



THE MOST RELIABLE WELDING®

# HOFFMAN ARC CO., LTD

## QUALITY CERTIFICATE OF WELDING CONSUMABLE

|               |                        |                     |                   |                           |                    |                                       |                             |
|---------------|------------------------|---------------------|-------------------|---------------------------|--------------------|---------------------------------------|-----------------------------|
| Type<br>E6013 | Norm<br>AWS A5. 1-2012 | Brand Name<br>STARK | Part #<br>6001301 | Diameter<br>3/32" (2.4MM) | Lot No.<br>23-1417 | Manufactured Date<br>Shown on Package | Date of Issue<br>2024-05-09 |
|---------------|------------------------|---------------------|-------------------|---------------------------|--------------------|---------------------------------------|-----------------------------|

| Mechanical Properties of Deposited Metal                                     |                            |             |               | Chemical Composition of Deposited Metal (%)                              |             |                 |                             |             |                   |
|------------------------------------------------------------------------------|----------------------------|-------------|---------------|--------------------------------------------------------------------------|-------------|-----------------|-----------------------------|-------------|-------------------|
| Item                                                                         |                            | Requirement | Actual Result | Element                                                                  | Requirement | Actual Result   | Element                     | Requirement | Actual Result     |
| Tensile Test                                                                 | Yield Strength Rel(MPa)    | ≥ 330       | 378           | C                                                                        | ≤0.20       | 0.077           | Mo                          | ≤0.30       | 0.0085            |
|                                                                              | Tensile Strength Rm(MPa)   | ≥430        | 483           | Si                                                                       | ≤1.0        | 0.21            | V                           | ≤0.08       | 0.0071            |
|                                                                              | Elongation A5 (%)          | ≥17         | 27.0          | Mn                                                                       | ≤1.20       | 0.28            | --                          | --          | --                |
| Impact Test                                                                  | Impact Temp (°C)           | --          | --            | S                                                                        | --          | 0.0081          | --                          | --          | --                |
|                                                                              | Impact Absorbed Energy (J) | --          | 85 80 92      | P                                                                        | --          | 0.028           | --                          | --          | --                |
| X-Ray                                                                        |                            | --          | Complies      | Cr                                                                       | ≤0.20       | 0.057           | --                          | --          | --                |
| Hydrogen Content (ml/100g)                                                   |                            | --          | --            | Ni                                                                       | ≤0.30       | 0.017           | Fillet weld test of t-joint |             | Passed            |
| 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 |                             |             |                   |