

CERTIFIED MATERIAL REPORT

CMR No. : 2101194100001

Date of Issue : 2021-01-19

| | | | | | |
|-----------------|----|---|---|-------------------------------------|-------------|
| Customer | | | | | |
| Trade Name | | S-6013.LF | | Size | 2.6mm*350mm |
| Lot No. | | 2156010 | | Purchaser's Order No. | - |
| Specification | | AWS A5.1 E6013 EN ISO 2560-A - E38 0 R 1 2 | | | |
| Welding Current | AC | Shielding Gas | - | Post Weld Heat Treatment (°C × hr.) | AS WELDED |

Mechanical Properties

* According to EN 10204-2004 : 3.1

| Weld Metal | Tensile Test | | | Impact Test (CVN - Joule) | | | | |
|------------|--------------|---------|-------|---------------------------|----|----|----|------|
| | YS(MPa) | TS(MPa) | EL(%) | Temp.(°C) | X1 | X2 | X3 | Avg. |
| | 446 | 521 | 25.0 | | - | - | - | - |
| AWS Spec. | ≥ 330 | ≥ 430 | ≥ 17 | - | | | | |

Chemical Composition (%)

* According to EN 10204-2004 : 3.1

| Weld Metal | C | Si | Mn | P | S | Ni | Cr | Mo | V | | |
|------------|--------|--------|--------|-------|-------|--------|--------|--------|--------|--|--|
| | 0.05 | 0.25 | 0.28 | 0.018 | 0.015 | 0.03 | 0.03 | 0.01 | 0.01 | | |
| AWS Spec. | ≤ 0.20 | ≤ 1.00 | ≤ 1.20 | - | - | ≤ 0.30 | ≤ 0.20 | ≤ 0.30 | ≤ 0.08 | | |

Others

Tested with S-6013.LF 4.0mm to obtain the above results.

ORIGINAL

We hereby certify that the material covered by this report has been inspected in accordance with and been found to meet the applicable requirements of specification and customer's requirements.



0035-CPR-C760
0035 12 / HWC-103
EN13479

Approved by

K.W. Park

QA Manager Park K. W.



HYUNDAI WELDING CO., LTD.

Head Office

507, Teheran-ro, Gangnam-gu, Seoul, Republic of Korea

Pohang Plant

100, Daesong-ro, Nam-gu, Pohang, Republic of Korea