



● STEAM

Packaging Plant Steam Boiler Case Study Savar, Dhaka, Bangladesh

HydroFLOW® unit eliminated softener salt and antiscalant use, reduced blowdown frequency by 75% and left a three-tonne steam boiler free of hard scale.

75%

Less Frequent Blowdown

400 kg

Monthly Salt Use Avoided

16.5 kg

Monthly Antiscalant Use Avoided

15K BDT

Monthly Treatment Cost Saved

⇒ BEFORE & AFTER

● BEFORE

- Softener consumed 400 kg of salt monthly
- Antiscalant use reached 16.5 kg per month
- Boiler blowdown was required every hour

● AFTER

- ✓ Salt and antiscalant treatment stopped
- ✓ Blowdown interval extended to four hours
- ✓ Boiler tubes were completely clear of scale



OVERVIEW

Babylon Trims Ltd produces paper and card packaging at its Savar facility in Bangladesh. The plant wanted to improve the operation of its three-tonne steam boiler and reduce treatment costs. Boiler feedwater was treated with a softener and antiscalant, while hourly blowdown and three-day cleaning work added further operating demands.



CHALLENGE

Conventional water treatment required ongoing chemicals, frequent blowdown and lengthy boiler cleaning.

- 400 kg of softener salt used each month
- 16.5 kg of antiscalant used each month
- Hourly blowdown and three-day boiler cleaning



SOLUTION

One HydroFLOW® unit was installed on the three-tonne steam boiler. The softener and antiscalant treatment were both stopped.

UNIT INSTALLED

1× HydroFLOW® Unit

INSTALLATION POINT

Cold-water inlet after the high-pressure pump



SYSTEM

Three-tonne steam boiler



INSTALLATION

Unit on the boiler cold-water inlet



RESULTS

Boiler Tubes Clear of Scale

After 1.5 months, the tubes were cleaner than after conventional cleaning.

Blowdown Frequency Cut by 75%

The blowdown interval increased from once every hour to once every 4 hours.

400 kg Monthly Salt Use Avoided

Stopping the softener avoided 400 kg of salt use each month.

16.5 kg Antiscalant Use Avoided

Stopping chemical dosing avoided 16.5 kg of antiscalant use each month.

Three-Day Descaling Avoided

Boiler tubes were clear of hard scale, avoiding the previous 3-day descaling.

Monthly Treatment Costs Removed

Avoided salt and antiscalant use saved 15,200 BDT per month.

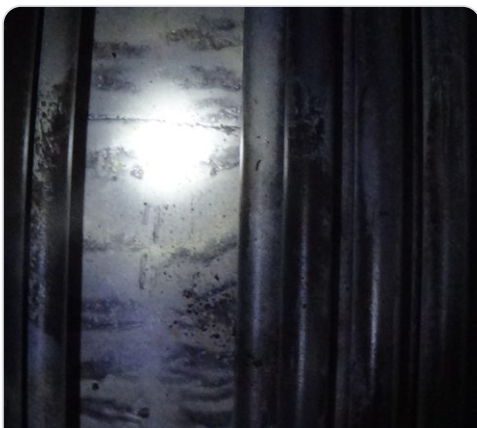
KEY TAKEAWAY

Summary

HydroFLOW® left the boiler tubes clear of hard scale, extended blowdown from hourly to every four hours, and allowed softening and antiscalant dosing to be stopped, saving 15,200 BDT per month.



ADDITIONAL PHOTO EVIDENCE



RESULTS

Boiler tubes completely clear of hard scale



INSPECTION

Soft deposits on the T-header



INSPECTION

Detached old scale caught in the T-header

HYDROPATH

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