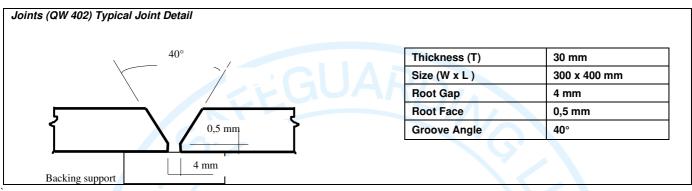


PROCEDURE QUALIFICATION RECORD (PQR)

(QW-200.2 - QW-483 Section IX ASME Boiler and Pressure Vessel code)

PRD-0616-24-ITA-DNV

Company name and address:	F.A.I.L. S.r.I Via G. Galilei, 18 - 42020 San Polo D'Enza (RE) Italy
Procedure Qualification Record no. :	06-2023
WPS no:	06-2023 Rev.0
Date:	03/04/2023
Welding Process(es):	SMAW
Type/s: (Manual, Semi-Automatic, Machine, Automatic)	Manual



Parent Material (QW-403)						Post-weld heat	(QW-407)			
Material Specification	ASTM A743 to		to	ASTM A743			Temperature:	A: 1040 T: 620	°C °C		
Type and Grade or UNS				CA6NM			Time	A: 120 T: 180	Minutes Minutes		
P No. 6	G No. 4	c/to P No.	6	G No.	4		Heating Rate	100	°C/hours		
Thickness of Tes	t Coupon	30 mm					Cooling Rate	In air	°C/hours		
Diameter of Test	Coupon	N.A.					Other	No	No		
Maximum Pass T	hickness	Up to 3.0 m	m								
Other: Parent Ma	terial Heat no. 6	22950 Test Cert	tificate	e no. 6639	80 dt: 01/06/20	17					
Filler Metal (QW-	404)				a)		b)		c)		
SFA Specification				5.4							
AWS Classification	n	7		E410NiMo							
Filler Metal F.no				5							
Weld metal Analys	sis A no.				N.A.	1					
Size of Filler meta	l				Ø 3,2 mm						
Filler Material Mak	se .			_	OY 89 NI MMERSALD						
Filler Metal Produc	ct form				N.A.						
Supplemental Fille	er Metal			N.A.							
Flux Type			N.A.								
Flux Trade Name		N.A.									
Weld metal thk [m	m]				30						
Other : SMAW Ele	ctrode – Ø 3,2 m	ım Heat No. 995	0835	– СОММЕ	RSALD Certific	cate No.	1313-2023.				

Lack of fulfilment of conditions as set out in the Contract with DNV may render this Certificate invalid.

DNV Business Assurance Italy S.r.l. Via Energy Park, 14, 20871 Vimercate (MB), Italy. Tel: 039 68 99 905. www.dnv.it/assurance



PROCEDURE QUALIFICATION RECORD (PQR)

(QW-200.2 - QW-483 Section IX ASME Boiler and Pressure Vessel code)

PRD-0616-24-ITA-DNV

Position (QW-405)		Preheat (QW-406)			
Position(s) of Groove:	osition(s) of Groove: 1G		20°C		
Weld Progression (Uphill - Downhill):	N.A.	Interpass Temperature [°C]:	260°C		
Position(s) of Fillet:	-	Preheat Maintenance:	No		
Other:	No	Other:	No		

Gas (QW-408)				Electrical Characteristichs (QW-409)			
	Gas(es)*	Mixture %	Flow rate [l/min]:	*Tungsten Electrode Type/Size [mm]:	N.A.		
Shielding:	N.A.	N.A.	N.A.	Mode of Metal Transfer (GMAW FCAW):	N.A.		
Trailing:	N.A.	N.A.	N.A.	Heat Input (KJ/mm):	0.98		
Backing:	N.A.	N.A.	N.A.	Other:	No		

