

ISP N°0006

**BUREAU
VERITAS**

WELDING PROCEDURE QUALIFICATION RECORD

N° QP-ITA-24-00806-rev.0**LEVEL****2**

Manufacturer's WPQR no 08/2024

Manufacturer OMV S.r.l.s.

Address Via dei Mille 24 Bologna - 40121 (BO)

Date of welding 21/08/2024

Reference standard UNI EN ISO 15614-1 Ed. 2019

Code/ Standard Supplem./Client Req N.A.

Certificate issued by / Authorized Inspector Ing. Giancarlo Tesei

BUREAU VERITAS ITALIA SpA

certifies that test pieces were prepared, welded and tested satisfactorily in accordance with the requirements of the document indicated above.

Permanent Joining Procedure Qualification Record respect the Essential Safety Requirements stated by PED Directive Appendix I- § 3.1.2. Test performed are equivalent to harmonized standard published in the Official journal of the European Union.

EXAMINATION BODY	MANUFACTURER
Name, date and signature of authorized representant Mirko Zancaner, 06/09/2024 Stamp 	Name, date and signature of representant

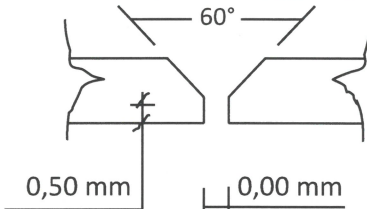
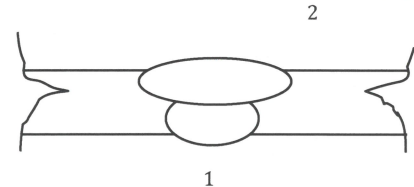
Revision No: 0 Reason of revision : Issued

Other identification (if necessary) : G15194/24/GT/gt

BUREAU
VERITAS

Organization Name	OMV S.r.l.s.	pWPS No.	08/2024 rev.1
Mfr Procedure Qualification Record No.	08/2024	Date	21/08/2024
Welders and/or welding operators :	Alexandru Lucian Geleanu, Stamp GA		
Welding Process(es)	A) 141	B) N.A.	C) N.A.
Types (Manual, Autom., Partly Mechanized)	A) Manual	B) N.A.	C) N.A.

WELDING PERFORMED WITNESSED BY :	Ing giancarlo tesei
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PREPARATION			PARENT MATERIAL		
Joint type	Butt weld		Parent material grade	Tp. 316L	Tp. 316L
Backing (only for BW)	Yes ☐	No ☒	Material Standard	ASTM A312	ASTM A312
Permanent backing Group	N.A.		Group / Subgroup	8.1	8.1
Gouging or grinding	N.A.		Thickness (mm)	2,77	2,77
Preparation and cleaning	Brushing and Grinding		Outside diameter (mm)	60,30 (2")	60,30 (2")
					

Note	N.A.						Note	N.A.
Bevels	Angle °	60°	Root gap (mm)	0,00	Root face (mm)	0,50	Tack weld	N.A.

Buttering information (if performed)	
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FILLER METALS					HEAT		
	A)	B)	C)	D)	Preheat temperature	15	°C
Filler Metal trade make	INERTROD 316LSI - LINCOLN	N.A.	N.A.	N.A.	Interpass temperature	150	°C
Filler Metal standard	EN ISO 14343-A	N.A.	N.A.	N.A.	Postheat temp and time	N.A.	°C
Filler Metal designation	W 19 12 3 L Si	N.A.	N.A.	N.A.			
F-No. (Only for level 1)	6	N.A.	N.A.	N.A.	POST WELD HEAT TREATMENT		
A-No. (Only for level 1)	N.C.	N.A.	N.A.	N.A.	Holding temp.	N.A.	°C
Flux trade make	N.A.	N.A.	N.A.	N.A.	Holding time	N.A.	min.
Flux designation	N.A.	N.A.	N.A.	N.A.	Heating rate	N.A.	°C/h
Weld Metal deposit	2,77 mm	N.A.	N.A.	N.A.	Cooling rate	N.A.	°C/h
Flux batch (recrushed slag)	N.A.	N.A.	N.A.	N.A.	Other info	None	
Tungsten electr. (type & Ø)	UNI EN ISO 6848 WTh20-Ø2,4	N.A.	N.A.	N.A.			
Other	None	N.A.	N.A.	N.A.			

GAS					TECHNIQUE	
	A)	B)	C)	D)	Weaving (max width of run)	String
Shielding gas type %	99,99%	N.A.	N.A.	N.A.	Oscillation amplitude	N.A.
Designation (EN ISO 14175)	I1	N.A.	N.A.	N.A.	Oscillat. frequ. - dwell time	N.A.
flow rate l/min	20 lt/min	N.A.	N.A.	N.A.	Single or Multiple Electr.	Single
Backing gas type %	99,99%	N.A.	N.A.	N.A.	Pulse welding details	N.A.
Designation (EN ISO 14175)	I1	N.A.	N.A.	N.A.	Dist. cont. tube/work piece	N.A.
flow rate l/min	12 lt/min	N.A.	N.A.	N.A.	Plasma welding details	N.A.
Plasma gas type %	N.A.	N.A.	N.A.	N.A.	Torch angle °	15° from vertical axis
Designation (EN ISO 14175)	N.A.	N.A.	N.A.	N.A.	Other	None
flow rate l/min	N.A.	N.A.	N.A.	N.A.		

Run	Proc	Transfert mode	Position	Filler metal (mm)	Current (A)		Voltage (V)		Curr. type and polar.	Thermal efficien. K	Wire speed (m/min)	Welding speed (mm/s)	Heat input (J/mm)	Energy or power x arc time (J)	Weld bead length (mm)	Arc Energy (J/mm) *only for Waveform Controlled
1	141	N.A.	H-L045	2,00	86	N.A.	9,5	N.A.	DC/Dir	0,60	N.A.	1,83	267	N.A.	N.A.	N.A.
2	141	N.A.	H-L045	2,00	86	N.A.	9,8	N.A.	DC/Dir	0,60	N.A.	1,83	276	N.A.	N.A.	N.A.

Power souce : //