

# Welder's Qualification Test Certificate

Certificate no.: **0045/202/9290/Z/00026/23/S/160(00)**  
 Designation(s): **ISO 9606-1 135-S T FW FM1 S t10 D88.9 PB ml**

Welder's name: **Bohdan Bolozhynskiy (BB)**      WPS reference: **135 OD88,9 t10 FW a8 ml**  
 Method of identification: **Identity card**      Order no.: **8121124292**  
 Date and place of birth: **1983-10-04, UKR**      Test report no.: **0045/202/9290/P/00026/23/S/160(00)**  
 Employer: **Welmet OÜ**  
 Test specification(s): **EN ISO 9606-1**  
 Remark:

Supplementary fillet weld test: **No**      Job knowledge: **Not tested**  
 (completed in conjunction with a butt weld qualification)

	Test piece	Range of qualification
Welding process(es);	135 MAG	135, 138
Transfer mode	S Spray	S, P, G
Product type (plate P or pipe T)	T Pipe/Tube	P, T
Type of weld	FW Fillet weld	FW
Parent material group(s)	1.2	1 to 11
Filler material group(s)	FM1	FM1, FM2
Filler material typ(s)	S	S, M
Shielding gas / flux	EN ISO 14175-M21	-----
Auxiliaries	-	-----
Type of current and polarity	DC+ (= +)	-----
Material thickness t (mm)	10.00	≥ 3.00
Deposited thickness s (mm)	-	-----
Outside pipe diameter (mm)	88.90	≥ 44.45
Welding position(s)	PB	PA, PB
Weld details	-	-----
Single layer (sl) / Multi layer (ml)	ml	sl, ml

Additional information: -----

The requirements of the Pressure Equipment Directive 2014/68/EU approval of personnel Annex I, 3.1.2 are fulfilled.

Type of tests	Performed and accepted	Not tested
Visual testing	X	-
Radiographic testing	-	X
Fracture test	X (FW)	-
Bend test	-	X
Notch tensile test	-	X
Macroscopic examination	-	X



Notified Body for Pressure Equipment

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 by Huke Matthias  
 Date: 2023.12.10  
 16:59:23 +01'00'

TUV NORD Systems GmbH & Co. KG  
 Große Bahnstraße 31, D-22525 Hamburg

Date of welding: 2023-11-06	Revalidation according: 9.3 a	Qualification valid until: 2026-11-05
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Revalidation for qualification by examiner or examining body for the following 2 years			Confirmation of the validity by welding coordinator / examiner or examining body for the following 6 months		
Date	Signature	Position or title	Date	Signature	Position or title
	N/A		2024-05-	<i>01</i>	<i>IWS</i>
			2024-11-	<i>01</i>	<i>IWS</i>
			2025-05-		
			2025-11-		
			2026-05-		

Contact: TÜV Eesti OÜ, Vana-Narva mnt 24b, 74114, Maardu, Estonia  
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# Welder's Qualification Test Certificate

**Certificate no.:** 0045/202/9290/Z/00026/23/S/188(00)  
**Designation(s):** ISO 9606-1 135-D T BW FM1 S s25 D50 PA ss mb  
**Welder's name:** Bohdan Bolozhynskiy (BB) **WPS reference:** 135 st BW OD50 ml  
**Method of identification:** Identity card **Order no.:** 8121124292  
**Date and place of birth:** 1983-10-04, UKR **Test report no.:** 0045/202/9290/P/00026/23/S/188(00)  
**Employer:** Welmet OÜ  
**Test specification(s):** EN ISO 9606-1  
**Remark:**  
**Supplementary fillet weld test:** No **Job knowledge:** Not tested  
 (completed in conjunction with a butt weld qualification)

