# Technical annexure I

GTAW ERNiCrMo-3 (UNS N06625) as per ASME Sec IIC, SFA 5.14 and requirement given below.

| S.No. | Parameters | ERNiCrMo-3 (UNS N06625) requirement. |
|---|---|---|
| 1 | Mechanical Properties | Mechanical Properties:<br>• HT condition: 630 Deg.C; Soaking : 120 minutes<br>• Impact test for deposited Weld Metal @-29 Deg.C; 20 J minimum<br>• Hardness Test: 250 HV10 Max.<br>• %Fe (Mass fraction) in deposited weld metal: 5.0 Max.<br>• Weld metal Tensile Strength : 760 MPa, minimum |
| 2 | Chemical analysis of Rod. | ERNiCrMo-3 (UNS N06625) as per ASME Sec IIC, SFA 5.14. |
| 3 | Diameter | 2.4 mm / 2.5 mm |
| 4 | Shielding Gas | Argon (100%) |
| 5 | Length/form | 1000 mm (+15 mm) |
| 6 | identification | Both ends of the rod. |
| 7 | FORM & SIZE: | The rods shall be supplied in straight lengths of 1000 mm (+15,-0 mm) .The tolerance on diameter shall be as per SFA-5.02. |
| 8 | RADIOGRAPHIC SOUNDNESS & USABILITY | The rod when used as filler in GTAW with 100 % Argon shielding shall deposit weld metal that flows freely, uniformly without sputter or other defects and shall exhibit excellent wetting characteristics. The resultant weld metal shall be smooth and uniform with no visible evidence of cracks/porosity or other defects and shall meet radiographic soundness requirements. |
| 9 | PACKAGING | Rods shall be packed in water resistant shaped cartons. The cartons shall be provided with watertight lid to ensure waterproof during transit & storage. Tube cartons shall be packed in waterproof boxes with crates so as to ensure no damage during shipment and normal storage conditions. |
| 10 | Testing and certification | Manufacturer certificate shall have following test results.<br>1. Chemical analysis of Rod..<br>2. Weld metal mechanical properties [Impact test for deposited Weld Metal at -29 Deg.C , Hardness , %Fe (Mass fraction) in deposited weld metal, Weld metal Tensile Strength,RT ].<br>Note: All mechanical properties of weld metal must be reported after heat treatment (HT condition: 630 Deg.C; Soaking : 120 minutes ). |