

CERTIFIED MATERIAL REPORT

CMR No. : 1612313700004

Date of Issue : 2016-12-31

| | | | |
|---------------|--|-----------------------|-------------|
| Customer | M.BINDT TRADING | | |
| Trade Name | SM-70 | Size | 1.0mm*300kg |
| Lot No. | 10001028FF6L11 | Purchaser's Order No. | - |
| Specification | AWS A5.18 ER70S-6 * According to EN 10204-2004 : 3.1 EN ISO 14341-A G 42 4 M21 3Si1 | | |

| | | | | | | | | |
|-----------------------|--------------|---------------|--------------------------|-------------------------------------|-----------|----|----|------|
| Welding Current | DCEP | Shielding Gas | 80%Ar+20%CO ₂ | Post Weld Heat Treatment (°C × hr.) | AS WELDED | | | |
| Mechanical Properties | Tensile Test | | | Impact Test (CVN - Joule) | | | | |
| | YS(MPa) | TS(MPa) | EL(%) | Temp.(°C) | X1 | X2 | X3 | Avg. |
| | 448 | 554 | 33.0 | -40 | 65 | 78 | 79 | 74 |
| AWS Spec. | ≥400 | ≥480 | ≥22 | - | | | | |

Chemical Composition (%)

| | C | Si | Mn | P | S | Cu | Ni | Cr | Mo | V |
|-----------|---------------|---------------|---------------|--------|--------|-------|-------|-------|-------|-------|
| (WIRE) | 0.08 | 0.83 | 1.47 | 0.014 | 0.014 | 0.20 | 0.02 | 0.04 | 0.01 | 0.01 |
| AWS Spec. | 0.06 ~0.15 | 0.80 ~1.15 | 1.40 ~1.85 | ≤0.025 | ≤0.035 | ≤0.50 | ≤0.15 | ≤0.15 | ≤0.15 | ≤0.03 |

Others

Tested with SM-70 1.2mm to obtain the above results.

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.

Approved by

K.W. Park

QA Manager Park K. W.



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