



**CERTIFICATE OF APPROVAL OF MANUFACTURERS OF
MATERIALS**
No. **FAB032524CF**

This is to certify that the manufacture of the product identified below is in compliance with the applicable requirements of the RINA Rules for the Approval of Manufacturers of Materials.

<i>Description</i>	Seamless steel tubes and pipes in austenitic and austenitic-ferritic (duplex) stainless steel
<i>Type</i>	Grades 304, 304L, 316, 316L, 321, 321H, 347, 347H, 316Ti, UNS S31803/S32205, UNS S31500, UNS S32750
<i>Applicant</i>	TUBACEX TUBES AND PIPES PRIVATE LIMITED SURVEY NO. 131/1, UMBERGAON-SANJAN ROAD, UMBERGAON 396171 Umbergaon (Gujarat-24) INDIA
<i>Manufacturer</i>	TUBACEX TUBES AND PIPES PRIVATE LIMITED
<i>Place of manufacture</i>	SURVEY NO. 131/1, UMBERGAON-SANJAN ROAD, UMBERGAON 396171 Umbergaon (Gujarat-24) INDIA
<i>Reference standards</i>	RINA Rules for the approval of manufacturers of materials
<i>Reference documents</i>	RINA Rules

Issued in **RINA India Marine** on **September 20, 2024**. *This Certificate is valid until* **July 8, 2029**



Aswin Palliath

RINA Services S.p.A.

This certificate consists of this page and 1 enclosure

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APPROVAL CONDITIONS

Size range

Outside diameter: Min. 6 mm to Max. 219 mm

Wall Thickness: Min. 1 mm to Max. 12.70 mm

Manufacturing process :

Hollow pipes made by Hot Piercing from round bars and cold finish pipes & tubes by Cold drawing/Cold Pilgering.

Heat treatment :

Solution Annealing to minimum temperatures as below for various grades and quenching by cooling rapidly with water or Air

Grades

304, 304 L, 316, 316 L, 321, 321H, 347, 347H & 316Ti

UNS S31803/S32205, UNS S31500 & UNS S32750

Minimum Temperature

1040 deg. C

1100 deg. C

Survey conditions:

The pipes are to be in compliance in all respects with the requirements specified in Part D, Ch 2, Sec 2 of the RINA Rules and are to be tested accordingly.

Raw material to be provided by RINA approved manufacturer

General conditions for the approval

-The approval is granted on condition that the RINA Rules for the approval, manufacture, testing and certification of materials are complied with in all respects.

-RINA is to be notified of any change of materials, manufacturing process, quality control routines that may affect the validity of this certificate.

RINA India Marine 20-09-2024