Reclaimers - Product Range

Sandvik reclaimers are designed to reclaim bulk materials from stockpiles at mines, ports, power stations, steel plants, etc. in a quick, efficient and orderly way. They are available in several main types, including bucket wheel, scraper and drum-type reclaimers, and in many configurations and sizes, with capacities from 500 to 20,000 tonnes per hour and more. The choice of design depends on factors such as the size and shape of the stockpile, the type of material to be reclaimed, the required reclaiming rate and the need for blending or homogenization.

**Boom-Type Bucket Wheel Reclaimers PR100 - PR200**
Sandvik boom-type bucket wheel reclaimers are designed to reclaim large volumes of bulk material from stockpiles at mines, ports, power plants, steelworks, etc. They can be mounted on rails, wheels, or tracks, and their design, boom length and control system are tailored to suit the stockpile configuration, the type of material to be handled and the needs of the customer. Boom length can range from 10 to over 60 meters and the exact configuration, as well as the operational features, will always depend on the application. The following two configurations can be provided:

**PR100 - Pylon Type**
The consistent performer - combines a good ratio between machine energy and capacity. Very popular in low to medium bulk density applications and medium ore applications.

**PR200 - Rocker Type**
Super-duty machine - minimizes the migration of the center of gravity in operation to allow very high capacities and an economic rail gauge and to keep utilizable stockyard width at a maximum.

**Bridge-Type Reclaimers PR300**
Sandvik bridge-type bucket wheel reclaimer designs are for a more efficient blending purpose. This can be even more improved by means of a dual bucket wheel design. They are typically used in the coal, iron- and steel industries for reclaiming material from stockpiles where homogenization is a primary requirement. The harrows are designed to promote homogenization and direct the flow of material to the base of the pile, where it is scooped up by the buckets and discharged on to a cross conveyor that either passes through the axis of the wheel, or is connected to the bucket wheel by means of an intermediate conveyor.

**Portal Scraper Reclaimers PR400**
Full portal scraper reclaimers usually reclaim the material from the surface of the stockpile in a longitudinal direction from one side of the pile only, down the full length of the pile. They discharge the material on to a conveyor belt along the stockpile. Because of the reclaiming path from the surface, traveling portal scrapers have limited ability to homogenize the material, unless a strict and rather complicated material layering scheme is implemented. They can be a good solution for small to medium capacities and where homogenization is not a priority.

**Bridge-Type Scraper Reclaimers PR500**
Front-acting bridge scraper reclaimers that operate in a transverse, slice-wise manner are clearly superior to those that reclaim the material longitudinally, because they cut across the pile layers and blend the material effectively during reclamation.

**Drum-Type Reclaimers PR600**
Essentially, the drum-type reclaimer is the alternative to single- and double bridge-type bucket wheel reclaimer. It comprises a long rotating drum fitted with a large number of reclaiming buckets arranged radially along its length, into which material is fed uniformly by the harrow. The drum-type reclaimer is a good solution if good homogenizing characteristics are of paramount importance.
Each bulk material has different behaviour with regard to cutting forces, free flowing capabilities and adhesiveness. Sandvik offers tailor-made designs for the complete range of bulk materials, to combine excellent cutting geometries with high abrasion resistance and prevention of bucket incrustations.

**Dust Concepts**

Depending on the application, Sandvik individually designs drive concepts for each appropriate drive train. These can include electromechanical variable speed drives (VFD or VVVFD), electromechanical constant speed drives with fluid coupling, as well as hydraulic drives, whichever is the most suitable drive for the field of application.

**Drive Concepts**

Sandvik is a high-technology engineering group with worldwide headquarters in Stockholm and extensive manufacturing sites in Europe, North America and Asia. Sandvik is also an active player in North America, employing more than 7,700 people and with sales of $1.8 billion.

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