Electrical Characteristics (QW-409)											
Weld Pass(es) Process			Filler M	letal	Current	Volts	Amps	Wire	Energy or	Travel speed	
	Classi	fication	Diameter	Type and Polarity	(Range)	(range)	Speed (range)	Power (range)	(range)		
			SE	E ATTACHED	ATTACHED WELDING TABLE FOR PASSES DETAIL						
Pulsating Cu	Pulsating Current : N.A.										
Other:	No		•							_	

Techr	nique (QW410)
String or Weave Bead	String
Orifice, Nozzle or Gas Cup Size	N.A.
Initial and Interpass Cleaning(Brushing, Grinding etc)	Grinding
Method of back Gouging	N.A.
Oscillation	N.A.
Contact Tube to Work Distance	N.A.
Multipass or Single pass (per Side)	Multipass
Single or Multiple electrodes	Single
Peening	Not Allowed
Other	○ No

	Tensile Test (QW-150)											
Specimen	L	D <i>imensions</i> (mn	n)		Ultimate Unit St	ress						
No.	Ø/	Area	Ultimate	Rp (N/mm ²)	Rm (N/mm ²)	A %	Z %	Type of Failure and				
	axb(mm)	(mm²)	Total Load (N)	≥	≥			Location				
					760							
T1-1	14.07x19.01	268	238085	-	890	-	-	Ductile HAZ				
T2-1	18.43x19.13	353	316524	-	898	-	-	Ductile B.M.				
T3-2	19.63x19.08	375	325649	-	869	-	-	Ductile B.M.				
T4-2	13.21x19.02	251	208155	-	829	-	-	Ductile HAZ				

	Guided Bend Test (QW-160)									
Specimen No. Type and figure No. Result										
1	SIDE BEND – Fig. QW-462.2 (Bend Anlge 180°)	Satisfactory								
2	SIDE BEND – Fig. QW-462.2 (Bend Anlge 180°)	Satisfactory								
3	SIDE BEND – Fig. QW-462.2 (Bend Anlge 180°)	Satisfactory								
4	SIDE BEND – Fig. QW-462.2 (Bend Anlge 180°)	Satisfactory								

Lack of fulfilment of conditions as set out in the Contract with DNV may render this Certificate invalid.

DNV Business Assurance Italy S.r.l. Via Energy Park, 14, 20871 Vimercate (MB), Italy. Tel: 039 68 99 905. www.dnv.it/assurance

Form ID: DMSP-5-PA-PED-05-A25 Page 2 of 3



PROCEDURE QUALIFICATION RECORD (PQR)

(QW-200.2 - QW-483 Section IX ASME Boiler and Pressure Vessel code)

PRD-0616-24-ITA-DNV

			Toughness	test (QW	'-170) - ISO 9016	6 - ISO148-1		
	Notch	Specimen	Notch	Test	Obtained	Impact Values	Lateral Expansions	Drop Weight Break (Y/N)
Specimens No.	Location	Size (mm)	Tipo/Type	Temp . (°C)	Joule	% Shear	≥ 0,38mm	
					27			
1	VWT 0/2	10x10x55	V-Notch	23	77	-		-
2	VWT 0/2	10x10x55	V-Notch	23	84	-	-	-
3	VWT 0/2	10x10x55	V-Notch	23	78	-	-	-
Average					80	-	-	
1	VHT 1/2	10x10x55	V-Notch	23	78	-	-	-
2	VHT 1/2	10x10x55	V-Notch	23	67	-	-	-
3	VHT 1/2	10x10x55	V-Notch	23	70 -		-	-
Average					72	-	-	-
Comments	s: <i>-</i>							

Fillet-Weld	Test	(QW-180)
-------------	------	----------

Result - Satisfactory:	N.A. ☐ YES ☐ NO	Penetration into Parent Metal:	⊠ N.A. □	YES 🗆 NO
		Other Tests		
	Report ID reference:		Result:	
Visual Inspection	TEC-EUROLAB Certificate 23-03719	9-02 dated 08/06/2023	☐ N.A.	Satisfactory
Dye Penetrant Test	TEC-EUROLAB Certificate 23-03719	9-03 dated 20/06/2023	□ N.A.	
Radiography Test	TEC-EUROLAB Certificate 23-03719	9-01 dated 08/06/2023	☐ N.A.	
Hardness Test	Not Required		⊠ N.A.	☐ Satisfactory
Macroscopic Test	TEC-EUROLAB Certificate 23-03719	9-07 dated 20/06/2023	□ N.A.	Satisfactory
Welder's Name:	POLISE GENNARO	Clock	No · NA	Stamp No · PI

