



TYPE APPROVAL CERTIFICATE
No. **MAC296721CS**

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

<i>Description</i>	Pipe Couplings
<i>Type</i>	Loose flanges for 90° flared tubes
<i>Applicant</i>	I.M.M. HYDRAULICS S.P.A. VIA ITALIA 49 - 51 66041 Atessa (CH) ITALY
<i>Manufacturer</i>	I.M.M. HYDRAULICS S.P.A.
<i>Place of manufacture</i>	VIA ITALIA 49 - 51 66041 Atessa (CH) ITALY
<i>Reference standards</i>	Part C, Chapter 1, Section 10 of RINA Rules
<i>Reference documents</i>	RINA Type approval system

Issued in **Genoa** on **July 2, 2021**. *This Certificate is valid until* **July 1, 2026**

RINA Services S.p.A.
Marco Dardano

This certificate consists of this page and 1 enclosure

TYPE APPROVAL CERTIFICATE
No. **MAC296721CS**
Enclosure - Page 1 of 2
Loose flanges for 90° flared tubes

Reference documents

GS-Hydro OY drawings nos. 815100 06-3, 815100 08-3 and 816100 01-3 approved with nos. 4274108 + 4274110 on 08 March 1990.
Product Offering GS-Flange System, March 2019.

Materials

Flanges with facing dimensions according to DIN:

- RSt. 37-2 and St 52.3 DIN 17100 or equivalent;
- AISI 304 or 316 DIN 17400 for NP 10 and NP 16;
- HII DIN 17155 for NP 25 and NP 40.

Flange with facing dimensions according to ANSI class 150:

- RSt. 37-2 DIN 17100 or equivalent;
- AISI 304 or 316 DIN 17440.

Technical characteristics

Dimensions:

ND 40 up to ND 400 according to DIN.

ND 1½" up to 16" according to ANSI class 150.

Design conditions:

The maximum allowable working pressure of the flanges, for each Nominal Pressure as indicated on the a.m. approved drawings, has to be based on the employed material and the maximum working temperature of the system.

Fields of application

- Ballast and Bilge system;
- Fuel oil systems;
- Lubricating oil system;
- Sounding, overflow and venting systems;
- Cooling and heating systems;
- Compressed air systems;
- Steam systems;
- Cargo piping for oil tankers;
- Inert gas systems;
- Sanitary water systems;
- Low pressure mud systems;
- Low pressure jet water systems;
- Drilling water systems;
- Fresh (hot and cold) water systems;
- Potable water systems;
- Waste water systems.

TYPE APPROVAL CERTIFICATE
No. **MAC296721CS**
Enclosure - Page 2 of 2
Loose flanges for 90° flared tubes

Acceptance conditions

The acceptance of the a.m. products on board ship and other units classed with RINA is subject to the satisfactory outcome of testing as per RINA Rules.

The installation on board is to be made in accordance with the Manufacturer's assembly instructions.

Remarks

This Certificate cancels and replaces the previous one n° MAC161619CS/002 issued on 08/08/2019.

Genoa 02/07/2021