



CNBM International Engineering Co., Ltd.
Bulk Material Handling

CNBM, Your Trusted Partner!

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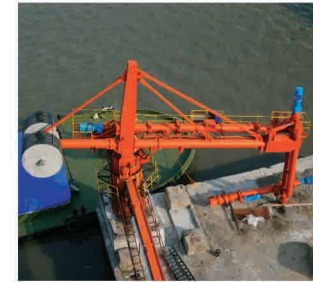
Company Profile

CNBM International Engineering Co., Ltd is a member of CNBM Group, as an EPC contractor, CNBM Bulk Materials handling is specialized in offering customer-oriented services of Engineering Design, Equipment Procurement, Plant Contactation and Project Management, Industrial Maintenance, and Industrial Spare Parts Supply for bulk material handling.

CNBM bulk materials handling program furnishes integrated solutions to process materials including powder, large particle and slurry. The process involves material loading & unloading, transportation, storage and package. CNBM bulk material handling system applies to wide range of industries including construction material, chemical, mining, agriculture manufacture, fuel, power generation and metallurgy.



Main Equipment



Loading & unloading

Pneumatic ship unloader
Screw type ship unloader
Bucket chain type ship unloader
Grab type ship unloader
Ship loader for bulk material
Ship loader for bag
Self loading and unloading ship
Float crane
Gantry crane
Stacker and reclaimer
Wagon tippler
Bulk truck loader
Train loader



Conveying

Overland belt conveyor
Pneumatic conveying system
Screw conveyor
Air slide
Bucket elevator



Storage

Stockpile
Welded steel silo
Spiral undercut steel silo
Steel structure shed



Other

Packing system
Dust collecting system
Air compression system
Weighting system
Grab bucket

Scope of Work

Planning and consulting

Preliminary studies
Profitability and feasibility studies
Conceptual design
Projecting

Technical services

Raw material analyses
Crushing tests
Geological investigations

Engineering

Overall and detail planning design

Project management

Manufacture (also local)
Mechanical engineering
Structural steelwork
Electrical equipment
Hydraulic equipment
Pneumatic equipment
Pre-assembly
Quality assurance system
Acceptance testing

Delivery

To any country worldwide

Services

Maintenance, Repair
Spare-parts service
Training

Financial solution

Short, medium and long-term
Financing concepts
Arrangement of national and international credits

Systems Engineering

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Pneumatic ship unloading and dispatching system

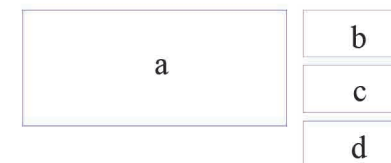
Pneumatic ship unloading and dispatching system applies to handle various powder and granular materials such as cement, ash powder, mineral powder, cereal, chemistry and fuel from river barge to silo. The mechanism is that bulk material can be sucked by vacuum suction through arm to separator then flowing into dual-transfer vessels, then using positive pressure air convey material to silo or other places. Pneumatic ship unloading and dispatching system is consisted of pneumatic ship unloader, pneumatic delivery system, silo and truck loading system. The system is environment-friendly and automatic to ensure effective dust depression and smooth operation.

1. Pneumatic ship unloader

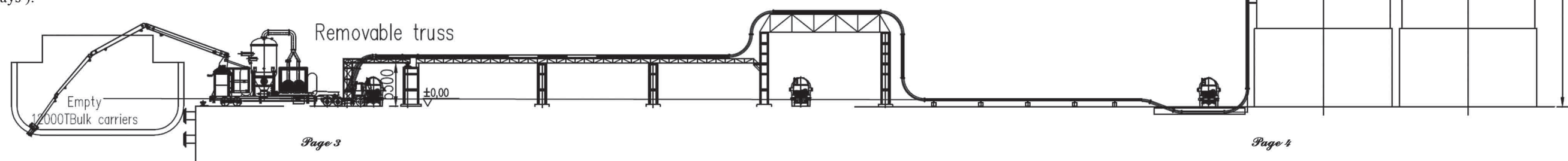
Pneumatic ship unloader is a type ship unloader that continuously conveying by pipe line after material unloaded into the equipment by pulling of vacuum. The equipment can be installed on many base either stationary or movable. Unloading capacity is from 20t/h to 500t/h, and Barge size can be handled is up to 20,000 DWT.

