

CERTIFIED MATERIAL REPORT

CMR No. : OJ2911352310

Date of Issue 2013/10/29

| | | | |
|--------------------------|--|-----------------------|-----------------|
| Customer | M.BINDT TRADING | | |
| Trade Name | S-6013.LF | Size | 2.6 mm * 350 mm |
| Lot No. | 336100 | Purchaser's Order No. | - |
| Applicable Specification | AWS A5.1 E6013 * According to EN10204 3.1 : 2004 Equivalent to EN ISO 2560-A E38 0 R 1 2 | | |

| | | | | | |
|-----------------|----|---------------|---|-------------------------------------|-----------|
| Welding Current | AC | Shielding Gas | - | 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. |
| | 460 | 540 | 26.6 | | | | | |
| Spec. | ≥331 | ≥415 | ≥17 | | | | | |

| | | | | | | | | | | | |
|--------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|--|--|
| Chemical Composition (%) | | | | | | | | | | | |
| (Weld Metal) | C | Si | Mn | P | S | Ni | Cr | Mo | V | | |
| | 0.06 | 0.27 | 0.30 | 0.024 | 0.010 | 0.04 | 0.03 | 0.01 | 0.01 | | |
| | 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.

*CONTRACT NO.: 37727
20.2MT

We hereby certifies 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.

ORIGINAL

Approved by

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