| MATERIAL DATA SHEET                       |   |                    | MDS N01       | Rev. 4      |
|---|---|--------------------|---------------|-------------|
| TYPE OF MATERIAL: Nickel alloy Type 625   |   |                    |               |             |
| PRODUCT                                   | STANDARD  | GRADE              | ACCEPT. CLASS | SUPPL. REQ. |
| Wrought fittings                          | ASTM B 366  | UNS N06625 Grade 1 | -             | S3          |
| Pipes                                     | ASTM B 705  | UNS N06625         | Class 1       | -           |
| Forgings                                  | ASTM B 564  | UNS N06625         | -             | S5.3        |
| Plates                                    | ASTM B 443  | UNS N06625 Grade 1 | -             | -           |
| Bars                                      | ASTM B 446  | UNS N06625 Grade 1 | -             | -           |
| Pipes and tubes                           | ASTM B 444  | UNS N06625 Grade 1 | -             | -           |
| 1. SCOPE                                  | This MDS specifies the selected options in the referred standard and additional requirements which shall be added or supersede the corresponding requirements in the referred standard.   |                    |               |             |
| 2. HEAT TREATMENT                         | Annealed.   |                    |               |             |
| 3. MACHINING OF<br>VALVES FROM<br>FORGING | Valves with nominal size NPS 4 and smaller may be machined from solid forgings in compliance with the terminology of ASTM A 788 on the following conditions:  |                    |               |             |
|   | - Purchasers' acceptance shall be obtained in each case.  |                    |               |             |
|   | - Supplementary requirement S5.3 shall apply to all finished products, ref. Item 5 below.   |                    |               |             |
| 4. TEST SAMPLING                          | Samples for production testing shall realistically reflect the properties in the actual component.  |                    |               |             |
| 5. NON DESTRUCTIVE<br>TESTING             | Fittings to B 366: Supplementary requirement S3, liquid penetrant testing, shall apply to the we area at 10 % of seamless (from the same lot as defined for mechanical testing) and 100 % of welded fittings above NPS2. For welded fittings the testing shall cover the weld only. |                    |               |             |
|   | Forgings to B 564: Supplementary requirement S5.3, liquid penetrant testing, shall be performed at 10 % of forgings above NPS 2 (of same lot as defined for mechanical testing).  |                    |               |             |
| 6. SURFACE FINISH                         | White pickled. Shall be carried out after any blasting and shall include finished machined surfaces.  |                    |               |             |
| 7. REPAIR OF<br>DEFECTS                   | Weld repair of base material is not acceptable.   |                    |               |             |
| 8. MARKING                                | The component shall be marked to ensure full traceability to melt and heat treatment lot.   |                    |               |             |
| 9. CERTIFICATION                          | The material manufacturer shall have a quality system certified in accordance with ISO 9001 and the system shall have undergone a specific assessment for the relevant materials.   |                    |               |             |
|   | The material certificate shall be issued in accordance with EN 10204 Type 3.1, and include the following information:   |                    |               |             |
|   | - Heat treatment condition. (Solution annealing and annealing temperature shall be state  |                    |               |             |

NORSOK standard Page 54 of 133