



THE MOST RELIABLE WELDING®

# HOFFMAN ARC CO., LTD

## QUALITY CERTIFICATE OF WELDING CONSUMABLE

| Type      | Norm               | Brand Name | Part #  | Diameter     | Lot No. | Manufactured Date | Date of Issue  |
|-----------|--------------------|------------|---------|--------------|---------|-------------------|----------------|
| AWS E7018 | AWS A5.1/A5.1M2012 | SINNVOLL   | 6001802 | 1/8" (3.2MM) | 214672  | SHOWN ON PACKAGE  | 2022 / 03 / 18 |

| Mechanical Properties of Deposited Metal                                     |                            |             | Chemical Composition of Deposited Metal (%) |                                                                          |             |                 |                             |                                                                                       |               |           |
|------------------------------------------------------------------------------|----------------------------|-------------|---------------------------------------------|--------------------------------------------------------------------------|-------------|-----------------|-----------------------------|---------------------------------------------------------------------------------------|---------------|-----------|
| Item                                                                         |                            | Requirement | Actual Result                               | Element                                                                  | Requirement | Actual Result   | Element                     | Requirement                                                                           | Actual Result |           |
| Tensile Strength Rel(MPa)                                                    |                            | ≥490        | 545                                         | C                                                                        | ≤0.15       | 0.084           | Mo                          | ≤0.30                                                                                 | 0.0022        |           |
| Yield Strength Rm(MPa)                                                       |                            | ≥400        | 458                                         | Si                                                                       | ≤0.75       | 0.24            | V                           | ≤0.08                                                                                 | 0.0054        |           |
| Elongation A5 (%)                                                            |                            | ≥22         | 32.5                                        | Mn                                                                       | ≤1.60       | 1.21            | Cu                          | --                                                                                    | --            |           |
| Impact Test                                                                  | Impact Temp (°C)           | -30         | -30                                         | S                                                                        | ≤0.035      | 0.0077          | Mn+Ni+Cr<br>Mo+V            | ≤1.75                                                                                 | 1.28          |           |
|                                                                              | Impact Absorbed Energy (J) | ≥27         | 211 210 207                                 | P                                                                        | ≤0.035      | 0.013           | Ti                          | --                                                                                    | --            |           |
| X-Ray                                                                        |                            | --          | Complies                                    | Cr                                                                       | ≤0.20       | 0.032           | --                          | --                                                                                    | --            |           |
| Limit of Moisture Content, % by Wt, Max.                                     |                            | ≤0.60       | 0.08                                        | Ni                                                                       | ≤0.30       | 0.035           | Fillet weld test of T-joint |                                                                                       | Complies      |           |
| Approved Classification Grade                                                |                            | CCS (--)    | LR (--)                                     | GL (--)                                                                  | NK (--)     | ABS (--)        | BV (--)                     | DNV (--)                                                                              | KR (--)       | RINA (--) |
| 10050 NW 116TH Way, Suite 15.<br>Medley, Florida 33178.<br>Telf: 305-4205099 |                            |             |                                             | This is to certify that the welding consumable conform with the standard |             |                 |                             |                                                                                       |               |           |
|                                                                              |                            |             |                                             | Signature                                                                |             | Inspection seal |                             |  |               |           |