	Test piece	Range of qualification
Welding process(es);	135 MAG	135, 138
Transfer mode	D Dip/Short	D, G, S, P (All)
Product type (plate P or pipe T)	T Pipe/Tube	P, T, Pipe branch ≥60°
Type of weld	BW Butt weld	BW
Parent material group(s)	1.2	1 to 11
Filler material group(s)	FM1	FM1, FM2
Filler material typ(s)	S	S, M
Shielding gas / flux	EN ISO 14175-M21	-----
Auxiliaries	-	-----
Type of current and polarity	DC+ (= +)	-----
Material thickness t (mm)	-	-----
Deposited thickness s (mm)	25.00 (≥ 3 Layers)	≥ 3.00
Outside pipe diameter (mm)	50.00	≥ 25.00
Welding position(s)	PA	PA
Weld details	ss mb	ss mb, bs
Single layer (sl) / Multi layer (ml)	-	-----

Additional information: -----

The requirements of the Pressure Equipment Directive 2014/68/EU approval of personnel Annex I, 3.1.2 are fulfilled.

Type of tests	Performed and accepted	Not tested
Visual testing	X	-
Radiographic testing	X	-
Fracture test	-	X
Bend test	X	-
Notch tensile test	-	X
Macroscopic examination	-	X



Notified Body for Pressure Equipment

**TÜVNORD**  
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 Date: 2023.12.19 08:51:27 +01'00'

TÜV NORD Systems GmbH & Co. KG  
 Große Bahnstraße 31, D-22525 Hamburg

Date of welding: 2023-11-06	Revalidation according: 9.3 a	Qualification valid until: 2026-11-05
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Revalidation for qualification by examiner or examining body for the following 2 years			Confirmation of the validity by welding coordinator / examiner or examining body for the following 6 months		
Date	Signature	Position or title	Date	Signature	Position or title
	N/A		2024-05-	<i>OA</i>	<i>IWS</i>
			2024-11-	<i>OA</i>	<i>IWS</i>
			2025-05-		
			2025-11-		
			2026-05-		

**Contact:** TÜV Eesti OÜ, Vana-Narva mnt 24b, 74114, Maardu, Estonia  
 Tel. +372 607 59 18, E-Mail: info@tuev-nord.ee

# Welder's Qualification Test Certificate



**Certificate no.:** 0045/202/9290/Z/00003/23/S/116(00)  
**Designation(s):** ISO 9606-1 135-G P BW/FW FM1 S s10 PA bs  
**Welder's name:** Dmytro Liniichuk (DL) **WPS reference:** 135 stBW t8-12 PA bs; 6365-04  
**Method of identification:** Identity card **Order no.:** 8121124292  
**Date and place of birth:** 1996-10-28, UKR **Test report no.:** 0045/202/9290/P/00003/23/S/116(00)  
**Employer:** Welmet OÜ  
**Test specification(s):** EN ISO 9606-1

**Supplementary fillet weld test:** Yes **Job knowledge:** Not tested  
 (completed in conjunction with a butt weld qualification)

	Test piece	Range of qualification
Welding process(es);	135 MAG	135, 138
Transfer mode	G Globular	S, P, G
Product type (plate P or pipe T)	P Plate	P; T
Type of weld	BW Butt weld	BW, FW
Parent material group(s)	1.2	1 to 11
Filler material group(s)	FM1	FM1, FM2
Filler material typ(s)	S	S, M
Shielding gas / flux	EN ISO 14175-M21	---
Auxiliaries	-	---
Type of current and polarity	DC+ (= +)	---
Material thickness t (mm)	-	FW: ≥ 3.00
Deposited thickness s (mm)	10.00 (≥ 3 Layers)	3.00 to 20.00
Outside pipe diameter (mm)	-	rot.: ≥ 75, PB fix: ≥ 500
Welding position(s)	PA	BW: PA; FW: PA, PB
Weld details	bs	ss mb, bs
Single layer (sl) / Multi layer (ml)	FW: sl	FW: sl, ml

Additional information: \_\_\_\_\_

The requirements of the Pressure Equipment Directive 2014/68/EU approval of personnel Annex I, 3.1.2 are fulfilled.

