



Mixers and Flowmakers

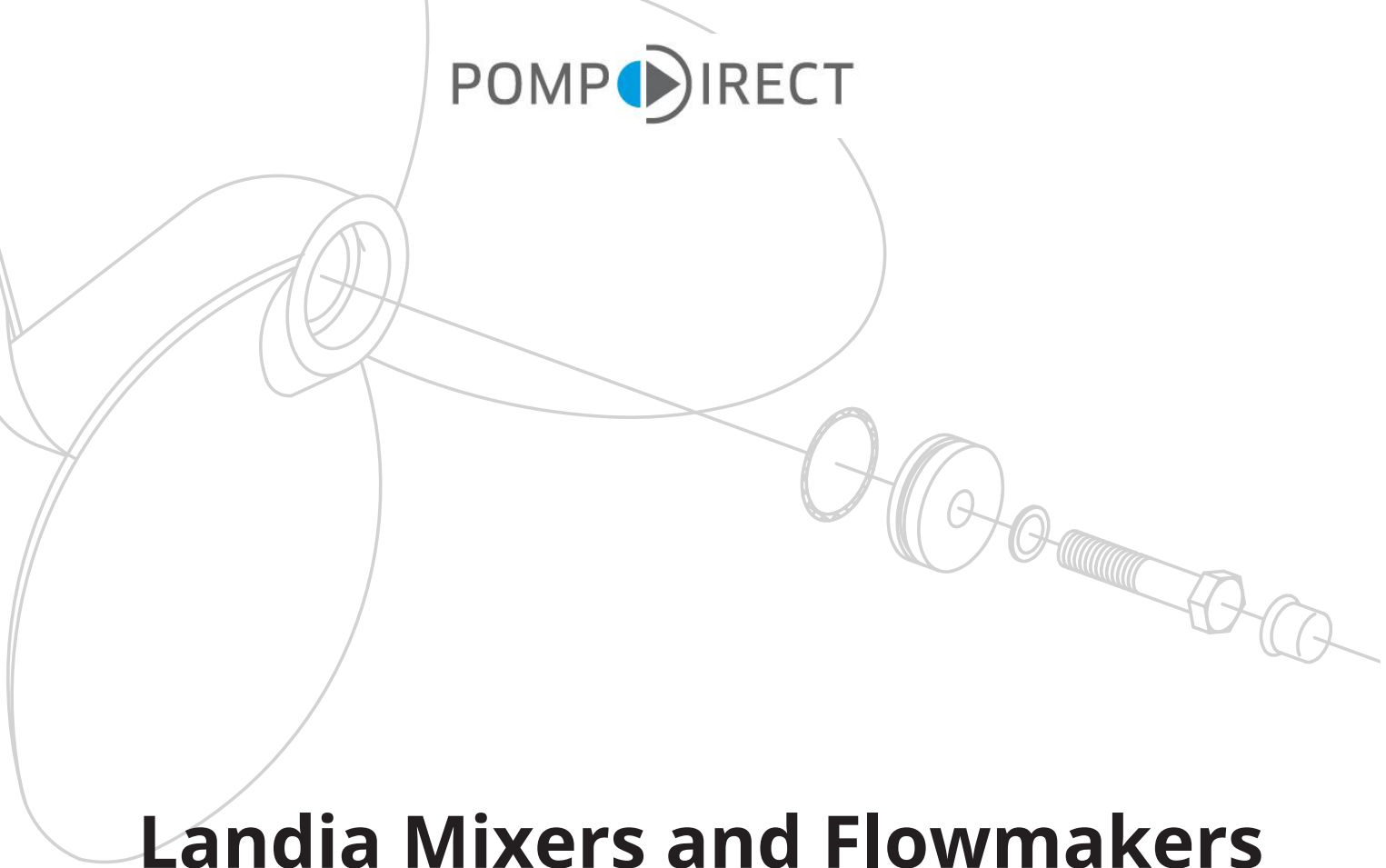
For municipal- and
industrial wastewater

POMP  IRECT

Landia[®]

ENGINEERED TO LAST





Landia Mixers and Flowmakers

Every day Landia mixers contribute to a cleaner world due to their work in wastewater treatment processes in municipal and industrial wastewater treatment plants.

Landia supplied the first mixer for wastewater in the mid 1980's for mixing the contents of a digester in a Danish wastewater treatment plant. Since then, tens of thousands of Landia mixers has been sold for wastewater applications all over the world.

All Landia mixers are carefully designed so that the lowest possible operational costs are achieved for power consumption, service and maintenance. Low power consumption of a mixer can be directly related to low propeller revolutions, which significantly increases the lifetime of a mixer.

Landia has the widest range of mixers and flowmakers in the industry with motor sizes from 1.1 kW to 30 kW. A Landia mixer is always adapted to the specific application and manufactured in the most suitable material for the longest possible lifetime – whether it is cast iron or acid-proof stainless steel.

