





### **Commitment for the Future**

With over 65 years of experience in metal construction, LIPP has developed from a small workshop into an industrial enterprise operating on an international basis. Projects have been carried out in over 80 countries. On-site, we realize tanks and systems safely and in the shortest possible time. We produce tanks with a variable height and variable diameter of 5 to 40 meters using our unique onsite manufacturing technology.

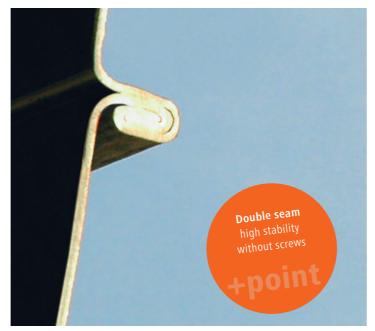
We are a highly innovative middle-sized family business in Baden-Württemberg. Inventiveness, innovation and development are part of the DNA of our company.

The invention of the LIPP Double-Seam-System over 55 years ago has laid the foundation for our entrepreneurial success. Important milestones have been the development of the VERINOX® patented material and the intensive research work on biogas technology. In the last fifteen years our business activities have expanded from mainly agricultural biogas plants to large projects for industry and municipalities. The company has made significant progress in certification of quality requirement and standards. In the past few years alone, we have developed three new products: a digester with a central agitator, a new type of buffer storage tank and tanks for drinking water. There is considerable potential for further development.

We know that success can only be maintained in the future with consistent progress. We will face the challenges of the future and view them as an opportunity to explore new development potential. We want to continue to take the technological lead in tank construction worldwide.

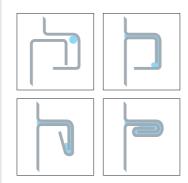
"Traditional, innovative and determined – shaping the future together with our employees and customers."

Leon and Manuel Lipp



## The System

#### LIPP® Double-Seam-System



When connecting the steel strips using the LIPP Double-Seam-System, the steel profiles are joined by folding them together twice. The automated process developed by LIPP back in 1970 enables a tight connection to be made with a smooth internal wall for the storage of solid, liquid and gaseous substances. It ensures optimum storage, regardless of the type of substrate.

#### LIPP® Welding Technology





The LIPP Welding Technology is an automated process that offers dimensional flexibility. This involves joining steel strips together with two seams by means of a combined welding process. The patent and know-how developed by LIPP enables tanks made from stainless steel, e.g. for drinking water and tanks made from black steel, e.g. for storing oil.















## The Assembly

Characteristically LIPP digesters and tanks are built top-down, starting with the roof on top of the tank. Due to the spiraling-up all intrusions and openings can be installed at low lewels, ensuring an easy, safe and fast construction.

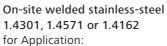
Transportable installation machines and individually shop-fabricated components guarantee the same quality level for any installation site in the world.



### Our Materials

LIPP offers a range of metallic materials suitable for use with a wide variety of media, from pure water to problematic and aggressive substances. Those materials range from galvanised/black steel through the combination material VERINOX® to high-alloy stainless steels. Stainless steel VERINOX® is a patented, award-winning combination material that offers the properties of high-quality stainless steels, e.g. 1.4301, 1.4571 or 1.4539, at the cost of galvanised steel and has been in use for more than 30 years. The highest quality and longevity of materials are our top priorities.





- . Potable water
- . Chemicals/pharma
- . Food industry



On-site welded carbon steel for Application:

- . Thermal storage tanks
- . Bulk silo
- . Cruede-oil storage tanks



Shop-welded stainless steel membrane for Application:

- . Gas-tight tank cover
- . Stainless steel floor-system

## Our Products for Industry, Communities and Agriculture

#### LIPP® Digester Systems



LIPP KomBio®-Reactor from 100 to 3.500 m<sup>3</sup>

The patented LIPP KomBio®-Reactor, a digester with integrated gas storage, is working substrate flexible. The surrounding steel shell additionally protects the gas accumulator from wind, UV-radiation, and bad weather conditions, while the roof decreases the required heat output during winter.



LIPP® Universal Digester from 100 to 7.000 m<sup>3</sup>

The LIPP Universal Digester does not have an integrated gas accumulator and is used for larger plants for industry and municipalities in connection with separate gas-storage. Panel heating and insulation are fitted on the outside and are easily accessible. The tank is covered by a self-supporting stainless steel diaphragm roof and can be equipped with multiple lateral mixing solutions.



# LIPP® UniCentralmix Digester from 100 to 7.000 m<sup>3</sup>

Designed for industrial and municipal applications. Equipped with a free-supporting stainless steel membrane roof. Operating pressure up to 25 mbar and either with a central agitator or lateral mixing systems.



#### LIPP® Eco Digester from 100 to 10.000 m<sup>3</sup>

The flexible LIPP Eco Digester for use in industry and agriculture can be adapted to individual requirements and customer demands. With a wide variety of different tank roofs to choose from, tank solutions with or without an integrated gas accumulator can be offered.

#### LIPP® Liquid Storage Tanks

Rain Reservoir
Water Tank
Buffer Tank
Waste Water Tank
Sludge Holding Tank
Aeration Basin
Trickling Filter Plant
Secondary Settling Tank
Mixing and Surge Tank
Fermenter
Landfill Leachate Storage
Process Vessel

## LIPP® Storage Tanks

Bulk Material Storage Thermal Storage Tank Gas Storage Tank



# LIPP® Thermal Storage Tank from 200 to 6000 m<sup>3</sup>

The LIPP Thermal Storage Tank is a customized solution to effectively store excessive heat from biogas plants, biomass heating plants, solar plants or other heat sources. The tanks are fabricated on site using the LIPP® Double-Seam-System, or the new LIPP® Welding Technology.



## LIPP® Gas Storage Tank from 50 to 5.000 m<sup>3</sup>

LIPP developed a special system for depressurised dry gas storage for its separate gas storage tanks, characterized by high functional and operational reliability.

A highly dependable method that requires less maintenance and provides for a longer service life of the storage device.



#### LIPP® Large Silos 15.000 m³ and bigger

They are impermeable and protect the bulk material against humidity. Their smooth inner wall is an advantage from which specific storage media benefits, for example grain, wood chippings, soybeans and cement.



## LIPP® Liquid Storage Tanks from 100 to 10.000 m<sup>3</sup>

LIPP offers professional solutions for plantand tank construction, for the storage and treatment of liquids as well as flexibility regarding the size, the choice of material and the equipment. LIPP is specialized according to § 19 WHG (Water Resources Act) and pays particular attention to the long service life of their products, professional execution and a solid construction to the last detail.

#### Tank Refurbishment and Volume Expansion

On-site assembly of tanks in all sizes is possible with the help of a mobile crane, which lowers the tanks on or in a steel or concrete basin, preventing elaborate and cost-intensive reconstruction work.



#### Behälter und Systemlösungen Tanks and System Solutions

