



LOSBERGER DE BOER



Induflex. The new standard for permanent space solutions

Flexible, quick-to-build and durable

Permanent flexibility

a durable and Eurocode compliant lightweight hall

From the Losberger De Boer Product Development Department comes the new Induflex hall, a lightweight structure that represents the pinnacle in durability, construction and worker safety, whilst being highly flexible, quick-to-build and easily scalable.



Safety

High snow load and wind resistance, Eurocode compliant

When developing our newest structure, safety was our top priority. In recent years, the weather has become increasingly unstable and unpredictable, therefore safety regulations for buildings of all types, shapes and sizes have gotten stricter. Our team of engineers was able to further improve the design of the roof system, offering even more support and enabling it to carry even more weight and handle higher wind speeds than any existing common lightweight structure.

Snow load

The standard version of the Induflex hall carries a snow load of up to 105 kg/m² on the roof. The static calculation of this hall is Eurocode-compliant and thus meet the strictest building regulations for permanent buildings within the EU. On request, the hall can be customized and reinforced further so that the roof can bear a snow load of up to 350 kg per m².

Wind resistance

With strong winds and storms becoming increasingly frequent on the European mainland, safety and durability are of paramount importance when it comes to industrial space. The standard version of the Induflex hall has an excellent wind resistance and can handle wind speeds of 25m per second. With additional customization, the structure can be strengthened further to withstand wind speeds of 30 meters per second and above.

Eurocode

The Eurocodes contain the basic European standards for structural design and dimensioning within the European Union. These standards have been drawn up to demonstrate compliance with the requirements for mechanical strength, stability and safety, to provide a basis for construction and engineering contract specifications and to provide the EU with a framework for drawing up uniform technical specifications for construction products (CE mark). The new Induflex hall is 100% compliant with the requirements of the Eurocodes, offering you the peace of mind that your building is both safe and durable and meets the highest legal standards in terms of building and worker safety. This also means that the Induflex hall can be built in all EU countries. As the Eurocode is accepted as one of the strictest building standards in the world this also applies to most export countries outside the EU.



"We urgently needed another storage hall to meet the increasing demand. Losberger De Boer's solution convinced us immediately, as the industrial hall not only ensures a maximum of flexibility but also a quick assembly. First-class advice and implementation."

*Ulrich Karsch,
Managing Director at Autohaus
Karsch GmbH*

Innovations

Recent innovations that add to the Induflex's flexibility, short installation time and worker safety



Height leveling function

A recent innovation by Losberger De Boer is the new height leveling function, which is part of the foundation of the Induflex hall. This feature, which is exclusive to structures by Losberger De Boer, ensures you that your industrial building is always level – even when the terrain is not. Height differences of up to 30 cm can be compensated, which saves you money and time when it comes to groundworks. This also contributes to the extremely short build time of the Induflex compared to conventional buildings.

Worker safety

Worker safety should always be a top priority. That's why we've equipped the new Induflex hall with connection points to integrate a fall protection system. This fall protection acts as a safety net during construction and maintenance work. By adding this feature, we can guarantee the safety of our and your employees, whenever they're working on the roof.

A scalable and flexible solution

The Induflex is available in a large number of configurations and sizes. The structure is highly flexible and can easily be scaled up and down, allowing you to quickly respond to market developments or peaks in production or supply. So, if your requirements change, we can easily adapt your space solution within days.



Levels of Configurations

The Induflex can be delivered with different levels of insulation.

A **non-insulated** hall can be used e.g. for storage purposes. This version is equipped with a PVC roof, or a trapezoidal metal sheet roof and a trapezoidal metal sheet wall.

The **partly insulated** option is equipped with a double layer PVC roof and sandwich panel wall. This configuration prevents condensation and keeps temperatures above freezing.

If you require a permanent working space such as workshops, manufacturing halls or logistic hubs with EnEV conformity we offer a **fully insulated** solution, with insulating sandwich panels up to 200 mm in the roof and in the wall.

Accessories

As a premium supplier Losberger De Boer offers a variety of additional accessories for your permanent hall. This includes

personnel doors, truck doors, windows and light bands, as well as fire protection supplies and much more. We work together with leading manufacturers of industrial structure components.

HVAC

Heating, Ventilation and Air Conditioning Systems are also part of our turnkey solution for your hall. Depending on the location and the purpose of your hall we, together with our partners, will provide an optimized HVAC concept to guarantee the best possible protection for your goods and the well-being of your employees.

Lighting

From a simple lighting concept to a fully health and safety regulations-compliant approach Losberger De Boer offers you the best solution for your individual needs, whatever Lux value is required.

