



Case Study

The Siwertell Coal Unloader at Kingsnorth

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The Siwertell ship unloader is a continuous bulk unloader, that has been used extensively to unload cement, grain and feedstocks, and minerals. More recently, it has been used for unloading coal, and two Siwertells have been purchased by the Central Electricity Generating Board (CEGB) in Great Britain. This article examines some of the reasons why the CEGB chose Siwertells and looks in detail at one of the Siwertells now in operation at the Kingsnorth power station.

Background

Kingsnorth, 25 miles east of London is one of the largest dual-fired power stations in Europe. It has a capacity of 2,000 MW and uses 3 Mt/a coal. The Siwertell newly installed at Kingsnorth will unload about 1.0 to 1.5 Mt/a and has a capacity of 950 to 1,150 t/h.

Kingsnorth was designed to burn either oil or coal and switched in the 1970s from using oil to coal. That was when most of the existing coal unloading equipment was brought in. Today, 96% of what the power station burns is coal the rest is oil.

Virtually all of the coal comes in by sea from the north-east of England in colliers of 5,500 to 11,500 DWT. The coming fleet is in the process of changing over to larger vessels of 18,000 to 22,000 DWT. This is part of a programme to cut down the costs of transporting and handling coal.