



# Chopping and pumping of difficult mediums

LANDIA CHOPPER PUMPS  
NEVER GIVE UP

**Landia**<sup>®</sup>





Back plate and front plate with guide traces

Open impeller

Rotating and fixed knives:

# The Unique Concept

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

## Rotating and fixed knives:

The knife system in front of the pump casing and the impeller ensures that

- The pump inlet is kept free
- The dry matter particles are chopped before the medium enters the pump
- The impeller and the pump casing are protected against impurities.

## Open impeller:

The pump casing and the impeller form a unit which ensures that no dry matter particles are "caught" in the pump. The shape and the size of the impeller are adjusted to the pumping situation and to the nature of the medium.

## Back plate and front plate with guide traces:

ensure that the dry matter particles are transported to the outlet of the pump, and thus protect the sealing system in the best way.

## Landia Pumps with knife system - the answer to all your jobs

# Landia's efficient Chopper Pumps - recommended by Satisfied Customers

Thousands of Landia chopper pumps operate at home and abroad. They pump many types of difficult mediums where traditional pumps have given continuous problems, i.e. blocking:

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

Many other tasks can also be carried out by means of Landia's unique concept for chopping and pumping.



## Septic Sludge

Reception pit for septic sludge at a municipal wastewater plant. Septic and primary sludge are pumped to the digester by a Landia submersible pump with extended knife system. Harsh solid parts are comminuted before the pumping takes place. The comminution results in a faster and larger gas production.



## Fish Silage

Waste from salmon production as well as whole rejected fish are comminuted and pumped further into the fish silage process. A stainless steel long shaft Landia pump with shredder propeller and knife system is mounted in a stainless steel tank. The fish waste is poured into the tank, and then the mixing system of the pump comminutes and mixes the tank content before the waste is pumped further on.





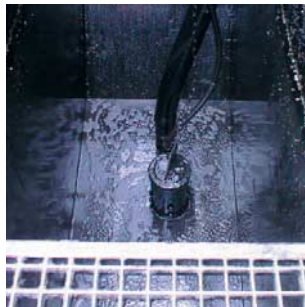
### **Poultry Slaughterhouse**

Slaughterhouse wastewater containing blood, chicken bones, feathers and fat is pumped to a storage tank by means of a long shaft Landia pump. The pump was installed after the customer has tried several other pump types with clogging problems. Operation time: approx. 12 hours per day.



### **Paper Factory**

A dry installed Landia pump is installed at a paper factory which only applies recycled paper. The pump is installed right after the macerator and pumps the paper pulp to the paper machine. The complete manufacturing process is dependent on the operation of the pump, 24 hours a day.



### **Waste Oil**

Reception of waste oil at a wastewater treatment plant. Waste oil from e.g. repair shops is delivered to the municipal wastewater plant. The oil is filled into a reception tank. It contains numerous harsh solid parts, e.g. rags, cotton waste and paper. A Landia submersible pump with knife system pumps the oil from the reception tank to a storage tank.



### **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.



### **Stormwater Tanks**

Cleaning of the bottom in stormwater tanks. The Air Jet system with a Landia submersible pump cleans the bottom of a stormwater tank. The drainage system leads a mix of stormwater and wastewater to the plant. The wastewater contains dry matter parts which must be comminuted in order to avoid clogging of the ejector.

# A Complete Pumping Program

The Landia chopper pumps are available in many types and models in cast iron or stainless Steel and can be tailor-made for your pumping system.

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

We supply the pumps with:

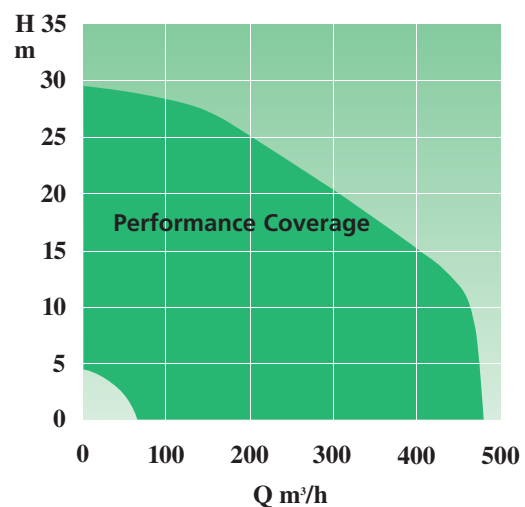
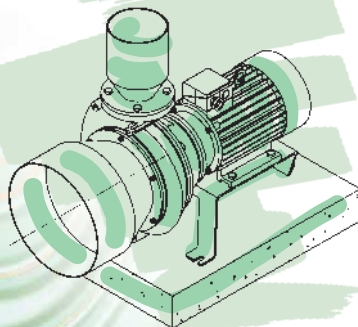
- Specially designed impellers for difficult mediums
- Motors from 1.1 to 30.0 kW, also available in explosion proof design
- Single or extended knife systems
- Augers/shredding propellers adjusted to the nature of the medium
- Pump casings and impellers in surface-coated cast iron or in stainless steel
- Mounting equipment for existing installations
- Extensive line of equipment for e.g. combined pumping and mixing



## Motor pump for dry installation

Type: MPTK-I

The pump can be mounted in new or in existing installations. Horizontal or vertical installation.

