



**YOUR PRETREATMENT HOUSE**

# IFDS SLUDGE THICKENER

DESIGN & MANUFACTURED BY



FLUITECO **IFDS** Designed and manufactured to thicken sludge



## WHAT IT MAKES

**IFDS** are sludge thickeners that play a vital role in separating water from solids, increasing solid concentration while reducing sludge volume. This process improves the efficiency of subsequent sludge treatment stages by minimizing material to be handled.

Key functions of iFDs include:

1. Thickening sludge - by removing excess water, making it denser.
2. Separating solids from liquids - through a rotating drum, filtering liquids via a porous surface.
3. Draining filtered water - safely for discharge or further treatment.
4. Discharging thickened sludge - for further processing, like dewatering or disposal.

These functions reduce sludge volume and streamline operations, saving on transport, storage, and disposal costs.

## ENCAPSULATED SOLUTION



## APPLICATIONS

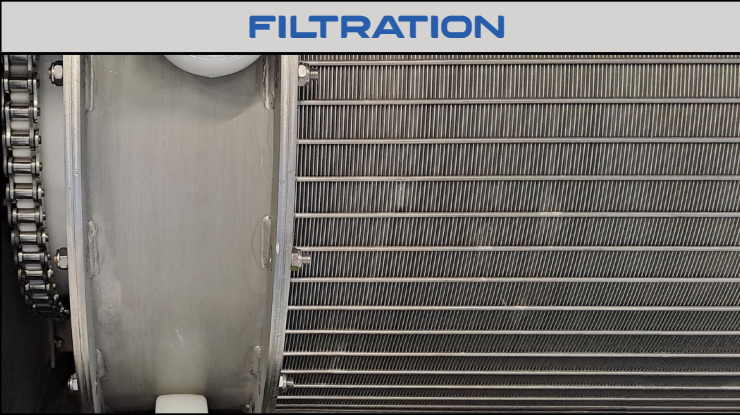
**MUNICIPAL WASTEWATER TREATMENT**  
**INDUSTRIAL PLANTS**  
**FOOD PROCESSING FACILITIES**  
**THERMAL POWER PLANTS**

## BENEFITS

**HIGH RELIABILITY**  
**LOW ENERGY CONSUMPTION**  
**INDOOR & OUTDOOR INSTALLATION**  
**SIMPLE & MINIMAL MAINTENANCE**

## WEDGE WIRE FILTRATION IN IFDS

Wedge Wire is a specialized filtration technology utilized by Fluiteco in its Internal Drum Filters (iFDs). This technology consists of a network of metal bars arranged to form wedge-shaped slots, enabling effective separation of solids from sludge.

