WELDING PROCEDURE QUALIFICATION RECORD

Ref: ROT 2025.48063 Rev.1

According to rule/standard/code:	ISO 15614-7: 2019
Manufacturer:	Technocladding Europe B.V.
Manufacturer address:	Nobelstraat 25, 3846 CE Harderwijk
Place welded:	Harderwijk

Remarks/additional requirements: -

General information

WPS No./Rev No:	25EWI07404		Date of test weld:		16-06-2025
Welding process(es)	523	Single/double side welding	Single side	Backing (e.g. gas):	-
Welding position:	PA	Preheating temp:	20°C		

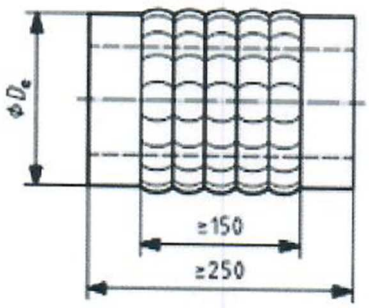
Material specification

Base material 1:	S355J2+N	Base material 2:	-
Delivery condition:	Normalized	Delivery condition:	-
Heat No:	488221	Heat No:	-
Material thickness:	--	Material thickness:	-
Outside diameter:	90	Outside diameter:	-
Additional information: (e.g. C%, C_{eq}, Pcm)	C= 0.176% Ceq= 0.41	Additional information: (e.g. C%, C_{eq}, Pcm)	-

Welding consumables

Filler metal			Gas	Flux		DNV grade
No.	Manufacturer	Brand name/ Designation		Manufacturer	Brand name/ Designation	
1	Oerlikon Metco	MetcoAdd 316L-A	100% Ar			

Joint preparation (sketch) and welding details

Joint design	Welding sequences
State rolling direction, if applicable	For multiple welding process qualification, the deposited weld metal thickness shall be recorded for each filler metal and process used.
	

Run/ layer	Welding Process	Ø filler metal (mm)	Filler metal No.	Flow rate gas (l/min)	Current (A)	Voltage (V)	Type of current/ polarity	Travel speed (mm/min)	Forehand/ backhand progression	Inter-pass temp. (°C)	Heat input (kJ/mm)
Welding parameters see procedure 25EWI07404											

Further information

Name of welder/operator:	J. Miedema	Baking of electrodes:	-
PWHT (Temperature/Time):	-	Heating/Cooling rate:	-

Other (e.g. weaving, groove preparation, gouging, grinding):

TEST RESULTS

Non-destructive testing

Test Method	Results	Test report No.	Test Method	Results	Test report No.
Visual inspection:	Acceptable	VT25EWI07401	Radiographic test:		
Ultrasonic test:	Acceptable	403746505 (Version 2)	Magnetic particle/ Dye penetrant test:	Acceptable	403746518 (Version 1)

Destructive testing

Tensile test		Test report No:	
Specified YS min:		Specified TS min:	

No.	Dimension	Area (mm²)	Temp. °C	YS (N/mm²)	Break load Fm (N)	TS (N/mm²)	Elongation (%)	Location/ Character of fracture

Bend test		Test report No:	25.1576
Specified degree:	180°	Mandrel diameter:	40mm

Type	Dimension (W x T)	Result	Type	Dimension (W x T)	Result
Side bend	10 x 13 mm	Acceptable			
Side bend	10 x 13 mm	Acceptable			

Notched bar impact test		Test report No:	
Test temperature:		Minimum requirement:	

Notch location	Result 1 (J)	Result 2 (J)	Result 3 (J)	Average (J)
Weld metal				
Fusion line				
Fusion line + 2 mm				
Fusion line + 5 mm				
Fusion line + 10 mm				

Hardness tests HV 10	Test report No:	25.1576
Sketch		

Vickers hardness test HV10 — Performed under accreditation RvA L647: WI-B1

Method: ISO 9015-1 — **Test date:** 22-08-2025 — **Location:** On cross section

Specimen no: 25.1576

Location	Base			Fusion line			Weld												
Indent	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Traverse	211	219	229	254	260	262	389	381	408	-	-	-	-	-	-	-	-	-	-

Test Method	Results	Test report No.	Test Method	Results	Test report No.
Macro photo			Fracture Test		
Micro photo	Acceptable	25.1576	Chemical Analyses	Acceptable	25.1576

This is to certify:

That the statements in this record are correct and the welds were prepared, welded, heat treated and tested in accordance with the specified rule/code/standard and/or purchaser´s specification.

☐ This Record is approved for application under PED 2014/68/EU by DNV Business Assurance B.V. (CAB 2388, 'beschikking 2021-0000082943; Accredited RvA I319)

☒ This Record is approved for application under DNV Classification Rules and Offshore Standards

☐ This Record is not direct ready for application under DNV Classification Rules and Offshore Standards

Survey station: Barendrecht
Surveyor: H.H.A. Elshof

Place: Barendrecht
Date: 25-10-2025

for **DNV Business Assurance B.V.**

I. Šakys
DNV authorized representative

Note: Assessment for specific application to be performed on the application project itself

In compliance with Dutch legislation, reference is made to DNV document "Reglement behandeling Klachten, Bezwaar en Beroep" for dealing with Complaints, Objections and Appeals. This document is retrievable at DNV Business Assurance B.V.