Welder's Name: POLISE GENNARO Clock No. : NA Stamp No. : PL

Tests conducted by: TEC-EUROLAB (Tensile Test)

Laboratory test No.: 23-03719-04

Date: 22/06/2023

Tests conducted by: TEC-EUROLAB (Bend Test) Laboratory test No.: 23-03719-05 Date: 20/06/2023

Tests conducted by: TEC-EUROLAB (Impact Test) Laboratory test No.: 23-03719-06 Date: 23/06/2023

We certify that statements in this record are correct and that the test welds were prepared, welded, and tested in accordance with the requirements of Section IX ed.2021 of the ASME Code. This Procedure is approved for application under PED Directive 2014/68/EU Annex I Para. 3.1.2 by DNV Business Assurance Italy S.r.I. No.Bo. 0496.

Test conducted under supervision of Manufacturer. Records of PQR approval signed by Manufacturer shall be maintain and available for review.

Manufacturer: F.A.I.L. S.r.I. Inspection Authority:

by: Branchi Luca Examiner: Fabiano Fabbri
Place of welding: F.A.I.L. srl – S. Polo D' Enza (RE) Italy Date of issuing: 21/03/2024

Date of welding: 03/04/2023

For the Manufacturer

ACCREDIA L'ENTE ITALIANO DI ACCREDITAMENTO

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC Signatory of EA, IAF and ILAC Mutual Recognition Agreements Maurizio Bellina

Management Representative

For the Certification Body

DNV

Lack of fulfilment of conditions as set out in the Contract with DNV may render this Certificate invalid.

DNV Business Assurance Italy S.r.l. Via Energy Park, 14, 20871 Vimercate (MB), Italy. Tel: 039 68 99 905. www.dnv.it/assurance



(Optional)

WELDER PERFORMANCE QUALIFICATION TEST CERTIFICATE

PRS-0617-24-ITA-DNV

Standard: ASME BPVC.IX-2021

Manufacturer's WPS: 01-2013

Welder's name: **GENNARO POLISE**Place and date of birth: **Napoli (NA), 15-08-1965**

Id. method: Driving License Stamp: PL

Employer: F.A.I.L. S.r.I., Via G. Galilei, 18, 42020 S. Polo D'Enza (RE), Italy

Spec. and type/grade/UNS of base 1 ASTM A216 WCB Thickness (mm):

metal(s) (side 1/2): 2 ASTM A216 WCB 1 20 2 20

metal(s) (side 1/2): 2 ASTM A	216 WCB			1 20	2	20			
Welding variables (QW-350)		Actu	al Value	es		Range Qualified			
Welding process(es)	a	SMAW	b	11/2	а	SMAW	b	=	
Transfer mode	а	_	b	-11/	а	-	b	=	
Product type		Plate	- Groo	ve	Р	late & Pipe- Groo thicki	ove, All fille ness & O.D	•	
Backing	а	With	b	-	a	With	b	=	
Base metal P-No. to P-No.	а	P-No.1	b	P-No.1		P-No.1 through P-No.41 t	P-No.15F, hrough P-N		
Filler metal specification(s) (SFA)	а	SFA-5.1	b	-		C-116		- L .	
Filler metal classification(s)	а	ER7018-1	b			For Into	rmation o	nıy	
Filler metal F-number(s)	а) [F-No.4		а	F-No.1, 2	, 3, 4 With	Backing	
Filler metal F-number(s)	b		4		b	161	-		
Consumable insert (GTAW or PAW)			-			17.1	-		
Filler Metal Product Form (QW-404.23) (GTAW or PAW)	а	-	b	-	а	57/	b	-	
Deposited thickness (mm) 3 layers minimum	а	Yes	а	20		Uı	nlimited		
Deposited thickness (mm) 3 layers minimum	b	100	b	-//-	1	- //	-		
Outside pipe diameter [O.D.] (mm)	1-				1		-		
Welding position(s)	а	1G	b	MA		•	O.D. ≥73) llet/ Tack)		
Vertical progression	а		b	_	а	-	b	-	
Type of fuel gas (OFW only)							-		
Use of backing gas (GTAW, PAW, GMAW)			-				-		
GTAW current type and polarity			DCEP		DCEP				
Type (Manual, Semi-automatic)	а	Manual	b		а	Manual	b	=	
		Produc	tion we	ld	Tes	t coupon	✓		

