

WPQR No.:
110043

WELDING PROCEDURE QUALIFICATION RECORD (WPQR)

according to EN ISO 15614-1:2004



Welding Procedure Qualification – Test Certificate

Manufacturer's WPQR No.: 110043

Examiner or examining body: TÜV AUSTRIA HELLAS

Manufacturer: LASERTECH Ltd.

Reference No.: 110043

Address:

43rd km of Old National Road Elefsina-Thiva, 322 00 THIVA

Code / Testing Standard:

EN ISO 15614-1:2004

Date of Welding:

13.10.2011

Range of Qualification

Welding Process(es):

EN ISO 4063-131

Type of Joint and Weld:

Full and Partial Penetration in Butt (BW) and Fillet (FW) Welds/
Both (bs) and Single Side (ss) with and without Backing

Parent Material Group(s) and
Subgroups(s):

1.1 with equal or lower specified yield strength (acc. CR ISO 15608)-
1.2 S235 (acc. EN 10025-2)

Parent Material Thickness (mm):

1,40 mm $\leq t \leq$ 2,60 mm (1,40 mm $\leq t \leq$ 4,00 for FW)

Weld Metal Thickness (mm):

2,10 mm $\leq t \leq$ 3,90 mm

Throat Thickness (mm):

1,50 mm $\leq t \leq$ 3,00 mm

Single run / Multi run:

Single run

Pipe Outside Diameter (mm):

$\varnothing > 500$ mm or $\varnothing > 150$ mm for PA or PC rotated position

Filler Material Designation:

G3Si1 / EN ISO 14341-A (ER70S-6 / AWS A5.18)
and others with equivalent characteristics

Filler Material Make:

All Manufacturers

Filler Material Size:

All sizes allowed provided that heat input requirements are fulfilled

Designation of Shielding Gas / Flux:

M21 (EN 439)

Designation of Backing Gas:

N/A

Type of Welding Current and
Polarity:

DC (-)

Mode of Metal Transfer:

Spray

Heat Input:

0,16 $\div$ 0,26 (kJ/mm)

Welding Positions:

All positions except for PG and J-L045

Preheat Temperature:

Ambient Temperature

Interpass Temperature:

Max. 250 °C

Post-Heating:

N/A

Post-Weld Heat Treatment:

N/A

Other Information:

%

Certified that test welds prepared welded and tested satisfactorily in accordance with the requirements of the code / testing standard indicated above.

Athens

31.10.2011

Location

Date of issue