2. Spiral undercut silo

Spiral undercut silo used a certain width coil rolling into a desired shape in the structure of the silo effect. This silo is strong and stable and also has good air tightness. By the way, the silo body weight is equal to the same volume of concrete silo 1/6, greatly reduces cost, at the same time duration is very short (1000 tons of warehouse, only need about 5 days).



- a. T-XS2F Type Pneumatic Ship Unloader (Double track type)
- b. XS2C Type Pneumatic Ship Unloader (Stationary type)
- c. XS2Z Type Pneumatic Ship Unloader (Stationary type)
- d. Steel Silo





Mechanical unloading and dispatching system

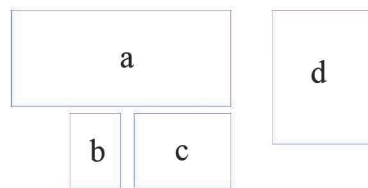
Mechanical unloading and dispatching system has excellent capacity to handle and dispatch easily caked power and granular materials. The system can fit unique needs of customer well to unload, convey, storage, package and load materials efficiently, automatically and environment-friendly. It is consisted of screw type ship unloader, belt conveyor, bucket elevator, silo and packing & loading system.

1. Screw continuously ship unloader

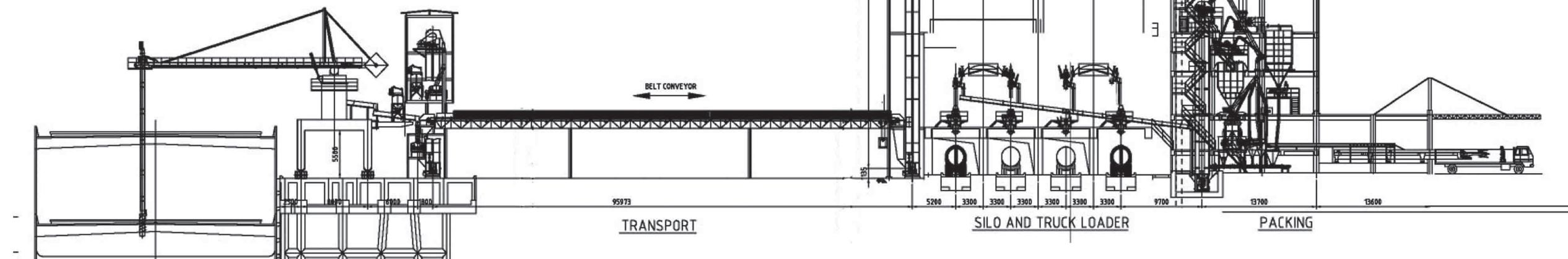
Screw continuously ship unloader is with three sections of arm is driven by mechanical drive, it is medium ship unloader which is made up of screw, vertical and horizontal conveying screw. The series ship unloaders are able to unload barge size 1000 DWT to vessel size 100000DWT. The capacity is from 100t/h-1000t/h. The feature is flexible and save power.

2. Packaging and truck loading system

As requirements of production capacity, helix type and rotary type packing machine with capacity from 30 t/h to 120 t/h can be supplied for the system to packing material. And the loading system can be classify as bulk loading and bag loading. For bag loading system, packaging and truck loading system has many advantages such as stable performance, secure running, accurate metering, labor saving and electric-mechanical integration etc.



a. LXJ series screw continuously ship unloader
 b. Bulk loading system
 c. Screw ship unloader
 d. Gantry crane