Test performed	
Visual test (QW-302.4)	Satisfactory
Radiographic test (QW-191)	Satisfactory
Ultrasonic test (QW-191)	Not performed
Macro examination (QW-184)	Not performed
Bend tests (QW-462)	Not performed
Fracture tests (QW-181.2)	Not performed
Other tests (see note on pag.2)	Not performed

Examiner:

Fabiano Fabbri

Place and date of issue:

Vimercate (MB), 21-03-2024



Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC Signatory of EA, IAF and ILAC Mutual Recognition Agreements Place of welding:

San Polo D'Enza (RE)
Date of welding:

03-04-2023

Revalidation method: (a) Expiry date: 03-04-2026

or DNV Product Assurance

Maurizio Bellina



PRS-0617-24-ITA-DNV

Welder's name: GENNARO POLISE
Place and date of birth: Napoli (NA), 15-08-1965

Supplementary remarks	(Information regarding job knowledge	certificate issued on the basis of previous approval, etc.)
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None

	Revalidation metho	d 9.3.a) (Refer to EN ISO 9606-1	
Confirmation of the validity	by employer, welding coo	dinator or Examining Body for t	ne following 6 months (refer to 9.2)
Ref. Inspection / test reports	Date	Position or Title	Signature
	EEG	UARA	
	CAL		
//	7		
15			1511
151			/3
131		N V	121
	Validation expire	after 3 years. The welder shall I	ne retested

1864

Statement

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME BOILER AND PRESSURE VESSEL CODE.

Welder qualification test certificate issued according to Directive PED 2014/68/EU Annex I Para. 3.1.2.

The certificate is approved for application under Directive PED 2014/68/EU by DNV Business Assurance Italy S.r.l., No.Bo. N° 0496. Revalidation requirements as per CABF Recommendation 019 are applied.

Test conducted under supervision of Manufacturer. Records of WPQ approval shall be maintain and available for review.

form id: DMSP-5-PA-PED-05-A18 Page 2 of 2



(Optional)

WELDER PERFORMANCE QUALIFICATION TEST CERTIFICATE

PRS-0618-24-ITA-DNV

ASME BPVC.IX-2021 Standard:

Manufacturer's WPS: 02-2013

Welder's name: **GENNARO POLISE** Place and date of birth: Napoli (NA), 15-08-1965

Id. method: **Driving License** Stamp: PL

Employer: F.A.I.L. S.r.I., Via G. Galilei, 18, 42020 S. Polo D'Enza (RE), Italy

Spec. and type/grade/UNS of base 1 ASTM/ASME A/SA 240: S31803 Thickness (mm):

