



● MARINE

Fresh Water Generator Case Study Car Carrier

HydroFLOW® installed on vessel's fresh water generator seawater feed. After 9 months, no slime or mud found, only light removable scale, and cleaning completed in 2 to 3 hrs without chemicals.

🔒 Client details have been anonymised at their request.

90%

Cleaning Time Reduction

No

Biofouling

0

Chemicals Used



Easy Manual Cleaning

⇒ BEFORE & AFTER

● BEFORE

- ✗ Scale required chemical soaking
- ✗ Cleaning could take up to 24 hours
- ✗ FWG cleaned shortly before trial start

● AFTER

- ✓ No slime or mud at inspection
- ✓ Light scale removed by hand
- ✓ Cleaning finished in 2 to 3 hours



BEFORE

FWG before, October 2011



AFTER

FWG after, August 2012

OVERVIEW

This case study covers a car carrier where Hydropath technology was tested on the fresh water generator. A HM120 unit was installed on the 4" seawater feed pipe in November 2011. The FWG had been opened and cleaned about two weeks before installation to establish the starting condition. When the unit was inspected in August 2012, the plates showed no slime or mud and only some internal scale, which could be removed easily by hand without chemicals.

CHALLENGE

The vessel needed to reduce fouling and simplify FWG cleaning without relying on chemical descaling.

- FWG plates were vulnerable to scale buildup
- Conventional cleaning could take up to 24 hours
- Chemical soaking was normally needed to dissolve scale
- Maintenance time affected onboard efficiency

SOLUTION

1x HM120 was installed on the 4" seawater feed pipe to the fresh water generator. The FWG was then monitored through to inspection in August 2012.

UNIT INSTALLED

1x HM120

PIPE SIZE

4" seawater feed pipe

INSTALLATION POINT

Fresh water generator seawater feed

INSTALL AND INSPECTION

Nov 2011 to Aug 2012

RESULTS

2 to 3 Hour Cleaning

FWG opening and cleaning took only 2 to 3 hours after treatment period.

No Chemical Cleaning

Scale could be removed by hand without chemicals during cleaning.

No Slime or Mud Found

Inspection found no traces of slime or mud on the FWG plates.

Scale Easily Removed

Some internal scale remained but was easily removed by hand.

Reduced Maintenance Burden

Cleaning time dropped sharply compared with conventional chemical soaking.

Successful 9 Month Trial

Performance was confirmed from installation in Nov 2011 to inspection in Aug 2012.

KEY TAKEAWAY

Summary

On this car carrier, Hydropath technology was applied to the fresh water generator using 1x HM120 on the 4 inch seawater feed pipe. After around 9 months, the FWG showed no slime or mud and only light scale that could be removed by hand. Cleaning took just 2 to 3 hours, compared with the usual process that can take up to 24 hours due to chemical soaking.

90%

CLEANING TIME REDUCTION



EASY MANUAL CLEANING

0

CHEMICALS USED

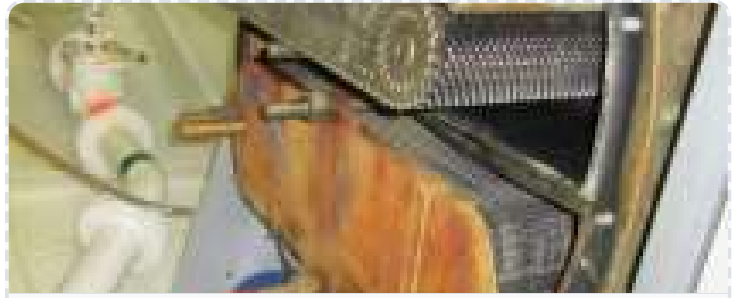


ADDITIONAL PHOTO EVIDENCE



BEFORE

Heavy scale on FWG plates before treatment



AFTER

Clean FWG plates with light removable deposits

RELATED CASE STUDY

Fresh Water Generator Marine Case Study

MV Hoegh America

A HydroFLOW® unit was installed on a vessel FWG to treat scale buildup on titanium plates. The system maintained full water production, eliminated chemical dosing, and allowed fast, damage-free cleaning with minimal manual effort.

Stable 25 MT/Day Output

No drop in water production over 6 months despite typical scaling issues

<2 Hour Cleaning Time

Cleaning reduced from 24-48 hours to under 2 hours without chemicals

Zero Chemical Usage

Chemical dosing fully stopped during the entire test period



Ready to reduce chemical dosing?

Get a free consultation for your facility.

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