A safe and effective choice –
silo construction and facilities engineering
by Blumer-Lehmann
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Our silo and facility construction activities have a long tradition, with 30 years' experience, a steady flow of fresh ideas and more than 600 silos erected throughout Europe. Our offer ranges from small-volume silos to modern, fully automated winter road maintenance bases.

We provide complete solutions with comprehensive logistics and automation concepts. From consulting, planning, manufacture and assembly to all-round servicing – we offer our customers everything they need from a single source. Our focus at all times is on the convenience, efficiency, safety and reliability of our facilities.

We tailor these facilities, which are suitable for a wide range of types of road salt and grit, to suit your local conditions. Our specialists also construct facilities for brine production and storage, as well as GRP (glass-reinforced plastic) silos.

What we offer

• Wooden silos, 5 – 1000 m³
• Mobile wooden silos for urban and municipal use
• Architectural silo constructions /
  modular silos with individual design
• Salt and grit storage halls
• Stationary hydraulic or electromechanical conveyor mechanisms
• Mobile return facilities
• GRP silos, 50 – 200 m³
• Brine mixing facilities, GRP
• Brine tanks
• Brine filling
• Automation and data processing
• Measurement and weighing systems
• Complete facilities
• Servicing and maintenance, restoration and modernisation
Traditional wooden silos

Blumer-Lehmann is a wood construction company with a tradition. For over 135 years now, we have been working and building with wood and developing innovative construction solutions. Silos have been part of our repertoire for the last 30 years. Wood, as a renewable construction material, is highly suitable for use in the storage of salt and other bulk materials, as it does not conduct heat and thereby prevents the formation of condensation water in the silo. Significant progress in the stability of wooden and steel constructions in recent years has made silo volumes of up to 1000 m³ possible.

With our individual solutions we help you put together a winter road maintenance system that is as efficient as possible and meets high architectural standards. We provide first-class planning and design services that guarantee the high quality and safety of our facilities. We are one of Europe’s leading manufacturers of silo systems.

What we offer

- Round silo, 100-600 m³, various steel bases
- Divider silo E8 (octagonal), ideal for simultaneous storage of grit and salt, can be divided either 1/2 and 1/2 or 1/3 and 2/3
- Large silo E12 (12-sided), panel construction and steel base, 300-1000 m³
Small silos and mobile Welaki silos – flexible to use

For smaller requirements we offer 5, 10, 15 and 20 m³. These silos are ideal for municipalities with low salt consumption or for suburban areas, with a view to optimising access routes for gritting vehicles. They are also suitable for creating additional storage capacity on a temporary basis. They can be used flexibly and need only a simple base. Transport and assembly can be carried out by a truck-mounted crane. The silo body is made of wood, while the base is constructed from galvanised steel.

The Welaki silo with a capacity of 7 m³ was developed for winter road maintenance in urban areas. With a view to optimising gritting vehicle routes, these silos are filled by skip lorries at central locations and placed temporarily on a steel construction in suburban areas. As the Welaki silos can be stacked, their storage during the summer requires little space.

Safe and effective storage with a logistics concept

Our urban and municipal concepts help you to ensure efficient winter road maintenance thanks to a combination of centralised grit and salt storage and Welaki silos. We optimise your gritting routes with a network of storage locations across your town or municipality. We have already successfully implemented urban concepts in various European towns and cities.

Silo E4 – our silo for municipal needs

The square-shaped “E4”, with its capacity of 30–70 m³, is ideal for an average municipality with the corresponding gritting needs. E4 silos are wooden panel silos and are available with all technical features such as height-adjustable windsocks, funnel or slider heating. They are suitable for storing grit or salt, and when fitted with a dividing wall, they can also be used to store different bulk materials simultaneously.
Modular silos – sophisticated silo architecture

Increasing importance is being attached to the design of silos and road maintenance depots. In addition to our search for technically convincing solutions, we also focus closely on ensuring that our modular silos can be integrated well visually into existing facilities, into the surrounding landscape or into residential areas.

Take time at an early stage in your project to contact us so that we can tailor your facility optimally to meet your technical and design requirements.

What we offer

- Architectural silo and facility construction
- Customised design through the choice of exterior and base, which can be made from steel, wood or concrete
- Design solutions regardless of size and shape
Automation, measurement and weighing systems

Our sophisticated measurement and weighing systems help you to keep track of your grit and salt stores. Depending on the required usage, we have the right fill-level measurement system for you: from straightforward manual measurement with a pulley to a fully automated winter road maintenance facility. Existing silos can also be retrofitted with a fill-level measurement system.

