POR Certificate no:

RKA 2200009

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Welding Procedure Qualification Record (PQR)

Rules for Manufacture, Testing and certification of Materials; Lloyd's Register, July 2021

14 February 2022

Rijeka

p WPS number and revision

Date of welding

Test place/location shop/site

1/22 Revision 02

26 January 2022

Manufacturer's shop on address below

Manufacturer's name

PRO NASA d.o.o.

Manufacturer's address

Industriiska cesta 1. 1290 Grosuplje,

Slovenia.

Base Material, Consumable and Welding Details:

Welding position

Welding process

Grade AH 36 to Grade AH 36 see Note 1)

Flat D (PA)

See Note 2)

Plate/Pipe Thickness (mm):

Pipe outside diameter (mm):

Joint type BW single sides without backing Shielding gas/flux flow rate

Gas composition

M21 (EN14175:08)/12-16 (all runs) l/min.

18% CO2, 82% Ar

Filler material

Make/type/diameter

Composition

Solid Wire

ESAB AB/OK Aristorod 12.50 /1,2mm

See Note 3)

Flux type

N/A

12/--

Preheat and interpass temperature (method) and control

None. BM at 12,0 °C, Max. interpass 268 °C, measured by IR thermometer

Postweld heat treatment temperature (method) and control

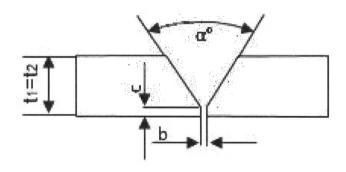
None

Note 1) Base material certified to be in accordance with LR Rules for Manufacture, Testing and certification of Materials; Issue 2016 Note 2) Semi-automatic-Solid Wire/Gas shielded welding process (135-D short circuit for root only and 135 - S spray transfer mode acc. EN4063:10) applied. Note 3) EN ISO 14341-A (2011): weld metal: G 38 3C1 3Si1; wire electrode; G 3Si1 is LR approved consumable:

Test joint details (sketch with dimensions) of weld preparation

 $t_1=t_2=12$ mm c=1-2 mmb=2-3 mm $\alpha \ge 50^{\circ}$

DXVuO BF 3YS H15



^{*}Manufacturer's Preliminary Welding Procedure Specification: 1/22 Revision 02

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Form 5209 (2021.02)