a	Actual SMAW -	b b	ues -	а	Range Qualified SMAW b -		
+	_			а	SMAW b -		
а	- Dista	b					
	Diete		~ 7/1/	а	- b -		
	Plate -	Gro	ove	Plate & Pipe- Groove, All fillet sizes in any thickness & O.D.			
а	With	b	-	a	With b -		
а	a P-No.10H		b P-No.10H		P-No.1 through P-No.15F, P-No.34, or P-No.41 through P-No.49		
a SFA-5.4		b	-		For information only		
а	E2594-15	b			For information only		
a F-No.5			.5	а	a F-No.5 With Backing		
b -				b 6 -			
-				17.1			
а	-	b	-	a	- b -		
a Yes a 20		Unlimited					
b	100	b	/	1			
				1	-		
pipe diameter [O.D.] (mm) position(s) a 1G b -		F (O.D. ≥73) F (Fillet/ Tack)					
а	-	b		а	- b -		
1					-		
-					-		
DCEP		DCEP					
а	Manual	b	=	а	Manual b -		
	a a a b b a a a a	a P-No.10H a SFA-5.4 a E2594-15 a F b a - a Yes b - a 1G a - a Manual	a P-No.10H b a SFA-5.4 b a E2594-15 b a F-No. b	a P-No.10H b P-No.10H a SFA-5.4 b - a E2594-15 b - a F-No.5 b - a - b - a Yes a 20 b - b - a 1G b - DCEP	a P-No.10H b P-No.10H a SFA-5.4 b - a E2594-15 b - a F-No.5 a b - b - a - a Yes a 20 b - b - a 1G b - a 1G b - a - b - a Manual b - a Manual b - a a		

Test performed							
Visual test (QW-302.4)	Satisfactory						
Radiographic test (QW-191)	Satisfactory						
Ultrasonic test (QW-191)	Not performed						
Macro examination (QW-184)	Not performed						
Bend tests (QW-462)	Not performed						
Fracture tests (QW-181.2)	Not performed						
Other tests (see note on pag.2)	Not performed						

Examiner:

Fabiano Fabbri

Place and date of issue:

Vimercate (MB), 21-03-2024



Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC Signatory of EA, IAF and ILAC Mutual Recognition Agreement

Place of welding:

San Polo D'Enza (RE) Date of welding:

03-04-2023

Revalidation method: (a) Expiry date: 03-04-2026

for DNV Product Assurance

Maurizio Bellina



PRS-0618-24-ITA-DNV

Welder's name:	GENNARO POLISE
Place and date of birth:	Napoli (NA), 15-08-1965

Supplementary remarks (Information regarding job knowledge, certificate issued on the basis of previous approval, etc.)

None

	Revalidation method	d 9.3.a) (Refer to EN ISO 9606-	1)
Confirmation of the validity by	employer, welding coor	dinator or Examining Body for	the following 6 months (refer to 9.2)
Ref. Inspection / test reports	Date	Position or Title	Signature
	FG		
	EAL		
1 1	/		
15	7		121
151			/7/
131		N V	121
	Validation expires	after 3 years. The welder shall	be retested.

1864

Statement

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME BOILER AND PRESSURE VESSEL CODE.

Welder qualification test certificate issued according to Directive PED 2014/68/EU Annex I Para. 3.1.2.

The certificate is approved for application under Directive PED 2014/68/EU by DNV Business Assurance Italy S.r.l., No.Bo. N° 0496. Revalidation requirements as per CABF Recommendation 019 are applied.

Test conducted under supervision of Manufacturer. Records of WPQ approval shall be maintain and available for review.

form id: DMSP-5-PA-PED-05-A18



(Optional)

WELDER PERFORMANCE QUALIFICATION TEST CERTIFICATE

PRS-0619-24-ITA-DNV

Standard: ASME BPVC.IX-2021

Manufacturer's WPS: 03-2013

Welder's name: **GENNARO POLISE**Place and date of birth: **Napoli (NA), 15-08-1965**

Id. method: Driving License Stamp: PL

Employer: F.A.I.L. S.r.I., Via G. Galilei, 18, 42020 S. Polo D'Enza (RE), Italy

Spec. and type/grade/UNS of base 1 ASTM/ASME A/SA 240: 316L Thickness (mm):

