



CASE STUDY

UK's Biggest Steel Manufacturer Demonstrates Best Practice in Water Supply Resilience

The Client

TATA Steel, South Wales

TATA Steel is the largest primary steelmaking company in the UK, operating 24 hours a day, seven days a week. Its three manufacturing sites in South Wales employ 4,000 people, with the potential for an additional 12,000 contractors on site every day. The sites produce almost 9,000 tonnes of steel every day, which is used in everything from cars and construction to food safe packaging, cans and tins, providing a vital foundation for many of the UK and Europe's strategic supply chains.

At these locations, three continuous casters take molten steel and cast it into strands which are cut into red-hot solid bars of steel, each weighing around 30 tonnes.

To enable this process, a reliable supply of 95,000 litres of water per hour is required, including water for dust control, cooling, descaling and other processes. In addition, a further four litres are required daily, per person for welfare, drinking and washing.

Even though TATA Steel had yet to experience water outages at the sites, it realised the importance of commissioning a site-specific emergency plan for water, to protect equipment, personnel, productivity, revenue, and reputation, and came to Water Direct to help.



Up to 16,000

people on site
every day



9,000

tonnes of steel
manufactured each day



80%

Produces 80% of UK
canned products



95,000

Consume 95,000 litres of
water per hour

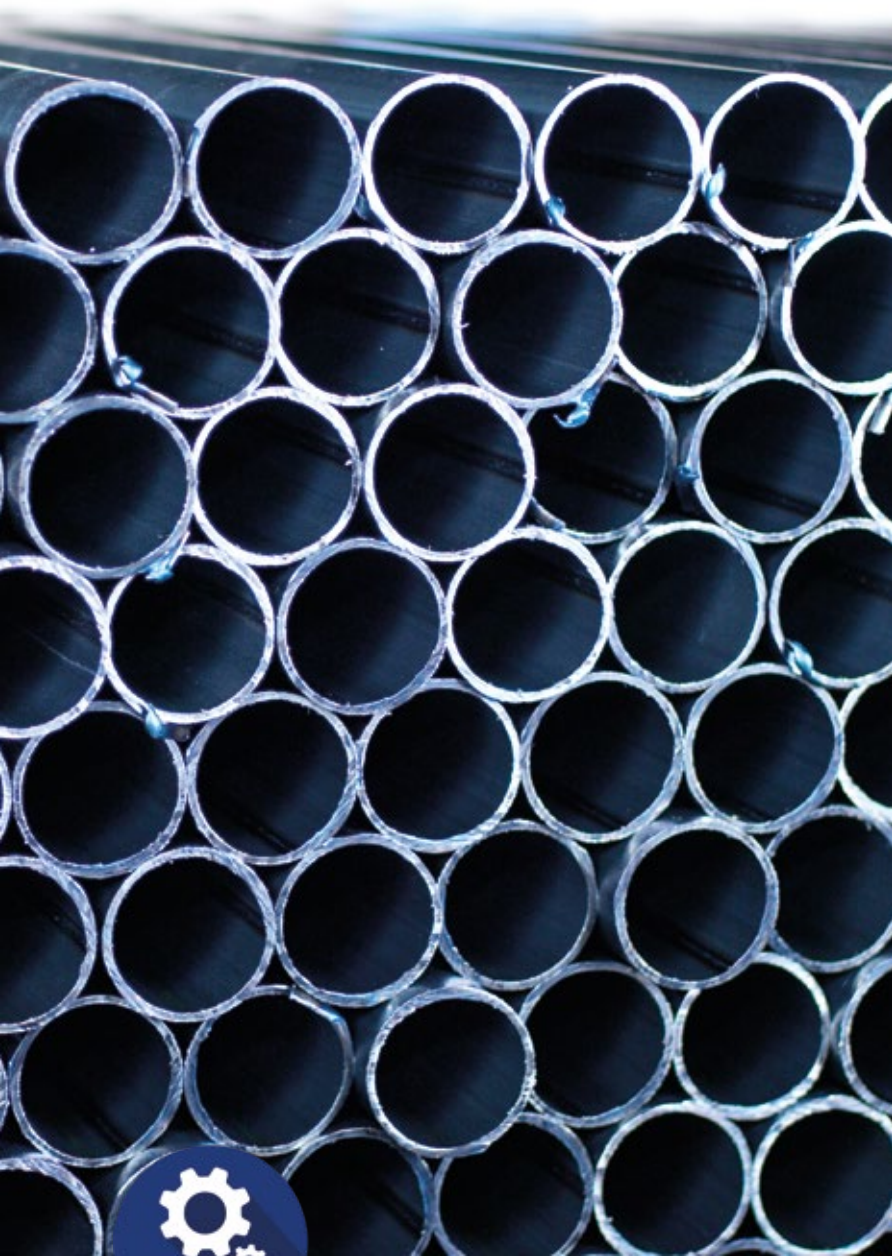


COMAH site



£1 million

Potential loss
£1 million per hour



Understanding the risk

Bijo Martin, TATA Steel's Energy Category Manager explains the complex nature of day-to-day operations at the Port Talbot manufacturing site.