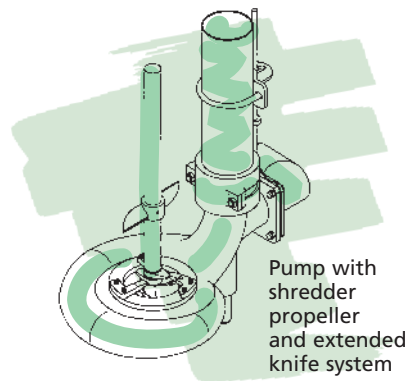
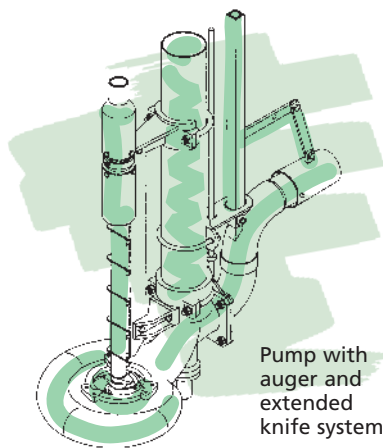
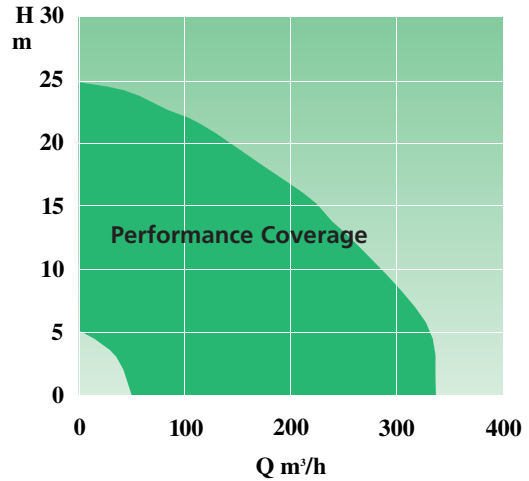
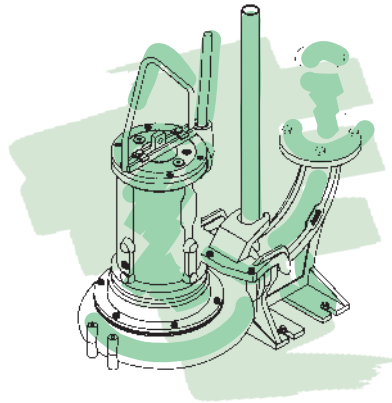




### Submersible pump

Type: DG-I

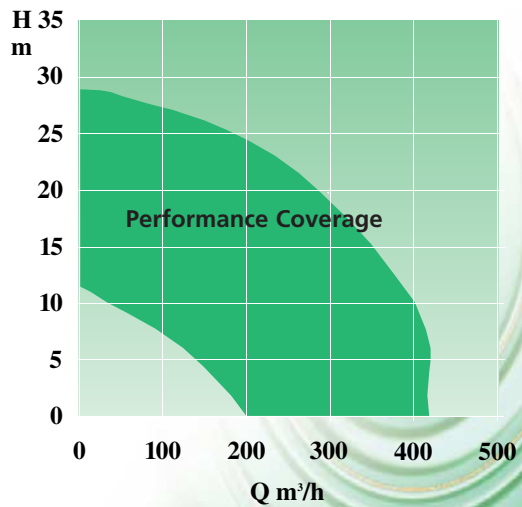
Next to the complete submersible pump installation with coupling flange in vertical installation we are able to supply pumps for horizontal installation or with an adapter for existing installations.



### Long shaft motor pump for wet well installation

Type: MPG-I

Extremely sturdy pump with liquid-lubricated bearings. Almost maintenance-free. Especially suited for combined pumping and efficient mixing. Sizes: 4", 5" and 6".



Landia offers solutions and systems to pump and mix difficult liquids. We develop, manufacture and distribute pumping and mixing systems. Pumps to chop, shred, cut, mascerate, grind and comminute. Mixers to agitate, homogenize and create liquid currents.

Landia products are distributed worldwide. Our distributors offer consultancy and after sales service by Landia trained personnel.

Distributor:

LANDIA A/S  
DENMARK  
ISO 9001

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