



THE MOST RELIABLE WELDING®

# HOFFMAN ARC CO., LTD

## QUALITY CERTIFICATE OF WELDING CONSUMABLE

|                                                                              |                               |                       |                                             |                                                                          |                   |                                       |                             |                                                                                       |               |           |
|------------------------------------------------------------------------------|-------------------------------|-----------------------|---------------------------------------------|--------------------------------------------------------------------------|-------------------|---------------------------------------|-----------------------------|---------------------------------------------------------------------------------------|---------------|-----------|
| Type<br>ER70S-6                                                              | Norm<br>AWS A5.18/A5.18M:2021 | Brand Name<br>ER70S-6 | Part #<br>6107061                           | Diameter<br>1/8" (3.2MM)                                                 | Lot No.<br>236123 | Manufactured Date<br>SHOWN ON PACKAGE | Date of Issue<br>23-03-2023 |                                                                                       |               |           |
| Mechanical Properties of Deposited Metal                                     |                               |                       | Chemical Composition of Deposited Metal (%) |                                                                          |                   |                                       |                             |                                                                                       |               |           |
| Item                                                                         |                               | Requirement           | Actual Result                               | Element                                                                  | Requirement       | Actual Result                         | Element                     | Requirement                                                                           | Actual Result |           |
| Yield Strength Rel(MPa)                                                      |                               | ≥400                  | 469                                         | C                                                                        | 0.06-0.15         | 0.084                                 | Mo                          | ≤0.15                                                                                 | 0.0022        |           |
| Tensile Strength Rm(MPa)                                                     |                               | ≥480                  | 574                                         | Si                                                                       | 0.80-1.15         | 0.82                                  | Cu                          | ≤0.50                                                                                 | 0.041         |           |
| Elongation A5 (%)                                                            |                               | ≥22                   | 29.0                                        | Mn                                                                       | 1.40-1.85         | 1.48                                  | V                           | ≤0.03                                                                                 | 0.0036        |           |
| Impact Test                                                                  | Impact Temp (°C)              | -30 °C                | -30 °C                                      | S                                                                        | ≤0.035            | 0.013                                 | --                          | --                                                                                    | --            |           |
|                                                                              | Av. Absorbed Energy (J)       | ≥27                   | 143; 141; 123                               | P                                                                        | ≤0.025            | 0.0067                                | --                          | --                                                                                    | --            |           |
| X-Ray                                                                        |                               | Required              | Complies                                    | Cr                                                                       | ≤0.15             | 0.022                                 | --                          | --                                                                                    | --            |           |
| Typical moisture of the covering                                             |                               | --                    | --                                          | Ni                                                                       | ≤0.15             | 0.029                                 | --                          | --                                                                                    | --            |           |
| 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                       |                             |  |               |           |