I BAU HAMBURG

Your efficient partner for modern and effective bulk material handling

PLANT DESIGN - ENGINEERING - EPC-CONTRACTING

CEMENT - THERMAL POWER - MINERALS

Central Cone Silos

Single silos. Ring silos. Multicompartment silos. From 2 to 22 chambers, diameters: 14 to 27 m.

EPC-Contracting

Piling. Civil works. Steel structure, supply/erection. Electrical/ mechanical supply and erection.

Marine Cement Terminals

Floating terminals. Mini terminals. Silo systems. Dome systems. Flat storage terminals.

Silo Conversions

Economic modifications with advanced cutting-edge technology.

Cement Carriers

Advanced technology for self-discharging Cement Carriers including the Midship tunnel.

Components

The key for a well functioning plant: Components, all made to measure.

Ship Unloaders

Stationary or mobile types: From the 5,000 class up to the 60,000 class.

Spare Parts

High stock availability: Just-in-time supply of spare parts. After-sales Service.

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Z/11/15/Custom-built Small Terminals

I BAU HAMBURG

IBAU HAMBURG

Custom-built Small Terminals

A HAVER & BOECKER Company

Small terminals from IBAU HAMBURG

Custom-built, high flexibility

Requirements for small terminals

Cement companies looking for opportunities to supply markets faster or seeking to conquer new ones need to expand their distribution network and install new cement depots.

Therefore, they require small terminals, which are able to handle about 100 to 250 thousand tons of cement per year.

Custom-built terminals in steel construction offer the most advantages because of their flexible design possibilities, low need for civil works, short erection time and low investment costs. Depending on customer needs, the design comprises 2-8 steel silos, each with capacities of 1000 to 3500 t for storing different cement products.

The silos are equipped with pneumatic discharge systems, which are adaptable for different diameters from 8-13 m and different capacities.

The silos have a raised bottom for direct bulk loading into trucks or railcars with capacities up to 350 t/h. Either telescopic loading chutes or IBAU Mobile loaders can be used.

The different silos and loading lanes should be equipped with separate dedusting filters to avoid the mixing of different products in the terminal.

Optionally there may be installed pneumatic tanker unloading facilities, an integrated mechanical mixer for the production of special cements or a packing line for the production of bagged cements. All terminal operations are simple, dependable, free of dust and can be fully automated.

Why to build with IBAU?

IBAU HAMBURG is one of very few companies that are able to install such terminals on a turnkey-base. The company has designed and built terminals exactly according to customers wishes, completely fulfilling their expectations, as can be seen on the following pages.

Ship loading station for Holcim, Brunsbüttel, Germany

Silo feeding via rotary bottom discharger

Cement carrier during loading

Small terminals from IBAU HAMBURG

Project examples

BIMITA Terminal, Dresden, Germany

This drawing shows the general arrangement of the BIMITA terminal.