Conditions for a mixer are often extreme, including 24/7 operation in dirty and aggressive wastewater. Such conditions require the very best sealing system. To address this, Landia has developed a unique sealing system consisting of three or four seals in combination with a grease chamber. These optimum conditions provide a greatly enhanced lifetime for the seals.

A mixer, whether submersible or dry-installed is a unique piece of equipment and requires experienced guidance from a Landia-trained sales engineer, which is a key part of our back-up service.

Landia Mixers

– mix almost everything!

A typical wastewater treatment plant consists of numerous tanks containing wastewater in different stages and Landia has a proven range of mixers and flowmakers for almost any municipal or industrial application.



Submersible Flowmaker POPL-I

The POPL-I is a low speed flowmaker for mixing and flow creation of large volumes of water at the lowest possible power consumption.

A unique feature of the POPL-I is the adjustable propeller blades that make it possible to change their angle or setting. This special feature - exclusive to Landia - optimizes power consumption.

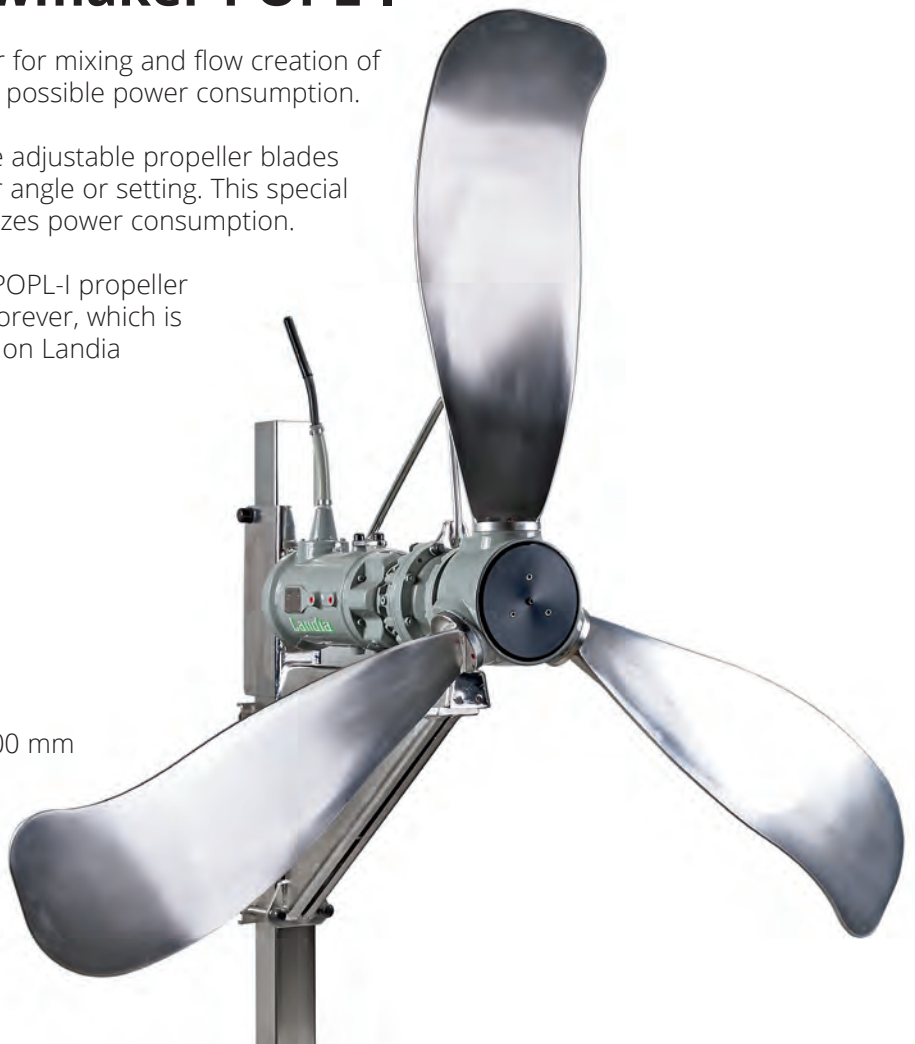
We know from experience that our POPL-I propeller (made from stainless steel) will last forever, which is why we offer a LIFETIME WARRANTY on Landia propeller blades!

Applications

- Aeration Tanks
- Oxidation Ditches
- Anoxic- and Anaerobic Tanks
- MBBR Reactors

In Short

Motor sizes from 1.1 - 7.5 kW
 Propeller diameter: 1700 mm or 2300 mm
 Propeller rpm: 19 - 47 rpm
 Propeller tip speed: 1.9 - 4.2 m/sec.
 Available with Ex motor



Submersible Flowmaker POP-I 150

The POP-I 150 is a low speed flowmaker for mixing and flow creation at the lowest possible power consumption.