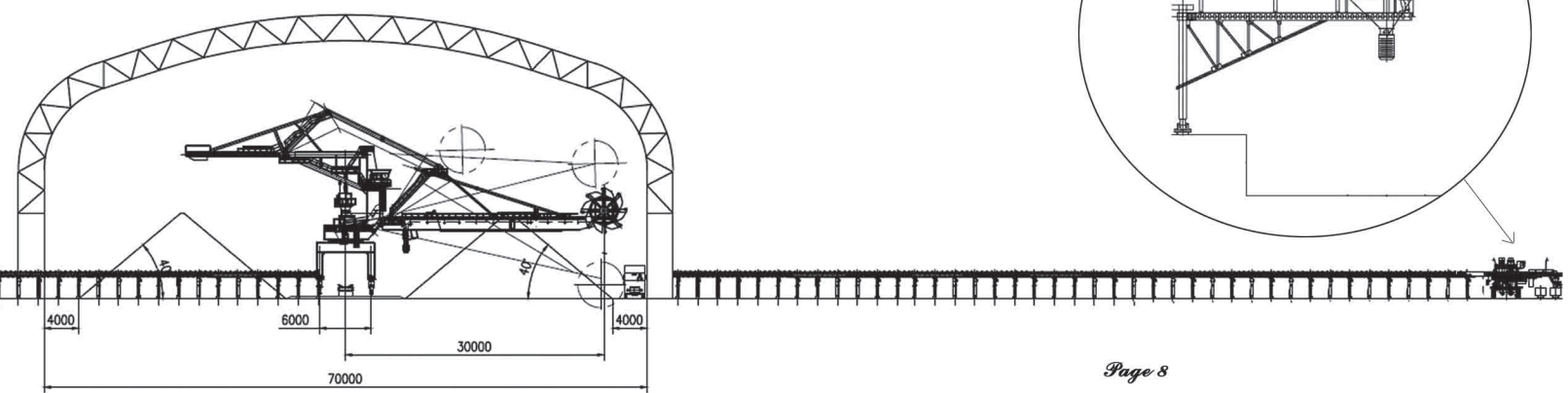
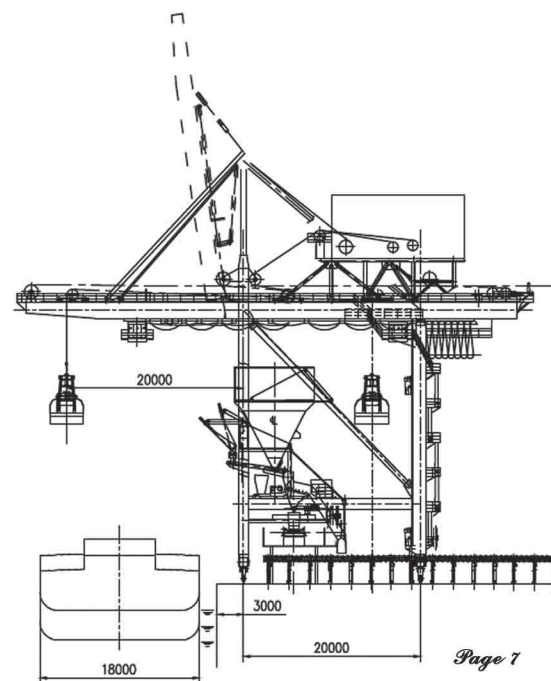


Stockpile system

Stockpile system is designed to deal with unloading, conveying, storing and loading of coal, ore and coke. This system can be widely used in bulk material handling of industries such as steel plant, cement plant, coking plant, coal storage yard and power station. Material will be unloaded by grab ship unloader from ship to hoop and be conveyed to stockpile by belt conveyor, stacker & reclaimer and be loaded to train by train loader.

1. Grab ship unloader

Grab bucket ship unloader is a special heavy duty equipment with satisfactory productivity and is widely applied to docks to unload bulk cargo ship of different sizes. Its capacity is from 600t/h to 1600t/h.



2. Stacker & reclaimer

Stacker & reclaimer integrated combines two kinds of operating mode, stockpile and reclaim, into one machine. It uses ribbon belt conveyor on arm support of stacker & reclaimer to discharge material to yard and use bucket-wheel to reclaim. The capacity of this series stacker and reclaimer is from 1500 t/h to 3000 t/h.

3. Overland belt conveyor

Belt conveyor can be designed according to exiting topography, suitable for rough, mountainous situations. And it has advantages such as suitable for long-distance, large capacity, high conveying speed work condition and continuous and highly efficient operation.

4. Train Loader

Non-dust train loader is specially is specially designed to load bulk material to train. Its mature and advance design allows it to fit actual requirements of different sites.

Train unloading and ship loading system

Train unloading and ship loading system is designed to deal with unloading, conveying and loading from train to ship. This system can be widely used in bulk material handling of industries such as mining, coal storage yard and cement plant. This system is consisted of truck tippler, belt conveyer and ship loader.

1. Ship loader

The ship loader is suitable for loading bulk ships and barges at bulk terminals and specialized coal terminals. The materials to be transferred are ore, cement, coal, grain, etc. The capacity is from 500t/h to 10,000t/h. The ship loader has advanced technology, perfect performance, reliable operation and stability, high ship loading efficiency, long service life, is convenient for maintenance and can meet the needs of high freight volume, high efficiency, frequent operation and environmental protection.



2. Rotary wagon tippler

Rotary wagon tippler is a kind of large equipment for unloading bulk goods in open wagon. It's preferred alternative in the countries that transport bulk goods by railway. Compared to other ways, all kinds of bulk goods in all sorts of open wagons well handled, and it is efficient and very easy to be automated.

