

**MAKE OIL BEHAVE
LIKE OIL AGAIN.**



Mercer International Inc.

BUBBLE BREAK

Bubble Break™ helps difficult wastewater streams behave more predictably before separation begins. By conditioning contaminants upstream, operators can often improve recovery, reduce chemical dependency, enhance treatment consistency, and create treatment trains that rely more on physics and less on increasing complexity.

BETTER SEPARATION STARTS UPSTREAM.

Recover More Saleable Oil

Destabilizes stubborn emulsions and promotes oil droplet coalescence for improved recovery.

Improve Separator Performance

Helps gravity separation operate within its intended performance range.

Reduce Chemical Dependency

May reduce reliance on demulsifiers, scavengers, and excessive chemical programs.

Improve Effluent Consistency

Creates more predictable downstream treatment performance.

Simplify Treatment Trains

In some applications, improved conditioning can reduce reliance on flotation or additional polishing processes.

NanoGas Conditioning for Difficult Emulsions and Challenging Wastewater Streams

Stable emulsions, surfactants, and complex wastewater chemistry can prevent oil from separating naturally.

Bubble Break™ uses NanoGas conditioning technology to destabilize emulsions and restore the conditions that allow oil-water separation to occur more effectively.

Condition the water before forcing the separation.

CHANGE THE BEHAVIOR. CHANGE THE RESULT.

1

EMULSION

Stable oil-in-water emulsion. Gravity separation struggles.



2

BUBBLE BREAK

Nanogas bubbles interact throughout the water column, destabilizing emulsions and changing contaminant behavior.



3

SEPARATION

Oil coalesces and rises. Cleaner water and better separation.

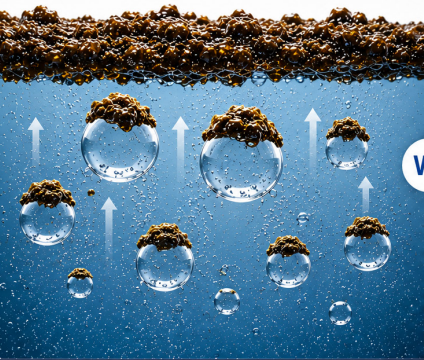


SAME IDEA. COMPLETELY DIFFERENT PHYSICS.

TRADITIONAL FLOTATION

Combine & Float

Oil and solids are bound together and carried to the surface for removal.



BUBBLE BREAK™ NANOBUBBLES

Separate & Recover

Oil rises. Solids settle. Water clarifies.



Traditional Bubbles

Move contaminants. Large bubbles attach to contaminants and carry them toward the surface for removal.

Bubble Break™ Nanobubbles

Change contaminant behavior. Ultra-fine nanobubbles (40-375 nm) remain suspended throughout the water column, interacting directly with emulsified oil and dissolved contaminants before separation occurs. By breaking emulsions at the molecular level they achieve higher oil recovery with less chemical and high-energy consumption equipment use.

**This isn't flotation done smaller.
It's conditioning done smarter.**

BUILT FOR DIFFICULT STREAMS

- Produced Water
- Refinery Wastewater
- Industrial Oily Wastewater
- Tank Bottom Recovery
- Petrochemical Operations
- Chemical Manufacturing
- Food Processing & FOG
- High-Surfactant Waste Streams
- Retrofit Treatment Systems

Best applied where emulsions, dissolved contaminants, or difficult water chemistry prevent predictable separation and recovery.

CHEMISTRY ALONE ISN'T THE SYSTEM.

Bubble Break™ supports the CATCH IT™ stage of Mercer's Integrated Treatment Ecosystem™ by conditioning difficult wastewater streams before separation and polishing.

The objective is simple:
Achieve the desired treatment outcome
with the simplest practical treatment train.



Every treatment technology performs better when contaminants behave predictably.

ANDRE ELLMAN
President

CONDITIONING FIRST. EQUIPMENT SECOND.

Improve what happens upstream
and everything downstream
works harder for you.



TEST
FOR FREE



SEND
SAMPLE

We Test for FREE and Guarantee.

Every wastewater stream behaves differently. That's why Mercer validates chemistry, conditioning behavior, separation response, and dewatering performance against your actual process stream before full deployment.

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