MARINE

Fresh Water Generator Case Study MV Hoegh Antwerp

A HM120 was installed on the FWG system. After 18 months, the system maintained full output with no reduction in performance and inspection confirmed clean plates with no chemical use.

20.5	18 mo	0	✓
MT/day Output	No Cleaning	Chemicals Used	Clean plates

⇄ BEFORE & AFTER

BEFORE

- ✗ Scale could build up on FWG plates
- ✗ No chemical dosing system installed
- ✗ No chemical dosing system installed

AFTER

- ✓ No scale observed after 18 months
- ✓ FWG maintained full production capacity
- ✓ No chemicals or cleaning required during operation

OVERVIEW

MV Hoegh Antwerp installed a HM120 unit on the freshwater generator to control scale formation. The unit was installed in January 2014 and inspected in June 2015 after 18 months of operation. During this period, the FWG maintained full production capacity without chemical treatment or cleaning, demonstrating stable long-term performance.

⚠ CHALLENGE

The vessel required a solution to control scale in the FWG without chemical dosing while maintaining reliable operation.

- Scale can reduce FWG efficiency
- No chemical dosing system was installed onboard
- Manual cleaning increases downtime
- Maintenance costs needed to be reduced

SOLUTION

A HM120 unit was installed on the seawater inlet pipe approximately 10 metres from the FWG.

UNIT INSTALLED	INSTALLATION POINT
1x HM120	Seawater inlet pipe (approx. 10 m from FWG)

INSTALL DATE	INSPECTION DATE
4 January 2014	26 June 2015

INSTALLATION

Unit on seawater pipe

SITE

FWG system layout

SITE

FWG system layout

RESULTS

Output Maintained

FWG maintained full production at 20.5 MT/day.

No Cleaning Needed

FWG operated for 18 months without opening for cleaning.

No Chemicals Used

No chemical dosing was required during the trial period.

No scale observed

nspection showed no scale at opening.

KEY TAKEAWAY

Summary

HM120 maintained FWG performance on MV Hoegh Antwerp over an 18-month period. The system operated at full capacity without chemical dosing or cleaning, and inspection confirmed clean plates with no scale observed.

20.5	18 months	0
MT/DAY OUTPUT MAINTAINED	NO CLEANING REQUIRED	CHEMICALS USED

ADDITIONAL PHOTO EVIDENCE

AFTER

FWG plates clean at inspection after 18 months.

RELATED CASE STUDY

Fresh Water Generator Case Study

MV Hoegh America

A HydroFLOW® unit was installed on the fresh water generator aboard the MV Hoegh America to combat scale on titanium plates. The unit successfully prevented scale formation, reducing both labor and chemical costs while maintaining optimal freshwater output.

Scale Prevention
Eliminated scale buildup on FWG titanium plate heat exchangers

Reduced Labor
Less manual cleaning required, freeing crew for other duties

Lower Chemical Cost
Reduced need for chemical descaling treatments aboard the vessel