

LONG-LASTING, TROUBLE-FREE EQUIPMENT WITH LOW MAINTENANCE

Robust, proven design.

Various options available to suit customer's special needs.

Ovivo's EWT drive units. Recognized industry wide for their quality & longevity.

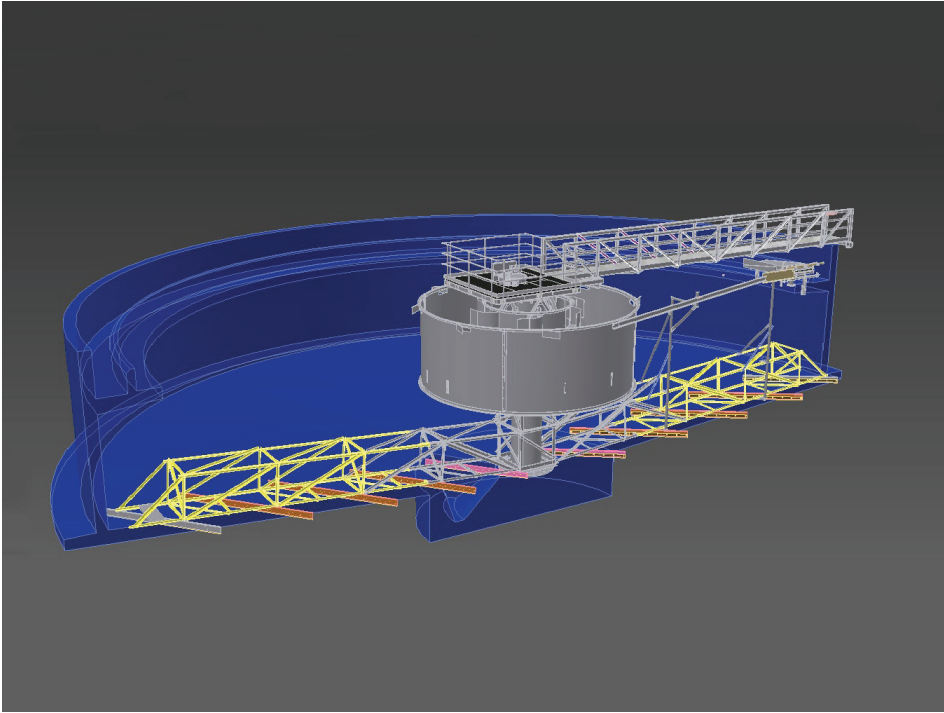
Simple, trouble-free installation



Long lasting
durable design from
a company with over
80 years of proven
experience.

PLOW RAKE BLADE CLARIFIERS (TYPE C3)

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OVIVO'S DIAGONAL RAKE BLADE CLARIFIERS INCLUDE:

- Ovivo's premier EWT cast iron drive.
- Influent center column.
- Optional: Energy dissipating inlet (EDI) of either conventional scoop design or EquaFlo 360® design.
- Flocculation feedwell.
- Structural steel drive cage.
- Rake arms with diagonal rake blades.
- Scum skimming system.

FEATURES OF THE CONVENTIONAL PLOW BLADED CLARIFIER

THE COLUMN SUPPORTED CLARIFIER

The column supported clarifier design can be used in light, medium or heavy applications with standard mechanism diameters up to 250 feet . The standard Ovivo clarifier is a central feed design where the drive unit is supported by the central influent column. The drive powers the center drive cage and rake arms. For the diagonal bladed collection system, the underflow is removed from a discharge sump near the bottom, center of the tank.

The mechanism is supplied with a half diameter access bridge and a maintenance platform decked with aluminum grating and handrail. Also included are the flocculation feedwell, energy dissipating inlet and scum collection system.

SLUDGE COLLECTION

Ovivo's Type C3 Clarifier (plow type rake blade) mechanism is a proven design used on clarification equipment since its first inception. Known for its ability to move heavier solids, this design is often used in primary clarifiers and industrial applications but is also found in secondary clarifiers.

With each pass of the rake arm, the diagonal rake blades move settled solids inward towards the center of the tank. The rake blades are fitted with adjustable 304 stainless steel squeegees for close tolerance scraping of the tank floor.