Type of tests	Performed and accepted	Not tested
Visual testing	X	-
Radiographic testing	X (BW)	-
Facture test	X (FW)	-
Bend test	X	-
Notch tensile test	-	X
Macroscopic examination	-	X



Notified Body 0045 for Pressure Equipment

TUVNORD

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by Huke Matthias  
Date: 2023.03.30  
11:16:21 +02'00'

TÜV NORD Systems GmbH & Co. KG  
Große Bahnstraße 31, D-22525 Hamburg

Date of welding: 2023-03-22	Revalidation according: 9.3 a	Qualification valid until: 2026-03-21
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Revalidation for qualification by examiner or examining body for the following 2 years			Confirmation of the validity by welding coordinator / examiner or examining body for the following 6 months		
Date	Signature	Position or titel	Date	Signature	Position or titel
	N/A		2023-09-22		LWS
			2024-03-21		LWS
			2024-09-20		LWS
			2025-03-		
			2025-09-		

**Contact:** TÜV Eesti OÜ, Vana-Narva mnt 24b, 74114, Maardu, Estonia,  
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# Welder's Qualification Test Certificate



**Certificate no.:** 0045/202/9290/Z/00003/23/S/115(00)  
**Designation(s):** ISO 9606-1 135-G P BW/FW FM1 S s10 PA bs  
**Welder's name:** Kaja Tuulik (KT) **WPS reference:** 135 stBW t8-12 PA bs; 6365-04  
**Method of identification:** Identity card **Order no.:** 8121124292  
**Date and place of birth:** 1977-06-27, EST **Test report no.:** 0045/202/9290/P/00003/23/S/115(00)  
**Employer:** Welmet OÜ  
**Test specification(s):** EN ISO 9606-1

**Supplementary fillet weld test:** Yes **Job knowledge:** Not tested  
 (completed in conjunction with a butt weld qualification)

	Test piece	Range of qualification
Welding process(es);	135 MAG	135, 138
Transfer mode	G Globular	S, P, G
Product type (plate P or pipe T)	P Plate	P; T
Type of weld	BW Butt weld	BW, FW
Parent material group(s)	1.2	1 to 11
Filler material group(s)	FM1	FM1, FM2
Filler material typ(s)	S	S, M
Shielding gas / flux	EN ISO 14175-M21	-----
Auxiliaries	-	-----
Type of current and polarity	DC+ (= +)	-----
Material thickness t (mm)	-	FW: ≥ 3.00
Deposited thickness s (mm)	10.00 (≥ 3 Layers)	3.00 to 20.00
Outside pipe diameter (mm)	-	rot.: ≥ 75, PB fix: ≥ 500
Welding position(s)	PA	BW: PA; FW: PA, PB
Weld details	bs	ss mb, bs
Single layer (sl) / Multi layer (ml)	FW: sl	FW: sl, ml

Additional information: -----

The requirements of the Pressure Equipment Directive 2014/68/EU approval of personnel Annex I, 3.1.2 are fulfilled.

Type of tests	Performed and accepted	Not tested
Visual testing	X	-
Radiographic testing	X (BW)	-
Facture test	X (FW)	-
Bend test	X	-
Notch tensile test	-	X
Macroscopic examination	-	X



Notified Body 0045 for Pressure Equipment

**TUVNORD**

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Date: 2023.03.30  
11:15:29 +02'00'

TUV NORD Systems GmbH & Co. KG  
Große Bahnstraße 31, D-22525 Hamburg

Date of welding: 2023-03-22	Revalidation according: 9.3 a	Qualification valid until: 2026-03-21
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Revalidation for qualification by examiner or examining body for the following 2 years			Confirmation of the validity by welding coordinator / examiner or examining body for the following 6 months		
Date	Signature	Position or title	Date	Signature	Position or title
	N/A		2023-09-22		LWS
			2024-03-21		LWS
			2024-09-20		LWS
			2025-03-		
			2025-09-		

