

Konecranes PD Cranes and Turnkey Steel Runway Selected by Innovative Precast Concrete Manufacturer

Features and Benefits

Ability to quickly customize its PD Process Duty Trolley to meet unusual customer specs

Ability to fabricate and deliver a custom ultra-heavy duty runway suitable for supporting precast concrete modules

Geographically close to the customer

Ability to fast-track the project

Industry Group: Crane Manufacturers Association of America (CMAA)



The Opportunity

One of the largest precast concrete companies in the U.S., Tindall Corporation has become known for its innovative solutions to emerging construction challenges.

Tindall purchased an existing plant in San Antonio TX and began designing a major expansion to produce one of its specialty products: modular precast correctional cells in two sizes. The company wanted maximum lifting flexibility to accommodate future products. And, they wanted the expansion completed quickly to accommodate prototype development, which meant expedited delivery on the cranes. Previous Tindall facilities had employed concrete runways. Because the stakes were high and time short, Tindall requested a turnkey bid including a fabricated steel runway from the crane manufacturer.

The Solution

The situation was a perfect fit for Konecranes new PD Process Duty Trolley. Designed to meet or exceed North American specifications, the PD Trolley is a heavy-duty custom hoist solution available at a less-expensive, pre-engineered price. It combines superior maintainability with a built-up design, rated for CMAA Class D –F Heavy Duty. Konecranes builds the PD trolley from a range of

proven, heavy-duty components that are also used for its totally custom hoists. The only difference is that the PD Trolley can be delivered substantially sooner than a fully-custom hoist.

The first crane ordered was a 40-ton bridge crane with a 107'8" span equipped with two 20-ton PD Trolleys. The crane was cab operated, CMAA Class E, delivering 400 fpm on the bridge and 250 fpm on the trolleys, with a fast Konecranes hoist.

A second 60-ton CMAA Class E bridge crane was ordered and designed to operate on the same runway. It includes two 30-ton hoists whose hooks, 19 feet apart, are positioned parallel to the runway on a wide rectangular bridge. This crane can pick up a 60-ton quad jail cell unit by itself, or it can be used in tandem with the first crane to pick up a 60-ton unit. Working together, the two cranes can also pick up prototypes for new structural products of extreme length. Konecranes also fabricated 1,000 feet of runway: two 500-foot-long heavy-duty steel box girders – 4'9" deep and 2' wide.

And the customer says

"We gave Konecranes the design of both the cranes and the runway, putting the specification under one umbrella. A turnkey deal was faster and easier for us because of production schedules. Since we were already onsite casting product, it would have delayed our schedule to build a runway," says Tindall's Jose Villalba, Plant Production Manager - Corrections Texas Division.

"Now with both cranes installed we can run nonstop on both sides of the facility, the casting side and the paint and up-fit side where furniture, electrical and plumbing are installed. This was a fast track project, with tight schedules, and the challenges of a long span and the unique lifting configuration we needed. We built in a lot of expansion capability up front not knowing what we might require in the future," Villalba said. "Konecranes handled all of those challenges very well."



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