



## **DECANTER CENTRIFUGE SOLIDS DEWATERING**



This system ensures the removal of rag and grits from the biosolids before they are removed from site. This allows more options for disposal of the biosolids via beneficial reuse solutions without the concern of contamination within the final product and avoids the need to take the material to landfill. We have maintained a minimum 20% solids content for all material processed through our new mobile centrifuge which has ensured safe and efficient transport solutions when disposing from site.

NPE's proven methods for emptying anerobic digesters ensures the material is mixed and uplifted from the tanks efficiently and safely without damage to the digester, allowing the digesters to be cleaned and returned to service in the shortest amount of time possible. This drastically reduces the operating pressure on the plant by avoiding lengthy downtime for our clients so that their digesters are returned to service quickly and back to full operating capacity.

# TECHNICAL SPECIFICATIONS

12,200L x 2,440W x Dimensions 2,590mmH Weight 20,000kg PUMPS Solids Feed Progressive Cavity Model RLGB671 Motor 15kW (1465RPM) Ratio 3.27 - 1 Inlet Hard Piping Outlet 100NB Male Camlock Polymer Dosing Progressive Cavity Model RLCB571 Motor 2.2kW (1450RPM) Inlet 50NB Female Camlock Outlet 100NB Male Camlock Water Pressure Multi-Stage Centrifugal Type CMB 10 47 I-C-A-A-P-C Model B-98117635P12338 Motor 240V 15 Amp Output 10m3 Inlet 50NB Female Camlock Outlet Hard Piping Macerator Model 10000-08B150 Motor 2.2kW Inlet 150NB Female Camlock Outlet Hard Piping









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LUBRICATION				
Bowl Bearings	Automatic Grease Lubrication with 2kg supply bin			
Scroll Bearings	Packed on assembly no lubrication required			
Simp Drive	Oil filled with reservoir and level sensor			
Screw Conveyors	Grease filled gland seal			

# SOLIDS HOUSING

Housing PU-Liner

#### FEED RATE

Max m3/hr @ 0.5% Solids	120m3 (33.3L/Se)
Maximum Feed Solids	4-6%
Maximum Solids Throughout	1-2D/T
Product Solid Content	16-22%

Note: Feed rate & solid content is highly dependent on multiple feed characteristics. Eg.

- High Feed solids lower feed rate.
- Polymer dose strength
- Cake Moisture restraints, the lower the moisture content the slower the feed rate.
- Feed characteristics (Digester, aerobic, alum sludge etc)

### **INSTRUMENTS**

Bowl RPM Indication	Proximity Switch
Scroll RPM Indication	Proximity Switch
Vibration Indicator	Motion Sensor
Simp Drive Level Sensor	Float Switch
Grease Lubrication	Level Sensor
Bearing Temperature Bowl Drive End	Temperature Sensor
	Temperature Sensor Temperature Sensor

#### BOWL

Speed	2920RPM (Variable)
Motor	110kW
Volume	650L
Max Acceleration Factor	3300xG
Wear Protection	Longitudinal Stainless Steel
Solids Dishcharge	Hard Metal Wear Bushing
Feed Ports	Hard Metal Wear Bushing
Outside	Tungsten Carbide Strips

SCROLL		
Speed	0.5 - 10RPM	
Motor	30kW	
Drive	Co-rating, multi-stage planetary gearbox (Simp-Drive)	
Wear Protection	Tungsten Carbide Spray to leading edge	

#### **SCREW CONVEYORS**

Inclined Conveyor	5.5kW Variable Speed
Horizontal Conveyor	1.5kW Variable Speed
Wear Liners	HDPE Liners

