



● COMMERCIAL HEATING/COOLING

Palace of Parliament Hot-Water Pipework Case Study Bucharest, Romania

A six-month *HydroFLOW®* i120 trial reduced biofouling by about 50% across newer and 30+ year-old pipework, while protecting new pipe from further deposits.

~50%

Biofouling Reduction



New Pipe Protected

30+ yrs

Old Pipework Also Improved



Existing Deposits Reduced



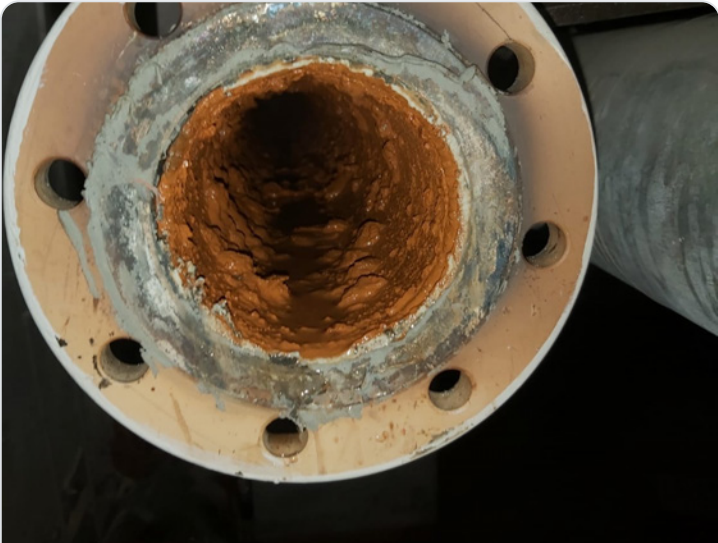
BEFORE & AFTER

● BEFORE

- Heavy deposits coated old pipework
- Biofouling covered internal surfaces
- Newer pipe also showed deposit build-up

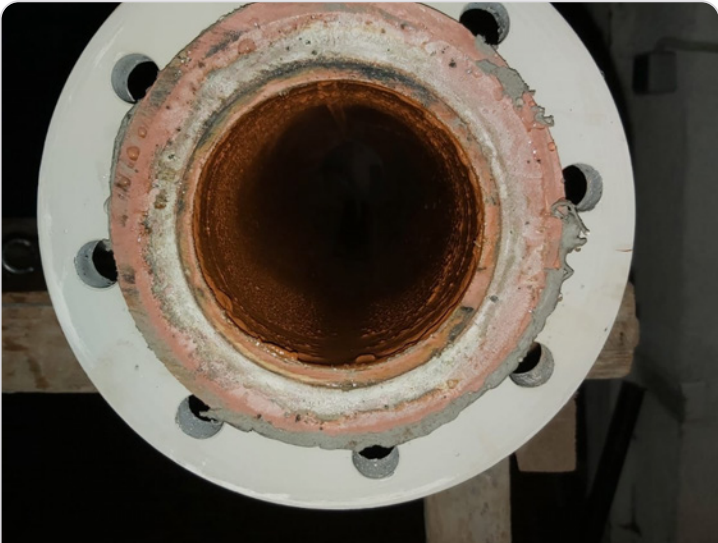
● AFTER

- ✓ About 50% biofouling reduction reported
- ✓ Existing deposits visibly reduced
- ✓ New pipe protected from further deposits



BEFORE

Old pipe after brief manual cleaning



AFTER

Same old pipe after six-month trial



OVERVIEW

The Palace of Parliament in Bucharest has nine levels above ground, nine below and more than 1,000 rooms. Its hot-water pipework had developed significant internal deposits affecting both newer and decades-old sections. A six-month trial compared a newer galvanised pipe section with adjacent steel pipework that had operated for more than 30 years.



CHALLENGE

Heavy internal deposits affected hot-water pipe condition and water quality.

- Thick biofouling deposits altered water quality
- Rust layers and flakes accumulated inside pipework
- Scale was also present inside the water-supply pipes
- Both newer and 30+ year-old pipework showed deposits



SOLUTION

One *HydroFLOW*® i120 was fitted to the 120 mm pump-free hot-water supply line. New and 30+ year-old pipe sections were visually assessed over six months.

UNIT INSTALLED

1x *HydroFLOW*® i120

PIPEWORK

120 mm steel hot-water supply pipe

COMPARISON SECTIONS

New pipe and adjacent 30+ year-old pipe

TRIAL PERIOD

6 months



INSTALLATION

HydroFLOW® i120 fitted to hot-water pipe



RESULTS

% About 50% Biofouling Reduction

Visual inspection estimated about 50% reduction across both tested pipe sections.

🛡️ New Pipe Protected

The newer pipe was protected from further biofouling deposits.

🛑 New Salt Deposits Stopped

Further calcium and magnesium salt deposition was not observed on the newer pipe.

📉 Old-Pipe Deposits Reduced

Existing deposits, including biofouling, visibly reduced inside the older pipe.

KEY TAKEAWAY**Summary**

One *HydroFLOW*® i120 treated the hot-water supply line for six months. Visual inspection found about 50% less biofouling across both tested pipe sections. The newer pipe was protected from further deposits, while decades-old pipework showed visible reduction of existing build-up.

~50%

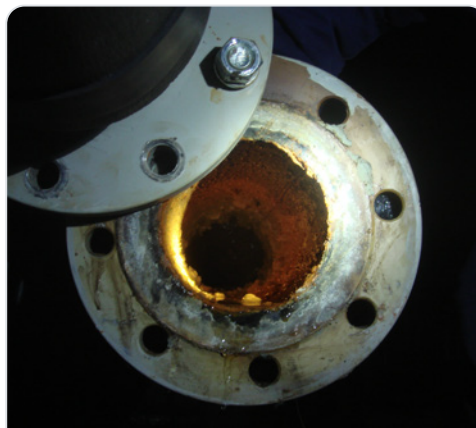
BIOFOULING REDUCTION

30+ yrs

OLD PIPEWORK IMPROVED



NEW PIPE PROTECTED

**ADDITIONAL PHOTO EVIDENCE****BEFORE***Heavy deposits in old pipe before manual cleaning***BEFORE***Deposits inside newer pipe before trial***AFTER***Newer pipe showed reduced deposits after six months***BEFORE***Old pipe after brief clean, before HydroFLOW® trial***AFTER***Same old pipe after six months with HydroFLOW®***HYDROPATH** **Ready to control biofouling in building pipework?**

Speak to HydroPath about controlling biofouling and scale in commercial water systems.

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