ABI Water Treatment Program

Two Phases. One Superior Result. Aqua PAC + Aqua Floc — the ABI Advantage

Introduction

The ABI Water Treatment Program provides a complete, industry-ready solids-removal system built on two sequential phases:

Coagulation with Aqua PAC
Flocculation with Aqua Floc

This dual-phase approach mirrors the best practices used by leading global water-treatment companies and is now optimized by ABI for Canadian industries.

Phase 1 — Coagulation (Aqua PAC)

Aqua PAC destabilizes colloids, neutralizes charge, and forms microfloc. This step is essential — without proper coagulation, flocculation cannot succeed.

Coagulation Objectives

Turbidity reduction
TOC removal
Phosphorus removal
Charge neutralization
Microfloc formation

Coagulation Guidelines

ABI provides industry-specific starting dosages and AI-supported recommendations. Final optimization is determined by jar testing.

Phase 2 — Flocculation (Aqua Floc)

Aqua Floc bridges microflocs into large, strong macroflocs that settle rapidly and dewater efficiently.

Flocculation Objectives

Build large, dense flocs
Improve sludge dryness
Enhance solids capture
Reduce polymer consumption

AQUABOND
Chemistry for Tomorrow

ABI Water Treatment Program

Improve belt-press and centrifuge performance

Why the Two-Phase System Works

Coagulation handles chemistry
Flocculation handles physics
Together they create a complete solids-removal system

This dual-phase method produces stronger floc, cleaner water, and lower operating costs across all industries.

Seven Industry Treatment Guidelines

(Aqua PAC + Aqua Floc starting points)

Municipal Drinking Water
Aqua PAC: 10–40 mg/L
Aqua Floc: 0.1–0.5 mg/L

Municipal Wastewater
Aqua PAC: 40–120 mg/L
Aqua Floc: 1–5 mg/L

Industrial Wastewater
Aqua PAC: 50–150 mg/L
Aqua Floc: 2–10 mg/L

Food & Beverage
Aqua PAC: 30–80 mg/L
Aqua Floc: 1–4 mg/L

Mining & Mineral Processing
Aqua PAC: 60–200 mg/L
Aqua Floc: 5–20 mg/L

Pulp & Paper
Aqua PAC: 40–100 mg/L
Aqua Floc: 2–8 mg/L

Oil & Gas / Petrochemical
Aqua PAC: 50–150 mg/L
Aqua Floc: 3–12 mg/L

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Jar Testing Protocol (Summary)

Jar testing is the final step to confirm optimal dosage.

Procedure
Add Aqua PAC and mix rapidly (30–60 seconds).
Reduce mixing speed and allow microfloc formation (10–20 seconds).
Add Aqua Floc solution.
Mix gently to avoid polymer shear.
Observe floc formation, settling rate, and clarity.
Adjust dosage as needed.

Program Benefits

Stronger floc
Cleaner water
Lower sludge-handling costs
Reduced polymer consumption
Improved dewatering performance
Industry-specific optimization

ABI Summary Statement

ABI's Dual-Phase Treatment System combines Aqua PAC and Aqua Floc to deliver unmatched water-treatment performance. With industry-specific guidelines and AI-supported dosage recommendations, ABI gives operators a clear starting point — and jar testing ensures perfect optimization.