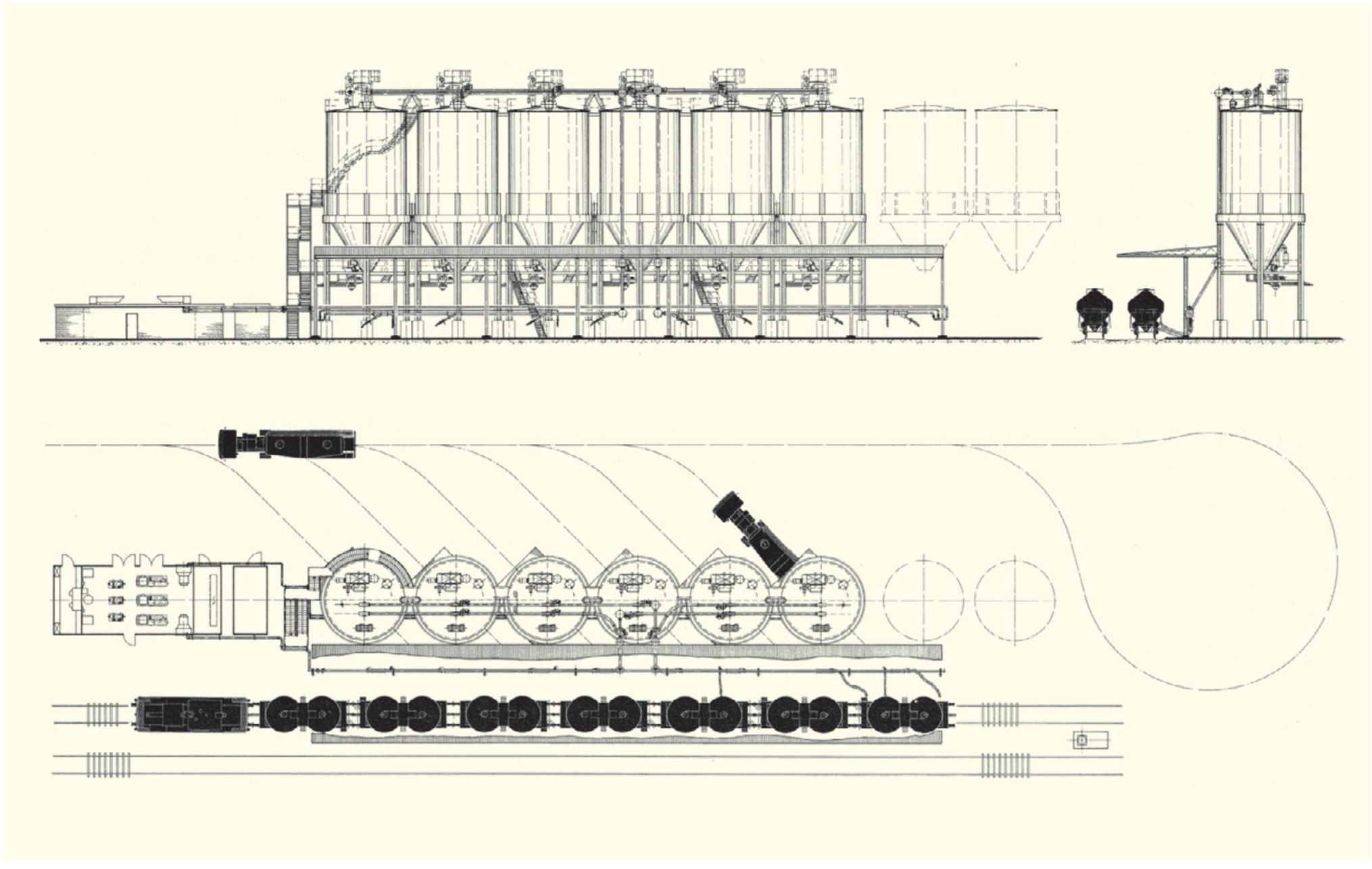
The name BIMITA is an abbreviation and it stands for „filling station for building material compounds“.

The terminal consists of six steel silos – 400 m³ capacity each – with bulk loading facilities, which have a rate of 250 t/h per silo.

The silos are fed by rail tankers at a rate of 2 x 100 t/h.

There are two rail tracks, one for silo feeding by tank wagons and one for standby-by. Loaded or unloaded wagons can wait on the stand-by rail track.

In each of the six silos a separate dedusting filter fan is installed to avoid the mixing of different types of product during feeding and truck loading process.



Small terminals from IBAU HAMBURG

Project examples

Top of the silos. Feeding lines and two-way valves

Loading of trucks at the BIMITA terminal

The BIMITA station is a good example for a typical efficient terminal.

It was built in a short time and at reasonable costs. It contains all the modern elements and equipment necessary to handle bulk cement and other building material compounds.

The loading procedure is computer controlled by modern weighing facilities, which ensures simple, dependable and free-of-dust operations.

View to the terminal

Rail wagons during unloading

Small terminals from IBAU HAMBURG

Project examples

High-capacity mixing plant in steel construction

HOLCIM AG, Lägerdorf, Germany

This high-capacity mixing plant in steel construction, with a throughput of 150,000 t/a, was designed to produce special cement binders and it has a storage capacity of 1360 m^3 for raw materials and finished products.

Eight steel compartment silos are integrated in a 47 m high mixing tower. The technology for metering, mixing and reloading the cement materials is located on 4 platforms below the silos.

In Lägerdorf IBAU HAMBURG installed the IB-M 8000 batch-type mixer, which has a throughput of 150 t/h.

Silo loading is done with 8 pneumatic truck unloading stations, each with a loading capacity of 30-35 t/h.

Cement reloading is done with an IBAU Simplex loader with 250 t/h capacity and a traveling range of 3.5 m.