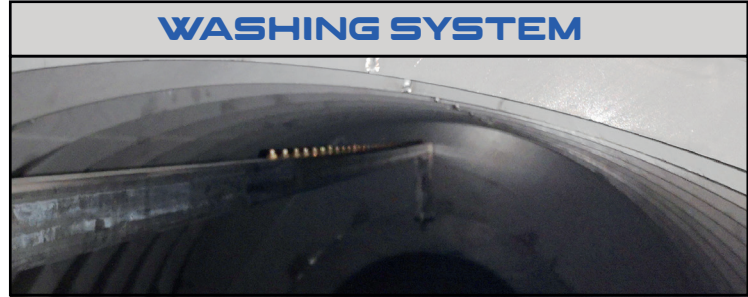


## DRUM CLEANING

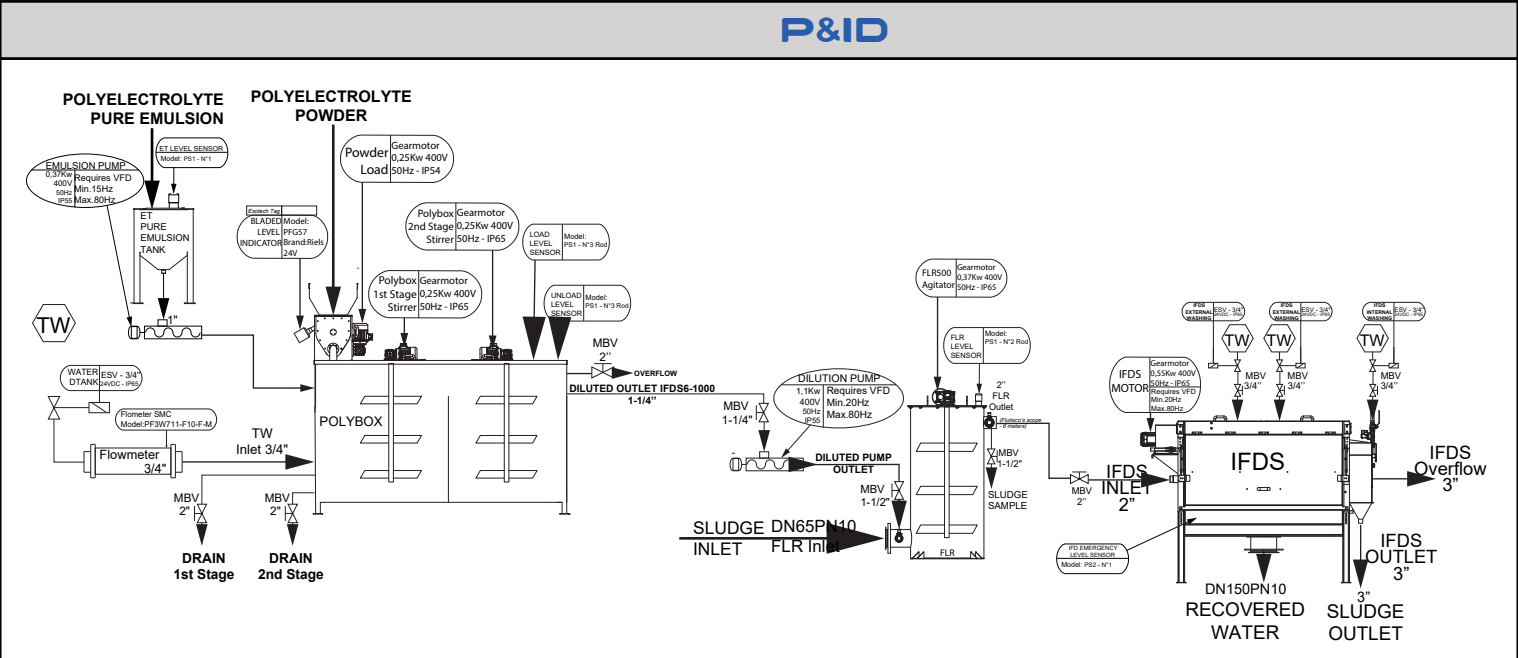
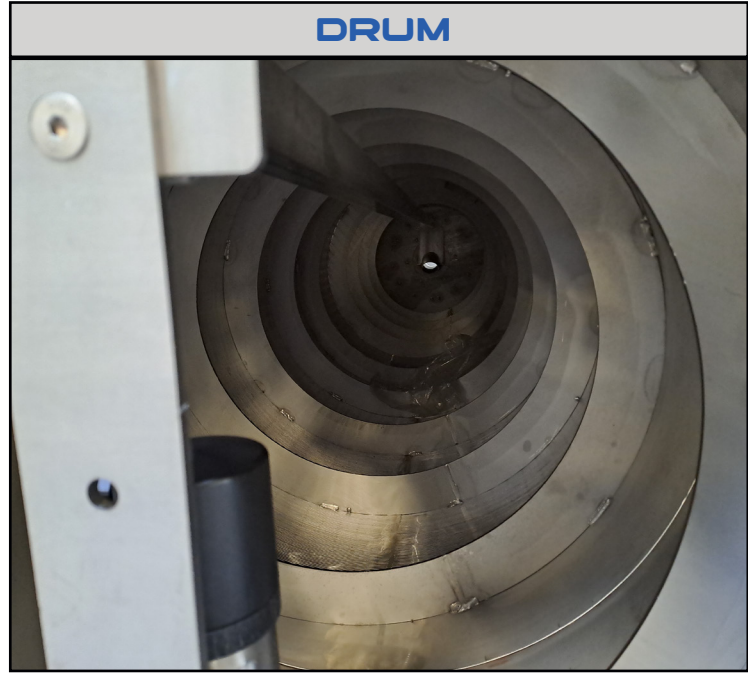
Efficient separation is achieved through the Wedge Wire design, which effectively retains solids while allowing filtered water to pass, ensuring accurate separation. High filtration precision is provided by customizable openings that capture various particle sizes, optimizing sludge thickening and enhancing treatment efficiency. Durability is guaranteed as Wedge Wire is made from corrosion-resistant materials, ensuring a long lifespan and lower maintenance costs. The robust design also reduces cleaning frequency, streamlining operations. Incorporating Wedge Wire reflects Fluiteco's commitment to innovative and sustainable sludge management.

