

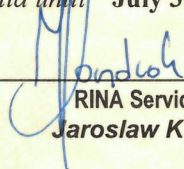


TYPE APPROVAL CERTIFICATE
No. MAC100723XP

This is to certify that the product identified below satisfies the requirements of the standard quoted under "Reference standard"

<i>Description</i>	Filter SYSTEM
<i>Type</i>	Water Treatment Units - PROTECTOR P5-70.
<i>Applicant</i>	IWTM AS PB 54 3471 Slemmestad NORWAY
<i>Manufacturer</i>	WONDERFIL SRL - WONDERFIL Srl (Headquarter)
<i>Place of manufacture</i>	WONDERFIL Srl Headquarter Via Benvenuto Cellini, 60 47521 Cesena (FC) ITALY
<i>Reference standards</i>	RINA RULES FOR THE CLASSIFICATION OF SHIPS
<i>Reference documents</i>	-

Issued in **GDAŃSK** on **August 1, 2023.** *This Certificate is valid until* **July 31, 2028**



RINA Services S.p.A.
Jarosław Kondracki

This certificate consists of this page and 1 enclosure



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Water Treatment Units - PROTECTOR P5-70.

Product description

Protector is a unique side stream filtration device that engineers the system water to a non-corrosive state. It provides corrosion protection in both new and existing Fw cooling heating and cooling systems, by removing sludge, particles, oxygen, and other corrosive products. Therefore, the system is maintained in the best possible way, by constantly filtering and engineering the water using electrochemistry and anode technology. The result is that its cleaning and engineering the water at the same time.

Product specification

Model	Max Pressure	Max temp	Max System Volume up to Liters (Hot water)	Max System Volume up to Liters (Chilled)	Connections	Digital Option
P5	10 bar	95°C	5,000	3, 000	1"	separate controller
P10	10 bar	95°C	10,000	7, 000	1"	YES
P25	10 bar	95°C	25, 000	17, 500	1"	YES
P40	10 bar	95°C	40, 000	30, 000	1"	YES
P70	10 bar	95°C	70, 000	60,000	1 1/4"-2"	YES

Application

Protector P5-70 to be mounted in a "bypass" installation over an existing circulation pump.

(Separate circulation pump can be used if needed.)

- Pressure side on pump should be to the inlet on Protector P5-70 unit.
- Suction side on pump should be to the outlet on Protector P5-70 uni

Type approval documentation

The type approval is based on the following documentation:

- Technical drawings filled by RINA with n° PLFP/2582,
- Protector Manual filled by RINA with n° PLFP/2583
- Protector pressure test certificates W230558 - W230560 filled by RINA with n° PLFP/2584.

Marking of the product

For traceability to this type approval each product shall be marked with:

- Manufacture name ore trade mark,
- Type designation
- Design pressure or pressure class.

Limitations

The Manufacturer's product certificate is to accompany each unit/delivery.

Each product to be pressure tested to at least 1.3 times the design pressure.

For retention of the type approval RINA surveyor shall perform an audit/ survey ever second year and before the expiry date of the certificate to verify that the condition for the type approval are complied with

There shall be performed an initial survey at IWTM AS premises before the expiry date od the certificate

GDAŃSK August 1, 2023

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