Small terminals from IBAU HAMBURG

Project examples

Installation of steel silos

Material discharge from a steel silo

Small terminals from IBAU HAMBURG

Project examples

SACIMA (SOCIÉTÉ ANONYME DE CIMENT DE MAYOTTE)

The import terminal, a turnkey installation of a bulk cement terminal in the Port of Longoni, consists of 3 steel silos, each with 8.6 m diameter, 27 m height and 1600 t cement capacity. The terminal is designed for 50000 t annual throughput. Cement is received via selfunloaders. The terminal integrates one bulk loading system with a capacity of 60 t/h and a packing plant for 2400 bags/h.

The IBAU supply also included a truck weighbridge, one petrol-fueled power generator station with storage tank as well as civil construction and road building.

RÜDERSDORFER ZEMENT, Germany

The terminal for the storage of different types of cement with integrated mechanical mixer comprises three steel silos, each with 480 m^3 storage capacity, two weighing systems, an IBAU Mixer IB-M 4500 for 80 t/h and a bulk loading system for 80-100 t/h.

The loading system can be either fed from one of the silos or directly from the mixer.

Sacima Port de Longoni on Mayotte Island

Mixing plant for RÜDERSDORFER CEMENT, Germany

Small terminals from IBAU HAMBURG

Project examples

CIMENTS CALCIA, Rouen, France

The ship loading silo for the storage and reloading of ground blast furnace slag has a 10 m diameter, 27.5 m silo height and a capacity of 1100 t. Silo discharge and ship loading is done via fluid-slides at a rate of 400 t/h.

The silo is fed via two IBAU Pumps over a distance of 280 m.

VOLKSWAGEN POWER PLANT, Wolfsburg, Germany

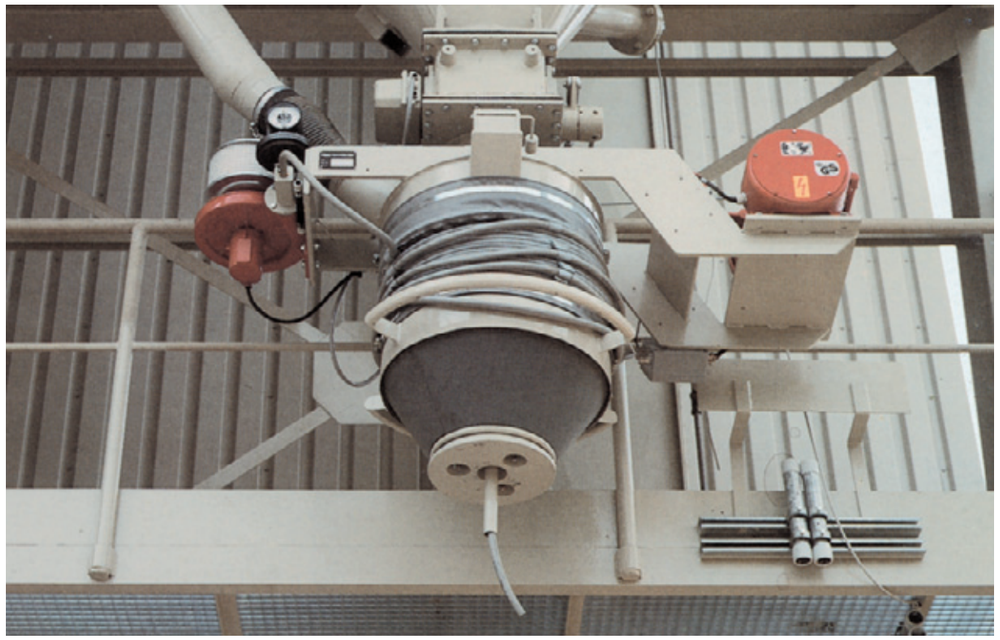
Each silo for dried paint dust has a capacity of 30 m^3 and a raised bottom for direct bulk loading into trucks at a rate of 40 t/h. Feeding of the silos is done from a cooling system via flowmeters, screw conveyors and bucket elevators with 2 t/h capacity.

