



Case Study

Modernization of Conrail's Pier 124 Nears Completion

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A major milestone in the modernization of Conrail's export coal pier 124, located in South Philadelphia, was recently achieved in the assembly of a gargantuan travelling shiploader weighing about 1,400 tons. This machine is designed to load vessels at a rate of 5,000 t/h, by means of an 84 inch wide belt conveyor having a shuttling head end with about 35 ft of travel.

The shiploader will be equipped with a telescopic chute attached to the head end of the shuttle. A unique automatic control system will maintain a head of material within the telescopic chute, thus minimizing free fall and resultant degradation of sized material. This control system has not been previously employed in the high rate loading of a vessel through a telescopic chute. The design was made more complex by Conrail's requirement that the shiploader handle sized anthracite and bituminous coal for stoker boilers and that it have additional flexibility to handle coke and fluxing stone for metallurgical use.