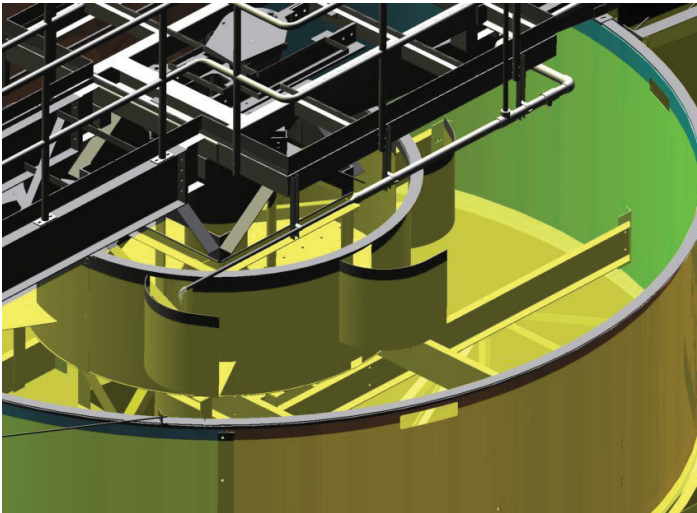


**CONVENTIONAL PLOW
TYPE RAKE BLADES**

ENERGY DISSIPATING INLET (EDI)

The C3 clarifier can be supplied with a standard tangential scoop EDI or Ovivo's EquaFlo 360® EDI for a superior uniform velocity profile which helps to prevent scouring of the sludge blanket and

flow jetting. Contact Ovivo or your local Ovivo representative for more information on this advanced clarifier technology.



TANGENTIAL DISCHARGE SCOOP EDI



EQUAFLO 360® EDI

SCUM SKIMMING

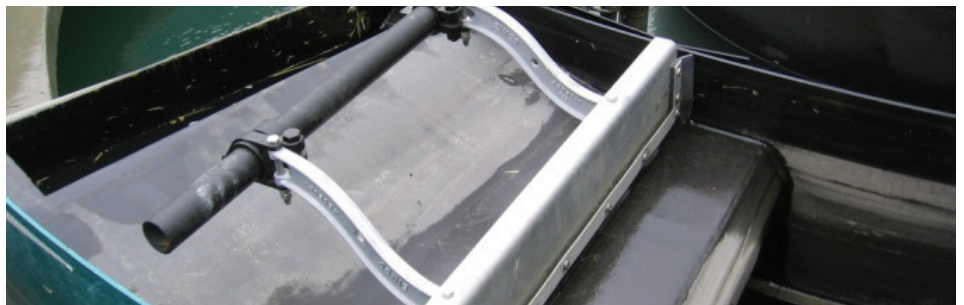
Ovivo's Type C3 mechanism is equipped with a scum skimmer system. Ovivo offers a conventional scum box with skimmer blades supported by rake arms or an enhanced skimming design with a full radius scum trough (FTS) and two cantilevered skimming blades.

AVAILABLE OPTIONS

Numerous clarifier options are available to fit your specific needs. With over 80 years experience in the sedimentation industry, Ovivo has the knowledge to help you select the right equipment for your application. Contact your local Ovivo representative for further assistance.

Some of Ovivo's more common options:

- Full across bridge
- Equaflo 360™ EDI
- Full trough skimmer system
- Density current baffles.
- Stainless steel mechanism.



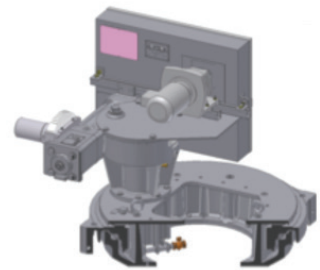
CONVENTIONAL SCUM BOX



FULL TROUGH SKIMMER (FTS) SYSTEM SYSTEM

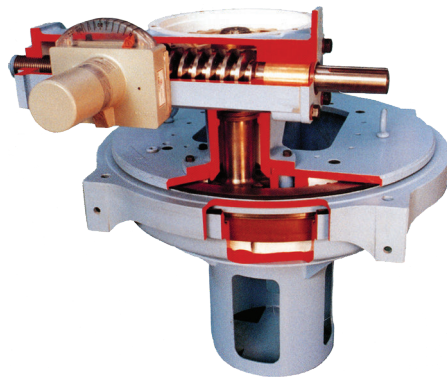
DRIVE UNITS

OVIVO PROVIDES STRONG, HIGHLY RELIABLE DRIVE MECHANISMS. THE STRENGTH OF OUR DRIVES IS DUE TO THEIR DESIGN, THE MATERIALS USED, FULL OIL BATH LUBRICATION AND THE PROPER ALIGNMENT OF THEIR COMPONENTS.



