

**CERTIFICATE OF APPROVAL OF MANUFACTURERS OF
MATERIALS**
No. **FAB114608MI**



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>	Welded steel pipes
<i>Type</i>	Austenitic and Duplex Stainless Steel
<i>Manufacturer</i>	ILTA INOX S.P.A.
<i>Place of manufacture</i>	STRADA STATALE 45 BIS 26010 ROBECCO D'OGGIO (CR) ITALY
<i>Reference standards</i>	RINA Rules for the approval of manufacturers of materials

Issued in **MILANO** on **November 13, 2008**. This Certificate is valid until **November 4, 2013**

RINA

Edoardo Giribaldi

This certificate consists of this page and 1 enclosure



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Austenitic and Duplex Stainless Steel

APPROVAL CONDITIONS

Material specifications:

ASTM A249 TP 316L - EN 10217 PART 7 1.4404

DUPLEX ASTM 789 - UNS 31803 - EN 10217 PART 7 1.4462

Size range:

- o Outside diameter: from 6 to 120 mm
- o Wall Thickness: from 0.75 to 4 mm

Manufacturing process: laser CO2 EQUIPMENT TLF 8000-12000 TURBO

According to Manufacturer Procedure GQ 751.03 IA Rev.6

Heat treatment: bright annealing solution (1050 - 1100 °C)

Non destructive examination of welded seam: eddy current in lieu of hydraulic test

Survey conditions: the pipes are to be in compliance in all respects with the requirements specified in Part D Ch 2 Sec2 of the RINA Rules and are to be tested accordingly.

General conditions for the approval

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

MILANO November 13, 2008

