



Repairing some of the country's most iconic chimneys



British Steel headquarters, Scunthorpe



Image: Cooling Tower, Gareth James, Creative Commons License.

Premier Technical Services Group Ltd (PTSG) was recently contracted for a major specialist services project at the headquarters of British Steel in Scunthorpe to repair a number of industrial chimneys.

Scunthorpe's iron and steel industry has been a cornerstone of the area since the mid-19th century. In 1967 the works were consolidated and nationalised as part of the British Steel Corporation. In 1988 they were privatised and became part of Corus and later Tata Steel. Greybull Capital, a private investment firm that specialises in buying up struggling businesses, took over in 2016, renaming the firm British Steel.

In the last several years, a significant investment has been made to improve the quality and range of wire rod produced at British Steel's headquarters in Scunthorpe.

The factory is a huge complex on the outskirts of the town centre and its towering chimneys can be seen for miles. Its presence is embedded into the lifeblood of the town – the central shopping arcade is named The Foundry in homage to it.

Steeplejack engineers from PTSG Building Access Specialists Ltd are currently onsite during a two-week shutdown of the steelworks, enabling them to perform a series of repairs to five different chimneys:

British Steel headquarters, Scunthorpe

Two steel chimneys at the Appleby Coke Ovens

The Appleby Coke Ovens were built in 1938 and have been progressively updated over the years. British Steel recently invested £10m in upgrading the benzole plant that services the coke ovens and captures the by-products of the coke-making process into a liquid product used in the chemical industry, such as in the manufacture of rubbers, plastics, lubricants, dyes and synthetic fibres.

Appleby Coke Ovens consists of four batteries, each comprising a series of ovens. The coke produced here is used in the blast furnace with the charged iron ores to produce the liquid iron, which is subsequently converted to steel in the plant. The steel chimneys are perhaps the most visible and iconic part of the entire plant at Scunthorpe. PTSG's steeplejack engineers are carrying out repairs to the two structures.

Two steel chimneys at the Scunthorpe Rod Mill

In the last several years, a significant investment has been made to improve the quality and range of wire rod produced at British Steel's headquarters in Scunthorpe.

Wire rod performs an essential role in letting people go about their everyday lives, from the car or bus they travel to work in to the bed they sleep in at night. It's one of the most diverse products available, so hundreds of millions of end-users will see the benefits of this investment.

PTSG's steeplejack engineers are carrying out repairs to two steel chimneys at the Scunthorpe Rod Mill.

One brick chimney at the Ore Preparation Plant

Coke, iron ore, sinter and limestone are fed into the top of the four blast furnaces in Scunthorpe. Each is named after four English queens: Mary, Bess, Ann and Victoria. A hot air blast of temperatures around 1,000°C is injected at the bottom of the furnace through nozzles called tuyeres. As the coke burns, temperatures higher than 2,000°C are reached and this heat creates molten metal (iron).

The plant's modern convertors (or vessels) take a combined charge of scrap and liquid iron of up to 330 tonnes and convert this into steel in just 25 minutes.

The Ore Preparation Plant is fairly central to the British Steel's headquarters in Scunthorpe. PTSG's steeplejack engineers are carrying out repairs to the large brick chimney stack.

Three squads of steeplejack engineers are on site during the two-week shutdown. During this time, they will complete the highly specialised repairs using rope access techniques.

PTSG Building Access Specialists Ltd has diversified its steeplejack service from traditional "cloth cap" techniques into a modern, high-tech engineering company, providing height work solutions to a vast array of structures. Today, it leads the high-level maintenance industry, serving clients worldwide and carrying out work to chimney stacks, cooling towers, flare stack and a host of other high and unconventional structures.