DRIVE

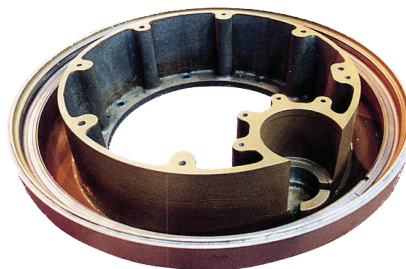
- Cast iron housing
- Oil lubrication
- Deep oil reservoir
- Strip liner bearings
- Worm gear reducer
- Single pinion
- Solid one piece main gear
- Meets latest AGMA standards



CAST IRON

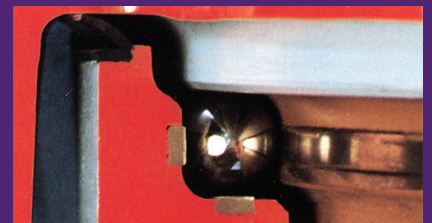
Our drives are built in cast iron per ASTM A48 Class 40A. Cast iron offers:

- Excellent corrosion protection. Cast iron has a natural resistance to corrosion and will not rust
- Resistance to heavy loads. Complex cross sections with a high degree of structural rigidity are more precisely formed than fabricated plates. Sections are easily varied to provide massive support in high load areas.
- Full inner and outer walls form a deep 'U' cross section, offering exceptional rigidity and an ample oil reservoir.
- Extra bulk under the main bearing, pinion bearing and intermediate reducer mounting surfaces ensures proper alignment under peak loads.



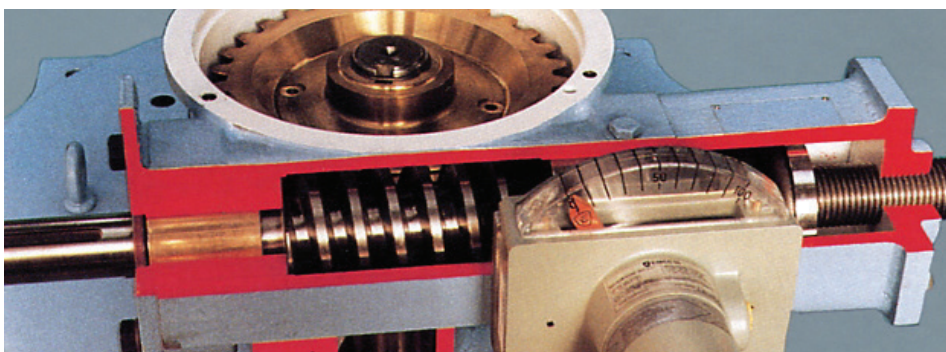
OIL LUBRICATION

Ovivo drive design includes a deep oil reservoir with full side wall. This design offers many advantages. The full sidewall avoids the possibility of oil leaking and provides good weather protection for the gear. The deep oil reservoir minimizes heat buildup, provides an area for condensate to accumulate well away from the main gear and bearings and allows complete immersion in the lubricant. The drain is located away from the main pinion gear at the lowest point to allow extraction of contaminants.



STRIP LINER BEARINGS

Ovivo drives use strip liner bearings and the largest chrome alloy bearing balls on the market. The strip liners are specially designed for wastewater treatment applications. These high quality strips are manufactured in AISI E4140, vacuum degassed and carbon deoxidized steel and offer high strength (43-46 Rc hardness).



