

# **Service letter**Rack Cooling System

Date: 14.12.2020 Revision A Page 1

Applies to all newbuildings and vessels in operation with Rack coolers installed

### BACKGROUND

# General info

As a part of Hydroniq's continuous improvement process of our product portfolio, we would like to inform the following:

The Rack cooling system from Hydroniq Coolers consist of numerous Copper-Nickel (CuNi) tubes. This CuNi material has been selected to prevent fouling. It is crucial for the CuNi material to form an oxide layer to prevent corrosion. Clean and fresh seawater will form and maintain this oxide layer.

Based on our latest experience regarding our Rack cooling system, we like to send you this Service letter with information on how to secure an adequate oxide layer during installation, start-up and after cleaning our Rack coolers with Multi Scale or other cleaning agents compatible with tubes (Cu/Ni) in Hydroniq Rack bundle.

## RECOMMENDED ACTIONS

### Ventilation

Make sure:

- The piping system is properly ventilated and without any "air pockets" in the seawater pipes.
- The Rack cases are properly ventilated by use of the Rack ventilation kit.

# Start-up procedure and running in sequence

Please note the following requirements:

First week: max 25% flow

Next 2 weeks (week 2 & 3): max 50% flow

#### Note!

This is continuous operation for one week (168 hours) and subsequent two weeks (336 hours), respectively.

This running in sequences is very important to assure the oxide layer (protective layer) on the tubes will be formed.

## Design criteria

Design pressure inside tubes: 6 Bar Design temperature: 0-95°C

Max. flow according individual project design calculation.

#### Caution

During stand still for more than 7 days, the Rack case must be drained for seawater. If this is not possible, run seawater through the Rack system at least every 7 days (approx. 10 min, 50 % flow).

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Date: 14.12.2020 Revision A Page 2

The latest version of our User manual you will find on our web site: www.hydronig.no

## CONTACT INFORMATION

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<u>Disclaimer</u> This Service letter gives details of recommended action to be taken. The continued operation of the identified equipment without the performance of the recommended actions and required test procedures is at your own risk. Hydroniq Coolers reserves the right to rely upon the content of this Service Letter and any failure to perform these actions in the event of any future incident arising as a direct or indirect result of the vessel owner, manager or crew not completing the recommended actions. Hydroniq Coolers reserves the right to issue a duty of care letter and to inform the appropriate classification society of the situation which may lead to a conditional class certificate being issued in respect of the vessel. The measures described in this Service Letter and any parts and services provided are on the discretion of Hydroniq Coolers and shall not be deemed as an extension or change of any limitations on warranty or liability outside the explicit scope of this inspection/action.

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