## DRUM CLEANING

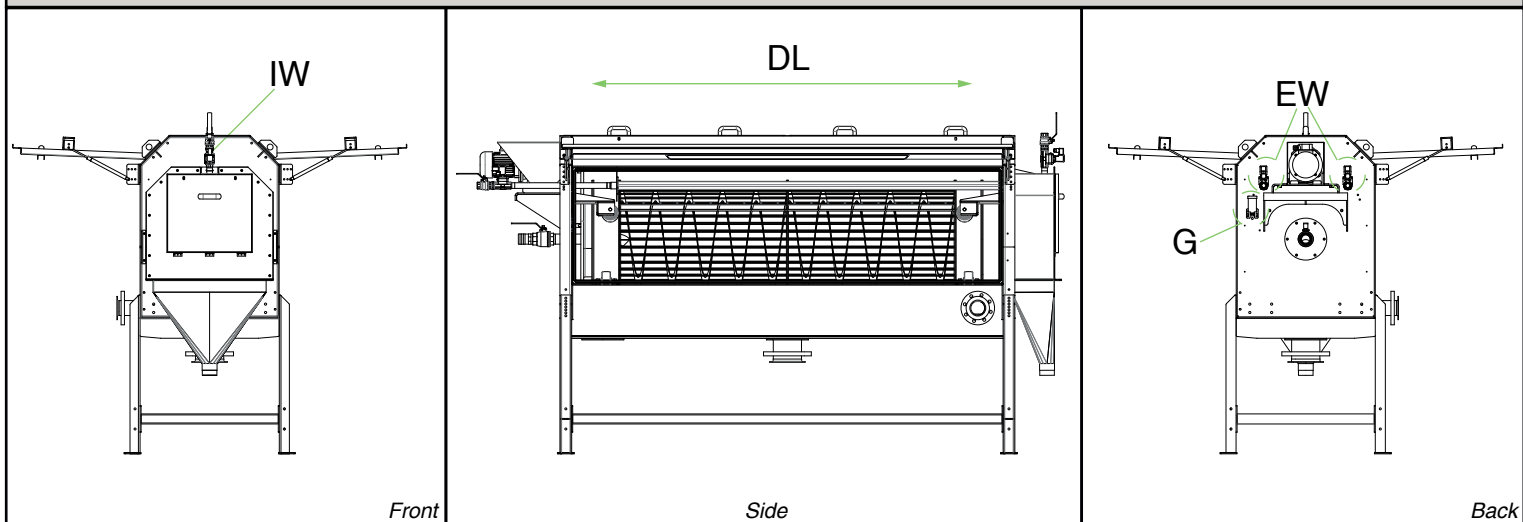
Cleaning requirements with square holes will be more than for round holes due to the extra “grab” of the hole on the material in the trommel.



**Drum With Internal Screw** – Used where the drum angle is either level or a slight slope ie <5 deg. Level drums require an internal spiral to move the material through the drum. Sloped drums rely on the material moving through the drum by being rolled or lifted (by lifter bars) further down the drum each movement (or drop).



## IFDS



## TECHNICAL DATASHEET

Model	6-2000	6-3000	12-2000	12-3000	18-4500	18-5500	20-5500	20-7000
CAPACITY								
Solids 0,5%	53m3/hr	63m3/hr	94m3/hr	125m3/hr	202m3/hr	247m3/hr	280m3/hr	305m3/hr
Solids 1%	48m3/hr	59m3/hr	87m3/hr	113m3/hr	185m3/hr	212m3/hr	264m3/hr	289m3/hr
Solids 1,5%	42m3/hr	54m3/hr	79m3/hr	101m3/hr	170m3/hr	199m3/hr	251m3/hr	278m3/hr
Solids 2%	34m3/hr	48m3/hr	70m3/hr	90m3/hr	150m3/hr	181m3/hr	239m3/hr	266m3/hr
DRUM								
ODiameter	600mm		1200mm		1800mm		2000mm	
DLength	2000mm	3000mm	2000mm	3000mm	4500mm	5500mm	5500mm	7000mm
FILTRATION								
Type	Wedge Wire							
Perforated Sheet	0.5mm							
MOTORISATIONS								
Power	1,5Kw		3Kw			4Kw		5,5Kw
DEVICES								
Grease	Always included							
WASHING SYSTEM								
EWash	External Washing system - Always included							
IWash	Internal Washing system - On Request							
Solenoid Valve	24Vdc - On Request							
CONSTRUCTION MATERIALS								
Drum	SS304   SS316   Duplex							
Carpentry	SS304   SS316   Duplex							