QUALITY COMPONENTS

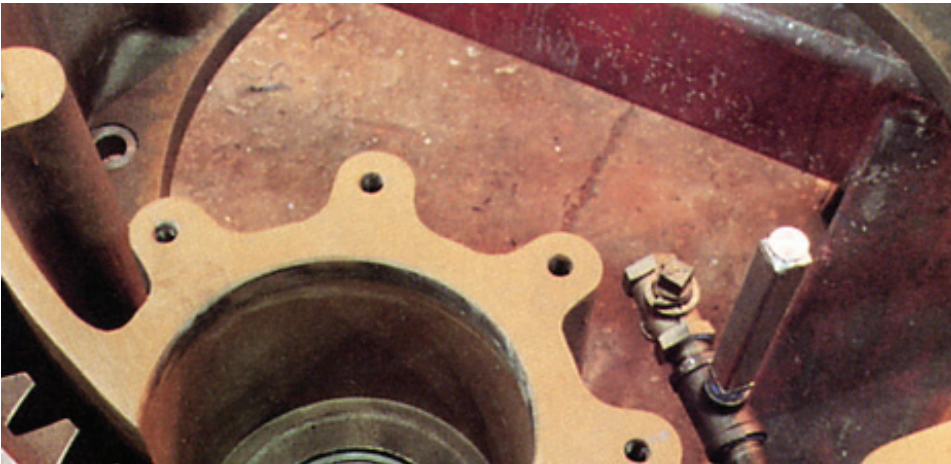
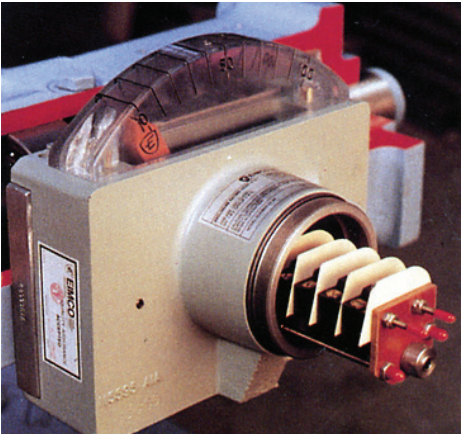
EWT drives are equipped with bearings, worms and pinion mounted on a precisely machined surface. In every drive a high quality solid pinion maintains alignment and gives better resistance to bending and deflection under loads. Mating parts are machined to precise tolerances to assure precise fit and alignment. Every drive part is fully restrained (top and bottom) with no overhung loads. Main bearings are fully restrained into base.

AGMA STANDARDS

Worm gear reducer, single solid pinion, single solid worm / worm shaft and main gear all meet the latest AGMA (American Gear Manufacturers’ Association) standards.

DRIVE CONTROL

Each drive is equipped with an overload control device activated by thrust from the worm shaft. This drive control includes a clear plastic enclosure and a weatherproof enclosure of epoxy coated aluminum construction with electro-mechanical switches.



DRIVE COMPONENTS MATERIAL

Main gear housing	Cast iron ASTM A48
Worm gear housing	Cast iron ASTM A48
Main gear	Ductile iron ASTM-A536 class 80-55-06
Worm gear	Cast alloy bronze
Worm	Alloy Steel AISI 4140/42H
Pinion	Alloy steel 4150 (26-33 Rc)
Strip liners	Steel AISI E4140
Bearing ball	Chrome alloy steel

Control enclosure	Cast aluminium
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PLOW RAKE BLADE CLARIFIERS (TYPE C3)

SERVICES

As well as a complete range of process equipment, Ovivo is your source for everything necessary to meet the total needs of a project, from inception to start-up and beyond.

FLOWSHEET CAPABILITIES

Ovivo can help you with the design of your total flowsheet, ensuring that all your equipment will work together for optimal performance and ease of operation.

TANKAGE AND ERECTION

Ovivo can take the hassle out of project management and coordinating independent contractors, who might not be familiar with all the details necessary for the installation of your thickener or clarifier. Our experienced tankage and erection crews can save you time and money by doing all the field work to deliver you a trouble-free machine.

UPGRADES AND RETROFITS

Sedimentation technology is constantly advancing. We can show you how to incorporate state-of-the-art design improvements into your existing thickener or clarifier. Many upgrades can pay for themselves in a matter of months and help increase capacity as well as improve performance.

SERVICING

Our team of skilled mechanical and process engineers can keep your equipment in top condition and help you to avoid costly, unscheduled interruptions.

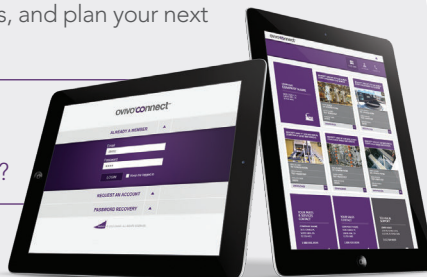
OVIVO®connectSM

Ovivo® ConnectSM portal is an innovative and intuitive application that allows our customers to use 'SmartTags' installed on our equipment (or a web URL) to access a personalized customer zone. Access your equipment documentation, find contract references, track service logs, manage spare parts, and plan your next maintenance to get the most out of your equipment.

NEED **ACCESS** TO YOUR **O&M MANUAL**?
NEED **SPARE PARTS**?
WANT THE **LATEST TIPS AND NEWS** ON YOUR ASSET?



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