

Heyl & Patterson equipment streamlines railcar operations in the stockyard



The H&P hammermill can be installed to work with any rotary car dumper.

Heyl & Patterson (H&P) is a specialist in bulk transfer and thermal processing. The company's bulk transfer division offers a wide range of products, including: rotary railcar dumpers; turnover railcar dumpers; C-shape 'CR'-model rotary railcar dumpers; C-shape 'CT' turnover railcar dumpers; travelling hammermills; train positioners; railcar indexers; platen weigh scales; continuous barge unloaders; grab bucket barge unloaders; barge haulage systems; CUBs; and electrical controls and upgrades.

The company has over a century's experience in designing and constructing bulk transfer equipment and also offers consulting and field service.

H&P's products are used to unload a wide variety of products, including coal, grain, iron ore, coke, bauxite and more.

Recent activity for the company includes rotary dumpers for South America, Russia, Nova Scotia and the USA.

TURNOVER AND ROTARY DUMPERS

H&P is well-known for its railcar dumpers, and offers these in two versions: the turnover dumper, and the rotary dumper.

The turnover dumper — usually known as a 'CT' dumper — is ideal when conditions demand a combination of shallow foundations and track-level receiving hoppers. This means it has lower construction costs and faster erection schedules. The turnover dumper is used for low to moderate throughput applications. Various end-ring configurations — either open or closed end-ring designs — are available for turnover dumpers.

The operational sequence of a turnover dumper is similar to that of the rotary dumper: a car is positioned on the platen, clamps lock it in place, and the dumper inverts it to a maximum of 180°. However, the essential difference between the two lies with the arcing movement of a turnover dumper in comparison to the axial rotation of rotary dumpers. Each car must be uncoupled and dumped individually in the turnover dumper.

The rotary dumper — usually known as a 'CR' dumper — is the latest addition to the company's bulk handling range. It is in use around the world as one solution to the demand for high-speed dumping of random and non-rotary coupled cars. Also, rotary-coupled unit trains can be handled on the same dumper,

because the centre of rotation is the same as the coupling centre. The open-sized feature of this design allows the arms of the car positioner or indexer to pass through the dumper. The CR dumper delivers low power advantages and fast cycle times and, when combined with multiple positioners, or indexers, achieves maximum productivity.

TRAVELLING HAMMERMILL

The H&P hammermill obviates the need to send a crew to break up oversize lumps, or to use any unsafe or explosive methods. It is rugged, with design simplicity that ensures uninterrupted service, with low operating and maintenance costs.

It crushes lumps at the hopper grizzly, an efficient method that eliminates the need for other expensive crushing equipment. Moreover, there is no need for additional crew, as it is controlled by the dumper operator. It can be installed to work with any existing rotary car dumper without the need for extensive downtime for the installation process.

H&P CUB

The CUB is an electro-mechanical unit specifically designed to move single railcars, or groups of cars. It is easy to install, easy to operate, and far less costly than larger systems, making it an ideal solution for mid-sized loading, unloading and repositioning.

The CUB's compact sturdy construction ensures safe, reliable operation, and requires very little maintenance. The CUB moves along a steel runway, utilizing two travelling carriage assemblies that ride on anti-friction bearings. Two pivoting arms securely capture the railcar truck frame to move the car(s). A variable speed motor drive powers a chain and sprocket arrangement, which allows the CUB to travel in a swift, bi-directional manner.

The CUB can be easily installed at any site without disrupting operations. The runway for the CUB is bolted to the track rail. The mechanical drive, which is installed next to the track, requires only a modest concrete pad. Each system is custom-designed for the user's unique application, and offers various travel speeds and car capacities to establish the most efficient mode of operation.