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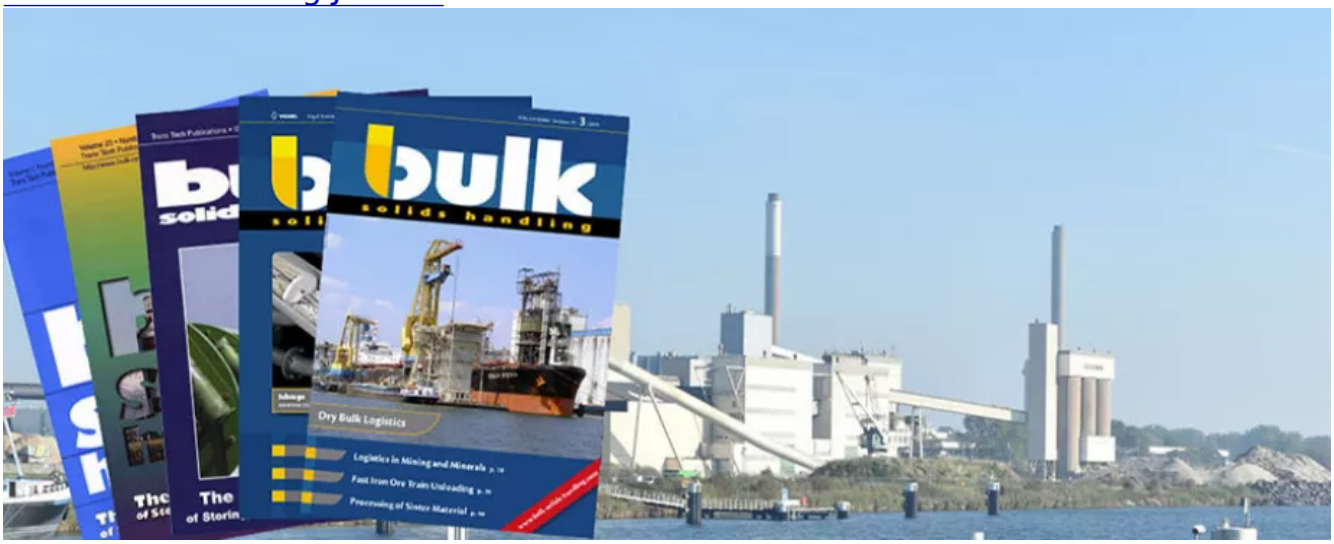

Case Study

Port Kembla Coal Terminal

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The new coal loading facilities at Port Kembla, presently under construction and to be commissioned in August 1982, are being described. The system consists of unit train and bottom-dump truck unloading, open stockyard, ship loading and extensive conveyor belting. One of the major criteria in developing the facility design was its environmental impact on the neighboring towns. A coal dust suppression system was incorporated to suppress coal dust at the transfer as well as to maintain stockpile surface moisture which is essential for the local summer temperature and high wind conditions.

The main system items such as railroad receiving, truck unloading, conveyor system, coal yard with stackers and reclaimers and the spray, storm water and drainage system, and ship loading are outlined.

The Port Kembla Coal Loader is being constructed south of Sydney in New South Wales, Australia. The terminal is a development by the N.S.W Government, with the Public Works Department as the construction authority, while the Maritime Service Board will own and operate the terminal.

The system master planning and detailed design and contract packages have been prepared by Soros-Longworth & McKenzie and Soros Associates. The terminal is planned for an ultimate capacity of 25·106 t/year with Phase 1 currently under construction, possessing an annual capacity of 15·106 t/year, a

stockpile capacity of 0.8·106 tonnes in 16 grades and the ability to load 110,000 DWT vessels to full draft or 160,000 DWT vessels to partial draft. Phase 2 will expand stockpile capacity to 1.4-106 tonnes and add a second loading berth for up to 250,000 DWT vessels. Phase 1 is designed to permit construction of Phase 2 without interruption of operation.

The design incorporates a variety of innovative features for enhanced reliability and ease of maintenance and cleanup.

In particular, the environment controls incorporate the best modern technology and represents a comprehensive approach including dust suppression and control, truck washing, noise control, fire prevention, water treatment, landscaping and aesthetic considerations, as well as features to increase the safety and convenience of the operating personnel.