Ship loading station for CIMENTS CALCIA, Rouen, France

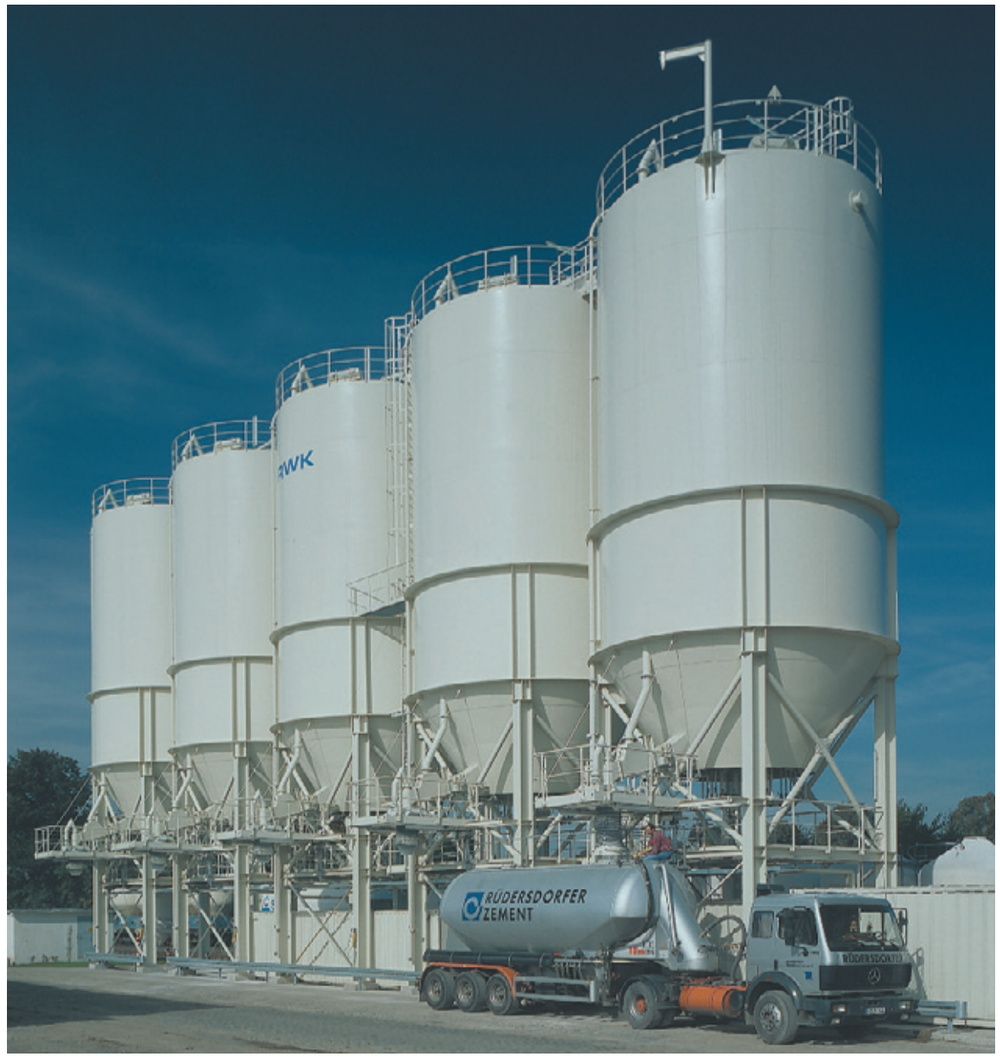
Paint dust silo station for VOLKSWAGEN, Wolfsburg, Germany

Small terminals from IBAU HAMBURG

Project examples



View of the loading chute and cement truck while loading at the Wolfsburg plant



RWK Kalk AG terminal in Dresden, Germany

RWK Kalk AG

The turnkey silo terminal, which was installed in Albertshafen, Dresden, Germany, is used for storing lime products in five steel silos with raised bottom, with 5 m diameter, 14.1 height and 470 m^3 capacity each. Silo feeding is done from a railcar unloading station with a capacity of 2x50 m^3/h. The Silo discharge capacity is 5x 200 m^3/h into five bulk loading systems for trucks.

Small terminals from IBAU HAMBURG

Project examples

BUXTON LIME INDUSTRIES LTD., UK

Many cement companies are extending their rail delivery network to dispatch cement over longer distances by rail instead of doing so by truck, thus breaking away from the past, when only raw materials and aggregates were transported by rail.

The switch-over to rail is a key element of the today's bulk cement distribution.

The new terminals in Walsall, Leeds, Tunstead and Willesden Freight Centre provide a faster and at the same time environmentally friendlier delivery.

Terminal station at Midland Yard, Walsall, UK

Loading station at Buxton Quarry, Tunstead, UK

Air supply and cement unloading pipes at the Walsall terminal