metal(s) (side 1/2): 2 ASTM/ASME A/SA 240: 316L 1 20 2 20

metal(s) (side 1/2): 2 ASTM/ASM	ME A/S	SA 240: 316L		1 20	2	20		
Welding variables (QW-350)		Actual Values				Range Qualified		
Welding process(es)	а	SMAW	b	1/1/1/	а	SMAW b -		
Transfer mode	a		b	-11/	a	- b -		
Product type		Plate -	Gro	oove	F	Plate & Pipe- Groove, All fillet sizes in any thickness & O.D.		
Backing	а	With	b	-	a	With b -		
Base metal P-No. to P-No.	а	P-No.8	b	P-No.8	1	P-No.1 through P-No.15F, P-No.34, or P-No.41 through P-No.49		
Filler metal specification(s) (SFA)	а	SFA-5.4	b	-		For information only		
Filler metal classification(s)	а	E316L-26	b			For information only		
Filler metal F-number(s)		a F-No.5			а	a F-No.5 With Backing		
Filler metal F-number(s)		b -			b 6 -			
Consumable insert (GTAW or PAW)		-			15.1			
Filler Metal Product Form (QW-404.23) (GTAW or PAW)	а	-	b	-	а	- b -		
Deposited thickness (mm) 3 layers minimum	а	a Yes a 20		-	Unlimited			
Deposited thickness (mm) 3 layers minimum	b	100	b	/	A	- /		
Outside pipe diameter [O.D.] (mm)	1				1			
Welding position(s)	a 1G b - F (O.D. ≥73) F (Fillet/ Tack)		· · · · · · · · · · · · · · · · · · ·					
Vertical progression			b		а	- b -		
Type of fuel gas (OFW only)			-			-		
Use of backing gas (GTAW, PAW, GMAW)		-			-			
GTAW current type and polarity		DCEP		DCEP				
Type (Manual, Semi-automatic)	а	Manual	b	-	а	Manual b -		
		Production	on w	veld	Tes	st coupon		

Test performed							
Visual test (QW-302.4)	Satisfactory						
Radiographic test (QW-191)	Satisfactory						
Ultrasonic test (QW-191)	Not performed						
Macro examination (QW-184)	Not performed						
Bend tests (QW-462)	Not performed						
Fracture tests (QW-181.2)	Not performed						
Other tests (see note on pag.2)	Not performed						

Examiner:

Fabiano Fabbri

Place and date of issue:

Vimercate (MB), 21-03-2024



Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC Signatory of EA, IAF and ILAC Mutual Recognition Agreements Place of welding:

San Polo D'Enza (RE)
Date of welding:

03-04-2023

Revalidation method: (a)

for DNV Product Assurance

Expiry date: **03-04-2026**



Maurizio Bellina



PRS-0619-24-ITA-DNV

Welder's name: GENNARO POLISE
Place and date of birth: Napoli (NA), 15-08-1965

Sunnlementary remarks (Info	ormation regarding job know	wledge certificate issued on	the basis of previous approval, etc.)
isubbletiletilai v reiliai ks tiiti	OLIHALIOH LEBALUHE IOD KHOV	MICUSC, CCI HIICALE ISSUCU DII	the pasis of previous approval, etc.1

None

	Revalidation meth	nod 9.3.a) (Refer to EN ISO 9606-	1)					
Confirmation of the validity by employer, welding coordinator or Examining Body for the following 6 months (refer to 9.2)								
Ref. Inspection / test reports	Date	Position or Title	Signature					
	FFC	SUARA						
	CAL							
/ /								
			1311					
<u> </u>			77					
Λi		NV	121					
13:1	Validation expir	es after 3 years. The welder shall	be retested.					

1864

Statement

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME BOILER AND PRESSURE VESSEL CODE.

Welder qualification test certificate issued according to Directive PED 2014/68/EU Annex I Para. 3.1.2.

The certificate is approved for application under Directive PED 2014/68/EU by DNV Business Assurance Italy S.r.l., No.Bo. N° 0496. Revalidation requirements as per CABF Recommendation 019 are applied.

Test conducted under supervision of Manufacturer. Records of WPQ approval shall be maintain and available for review.



