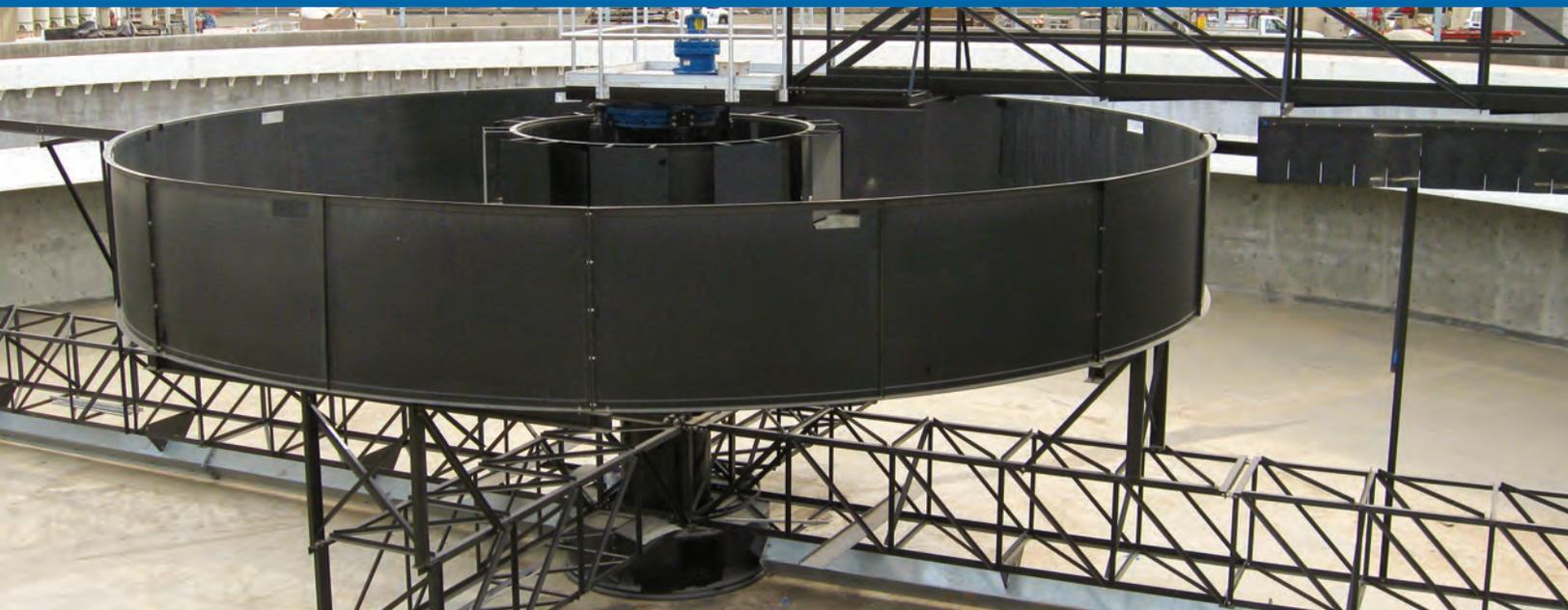


# COP™ Suction Header Clarifier

Rapid Solids Removal



**WESTECH®**

# Clarifier Optimization Package



The COP™ Suction Header merges the rapid solids removal of a suction header mechanism with the performance-enhancing components of the WesTech Clarifier Optimization Package (COP). The combination of these features provides high-quality effluent and full-floor sludge removal with every rotation.

## Why Choose a COP™ Clarifier?

When denitrification or secondary phosphorous release may occur in your secondary clarifier, you need a system that will get the solids to the floor more quickly and remove them more efficiently. Combining COP features like the Dual-Gate™ energy-dissipating inlet (EDI) and flocculating feedwell in conjunction with a suction header mechanism helps remove the solids from the system efficiently. This prevents process upsets and/or effluent violations.

The influent center column is sized and ported to both prevent settling and to systematically reduce incoming velocities. Our unique Dual-Gate EDI nearly eliminates hydraulic energy as the flow enters the feedwell. The flocculating feedwell (FFW) encourages the interaction of the solids as they exit the EDI. This leads to larger floc particles that improve settleability without inducing increased vertical velocities which could scour the sludge blanket. The suction header removes the settled solids from the tank floor with every rotation.

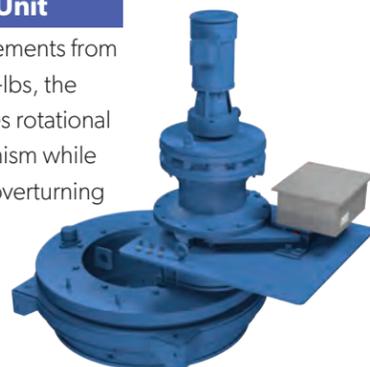
## Rapid Solids Removal Mechanism

- Removes solids quickly from clarifier tanks
- Limits denitrification in the secondary clarifier
- Helps prevent secondary phosphorous release in biological phosphorous removal plants



## Premium Drive Unit

Designed for torque requirements from 1,000 ft-lbs to 6,000,000 ft-lbs, the Premium Drive Unit provides rotational force to the clarifier mechanism while resisting torque loads and overturning moments.