7 reasons why

- 1. Made in Germany** Certified German Engineering
- 2. Higher Stability of Value** Losberger De Boer products are known for holding their value. Slow depreciation renders our products a more attractive investment, recognised by the wider industry as having a high stability of value.
- 3. Comprehensive Experience** From the first aluminum tent construction in 1974 to the first self-supporting aluminum construction with a 60 m clear span width in 2015: Losberger De Boer has been a pioneer in developing new space solutions for over 100 years.
- 4. Speed of delivery** The Induflex hall can be delivered within a few weeks.
- 5. Speed of installation** The Induflex is made of prefab, high grade aluminum parts, which contributes to its short installation time.
- 6. Flexibility** The Induflex is easily scalable; it can be scaled up or down within days.
- 7. Relocatable** The Induflex hall is easily demountable and relocatable, offering you maximum flexibility.



Project references



Extra warehouse space

Client

Lehnert Tools GmbH

Date

April 2019, Neuenstadt am Kocher- Germany

Project description

German rail test systems specialists Lehnert Tools expanded its storage capacities for general cargo with a flexible lightweight hall from Losberger De Boer.

240 m² extra storage space

In order to meet the increasing demand for their products and services, the management of the Franconian family business commissioned Losberger De Boer to expand their premises at their Neuenstadt production site. By adding a quickly deployable, robust and long-term flexible Induflex industrial hall, they created 240 m² of additional storage and goods handling space. This fits seamlessly into the company premises and provides a spatial and visual link to the main building.

From order to handover in 8 weeks

In just 8 weeks, the Losberger De Boer team provided the 10 m wide, 24 m long and 5.20 m high cold hall. This was fixed to concrete foundations with dowels and fitted with trapezoidal sheeting in the sides and roof. Particularly steady hands were needed for the assembly, as lifting equipment could only be used from one side of the construction site due to the confined space.

A nice touch: warehouse matches brand colours

Access to the hall is possible via a large sectional door as well as personnel doors, which were installed in the sides together with light bands and window elements. These ensure controlled ventilation and as much daylight as possible inside the hall. In order to better protect the unit loads from dripping and condensation water, the wall cladding was fitted with an anti-condensation coating, which also contributes to the general insulation. As the client requested, the new warehouse was delivered in the company's brand colours.

Structure

Induflex 10/520 SL105 x 24 m

Components

- 240 m² storage space within shortest time usable
- Light panels for daylight inside
- Trapezoidal steel sheeting in corporate colours
- Trapezoidal steel sheeting with anti-condensation coating
- Alu framework for fast construction and short delivery time



Project references

Flexible ice hockey rink for the ETC Crimmitschau

Client

Ice-World Ice-Business GmbH

Date and location

October 2020, Crimmitschau- Germany

Project description

The ETC Crimmitschau has a flourishing youth work, but the capacities were no longer sufficient to be able to train the almost 300 children and young people. For this reason, the board decided to build a new training hall on the club grounds. For the implementation, the ETC assigned the experts from Ice-World, who in cooperation with Losberger De Boer, provided a tailor-made ice hockey rink. The innovative lightweight Induflex hall was used, which is equipped with a thermal roof and sandwich elements. The mobile ice hockey rink covers a total area of 1.125 m² and was coloured in red and white- the colours of the club.

After only 10 days of construction, the permanent light-weight hall was handed over to Ice-World for interior installation. Lutz Höfer, board member of the ETC, looks back on the project with satisfaction: "The construction was carried out by the competent staff of Losberger De Boer on schedule and in an attractive quality. Problems could be solved even directly or afterwards unbureaucratically."

Structure

Induflex 25/320 SL105 x 45 m



Components

- Ground anchoring with ground anchors
- Flame-retardant sandwich elements
- Thermal roof tarpaulins
- Snow load of 70 kg/m²
- Louvered windows in the gable for smoke and heat extraction
- Various windows and escape doors
- Drainage via gutters and downpipes



1,000 m² of scalable warehousing space

Client

Werner Mitsch GmbH

Date and location

October 2019, Heilbronn- Germany

Project description

The family business Werner Mitsch GmbH, founded in 1971, established itself in the metal sheet forming business through comprehensive knowledge. Customers of the Swabian company value the high economic value of the produced goods. That includes samples, individual and serial manufacturing or even the development of entire components and complete solutions. Until now, the company has had around 5.000m² (~55.000ft²) of production and warehousing space.

Precision and economic reliability is a highly valued factor in the metal sheet forming business and partners and suppliers are held to the same high standards. As Losberger De Boer is a certified ISO 9001-2015 and ISO 14001-2015 company, the specialist in modular space solutions has already worked with Werner Mitsch GmbH in the past.