**Contact:** TÜV Eesti OÜ, Vana-Narva mnt 24b, 74114, Maardu, Estonia,  
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Issued Date: 2024-08-15

Certificate number:

EC27609359 rev. 0

Our order:

Your order:

Our reference:

Your reference:

Customer number:

EEB00005

Your fax number:

Customer order date:

Your e-mail:

Invoice address

Receiver of certificate

Delivery address

Alas Kuul AS  
Loomäe tee 1  
Lehmja küla  
EE-75306 Rae vald  
Estonia

**DELIVERY**

Lot number:

PVY0210612

**PRODUCT**

Brand: ESAB  
Description: OK AristoRod 12.50 1.0mm 18kg  
Item number: 1A50106910  
Heat number: 35627

**CHEMICAL ANALYSIS**

Actual results: acc to EN 10204 - 3.1

Wire/strip	
C	0.07%
Si	0.82%
Mn	1.42%
P	0.011%
S	0.014%
Cr	0.03%
Ni	0.02%
Mo	0.01%
Cu	0.03%
V	< 0.01%
Al	0.001%
Ti+Zr	0.01%

**CLASSIFICATIONS**

EN ISO 14341-A: G 3Si1  
EN ISO 14341-A: G 38 3 C1 3Si1  
EN ISO 14341-A: G 42 4 M20 3Si1  
EN ISO 14341-A: G 42 4 M21 3Si1  
SFA/AWS A5.18: ER70S-6  
CSA W48: B-G 49A 3 C1 S6  
JIS Z 3312: YGW 12 (C1)

**MECHANICAL PROPERTIES**

Typical data: acc to EN 10204 - 2.2

**Tensile**

Standard	Shielding Gas	ReL [MPa/ksi]	Rm [MPa/ksi]	A5 [%]
EN	M21	470/68	560/81	26

**Impact**

Standard	Shielding Gas	Temp [°C/°F]	KV[J/ft-lb]
EN	M21	-30/-22	100/74
EN	M21	-40/-40	90/66
EN	M21	-50/-58	70/52

A4, A5 = Elongation  
ReH = Upper Yield Point  
ReL = Lower Yield Point  
Rm = Ultimate Tensile Strength  
Rp0.2 = Yield Strength 0.2 offset  
Rp1.0 = Yield Strength 1.0 offset

**COMMENTS**

Product supplied under a QA Programme fulfilling the EN ISO 9001 standard.

This certificate is produced electronically.

Please refer any queries to:

OY ESAB, Karapellontie 12, FI-02610, Espoo, Phone: +358 9-547 761.

Raj Kumar Singh

Validation

Josef Moravek

Quality Manager

Raj Kumar Singh

Product Manager



Issued Date: 2024-11-18

Certificate number:

EC27700605 rev. 0

Our order:

Your order:

Our reference:

Your reference:

Customer number:

EEB00005

Your fax number:

Customer order date:

Your e-mail:

Invoice address

Receiver of certificate

Delivery address

Alas Kuul AS  
Loomäe tee 1  
Lehmja küla  
EE-75306 Rae vald  
Estonia

**DELIVERY**

Lot number:

PVY4010283

**PRODUCT**

Brand: ESAB  
Description: OK AristoRod 12.50 1.0mm 18kg  
Item number: 1A50106910  
Heat number: 736313

**CHEMICAL ANALYSIS**

Actual results: acc to EN 10204 - 3.1

Wire/strip	
C	0.08%
Si	0.82%
Mn	1.41%
P	0.013%
S	0.012%
Cr	0.03%
Ni	0.01%
Mo	< 0.01%
Cu	< 0.01%
V	< 0.01%
Al	0.001%
Ti+Zr	< 0.01%

