

Nova Rotors Progressive Cavity Pumps

The ideal pumping solution for Anaerobic Digestion plants

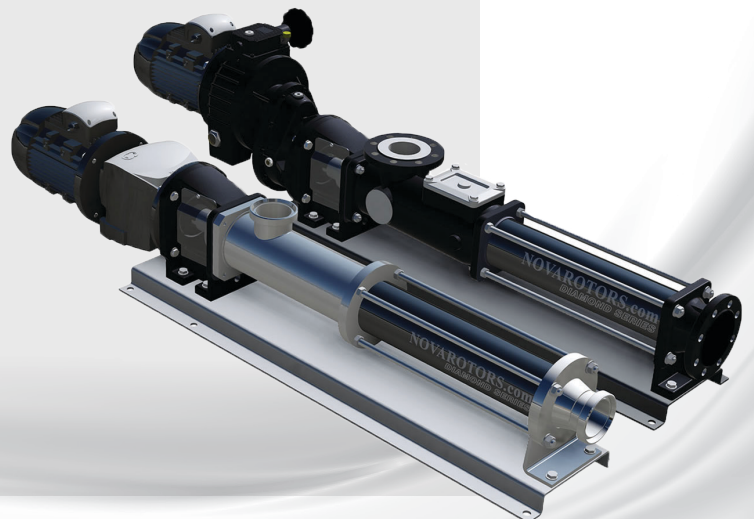
With waste reduction, the environment and energy consumption becoming increasingly prevalent issues, Anaerobic Digestion (AD) as a source of energy is a growing market. AD refers to the process of biomass such as manure, food waste and crops being broken down by micro-organisms in the absence of air. Once added to the digester, micro-organisms begin digesting the biomass, which in turn releases a biogas that can be used to generate energy.

Due to the abrasive nature of the medium being pumped, the viscosity of the slurries and the high chance of solids, the biogas industry demands reliable and durable pumps with good solid handling capabilities – the perfect application for the Nova Rotors' progressive cavity pump design.



Why choose Nova Rotors for Anaerobic Digestion ?

- ✓ 10 years' experience in the biogas market since the industry first developed
- ✓ Highest solid passage in the market to cope with the harshest of biomass waste
- ✓ Large range of performance levels up to 420m³h & 48 bar
- ✓ Great suction capacity & suitable for pumping over large distances
- ✓ Patented pin joint ensuring 8000 operating hours before maintenance
- ✓ High efficiency – 20% less power consumption with long pitch rotor
- ✓ Can be manufactured to fit existing pipework for replacement pumps
- ✓ Accessories to limit costly issues including dry run & temperature sensors, over pressure valves, auger feed & dry shaft protection



Pumping solutions within an AD plant

1. DN –

Used for pumping liquid livestock manure to the collection tanks.

2. DN –

Used for injecting liquid manure from the collection tank to the DHS-T pump to make the fluid pumpable.