"The potential for chemical spills and splashes means that a constant and reliable water facility is crucial for keeping employees safe during daily operations. A sudden interruption would be a disaster. The risk could be loss of life, or it could be millions of pounds. We are operating on one of the most dangerous sites in the UK."

"If you stop one of the operations you can lose a million pounds an hour. If it's a complete stop and our blast furnace comes down it would take 15-30 days to come back online."



TATA Steel ensures a **WaterTight™** response to a crisis

Core operations take place at Port Talbot, which, as a site subject to Control of Major Accident Hazards (COMAH) Regulations 2015, is one of the TATA Steel's most high-risk sites. Thousands of companies across a variety of industries rely on the steelmaker to provide half a million tonnes of steel within a two-week lead time, and water is essential to its operations.

This led TATA Steel to work with Water Direct's specialist business continuity and planning team to complete a comprehensive site audit and risk analysis and work with the TATA team to create a robust water contingency plan that covered operational and human risk.





A WaterTight™ response

As experts in planning for business continuity, Water Direct's Watertight team understood the criticality of water to TATA Steel's operations and the need for a robust contingency plan with a rapid assured response. Chemical spills weren't the only concern for TATA Steel. Any large-scale disruptions to its water supply could result in a financial loss of millions of pounds and cause significant damage to on-site machinery that relies on water to operate.

Bijo explains: "Due to the nature of our operations, on-site machinery requires a controlled, slow turn down, otherwise it could lead to hazardous activities. This means even the bare minimum of water is essential for operations."

Alongside the health and safety risks, TATA Steel had to consider the impact of halted productivity, unprotected equipment, and significant losses in revenue. After an on-site audit, TATA received a site-specific plan, specially designed by our expert WaterTight team, to meet the unique needs of the site and supply a robust plan with assured response in place to ensure minimal disruption to operations.



Research suggests that up to two-thirds of uk businesses have no contingency plan in place for loss of water supply

Water utility companies aim to provide businesses with water 24 hours a day, 365 days a year. However, in the event of a water supply interruption, water companies aren't obligated to jump in and save the day. Companies can be left without water supply for hours, days and even weeks, causing complete shutdown for most businesses.

With water supply critical to operations, TATA Steel recognised the urgency for a detailed contingency plan with an assured response in place. "The water supply contingency plan we designed with Water Direct gave us a great deal of insight," says Bijo. "We [TATA] thought we knew everything there was to know about the site, but the audit and planning process opened our eyes to other areas that had the potential to cause hazards."

Highlighting these areas gave TATA Steel the confidence to take the necessary steps towards planning for any large-scale water supply interruptions. A clear action plan to introduce an alternative water supply was put in place that will allow TATA Steel to act rapidly to avoid disruption should its water supply unexpectedly stop.

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Are your Business Continuity Plans WaterTight™?

Every WaterTight contingency plan is specifically tailored to suit the needs and requirements of individual clients, and particularly the sites they operate from. TATA Steel's Bijo Martin noted: "Our operations team reported that everything was brilliant, from the site visit and planning to interactions and follow ups and was impressed by the quality and content of the on-site report."

He further encouraged other businesses to consider a water contingency plan stating: "A clean, uninterrupted water supply is critical, especially if it is needed for health and safety, which has a direct impact on employee wellbeing."

The steel manufacturer recognises how crucial it is to have a reliable water supply and found that working through the audit and risk analysis process with the specialists at Water Direct enabled a detailed, tailored report enabled clear planning, even for areas of site that hadn't previously been considered as a hazard risk.

Do you have a plan for loss of water supply? Could loss of water present hazards on site that you aren't aware of? Could your employees be at risk? Taking action and having a reliable water emergency plan in place is essential; Water Direct developed its award-winning WaterTight service to help even the most complex businesses stay operational and mitigate any water supply issues.

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Get a WaterTight™ Plan

Book a call with one of our WaterTight team to see how Water Direct can help your business prepare for the unpredictable with an industry recognised approach to water continuity planning.

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Alternatively, you can now Live Chat with one of the team at www.water-direct.co.uk