**CLASSIFICATIONS**

EN ISO 14341-A: G 3Si1  
EN ISO 14341-A: G 38 3 C1 3Si1  
EN ISO 14341-A: G 42 4 M20 3Si1  
EN ISO 14341-A: G 42 4 M21 3Si1  
SFA/AWS A5.18: ER70S-6  
CSA W48: B-G 49A 3 C1 S6  
JIS Z 3312: YGW 12 (C1)

**MECHANICAL PROPERTIES**

Typical data: acc to EN 10204 - 2.2

**Tensile**

Standard	Shielding Gas	ReL [MPa/ksi]	Rm [MPa/ksi]	A5 [%]
EN	M21	470/68	560/81	26

**Impact**

Standard	Shielding Gas	Temp [°C/°F]	KV[J/ft-lb]
EN	M21	-30/-22	100/74
EN	M21	-40/-40	90/66
EN	M21	-50/-58	70/52

A4, A5 = Elongation  
ReH = Upper Yield Point  
ReL = Lower Yield Point  
Rm = Ultimate Tensile Strength  
Rp0.2 = Yield Strength 0.2 offset  
Rp1.0 = Yield Strength 1.0 offset

**COMMENTS**

Product supplied under a QA Programme fulfilling the EN ISO 9001 standard.

This certificate is produced electronically.

Please refer any queries to:

OY ESAB, Karapellontie 12, FI-02610, Espoo, Phone: +358 9-547 761.

Raj Kumar Singh

Validation

Josef Moravek

Quality Manager

Raj Kumar Singh

Product Manager



Issued Date: 2024-06-03

Certificate number:

EC27540839 rev. 0

Our order:

Your order:

Our reference:

Your reference:

Customer number:

EEB00005

Your fax number:

Customer order date:

Your e-mail:

Invoice address

Receiver of certificate

Delivery address

Alas Kuul AS  
Loomäe tee 1  
Lehmja küla  
EE-75306 Rae vald  
Estonia

**DELIVERY**

Lot number:

PVY1510759

Quantity:

**PRODUCT**

Brand: ESAB  
Description: OK AristoRod 12.50 1.2mm 18kg  
Item number: 1A50126910  
Heat number: 39284

**CHEMICAL ANALYSIS**

Actual results: acc to EN 10204 - 3.1

Wire/strip	
C	0.08%
Si	0.90%
Mn	1.44%
P	0.011%
S	0.017%
Cr	0.05%
Ni	0.01%
Mo	< 0.01%
Cu	0.02%
V	< 0.01%
Al	0.001%
Ti+Zr	0.01%

**CLASSIFICATIONS**

EN ISO 14341-A: G 3Si1  
EN ISO 14341-A: G 38 3 C1 3Si1  
EN ISO 14341-A: G 42 4 M20 3Si1  
EN ISO 14341-A: G 42 4 M21 3Si1  
SFA/AWS A5.18: ER70S-6  
CSA W48: B-G 49A 3 C1 S6  
JIS Z 3312: YGW 12 (C1)

**MECHANICAL PROPERTIES**

Typical data: acc to EN 10204 - 2.2

**Tensile**

Standard	Shielding Gas	ReL [MPa/ksi]	Rm [MPa/ksi]	A5 [%]
EN	M21	470/68	560/81	26

**Impact**

Standard	Shielding Gas	Temp [°C/°F]	KV[J/ft-lb]
EN	M21	-30/-22	100/74
EN	M21	-40/-40	90/66
EN	M21	-50/-58	70/52

A4, A5 = Elongation  
ReH = Upper Yield Point  
ReL = Lower Yield Point  
Rm = Ultimate Tensile Strength  
Rp0.2 = Yield Strength 0.2 offset  
Rp1.0 = Yield Strength 1.0 offset

**COMMENTS**

Product supplied under a QA Programme fulfilling the EN ISO 9001 standard.

This certificate is produced electronically.

Please refer any queries to:

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Raj Kumar Singh

Validation

Josef Moravek

Quality Manager

Raj Kumar Singh

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