The new building was equipped with two sectional roller shutters and glass panels on all sides. Thus, on all sides, meaning workers benefit from a maximum amount of daylight. Furthermore, three smoke exhausts were placed in the depot for fire protection reasons. Trapezoidal plates on the walls and within the roof provide additional stability.

A fast and reliable solution to production peaks

Whenever a quick reaction to market developments is required, detachable industrial halls by Losberger De Boer can be used to increase productivity almost overnight. In the end, flexibility plays a big role in economic success. After a short assembly

time and with all possible options for rapidly scaling up and down made available, Werner Mitsch GmbH has had its new warehouse handed over after a construction period of only six days.

Structure

Induflex 20/520 SL70 x 50 m

Components

- Trapezoidal sheet walls
- Sectional doors
- SHEV systems
- Snow load of 70 kg/m²
- Light bands on all sides





Project references

Insulated storage hall

Client

R. Stahl Schaltgeräte GmbH

Date

October 2022, Waldenburg- Germany

Project description

In order to quickly increase the storage capacity at their headquarters in Waldenburg, R. Stahl Schaltgeräte turned to Losberger De Boer. Within only five days, a 10 m wide, 13 m long and 4.20 m high insulated warehouse was erected on the company's premises, to create 130 m² of additional storage space.

Rolling gate for easy access

Since easy access and flexibility were of great importance to the client, we installed an automatic rolling gate of 4 m in height. In addition to this, we also equipped the hall with a personnel door. We also installed a ridge light strip along the entire length of the hall to allow daylight to enter the structure, and to ensure sufficient ventilation.

Full insulation

To ensure a constant temperature, we installed sandwich elements. This 60 mm thick wall and roof cladding minimizes operating costs and reduces CO² emissions.

Structure

Induflex 10/420 SL105 x 13 m

Components

- Insulated wall and roof elements
- Rolling gate
- Ridge light strip
- Personnel door



Details





Configure your storage facility in only a few easy steps



Step 1: Determine the right building type

What is the hall's intended use? This is key in determining the best type of structure. Will a straightforward hall with PVC roof do, do you need a cold storage facility, or do you need a fully insulated hall, which can maintain a steady temperature, so that sensitive goods can be stored properly and people can work in a comfortable climate?

Step 2: Set dimensions

You can easily scale the hall to whatever dimensions suit you best. This depends on the conditions and available space on your location, and the amount of room you need for people, vehicles and machines.



3D Hall Configurator

A custom hall design is just a few steps away. Choose a building type, enter the desired dimensions and pick the options and add-ons that will best help you reach your goals. It will only take a few minutes, and it's fun.

Design the hall you want easily and free of charge online with our configurator. Contact us now for more information about our lightweight hall! Easy configuration. Certified processes. Proven quality. Highly customizable.



Configure online now!



Step 3: Selecting equipment & accessories

Which materials do you want to use for your walls and roof? How much windows do you want, and where should they be located? Do you require specific access doors for trucks or vehicles? Do you want light bands and light domes? Do you have a specific colour in mind? There are many options, and again: the purpose of the hall often determines what options suit you best. After you've made your choice, you can receive your unique design in pdf format, by e-mail!

Our three steps to your success

Our main focus is to make sure you achieve your goals. In close collaboration, we create the perfect permanent industrial space for your business, to ensure everything is running smoothly.

Step 1: Advice

We are dedicated to offering you the best possible space solution. The only way we can achieve this goal, is by listening to you. Listen to your needs, the circumstances that led to this need, your projections for the future, your processes, and so on. Your daily business is the focus of our collaboration.

Our team of sales and project managers has a technological background and amassed vast experience throughout numerous turnkey projects. After getting to know your business and your needs, they will draft a requirement profile for all factors of your permanent facility. They will advise you every step of the way and are never farther away than one phone call.

Step 2: Planning

We do have more than 100 years of experience in planning the construction of flexible lightweight space solutions. This experience in combination with our team's superb product knowledge and advisory expertise guarantees a high planning security for your project. Apart from planning the operation to perfection, we are also at your disposal to help with building permits and building inspections.

For a good reason our promise is: Committed to your success!

Step 3: Assembly

As soon as the planning phase is completed, we will arrange an installation date with you, within the timeframe we agreed upon. Our trained builders and experienced site managers will ensure an accurate installation and a thorough handover. Together with a wide array of trusted partners, we will provide you with additional equipment, like heating, air conditioning, sanitary services, lighting, and so on. As your one-stop shop Losberger De Boer will plan, arrange and coordinate all works on site.

We will not rest until your structure is delivered turnkey and ready for use.



Committed to your success