

TYPE APPROVAL CERTIFICATE
No. MAC210203CS/1

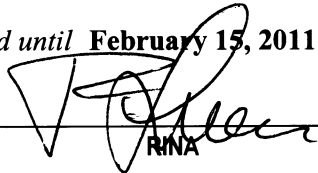


This is to certify that the product identified below is in compliance with the regulations herewith specified.

<i>Description</i>	MECHANICAL JOINTS FOR PIPES
<i>Type</i>	STRAUB FLEX1 + STRAUB FLEX1.dot
<i>Applicant</i>	STRAUB WERKE AG CH - 7323 WANGS SWITZERLAND SWITZERLAND
<i>Manufacturer</i>	STRAUB WERKE AG
<i>Place of manufacture</i>	CH - 7323 WANGS SWITZERLAND SWITZERLAND
<i>Reference standards</i>	RINA RULES
<i>Reference documents</i>	RINA TYPE APPROVAL SYSTEM

Issued in Genoa on February 16, 2006. This Certificate is valid until February 15, 2011




RINA

Francesco Sciacca

This certificate consists of this page and 1 enclosure

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STRAUB FLEX1 + STRAUB FLEX1.dot

Reference documents

Straub technical Manual 6/02 sheet E/145110 G 02/03 AT page 52
Tightness indicator (Straub . dot) pamphlet E/320002 A 01/10 AT

Materials/Components

Version	W2	W5
Casing	AISI 316Ti	AISI 316Ti
Screws	AISI 4315	AISI 316L
Bolts	AISI 12L 14 galvanized	AISI 316L
Strip insert (option)	AISI 316L PA/GF (from 127 mm HDPE)	AISI 316L PA/GF (from 127 mm. HDPE)

Sealing sleeve
EPDM Temperatures: -20°C up to + 80°C
NBR Temperatures: -20°C up to + 80°C

Technical characteristics

The maximum working pressure is according to the following tables:

Outer pipe diameter (mm)	Maximum working pressure (N/mm ²)
from 48.3 up to 168.3	1.6

Fields of application

The fields of application are shown in the Table 16 of Part C, Chapter 1, Sec 10 of RINA Rules 2006
The applications depending upon the class of piping are shown in the Table 17 of Part C, Chapter 1, Sec 10 of RINA Rules 2006

Acceptance conditions

The material used for the gaskets must be resistant to the fluid conveyed in the piping.
The acceptance of the above mentioned products on board ships and other units classed RINA is subject to the satisfactory outcome of testing as per RINA Rules

Remarks

This certificate annuls and replaces the previous one issued with No. MAC/133100/1/TO/00 dated 22.09.2000.

Genoa 16/02/2006