Compared with the POPL-I Flowmaker, the POP-I 150 can be used for smaller and odd shape tanks due to its smaller physical size.

The POP-I 150 is also available in solid stainless steel SS316 – typical for the use in the chemical or food industry.

Applications

- Aeration Tanks
- Oxidation Ditches
- Anoxic- and Anaerobic Tanks
- SBR Reactors
- Sludge Tanks
- MBBR Reactors

In Short

Motor sizes from 1.1 - 7.5 kW
 Propeller diameter: 620 - 1080 mm
 Propeller rpm: 150 rpm
 Propeller tip speed: 5.2 - 7.6 m/sec.
 Available with Ex motor



Submersible Mixer POP-I 300

Landia POP-I 300 is a versatile and efficient heavy duty mixer. The three-blade propeller and the relatively low propeller rpm makes it ideal for the mixing of high viscosity liquids such as dewatered sludge.

The POP-I 300 is available also in solid stainless steel SS316- typical for the use in the chemical- or food industry.

Applications

- Anoxic- and Anaerobic Tanks
- SBR Reactors
- Sludge Tanks
- Digester Mixing
- Pump Lift Stations

In Short

Motor sizes from 1.1 - 30 kW
 Propeller diameter: 365 - 880 mm
 Propeller rpm: 300 rpm
 Available with Ex motor



Side Entry Mixer POPTR-I

Landia's POPTR-I is a versatile and efficient side-entry mixer. The three-blade propeller and the relatively low propeller rpm makes it ideal for mixing of high viscosity liquids such as dewatered sludge or digested sludge.

Being a side-entry mixer the POPTR-I has the motor outside the tank which significantly eases service and maintenance. Optimum cooling conditions for the motor makes it the ideal choice for high temperature liquids.

The POPTR-I is suitable for most types of tanks – concrete and steel.

Applications

- Sludge Tanks
- Digester Mixing
- Hot liquids

In short

Motor sizes from 5.5 – 18.5 kW
 Propeller diameter: 575 - 770 mm
 Propeller rpm: 300 rpm
 Available with Ex motor



Submersible Mixer POD-I

The POD-I is a compact and flexible submersible mixer for applications in smaller tanks and liquids with relatively low solids concentration.

Landia POD-I is available both in cast iron and solid stainless steel SS316.

Applications

- Selector Tanks
- Anoxic- and Anaerobic Tanks
- SBR Reactors
- Pump Lift Stations
- Equalization Tanks

In Short

Motor sizes from 1.1 – 18.5 kW
 Propeller diameter: 170 - 375 mm
 Propeller rpm: 1000 and 1500 rpm
 Available with Ex motor



Landia is much more - than just mixers!

Landia is a pump and mixer manufacturer offering a comprehensive range of pumping and mixing solutions, suitable for numerous applications within the wastewater industry. Please see examples below.

SEE THE COMPLETE
PROGRAMME ON
LANDIA.CO.UK

➤ **Submersible Mixer POPR - the True Stainless Steel Mixer**

Landia POPR-I mixers are made from solid SS316 stainless steel. The applications are typically acidic liquids or high chloride content applications such as desalination plants.

The POPR-I mixers are available with propeller rpm of 150 and 300 and with motor sizes ranging from 1.1 kW to 30 kW.

Also available in Super Duplex (SAF 2507) upon request
- fully resistant to sea water!



➤ **Submersible BioMover Mixer for MBBR Applications**

The Landia BioMover range of mixers is developed specifically for efficient and gentle mixing of bio media; plastic carriers.

The BioMover is suitable for all types of bio carriers, with the low propeller rpm and propeller tip speed ensuring maximum hydraulic efficiency and protection of the carriers.

All Landia BioMovers are equipped with stainless steel propellers as recommended by all leading MBBR suppliers.

Landia BioMover is available with motor sizes from 0.75 kW to 7.5 kW and propeller rpm from 22 to 150. Propeller tip speed from 2 to 8 m/sec.



➤ Submersible Chopper Pump Model DG-I

The DG-I submersible chopper pump is designed for tough applications such as unscreened sewage, septic sludge, thickened sludge and other high solids liquids



➤ Dry Installed Chopper Pump Model MPTK-I

The MPTK-I chopper pump is designed for tough applications such as unscreened sewage, septic sludge, thickened sludge and other high solids liquids



➤ Recirculation Pumps / Wall Pumps

Landia offers a range of low head recirculation pumps – 300, 500 or 800 mm. Capacity up to 5,000 m³/h. Also available in stainless steel SS316 upon request.



➤ AirJet Jet Aerators

The Landia AirJet is available as submersible, dry installed or as a floating unit. Extremely flexible non-clogging aeration system that requires no external blower or compressor



➤ Landia GasMix

Landia GasMix is an external anaerobic digester mixing system that not only simplifies service- and maintenance but also has a very positive effect on biogas production

