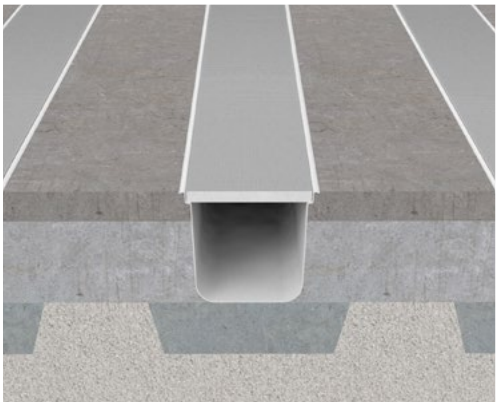


Plan Storage

in fiber-reinforced composite with grain drying plant

TUNETANKEN

Plan Storage

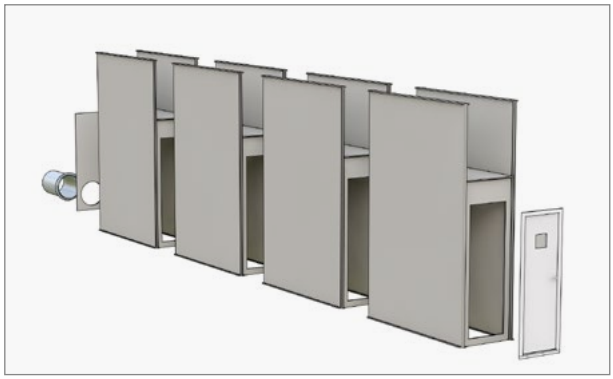
– in fiber-reinforced composite with grain drying plant

The Tunetanken storage and grain drying plants are durable grain and seed storage systems. The systems' even and continuous air flows ensure constant drying conditions and ventilation so that the drying down takes place as quickly as possible. A fast drying process ensures the quality of the grain during storage.

The simple and robust construction of the ducts means that the systems can be built in both existing and new buildings, as the systems are self-supporting, ie. the storage floor does not require the ability of the buildings to withstand pressure.

The plan storages are dimensioned and built up as needed and with respect to the environment in which they are to be built.

A fan is connected to the systems, which fills the ducts air for faster drying of grains / seeds. The structure of the system allows only air / ventilation to be supplied in the ducts where needed.



Flexible structure with elements for plan storage and grain drying.

The Tunetanken plan storage elements and grain drying elements are made of fiber-reinforced composite material, which makes the construction durable as well as resistant to loads of heavy machinery.

The Tunetanken elements for plan storage are well thought out with respect to establishment – operation – maintenance – service life – environment.

Advantages

1. **Ventilation ducts**
   in composite and road resistant. The channels are fastened with screws through the bottom. A wall-in connection connects the duct to the bulkhead gutter of the main channel, from which the air is distributed. The channel closes in the outer end with an end plate and any extra lengths are assembled with fittings.

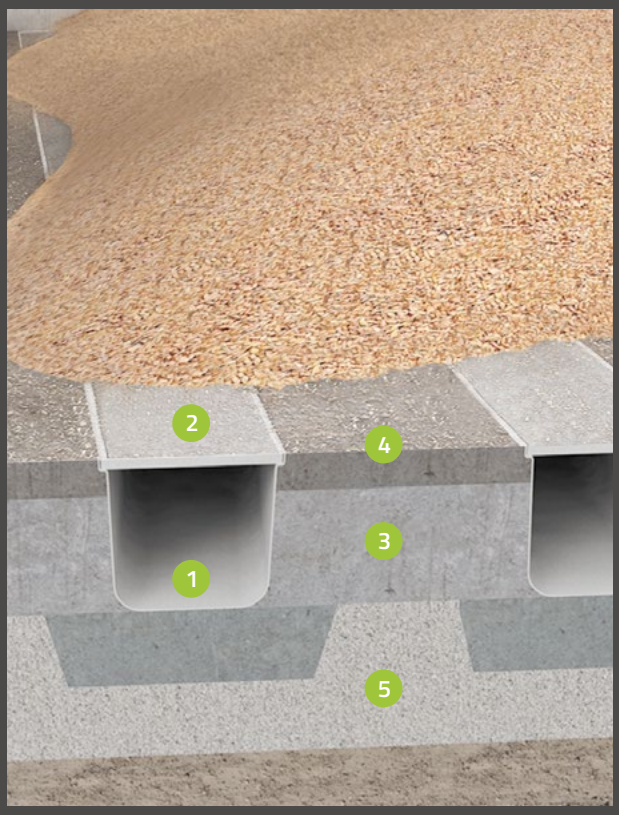
2. **Grid grate with layers of fiberglass mesh**
   (intended for dry transformer). Grid grate assembled with elastic joint.

Casting of AFC drive-proof floor:

3. **Plinth concrete**

4. **Wear layer concrete**
   makes the floor stronger and more durable.

5. **Capillary breaking layer**
   to prevent moisture from the ground to penetrate.



Cross-section floor plan built with composite ducts and gratings.

