$t \leq 5$	$t > 5$					
Indent Numbers	Indent Numbers						

Test Results

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

Please see the following tables for all hardness reading taken.



Cutting Procedure Inspection Report - Hardness

EIS FORM No.CPTR 002

Test Report No.:	10016	Date:	24/04/2023
EIS Job No.:	30774		

Manufacturer:	D. KENNEDY STEEL SUPPLIES
Address:	PLAMERSTOWN LOWER, DUBLIN 20
Manufacturers pCPS No.:	PRELIM 24167.01/6mm PLASMA ERMAKSAN
Manufacturers CPQR No.:	24167.01/6mm PLASMA ERMAKSAN

Free Edge Surface - A			
Plate Thickness:	6mm	Total Indents Required:	15
Indent Number	Required (Y/N)	Hardness HV	Position on Free Edge Surface (Cut Surface)
I1	Y	404	Upper side of plate
I2	Y	401	Upper side of plate
I3	Y	409	Upper side of plate
I4	Y	414	Upper side of plate
I5	Y	410	Upper side of plate
I6	Y	407	Centre of plate
I7	Y	398	Centre of plate
I8	Y	406	Centre of plate
I9	Y	409	Centre of plate
I10	Y	412	Centre of plate
I11	Y	405	Lower side of plate
I12	Y	409	Lower side of plate
I13	Y	418	Lower side of plate
I14	Y	416	Lower side of plate
I15	Y	398	Lower side of plate

Free Edge Surface - B			
Plate Thickness:	6mm	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	402	Upper side of plate
I3	Y	395	Upper side of plate
I4	Y	391	Upper side of plate
I5	Y	399	Upper side of plate
I6	Y	405	Centre of plate
I7	Y	409	Centre of plate
I8	Y	414	Centre of plate
I9	Y	402	Centre of plate
I10	Y	394	Centre of plate
I11	Y	407	Lower side of plate
I12	Y	403	Lower side of plate
I13	Y	409	Lower side of plate
I14	Y	401	Lower side of plate
I15	Y	416	Lower side of plate

TECHNICIAN:	NIALL O'BRIEN	QUALIFICATION:	PCN LEVEL II	DATE:	24/04/2023
SIGNATURE:		FIRM OFFICIAL STAMP:			
INSPECTION AUTHORITY:	BS EN ISO 1090-2:2018 (Annex D) & BS EN ISO 9013:2017 & BS EN ISO 6507-1				
CLIENT WITNESS:					