



**WELDING PROCEDURE QUALIFICATION RECORD**

According to (code, standard)

**Bureau Veritas Rules on Materials & Welding**

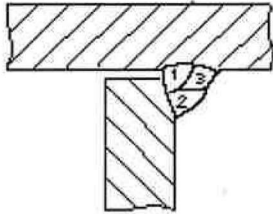
Manufacturer's welding procedure No.  
**WPS 111PFWPDml**

Manufacturer **AN-ELEC Sp. z o.o.** Place and date **10.06.21, Gdynia, Poland**

Purchaser's spec. No. **4046GDA21** Project **Approval of WPS**

Requirements beyond code/standard **Bureau Veritas Rules on Materials & Welding, January 2021**

Joint preparation and welding sequence (Sketch).  
State rolling direction, if applicable



BASE MATERIAL SPECIFICATION AND GROUPING

**NVE36 group 1.2 acc.to EN-CR ISO 15608, t=10 mm**

Grade	C, %	C eq %	Grade	C, %	C eq
<b>BVAH36</b>	<b>0,14</b>	<b>0,36</b>	<b>BVAH36</b>	<b>0,14</b>	<b>0,36</b>

Document No 229/NV/1-1; Heat No 574322

Welding process(es) **111** Welding position **PD** Single-/double sided welding **single**

**WELDING CONSUMABLES:**

Index	Consumable(s), trade name	Code designation
<b>A</b>	<b>OK 48.00</b>	<b>3Y H5 acc to BV</b>

**WELDING PARAMETERS**

Pass No.	Index	Diam. mm	Gas composition	Gas L/min	Current polarity	Amps	Volts	Travel speed mm/s	Wire feed mm/min	Heat input kJ/mm
<b>1</b>	<b>A</b>	<b>2,5</b>	<b>---</b>	<b>---</b>	<b>DC+</b>	<b>110</b>	<b>24</b>	<b>1,495</b>	<b>---</b>	<b>1,41</b>
<b>2</b>	<b>A</b>	<b>2,5</b>	<b>---</b>	<b>---</b>	<b>DC+</b>	<b>105</b>	<b>24</b>	<b>2,91</b>	<b>---</b>	<b>0,69</b>
<b>3</b>	<b>A</b>	<b>2,5</b>	<b>---</b>	<b>---</b>	<b>DC+</b>	<b>105</b>	<b>24</b>	<b>2,24</b>	<b>---</b>	<b>0,90</b>

Other information (weaving, backing, groove preparation, gouging, grinding, etc.):

**Detailed information are presented in pWPS No 111PFWPDml /t10 which is attached to WPQR as App. No 1**

SPECIAL REQUIREMENTS: Preheat min. **min 25°C** Interpass max **200°C** PWHT **N/A** Time **N/A Hr(s)**

Heating/cooling rate **N/A** Baking of electrodes **N/A** Others **N/A**

WELDING CARRIED OUT BY **SEBASTIAN K** TEST PIECE MARKED **PD**

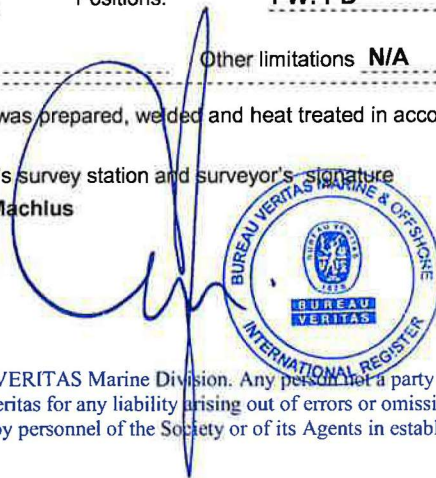
EXTENT OF APPROVAL: Base material(s) **Steels of group 1.1 and 1.2** Positions: **FW: PD**

Plate /wall thickness **3 ÷ 20 mm** Diam. Other limitations **N/A**

We certify that the statements in this record are correct and that the test weld was prepared, welded and heat treated in accordance with the specified Code/Standard and/or purchaser's requirements.

