



**Robust Pumping Solutions for
Biogas Industry**



HELPING BIOGAS INDUSTRY WITH ROBUST PUMPING SOLUTION

Biogas is the ideal energy solution for today's world. It provides clean fuel to generate the electricity & thus meets the power demand and reduces the load on the local power grid. It produces organic manure for farming as a by-product. It also significantly reduces water and land waste.

Roto Pumps has developed a new range of Progressive Cavity Pumps specially designed to meet the growing needs of the Biogas Industry. In biogas production, the pumping application requires efficient transfer of varied highly viscous & solid laden biowaste media.

- 1** 2,500+ Successful Installations in UK, Europe & Australia
- 2** ROTO KWIK, Quick Maintenance in Place Pumps
- 3** Robust & Sturdy Design
- 4** Preferred Choice of OEM & End user

- › Digestate
- › Grass & Corn silage
- › Food waste
- › Whole plant silage
- › Liquid & Solid manure
- › Municipal waste (Biological portion)
- › Waste fodder
- › Fish & Slaughterhouse waste
- › Faecal sludge
- › Cereal shreds
- › Pomace
- › Sugar beet



Conveyed Media

ROTO PUMPS IN BIOGAS INDUSTRY



DIGESTATE TRANSFER PUMP

Flow – 75 m³/hr, Pressure – 10 bar



LIQUID MANURE PUMP

Flow – 130 m³/hr, Pressure – 4.5 bar



BIOMASS RECIRCULATION PUMP

Flow – 80 m³/hr, Pressure – 4 bar



BIOMASS TRANSFER PUMP

Flow – 40 m³/hr, Pressure – 3 bar

BIOMASS PUMP RANGE



Roto Biomass pump developed on 'Maintenance in place' platform is used for recirculation of fermentation tank slurry and feeding to digestate storage tanks. This pump range is also available in vertical configuration and it is used in open lagoons to transfer organic manure.



Model	582	602	621	632/641	652	661/662	681	692	701
Capacity m ³ /hr at 100 Rpm	4	6	11	17	23	24	36	44	47

Higher capacity & higher pressure pumps are also available on request. Different orientation & multiple opening pump housing options are also available.

Distinctive Features & Benefits

- › Quick Maintenance in Place Pump
- › Rotor, Stator & Joint parts can be easily replaced without dismantling suction and delivery pipelines
- › Heavy-duty Bearing Housing Directly Coupled with geared motor
- › Specially Designed Double Cartridge Mechanical Seal
- › Heavy duty Cardan Universal Joint with Reinforced Boot Seal and Protector Rings
- › Antiblock Arrangement at the Entry of Stator

Applications

- › Biomix Feed
- › Press Separator
- › Pasteurized Biomass
- › Condensed Substrate
- › Transfer of Digestate to Biomix Unit & Open Lagoon or Storage Tank



Antiblock (Sweeper) Arrangement



6 Opening Pump Housing



BIOMIX PUMP RANGE

Roto Biomix pumps have been integrated into the process of renewable energy generation and are constantly upgraded and optimized to meet the customer's demand. These pumps are used to mix and transfer solid bio waste and digestate liquid into the fermentation tank. Customized hopper available in round & rectangular shape up to 3 meter length.

Model	701	720	730	740
Capacity in m ³ /hr at Zero to 1 bar at 100 Rpm.	47	66	98	133

Higher capacity & higher pressure pumps are also available on request.



Large Auger - Feed Screw

Designed for crushing & mixing of dry to wet media and feeding of substrate. Option available in plasma nitrided coating.



Rectangular Hopper

Hopper option available with additional large inlet flange for substrate mixing.



Round Hopper

Designed to handle a high degree of dry solid content.

Inspection Cover

For easy access, quick inspection and maintenance.

Stone Catcher

Designed to trap large solid particles inside the hopper.

Heavy Duty Bearing Housing

Capable of taking high axial thrust and can be directly coupled with geared motor.

Inbuilt Feed Flange

Left handed & right handed port included as standard for feeding of digestate to ensure optimum homogenization.

Cardan Universal Joint

Universal joint with sleeve protector & flight wing to avoid any solid build up.

Smarter Shaft Sealing

Cartridge dual mechanical seal with oil lubrication plan for longer life.



ROTO PUMPS LTD.

Regd. Off. & Global Headquarters

13, Roto House, Noida Special Economic Zone,
Noida-201305, UP, India
Tel: +91 120 2567902-5, Fax: +91 120 2567911
Email: contact@rotopumps.com
CIN: L28991UP1975PLC004152

Overseas Establishments

Roto Pumps Ltd. United Kingdom
Email: sales@rotopumps.co.uk
Web : www.rotopumps.co.uk

Roto Pumps Ltd. Australia
Email: sales@rotopumps.com.au
Web : www.rotopumps.com.au

Roto Pumps North America Inc.
Email : sales@rotopumpsna.com
Web : www.rotopumpsna.com

Roto Pumps Africa (Pty.) Ltd.
Email : sales@rotopumps.co.za
Web : www.rotopumps.co.za

Roto Pumpen GmbH
Email : sales.rpg@rotopumps.com
Web : www.rotopumps.com

Roto Pumps (Malaysia) Sdn. Bhd.
Email : salesmy@rotopumps.com
Web : www.rotopumps.com.my

www.rotopumps.com