

The Unique Concept

The knife system in the Landia chopper pump is isolated, clearly separated from the pump casing and the impeller. This unique design ensures that the pump and the subsequent pipe do not become blocked, and that the pump casing and the impeller are not worn or damaged in connection with the chopping function of the pump.

Knife System:

Locating the hardened steel knife system in front of the pump casing and the impeller ensures that:

- The pump inlet remains clear of debris
- The dry matter particles are chopped before the medium enters the pump
- The impeller and the pump casing are protected against clogging
- Knives are easily replaced and require no adjustments

Open Impeller:

The pump casing and the impeller form a unit which ensures that no dry matter particles are "caught" in the pump. The design and size of the impeller are carefully selected based on the properties of the medium and the requirements of each specific pump application.

Back Plate and Front Plate Guide Traces:

The back plate and front plate are equipped with guide traces, ensuring that the dry matter particles are transported to the outlet of the pump, thus protecting the sealing system.

Landia Chopper Pumps

- The Answer to All Your Jobs

Landia's Heavy-Duty Chopper Pumps are Recommended for a Wide Range of Applications

Thousands of Landia chopper pumps are in operation worldwide, pumping various types of severe mediums where traditional pumps have experienced continuous problems, such as clogging, pump failure, etc.

- Domestic wastewater containing food, paper, rags, fat, etc.
- Abattoir wastewater containing bones, intestines, feathers, hair, fat, etc.
- Waste oil from industrial manufacturing facilities, repair shops, etc.
- Fish and fish by-products
- Paper pulp and paper waste
- Sludge, organic waste, slurry and straw at biogas plants
- Cooling water containing hard solids

Many other tasks can also be tackled using Landia's unique approach to chopping and pumping.





Septic Sludge

A Landia submersible chopper pump, installed at a municipal wastewater plant, pumps septic and primary sludge from the reception pit to the digester. The hardened steel knife system macerates the coarse solid particles prior to pumping. The reduced particle size results in improved gas production.







Fish Silage

By-products from salmon production, as well as whole rejected fish, are macerated and pumped further into the fish silage process by a Landia stainless steel long-shaft chopper pump. The chopper pump is equipped with a shredder propeller and is mounted on a stainless steel tank. The fish by-products are poured into the tank, where the mixing action of the pump macerates and mixes the tank contents prior to pumping the medium.





Poultry Slaughterhouse

Slaughterhouse wastewater containing blood, chicken bones, feathers and fat is pumped to a storage tank by a Landia long-shaft chopper pump. The pump was installed after the customer had tried several other types of pumps that all experienced clogging problems. Operation time: approximately 12 hours per day.





Paper Mills

A Landia dry-installed pump is in operation at a paper factory that processes recycled paper. The pump is installed immediately after the macerator and pumps the paper pulp to the paper machine. The entire manufacturing process is dependent on the pump operating 24 hours per day.





Correctional Facilities

The Landia long-shaft chopper pump, installed in wastewater tanks at prisons, youth centers, jails, courthouses, etc., macerates clothing, food, paper products, etc. and pumps the medium to the main sewer line. The tanks and pumps do not become clogged and thus, the correctional facilities are able to operate without interruption.





Biogas Plant

Straw, domestic waste, abattoir waste and sludge from wastewater plants are mixed in a reception tank by Landia mixers. The comminution and the pumping to the biogas reactor take place by means of a Landia submersible pump. The comminution is important for obtaining the optimum biogas production.





Storm Water Tanks

The Landia AirJet submersible chopper pump cleans the bottom of a storm water tank. The drainage system leads a mix of storm water and wastewater to the plant. The wastewater contains dry matter particles which are comminuted by the chopper pump in order to avoid clogging of the air ejector.

A Complete Pump Product Line

Landia offers a complete product line of chopper pumps. Many styles and models are available, manufactured of cast iron or stainless steel, and can be customized to fit your specific pump application.

The numerous outstanding advantages of the pumps ensure the optimum function.

Landia equips the pumps with:

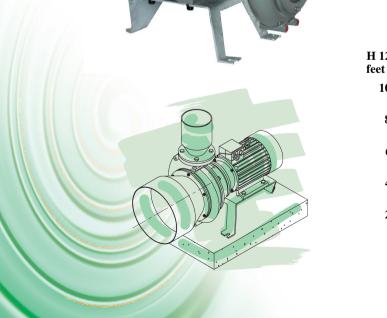
- Specially designed impellers for difficult mediums
- Motor sizes from 1.8 to 48.0 hp; also available in explosion-proof design
- Single or extended knife systems
- Augers/shredding propellers adjusted to the properties of the medium
- Pump casings and impellers manufactured of surface-coated cast iron or of stainless steel
- Mounting equipment for existing installations
- Extensive line of equipment for e.g. combined pumping and mixing
- 2" to 6" discharge

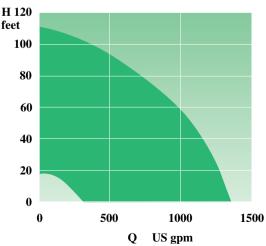


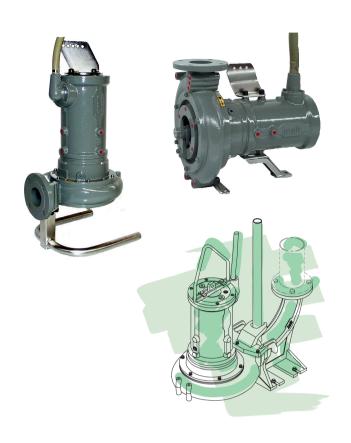
Dry-installed end suction pump

Model: MPTK-I

The pump can be mounted in new or existing installations; positioned horizontally or vertically.



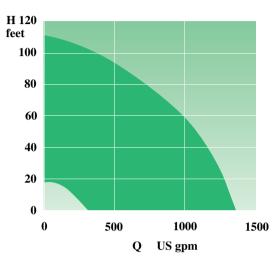


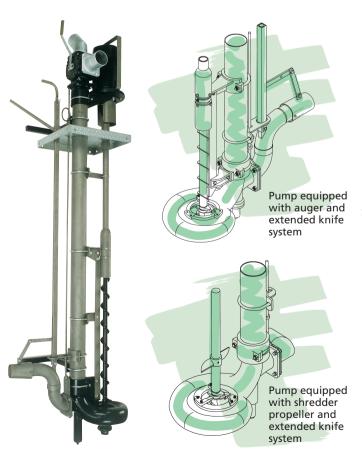


Submersible pump

Model: DG-I

The complete line of submersible pumps include vertically and horizontally installed pumps. Landia offers adapters for retrofit of existing pump installations.





Long-shaft pump for wet well installation

Model: MPG-I

This extremely sturdy pump with liquid-lubricated bearings is almost maintenance-free, and is especially suited for combined pumping and efficient mixing. Available in 4", 5" and 6" discharge sizes.

