APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM00001B0
Revision No:
4

This is to certify:

That

Ratnamani Metals & Tubes Limited
SS Plant - Indrad Works
Survey No. -423, Ahmedabad - Mehsana Highway, Village - Indrad, Ta.- Kadi,
Dist. Mehsana - 382715, Gujarat,
India

is an approved manufacturer of
Steel Pipes and Fittings

in accordance with
DNV rules for classification – Ships
DNV-OS-B101 – Metallic materials
DNV class programme – DNV-CP-0252 Steel pipes and steel pipe fittings

and the following particulars:

Product	**Pipes**
Application area	**Austenitic and ferritic-austenitic steel pipes**
Steel type	**Austenitic stainless,** **Ferritic-austenitic (Duplex) stainless,** **See page 2**
Manufacturing method	**Seamless**
Max. outer diameter	**See page 2**
Max. wall thickness	**See page 2**
Heat treatment condition	**See page 2**
Additional approval conditions	**See page 2**

Manufacturer(s) approved by this certificate is/are accepted to deliver according to DNV GL, DNV and GL rules. Materials to be applied to DNV classed object shall fulfill the material requirements in the applicable DNV class rules.

Issued at **Hamburg** on **2024-04-11**

This Certificate is valid until **2027-04-04**.
DNV local unit: **Mumbai NB & CMC**

Approval Engineer: **Christian Wildhagen**

for **DNV**

This document has been digitally signed and will therefore not have handwritten signature

Stefan Röhr

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

Particulars of the approval

Austenitic and ferritic-austenitic steel pipes

Steel type /grade [3]	Manufacturing method [1]	Max. outer diameter [mm]	Max. wall thickness [mm]	Heat treatment condition [2]
Austenitic stainless	CFS	50.0	5	SHT
	HFS	273.0	30	SHT
22Cr duplex	CFS	38.10	5	SHT
25Cr duplex	CFS	38.10	5	SHT

Remarks:

1) CFS: cold finished seamless
   HFS: hot finished seamless
2) SHT: Solution Heat Treated (solution annealing)
3) Suitable pipe grades shall be selected from the following recognized standards:
   ISO 9329 Part 4, ISO 9330 Part 6, EN 10216 Part 5, EN 10217 Part 7, ASTM A269, ASTM A312, ASTM A358, ASTM A789, ASTM A790, ASTM A928 or JIS G3459

Special conditions:
Including austenitic stainless steel for approved low-temperature applications