MATERIAL DATA SHEET MDS R15 Rev. 4

TYPE OF MATERIAL: Austenitic Stainless Steel, Type 6Mo				
PRODUCT	***STANDARD***	***GRADE***	***ACCEPT. CLASS***	***SUPPL. REQ.***
Plates	ASTM A 240	UNS S31254 UNS N08367 UNS N08926	-	-

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. QUALIFICATION	Manufacturers and the manufacturing process used for manufacturing of product to this MDS shall be qualified in accordance with NORSOK Standard M-650.
3. MANUFACTURING PROCESS	The manufacturing of products according to this MDS shall be carried out according to the M-650 qualified manufacturing procedure.
4. STEEL MAKING	The steel melt shall be refined with AOD or equivalent.
5. HEAT TREATMENT	The plates shall be solution annealed followed by water quenching.
6. TENSILE TESTING	RP0,2 ≥ 310 MPa, RM ≥ 655 MPa, A ≥ 35 %.
7. CORROSION TESTING	Corrosion test according to ASTM G 48 Method A is required. Test temperature shall be 50 °C and the exposure time 24 hours. The test shall expose the external and internal surfaces and a cross section surface in full wall thickness. Cut edges shall be prepared according to ASTM G 48. The whole specimen shall be pickled before being weighed and tested. Pickling may be performed for 5 minutes at 60 °C in a solution of 20 % HNO3 + 5 % HF. The acceptance criteria are: - No pitting at 20 X magnification. - The weight loss shall be less than 4,0 g/m2.
8. EXTENT OF TESTING	Tensile, hardness and corrosion testing shall be carried out for each heat, nominal thickness and heat treatment load. For heat treatment in continuous furnace a heat treatment load is defined as all plates heat treated continuously in the same furnace, of the same heat and nominal thickness.
9. TEST SAMPLING	Samples for production testing shall realistically reflect the properties in the actual components.
10. SURFACE FINISH	White pickled.
11. REPAIR OF DEFECTS	Weld repair is not acceptable.
12. MARKING	The component shall be marked to ensure full traceability to melt and heat treatment lot.
13. 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 in accordance with EN 10204 Type 3.1, and shall include the following information: - Steel manufacturer; - Steel melting and refining practice; - Heat treatment condition. (Solution annealing temperature and holding time shall be stated.)