(Optional)

WELDER PERFORMANCE QUALIFICATION TEST CERTIFICATE

PRS-0620-24-ITA-DNV

Standard: ASME BPVC.IX-2021

Manufacturer's WPS: 04-2013

Welder's name: **GENNARO POLISE**Place and date of birth: **Napoli (NA), 15-08-1965**

Id. method: Driving License Stamp: PL

Employer: F.A.I.L. S.r.I., Via G. Galilei, 18, 42020 S. Polo D'Enza (RE), Italy

Spec. and type/grade/UNS of base 1 ASTM/ASME B/SB 443: N06625 Thickness (mm):

metal(s) (side 1/2): 2 ASTM/ASME B/SB 443: N06625 1 20 2 20

metal(s) (side 1/2). 2 ASTIVI/ASIVII	ןט ב	3D 443: NU0025		1 20		20		
Welding variables (QW-350)	Actual Values					Range Qualified		
Welding process(es)	a	SMAW	b	1/1/1/	а	SMAW	b -	
Transfer mode	а	_	b	711/	а	-	b -	
Product type		Plate -	Gro	pove	Plate & Pipe- Groove, All fillet sizes in any thickness & O.D.			
Backing	а	With	b	-	a	With	b -	
Base metal P-No. to P-No.	а	P-No.43	b	P-No.43	M		No.15F, P-No.34, or ough P-No.49	
Filler metal specification(s) (SFA)	а	SFA-5.11	b	-		5 - M. 6 - M.		
Filler metal classification(s)	а	E NiCrMo-3	b			For Inform	ation only	
Filler metal F-number(s)		F-	-No.	43	a F-No.34 and all F-No.41 through F-No.4			
Filler metal F-number(s)		b -			b	b / 6 / -		
Consumable insert (GTAW or PAW)			-			17.1	-	
Filler Metal Product Form (QW-404.23) (GTAW or PAW)	а	-	b	-	a	57/	b -	
Deposited thickness (mm) 3 layers minimum	а	Yes	а	20	1	Unlimited		
Deposited thickness (mm) 3 layers minimum	b	000	b		1	× //	-	
Outside pipe diameter [O.D.] (mm)	1				1		-	
Welding position(s)	a 1G b - F (O.D. F (Fillet)			•				
Vertical progression			b		а	-	b -	
Type of fuel gas (OFW only)			-				-	
Use of backing gas (GTAW, PAW, GMAW)			-				-	
GTAW current type and polarity	DCEP			DCEP				
Type (Manual, Semi-automatic)	a Manual b -			-	а	Manual	b -	
		Production	on v	veld	Te	st coupon	<u></u>	

Test performed	
Visual test (QW-302.4)	Satisfactory
Radiographic test (QW-191)	Satisfactory
Ultrasonic test (QW-191)	Not performed
Macro examination (QW-184)	Not performed
Bend tests (QW-462)	Not performed
Fracture tests (QW-181.2)	Not performed
Other tests (see note on pag.2)	Not performed

Examiner:

Fabiano Fabbri

Place and date of issue:

Vimercate (MB), 21-03-2024



Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC Signatory of EA, IAF and ILAC Mutual Recognition Agreements Place of welding:

San Polo D'Enza (RE)
Date of welding:

03-04-2023

Revalidation method: (a) Expiry date: 03-04-2026

for DNV Product Assurance

Maurizio Bellina



PRS-0620-24-ITA-DNV

Welder's name:	GENNARO POLISE
Place and date of birth:	Napoli (NA), 15-08-1965

Supplementary remarks (Information	rogarding job knowledge	cortificate issued on the	hacis of provious approval atc.)

None

	Revalidation method	d 9.3.a) (Refer to EN ISO 9606-	1)
Confirmation of the validity by	employer, welding coord	dinator or Examining Body for	the following 6 months (refer to 9.2)
Ref. Inspection / test reports	Date	Position or Title	Signature
	FG	UARA	
	CAL		
, ,	7/		
15			121
			/3
131		N V	121
	Validation expires	after 3 years. The welder shall	be retested.

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Statement

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME BOILER AND PRESSURE VESSEL CODE.

Welder qualification test certificate issued according to Directive PED 2014/68/EU Annex I Para. 3.1.2.

The certificate is approved for application under Directive PED 2014/68/EU by DNV Business Assurance Italy S.r.l., No.Bo. N° 0496. Revalidation requirements as per CABF Recommendation 019 are applied.

Test conducted under supervision of Manufacturer. Records of WPQ approval shall be maintain and available for review.

form id: DMSP-5-PA-PED-05-A18