



● HOTEL INDUSTRY

Hotel Condenser Scale Control Case Study Chandigarh, India

HydroFLOW® units controlled scaling in condenser systems operating with extremely hard water, reducing downtime and eliminating reliance on mechanical cleaning systems.

1000ppm

Water Hardness



System Downtime

4.3°C

Condenser Approach



Maintenance Costs

⇒ BEFORE & AFTER

● BEFORE

- ✗ Weekly condenser cleaning required
- ✗ ATCS balls replaced every 2 months
- ✗ System shutdowns for maintenance

● AFTER

- ✓ Stable condenser approach maintained
- ✓ No frequent shutdowns required
- ✓ Soft scale removed from system

🏢 OVERVIEW

Taj Chandigarh, a 5-star hotel, faced scaling issues in condenser systems due to extremely hard water at around 1000 ppm, requiring frequent cleaning and causing operational disruption.

⚠️ CHALLENGE

Extremely hard water caused frequent cleaning, downtime and high maintenance costs.

- Cleaning required weekly during peak seasons
- ATCS balls hardened and needed replacement
- System shutdowns for 2–3 hours per clean
- Risk of damage and pipe cutting for retrieval

HYDROPATH

The Forefront of Sustainable Water Treatment

SOLUTION

2x HydroFLOW® Custom P units installed to control scale and reduce reliance on mechanical cleaning.

UNIT INSTALLED

2x HydroFLOW® Custom P

INSTALLATION POINT

Cold feed to condensers

WATER HARDNESS

1000 ppm

INSTALL DATE

December 2016



INSTALLATION

On condenser inlet



INSTALLATION

On condenser line



SITE

System pipework overview

RESULTS

Stable Approach Temp

Condenser approach maintained at 4.3°C after installation.

Reduced Cleaning

Frequent weekly cleaning no longer required.

Lower Maintenance

Reduced need for ball replacement and servicing.

Reduced Downtime

Eliminated repeated 2-3 hour shutdowns.

Scale Removal

Soft scale removed from condenser surfaces.

Cost Reduction

Reduced costs linked to ATCS system.

KEY TAKEAWAY Summary

HydroFLOW® Custom P units controlled scaling in condenser systems at Taj Chandigarh operating with 1000 ppm water, maintaining 4.3°C approach and reducing downtime and maintenance.

1000ppm

WATER HARDNESS

4.3°C

APPROACH TEMP



DOWNTIME

HYDROPATH

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