Plan storage with grain drying. The warehouse is built in a simple and durable element system.

Advantages of a Tunetanken plan storage/grain drying plant

- Flexible and individually built.
- Great strength.
- Minimal maintenance.
- Strong, durable and pressure-resistant construction.
- Corrosion resistant.
- Dimensioned as needed.
- Chemical resistant.
- Low weight.
- Long service life.

Grain drying building system

1. **Standard walls**
   in composite hanging in H-profiles.

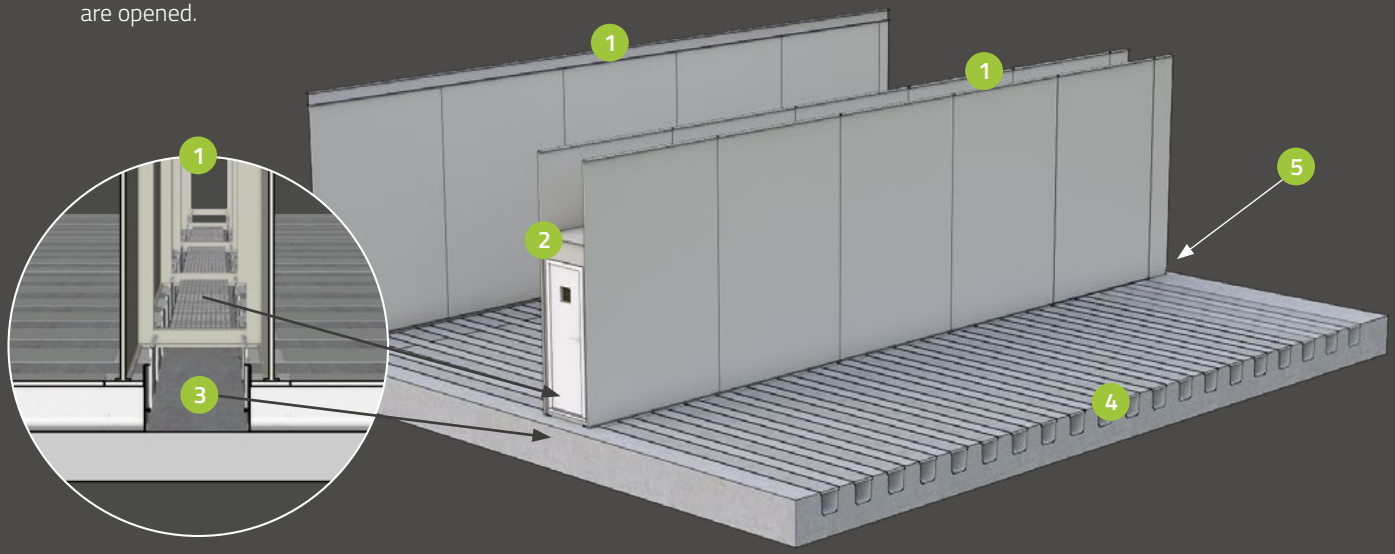
2. **Main channel**
   with bulkhead, airtight door and connection of grain blower.

3. **Scooter**
   with adjustable channel openings so only channels to be used are opened.

4. **Drive-proof ventilation ducts**
   in composite are provided with grid grates assembled with an elastic joint. The channels are casted in plinth concrete and the wear layer is placed at the top between the channels.

5. **Connection of grain blower**
   The fan size is calculated to each individual plant.

Main channel function.
When the system / grain blower is started, the entire main channel is filled with circulating air, which is why the door is airtight. At the same time it is possible only to open the channels you want to use.



Tunetanken

With more than 50 years of experience working with fiber-reinforced composite materials, their unique advantages and a large standard product programme we have developed our market position as the leading Danish manufacturer of storage tanks, industry systems and silos in composite materials.

Tunetanken markets a large and varied programme of products and facilities for various purposes as well as supplies a large range of industries including agriculture, industry, wastewater and water treatment for energy sector. We produce all our solutions in fiber-reinforced composite materials – the same materials that are used in the manufacturing of space shuttles, air planes and wind mills. With benefits as strength, corrosion resistance and long life cycle, composites are among the popular materials of the future.

Agro

Tunetanken offers a broad programme of products, facilities and systems for agriculture. We produce silos, tanks, airtight silos, grain handling systems, hay and grain drying systems, carcass covers, slurry systems, shelters, buildings, irrigation systems, barn inventory et al.

Most of our products are made with the incorporation of fiber-reinforced composite materials, which with their unique properties are extremely suitable for the demanding agricultural environment.

Modern composite materials are materials of the future. The innovative and unmatched technical material properties contribute greatly to the development of new sustainable products and solutions, which are necessary for a sustainable future.

Composit

Composite is derived from the Latin word »componere«.

Composite materials are made by combining two or more materials (physically not chemically), thereby creating a new material with specially intended and superior properties.

Technical properties of composite materials derive from the initial qualities and properties of the combined materials, the combination of the fabrics (matrix, reinforcement, hardener, additives), as well as, the production processes and conditions.

Possibilities are endless!

31.08.2022