Stacking Systems and Equipment

ThyssenKrupp Robins
Machines to Move Material

Meeting the needs of modern industry.

Storage
Stockyards play an integral part in the layout and operation of most materials handling systems. They serve as a storage area for raw or processed materials, a buffer area between the mine and processing facility, or to provide blending of two or more grades of material.

ThyssenKrupp Robins has supplied a major share of the stockyard equipment for circular or longitudinal storage systems.

Luffing & Slewing Stackers
The luffing stacker travels along the entire length of the longitudinal stockpile conveyor and serves to build a stockpile on one side of the conveyor only. The tripper is connected to the traveling stacker by way of connecting structure and serves to transfer material to the boom. The stacker consists of a rigid structural design which has a boom pivot in the center of the machine. The luffing motion is often done by concrete counter-weight design. Stacker and tripper are designed for variable speed travel and can be quickly relocated from one place of the stockpile to another. This machine can be operated in a manual mode, semi-automatic mode or fully automatic mode from a central control station.

The luffing stacker is the most cost effective design for a stockpile on one side of the conveyor. Its structure is simple and it has fewer mechanical components than the slewing and luffing stacker. A traveling slewing stacker serves both stockpiles, left and right of the stockpile yard conveyor. It is controlled remotely and can build a stockpile in chevron, coneshell or windrow stockpiling modes.

The Luffing/Slewing type of stacker is the most versatile since it is able to slew from a stockpile to the other side of the yard conveyor and build equal stockpiles on both sides of the yard feed conveyor.

We design the machine to meet the need, from shipping and storage facilities to power plants, mining and heavy industry.
Whether for circular or longitudinal storage systems, ThyssenKrupp Robins has a solution.

**Wing Stackers**

One wing stacker fulfills the function of two luffing stackers. It can be used to either simultaneously stack two stockpiles or just one at a time. The material flow comes over a tripper car and is diverted to one or two luffing booms. The structure in the center of the machine houses luffing winches for the luffing motion of the booms and a flop gate to divert the material flow.

**Radial Stackers**

Radial Stackers stockpile materials in a kidney shaped pile, slewing between 90° and approximately 360°. Boom angles are either fixed or can be made a luffing motion between plus 15° to minus 15°.

**Tripper Cars for Stackers**

The tripper car serves to transfer the material flow from one part of the machinery to the next for example from the stockyard longitudinal belt conveyor onto the conveyor in the boom of a stacker.

**Side Boom Stacker/Reclaimer**

The side boom stacker/reclaimer has the same reclaiming functions as the side boom reclaimer. A tripper trailer adds a stacking function to this machine. It transports material to the center of the transfer table and discharges it into the scraper blades. The scraper blades work in reversed rotation and build a stockpile in a slow motion traveling mode.

In order to achieve a clean material transfer, a rotating flop gate covers the reclaim opening. This machine can also send the incoming material in bypass mode back onto the yard conveyor and reclaim additional material on top of it. The side boom stacker reclaimer can also be used to stack and reclaim separately.