Manufacturer's signature and stamp

BV's survey station and surveyor's signature  
**E.Machlus**



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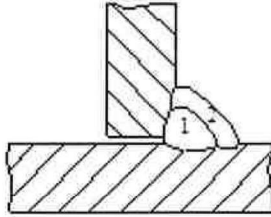
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**Bureau Veritas Rules on Materials & Welding**

Manufacturer's welding procedure No.  
**WPS 111PFWPFml**

Manufacturer **AN-ELEC Sp. z o.o.** Place and date **10.06.21, Gdynia, Poland**  
Purchaser's spec. No. **4047GDA21** Project **Approval of WPS**  
Requirements beyond code/standard **Bureau Veritas Rules on Materials & Welding, January 2021**

Joint preparation and welding sequence (Sketch).  
State rolling direction, if applicable



**BASE MATERIAL SPECIFICATION AND GROUPING**

**NVE36 group 1.2 acc.to EN-CR ISO 15608, t=10 mm**

Grade	C, %	C eq %	Grade	C, %	C eq %
<b>BVAH36</b>	<b>0,14</b>	<b>0,36</b>	<b>BVAH36</b>	<b>0,14</b>	<b>0,36</b>

Document No 229/NV/1-1; Heat No 574322

Welding process(es) **111** Welding position **PF** Single-/double sided welding **single**

**WELDING CONSUMABLES:**

Index	Consumable(s), trade name	Code designation
<b>A</b>	<b>OK 48.00</b>	<b>3Y H5 acc to BV</b>

**WELDING PARAMETERS**

Pass No.	Index	Diam. mm	Gas composition	Gas L/min	Current polarity	Amps	Volts	Travel speed mm/s	Wire feed mm/min	Heat input kJ/mm
<b>1</b>	<b>A</b>	<b>2,5</b>	<b>---</b>	<b>---</b>	<b>DC+</b>	<b>108</b>	<b>24</b>	<b>1,43</b>	<b>---</b>	<b>1,43</b>
<b>2</b>	<b>A</b>	<b>2,5</b>	<b>---</b>	<b>---</b>	<b>DC+</b>	<b>102</b>	<b>24</b>	<b>1,55</b>	<b>---</b>	<b>1,23</b>

Other information (weaving, backing, groove preparation, gouging, grinding, etc.):

**Detailed information are presented in pWPS No 111PFWPFml /t10 which is attached to WPQR as App. No 1**

SPECIAL REQUIREMENTS: Preheat min. **min 25°C** Interpass max **200°C** PWHT **N/AC** Time **N/A Hr(s)**

Heating/cooling rate **N/A** Baking of electrodes **N/A** Others **N/A**

WELDING CARRIED OUT BY **SEBASTIAN K** TEST PIECE MARKED **PF**

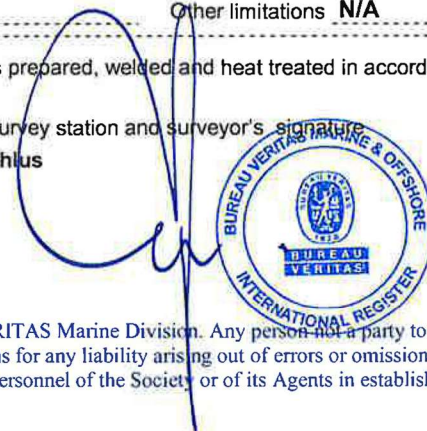
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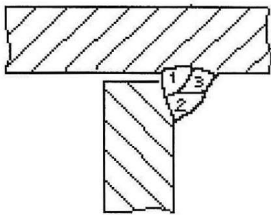
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 Purchaser's spec. No. **4046GDA21** Project **Approval of WPS**  
 Requirements beyond code/standard **Bureau Veritas Rules on Materials & Welding, January 2021, PN-EN ISO 15614-1:2017**

Joint preparation and welding sequence (Sketch).  
State rolling direction, if applicable



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1	A	2,5	---	---	DC+	110	24	1,495	---	1,41
2	A	2,5	---	---	DC+	105	24	2,91	---	0,69
3	A	2,5	---	---	DC+	105	24	2,24	---	0,90

Other information (weaving, backing, groove preparation, gouging, grinding, etc.):  
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**SPECIAL REQUIREMENTS:** Preheat min. **min 5°C** Interpass max **200°C** PWHT **N/A** Time **N/A Hr(s)**  
 Heating/cooling rate **N/A** Baking of electrodes **N/A** Others **N/A**

WELDING CARRIED OUT BY **SEBASTIAN K** TEST PIECE MARKED **PD**

EXTENT OF APPROVAL: Base material(s) **Steels of group 1.1 and 1.2** Positions: **FW: PD**

Plate /wall thickness **3 ÷ 20 mm** Diam. Other limitations **N/A**

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**E.Machlus**



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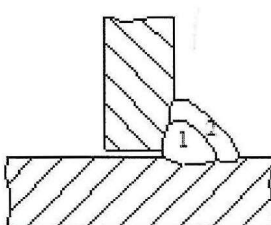
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Joint preparation and welding sequence (Sketch). State rolling direction, if applicable



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1	A	2,5	---	---	DC+	108	24	1,43	---	1,43
2	A	2,5	---	---	DC+	102	24	1,55	---	1,23


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