

Company profile

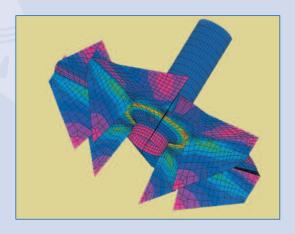


LANDUSTRIE

- Since 1913 Landustrie has been active with water. Starting with polder drainage, later during the reconstruction years after the Second World War with complete sewage treatment plants.
- ☼ Since the sixties Landustrie has also been well-known abroad. A reputation which is mainly owed by the product name LANDY. In short, Landustrie designs, supplies and installs equipment and turn-key installations for the water market. All these activities are performed from Frisian Sneek, where lots of surrounding water inspires to high quality products and solutions for the clients.

ORGANISATION

- The Landustrie organisation is formed by two product groups, PG "Waste Water Treatment" and PG "Pumps & Pumping Stations" in which group the Service department is accommodated.
- Within these product groups the Sales and Project Management are integrated. Both product groups make use of the heart of the company, the specialized machine shop.
- The organization is completed by the standard staff departments, such as Administration, Procurement, Quality Control, Product Data Management (PDM) and Personnel Department.
- An important position is taken by the Research and Development Department, which takes care that Landustrie anticipates on new developments in the different markets.





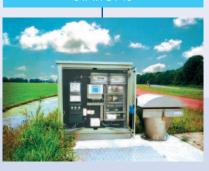
PG WASTE WATER **TREATMENT**



PRODUCTION



PG PUMPS & PUMPING STATIONS



PERSONNEL

people, of which many with long term employment. This not only shows that Landustrie is a pleasant company to work for, but also guarantees the fact that many years of experience are education.

Landustrie has a staff of approximately 155 at the disposal of the client every day. In order to keep up with new techniques and developments our employees are offered frequent training and

LICENSEES

Since 1994 Landustrie closely cooperates with WesTech Engineering, Inc. from Salt Lake City, Utah, USA. The extremely successful cooperation has resulted in licensing the LANDY surface aerators in both the USA and China, under the same strict requirements.

In November 2008 the license contract between Maezawa Industrie, Inc. and Landustrie was signed. Maezawa, located in Tokyo, takes care of production and supply of Landox flow boosters in Japan.

CERTIFICATION

Landustrie is in the possession of following certifications:

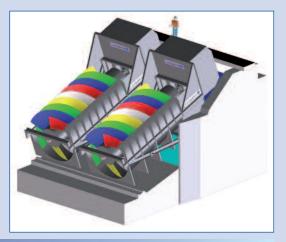
- # ISO 9001: 2008
- Contractors' Safety Checklist VCA**
- # ATEX certificate for EC-Type examination
- # Kiwa BRL-K14020/01 "Quality-controlled maintenance of pumping installations and pumping stations"

All Landustrie products are manufactured according the European guidelines, like for instance the Machinery Directive, Low Voltage Directive and the EMC Directive.





Company profile



R&D

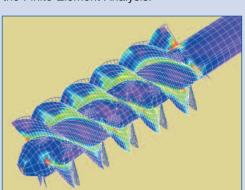
An important part of the Landustrie know-how has built up over many years by putting effort into Research and Development. The newest developments in the range of LANDY Archimedean screw pumps are the fish friendly screw pump and the hydropower screw. All this specific know-how and experience makes Landustrie the leading manufacturer in the world of screw pumps.

Further Landustrie owns an unique test tank (2200 m³) in which a 1 : 1 scale aeration test can be carried through. This is one of the reasons that Landustrie for many years is the leading company in the field of aeration technology. In this quality Landustrie is a member of the European Norm Commission for oxygen measurements.

FINITE ELEMENT ANALYSIS

Landustrie has the capability to design all her equipment based on the Finite Element Analysis.

This results in the optimum design for the equipment in terms of weight and robustness. For Landustrie this technique is a unique selling point.



INNOVATIONS

New markets and developments are actively approached. The most recent examples in the field of water technology are our mobile sanitation units (MobiSan). This sanitation technique has been developed in order to release pressure from existing water resources and reduce load on municipal waste water treatment plants. MobiSan is very well applicable in e.g. slums and refugee camps.

Another innovative product is our Dyke Monitoring and Conditioning system (DMC system). This system provides information about dyke condition by measuring pore pressure and temperature in the dyke body using fibre-optic sensors.