## Density Current Baffle

Eliminates wall currents and prevents short-circuiting. The wall-mounted baffle is low in cost and requires no maintenance.

## Scum Removal

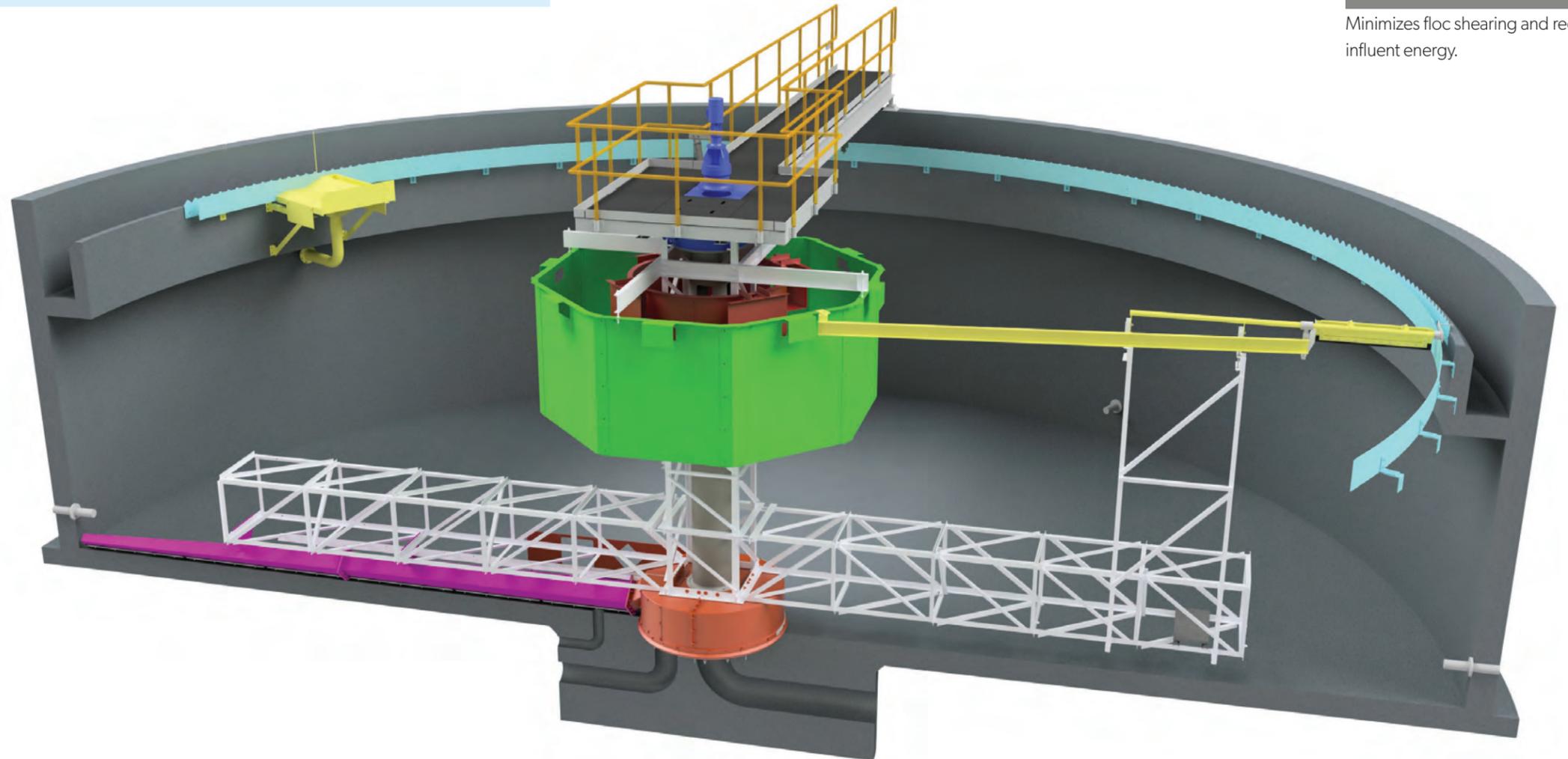
Removes scum build-up from within the feedwell and from the clarifier surface.

## Flocculating Feedwell

Promotes hydraulic flocculation in the inlet area and is designed to eliminate scouring of the sludge blanket.

## Center Column

Minimizes floc shearing and reduces influent energy.



## Sludge Manifold

Transmits hydraulic suction from return activated sludge (RAS) pumps to suction header collector(s).

## Suction Header

Rapid, hydraulically driven sludge removal via engineered orifices in either one or two tapered header duct(s).

## Energy-Dissipating Inlet (EDI)

Reduces the higher energy feed from the center column into a lower velocity flow. The flow is then gently introduced as a tangential flow into the flocculating feedwell to maximize flocculation.



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