The salt manager offers a further level of automation and convenience in the management of your winter road maintenance. It is an online platform used for recording and managing grit and salt stocks. With a connection to the modern measurement and weighing systems used in our facilities, you have a constant, real-time overview of the current salt levels in all of the silos for which you are responsible. Mobile radio modules are used with silos and brine tanks to transmit the fill levels of all your facilities. Withdrawal with ID chips enables you to evaluate the salt consumption of individual vehicles or routes.

What we offer

• Laser, ultrasound and radar sensors (measurement by distance)
• Strain gauges or weighing cells (measurement by weight)
• Automation tailored to meet your needs

From straightforward content display to highly automated

Straightforward content display
Weighing of silo, onsite display, manual withdrawal

Semi-automation
Weighing of silo, onsite display, withdrawal with ID chip

Full automation
Weighing of silo, onsite display, withdrawal with ID chip, electrical or hydraulic slider opening, automatic windsock/loading tube

Premium automation
Weighing of silo, on-screen display, automatic windsock/loading tube, start and stop withdrawal directly from vehicle, monitoring of withdrawal using large screen

Conveyor mechanisms

Reliable and efficient conveyor equipment is often an important element of efficient operations at larger winter road maintenance bases. Depending on requirements, it is available as a stationary facility or as a mobile modular conveyor facility for retrofitting existing salt depots, for example. Our mobile conveyor mechanisms, available with electrical or power take-off drive, are compact, small and extremely flexible for use in various winter road maintenance tasks. The mobile system returns the salt from the gritter lorry back into the silo, fills salt containers following maintenance work and can be used in suburban areas. The size and features can be chosen according to your needs.

What we offer

• Stationary under- and overfloor conveyor systems with electrical drive, up to 90 kW output
• Mobile modular conveyor systems with electrical drive
• Mobile conveyor systems with electrical or power take-off drive
• Diesel-powered conveyor system available to rent on request

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Brine

Wet salt is increasingly being used in winter road maintenance, with experience having shown that a combination of brine and road salt produces better results. Based on these findings and on our aim to develop competence and references in this area, we founded Blumer-Lehmann GmbH in Germany in 2011. Our staff in technical distribution, design and development have extensive experience in the construction of facilities for the manufacture and storage of salt solutions. They are on hand to provide you with competent support and to enable you to benefit from our patented process technology.

Our partner companies in the field of plastic construction manufacture the GRP (glass-reinforced plastic) or thermoplastic containers, tanks or components designed by us. These are then assembled at our production location into facilities for use in the manufacture and storage of brine.

The functionality of our facilities is combined with a simple construction and freely programmable process control. We offer you everything you need from a single source – from consulting, planning, manufacture and assembly to all-round servicing.

What we offer

- GRP silos, 50 – 200 m³
- Brine mixing facilities with an output of up to 9000 litres/hour
- Silo brine mixing facilities
- Brine mixing facilities
- Brine tanks
- Brine filling
- Automation and data processing
Servicing and maintenance
Your satisfaction is our top priority. With our competent and reliable service provision, we can help you to ensure safe and efficient winter road maintenance. A service agreement with us will enable you to take a more relaxed approach to next winter, with a comprehensive package throughout the year to make sure that your facilities are ready for use precisely when you need them. And to extend the life of these facilities thanks to regular checks and maintenance.

Restoration and modernisation
Is your existing facility no longer state of the art? We carry out a thorough check-up of all components and assess the overall state of the facility. On this basis we put together a restoration plan aimed at ensuring the operability of your facility and optimising your work processes thanks to modern technology. We also focus on optimising the cost/benefit ratio throughout the restoration process.

What we offer
• 24-hour emergency service
• Service provision for all models by all manufacturers
• Comprehensive control and maintenance for silos and brine facilities
• Preparation of measurement logs and detailed overall reports for your facilities
• Conversion, restoration, expansion and modernisation of facilities of all kinds

All-round service throughout the year
• Checking and maintenance
• Repair work
• Commissioning
• Winter operation

What we offer
• An accurate analysis of components and of the overall state of your facility
• Development of restoration plans
• Restoration and modernisation of base, silo body and safety installations
• Construction of new silos on existing foundations
• Expansion of existing silos to increase storage capacity
• Retrofitting of technical installations

Restoration and modernisation

Faszination Holz