REFERENCES

On the Dutch market Landustrie counts as the market leader for the supply of electromechanical equipment for waste water treatment plants. It is worth mentioning that our products can be found at each sewage treatment plant in The Netherlands. Furthermore Landustrie is world-wide known because of the supply of thousands of screw pumps and surface aerators.

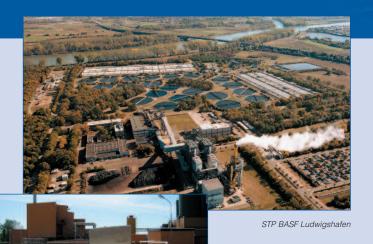


Shanghai, China



Porirua, New Zealand





Stora Enso, Sweden

PRODUCT GROUP WASTE WATER TREATMENT

This product group is split up into the different markets in which it operates. First of all the home market, where Landustrie already more than half a century not only supplies a big range of electromechanical equipment but also numerous complete sewage treatment works have been realized as a turn-key contractor. Secondly the export market, in which Landustrie acts as equipment supplier. Through a worldwide agent network a number of products is marketed, like screw pumps, surface aerators, Landox flow boosters and screen cleaners.



Aeration rotor





DELIVERY PROGRAM

Depending on the market, a summarized delivery program of Landustrie, is mentioned below:

- Screw pumps and screw pumping stations with newest developments such as
 - Fish friendly screw pumps
- # Hydropower screws
- Surface aerators and aeration rotors
- Landox flow boosters
- Clarifiers
- Thickeners
- Screen cleaners
- Effluent treatment installations
- # Flexible membrane gasholders
- Covers
- etc.

ERECTION

Many of the Landustrie products are installed by highly qualified and first rate equipped Landustrie personnel. This counts not only for the Dutch but also for the international projects. When the client decides to do the erection herself, Landustrie offers the option of sending

out a supervisor for the right advice on site.

AFTER SALES

Landustrie's after sales service is the customers connection to Landustrie



Indianapolis

for not only supply of spare parts but also for training and supervision. Worth mentioning are installation upgrades, some of which have amazingly short payback times through savings in energy and maintenance.



🙀 aftersales@landustrie.nl



+31.515.486.888

Landustrie (1)

MANUFACTURING

Landustrie has it's own manufacturing facilities directly situated near open water and motorways.

The manufacturing departments are manned by highly motivated and experienced staff with a large know-how in manufacturing, assembling and installing all kinds of equipment of various materials. The company premises exist of an office building, machinery department, construction and assembling halls, totaling a surface of 1.6 hectares. The maximum hoisting capacity in the manufacturing halls is 200 tonnes with a free

working height of 16 meters.

In addition to the mechanical disciplines, Landustrie has also in-house, it's own electrotechnical workshop, as well as blast and coating facilities.



DELIVERY PROGRAM

Facilities are not only very suitable for the manufacturing of Landustrie's own products but also to accommodate, if required under inspection, specialized products like;

- # Compiled steel constructions
- Tanks
- Apparatus construction
- Ship segments
- Yachts
- # etc

The high quality end products are built according the standards formulated by either Stoomwezen, Lloyd's register, Germanischer Lloyd, Dansk Norsk Veritas etc.



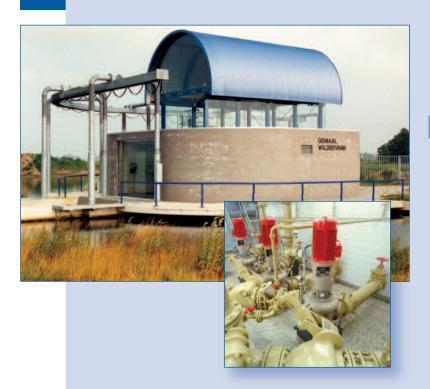


MATERIALS

The majority of the equipment is manufactured in carbon steel, aluminium and different sorts of stainless steel. But our skilled and experienced personnel is also qualified to handle more exotic materials such as duplex, dillidur, hardox, weldox and armox, with great skill and craftsmanship.



Company profile



PRODUCT GROUP PUMPS & PUMPING STATIONS

Landustrie is also a leading player regarding the supply of pumps and pumping stations. For both the municipal and industrial market Landustrie designs and manufactures sewer and polder drainage pumping stations, executed with pumps of Landustrie's own make, Landy.

Before a Landustrie pump leaves the premises, it has been tested hydraulically at the test bed on capacity and power, and if desired witness tested by the client.