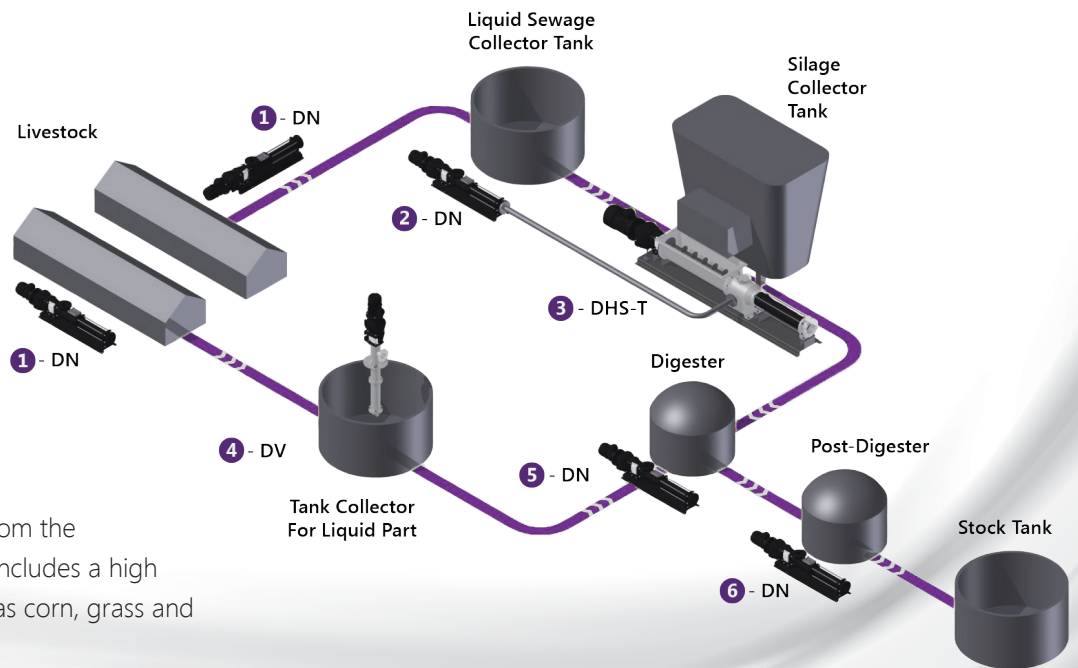
3. DHS-T –

Used for feeding the digester from the biomass collection tank, which includes a high percentage of dry matter such as corn, grass and vegetable waste.

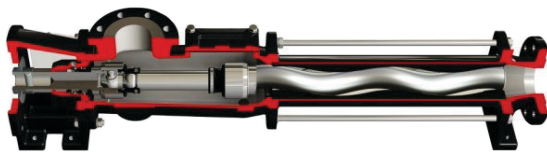
4. DV – Used for pumping zotechnical waste from the collection tank to the digester.

5. DN – Used for pumping the partially fermented biomass from the main digester to the post-digester.

6. DN – Used for pumping digestate from the post-digester to the final storage.

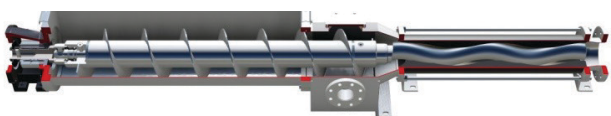


DN Series



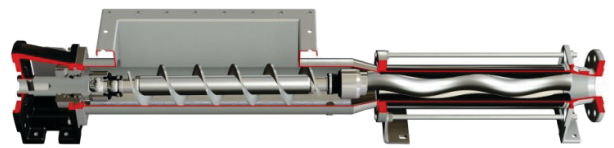
This is an ideal pumping solution for most heavy duty, industrial applications where mediums including solids or large debris need to be handled. It is available with UNI, DIN and ANSI flanged and GAS BSP threaded connections.

DHS-T Series



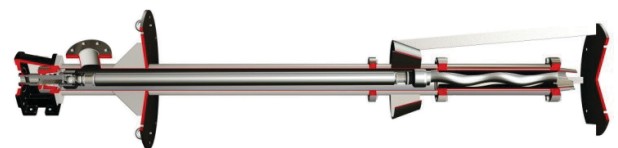
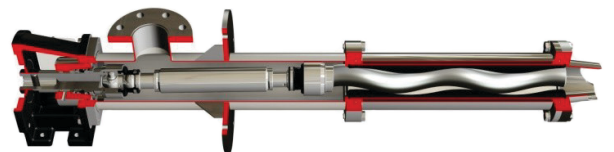
This model features a rectangular hopper, joint protection sleeves and enlarged auger feed screw to move the product to the hydraulic part. It is designed to pump silage in the biogas sector, and has a separate inlet connection for the injection of liquids and a rectangular bottom for collecting any stones that may enter. It also benefits from a large inspection hatch.

DH Series



This is a standard model equipped with a hopper and auger feed screw to move the product to the hydraulic part. It is suitable for pumping materials that don't flow with ease and are prone to bridging.

DV Series



This is a vertical model designed for pumping from a tank or well and is usually immersed directly into the product being pumped. There are two versions available; a short option and a long version with removable inlet and downhole plate.