



● WASTE WATER

Flotation Plant Case Study Emilia Romagna, Italy

HydroFLOW® improved wastewater clarity and reduced chemical dosing in a flotation plant, achieving a 20% reduction in polyelectrolyte use and reducing turbidity.

20%

Chemical Reduction

76→43

Turbidity Reduction (NTU)

18 mo

ROI Payback Period



Consistent Output Levels

⇒ BEFORE & AFTER

● BEFORE

- ✗ High turbidity in discharge water
- ✗ High polyelectrolyte consumption
- ✗ Inconsistent output with peaks

● AFTER

- ✓ Reduced turbidity in discharge water
- ✓ 20% less chemical dosing required
- ✓ Stable and consistent output levels

OVERVIEW

Global Carni operates a flotation plant for wastewater treatment in its food production facility. The system required improved clarification of outgoing water without increasing chemical usage. Hydropath treatment was introduced to enhance flocculation performance and optimise the separation of solids within the flotation process.

CHALLENGE

The plant required better water clarity while reducing reliance on chemical dosing.

- High turbidity in discharge water
- Heavy reliance on polyelectrolyte dosing
- Inconsistent output with turbidity peaks
- Need to improve efficiency without more chemicals



SOLUTION

1x *HydroFLOW*® P60 unit, using Hydropath Technology, was installed on the input line to the flotation unit before chemical dosing to improve flocculation.

UNIT INSTALLED

1x *HydroFLOW*® P60

INSTALLATION POINT

Input line before flotation unit

APPLICATION

Wastewater flotation plant

INSTALL DATE

July 2013



RESULTS

20% Chemical Reduction

Polyelectrolyte dosage was reduced by 20% within hours of installation.

Lower Turbidity

Turbidity reduced from 76 NTU to 43 NTU in discharge water.

Fast Results

Improvements were observed within a few hours of operation.

Stable Output

Output values became consistent with no observed turbidity peaks.

18 Month Payback

Chemical savings enabled full return on investment within 18 months.

Improved Flocculation

Enhanced flocculation improved separation efficiency in the plant.

KEY TAKEAWAY

Summary

HydroFLOW® P60 unit was installed at a Global Carni flotation plant to improve wastewater clarification without the use of additional chemicals. Within hours, turbidity dropped from 76 NTU to 43 NTU and polyelectrolyte dosing was reduced by 20%. Output became stable with no peaks, and chemical savings delivered a full return on investment within 18 months.

20%

CHEMICAL REDUCTION

76→43

TURBIDITY REDUCTION

18 mo

ROI PAYBACK

HYDROPATH

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