

Delivering Energy to Industry
Combined Heat and Power in Practice

Huntsman Tioxide – Grimsby



'cogen was chosen after an intensive and rigorous selection process. It means we have secured the best possible partner to supply our long-term energy needs competitively.'

Colin Deas, Site Manager, Huntsman Tioxide.

Huntsman Tioxide – Grimsby

Huntsman Tioxide, the manufacturers of Titanium Dioxide which is used to provide the white pigment colouring in a wide range of products, from toothpaste to paint, selected npower cogen to build and operate a CHP scheme to meet the future energy demands of the production site.

The scheme

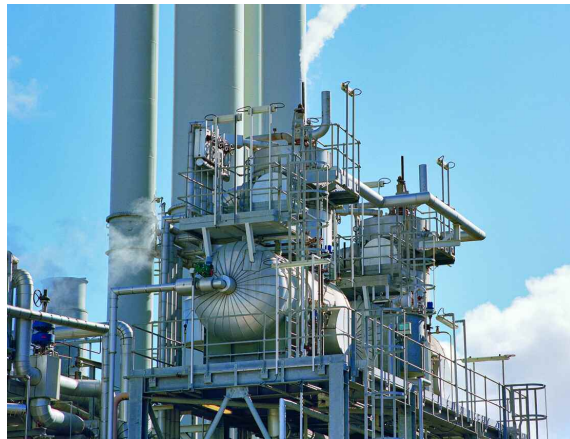
The £18 million CHP scheme is based on a Cyclone gas turbine generator and supplementary/ auxiliary fired waste heat recovery boiler combined with a steam turbine with backup auxiliary boilers. The plant, which has completely replaced the life expired steam production facilities at Tioxide, Grimsby, entered full commercial operation in July 2003.

The technology

The 13MW gas turbine, 55 tonnes per hour waste heat recovery boiler and 9MW steam turbine generator operates with an overall efficiency in excess of 80% compared with around 36% for a conventional power station and 56% for a CCGT. The heat and electrical efficiencies achieved qualify the scheme as 'Good Quality CHP' under DEFRA's 'CHP Quality Assurance Programme'.

Contract terms

npower cogen built, owns and operates the CHP scheme, selling electricity under a long-term contract to Huntsman Tioxide as well as the steam produced at the plant. npower cogen exports power to and provides backup electricity supplies from the grid.



How Huntsman Tioxide gains

The scheme's fuel efficiency and the contract terms result in significant savings for Huntsman Tioxide on their annual energy expenditure. They also benefited from replacing the old steam plant with a new utilities plant on their site without major capital expenditure. Meanwhile, the environment gains from Huntsman Tioxide's use of CHP technology to replace the existing boiler plant, ensuring the site meets its internal target to reduce emissions of SO_x and NO_x by 70% from the 2000 baseline.

To find out how a CHP scheme could benefit your organisation, contact us at:

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