The electro technical installations are also built and tested in the workshop in Sneek together with the accompanying software.

A new range of waste water and mixing pumps is introduced in 2012. This new range matches the former series of Robot pumps, whereas ITT ceased the production of these pumps earlier. Our new Landy pumps are completely exchan-

geable with the existing Robot pumps and spare parts. All pumps, including Vortex and wear resistant type, can be supplied explosion proof.

DELIVERY PROGRAM

- Polder drainage pumping stations
 - screw pumps
 - axial flow pumps
 - mixed flow pumps
- # High-pressure pumping stations
 - submersible disintegrator pumps
 - pumps with open channel impeller
- Pumping stations
 - dry mounted pumps
 - submerged pumps
 - mixed flow pumps
 - inclined rotor pumps
- Sewage pumps
- # Turn-key pumping stations
- # Electrotechnical installations
- Telemetry systems
- # Pump testing





TELEMETRY

These days more and more demands are being placed on water management. Landustrie provides advanced technology, which automatically regulates and manages the controls, detection and data registration for pumps, treatment plants, etc. It is possible to



obtain information at any time by incorporating substations in existing and new facilities, which are connected to a central command post by data lines. Each substation can also be independently monitored and operated from the command or local post. Thanks to the specialised knowledge of Landustrie the above components and systems are developed and built entirely under our own management. These products are subsequently marketed under the names of LANDY-Web and LANDY-Line.

LANDY-WEB

Measuring and control system for water management in sewer/polder drainage stations and waste water treatment plants LANDY-Web is a control and telemetry computer which stands out from other systems not only due to its simplicity and clarity, but most of all because of the high degree to which control processes can be analysed.

LANDY-LINE

Control and automatic fault reporting for sewer pumping systems

Landustrie has developed exceptionally comprehensive microcomputer control systems especially for sewer pumping systems. LANDY-Line is the ideal tool for sewer managers thanks to its carefully designed control functions, remote detection and data logging. By combining the LANDY-Line system with a LANDY-Web web controller you can achieve a highly reliable and cost-efficient system.

LANDY-PLC

PLC's are viewed as 'open' systems. Landustrie has everything you need in this area. The controls and adjustment can be provided by the PLCs of various makers, and the protocols are available in LANDY-Web web controller. An internet connection will provide the telemetry function.

LANDY-CARS

Landustrie supplies an open main control system especially for controlling unmanned operation installations like sewer drainage pumping stations, dams, polder drainage pumping stations, sewage treatment plants, etc. The newest version is suitable for the internet.



SERVICE DEPARTMENT

This skilled and experienced department is manned and organized for preventive and corrective maintenance of:

- # pumps and pump installations
- waste water treatment plants
- screen cleaners
- # gasholders
- electrotechnical installations according NEN-1010 and NEN-3140
- # control systems



The results of periodical and precautionary maintenance are reported in writing or digitally, so that the client can take the required measurements, if necessary.

In order to be able to offer the client a fast and adequate service, the service department has about 20 fully equipped service vans ready to respond to service calls.

Within the Landustrie premises in Sneek the service department has it's own well equipped work shop where the experienced mechanics can do repair work which can't be done on-site.

In addition the service department has the possibility by means of telemetry systems to monitor and guard installations.

Since 2009 a new service center has been opened in Veenendaal, centrally located in the Netherlands. From this location even faster and more efficient service can be offered across the country.



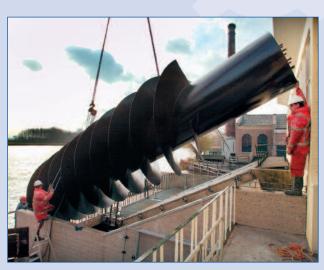
24H SERVICE

For the home market, clients can count on the service department of Landustrie, seven days per week, day and night, so also during the weekend. The special thing of this service is that you don't need a subscription. You only will be charged for the service supplied.

FOR SERVICE PLEASE CALL

+31 515 - 48 68 80 durit +31 6 - 51 27 83 24 call

during office hours call for 24h service









Landustrie Sneek BV P.O Box 199

NL-8600 AD Sneek The Netherlands

Watertechnology



Tel. +31 515 - 48 68 88 Fax +31 515 - 41 23 98 e-mail info@landustrie.nl website www.landustrie.nl

Office address Pieter Zeemanstraat 6, Sneek

