

**TATA STEEL**



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## Overview

### Business challenge

For more than 20 years, Tata Steel Europe's Tubes Division has relied on HP Integrity NonStop servers to provide total availability for its manufacturing execution systems. Although the systems themselves were completely reliable, some of the surrounding communications infrastructure was more fallible, and it was difficult to integrate the solution with other systems to meet changing business needs.

### Solution

Orbital Integrated Systems, an IBM Business Partner, helped Tata Steel Europe upgrade its IBM WebSphere MQ for HP NonStop messaging solution. This has enabled more reliable communication between systems at different UK sites and simpler integration with the company's SAP system in the Netherlands. Orbital also provided extensive training for the in-house team, helping them become self-sufficient on the new version of WebSphere MQ.

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# Tata Steel Europe creates a simpler, more flexible messaging infrastructure

*Supporting complete continuity for manufacturing systems with IBM WebSphere MQ for HP NonStop*

The European operations of Tata Steel (formerly known as Corus) comprise Europe's second largest steel producer. With main steelmaking operations in the UK and the Netherlands, they supply steel and related services to the construction, automotive, packaging, material handling and other demanding markets worldwide. Tata Steel is one of the world's top ten steel producers. The combined group has an aggregate crude steel capacity of more than 28 million tonnes and approximately 80,000 employees across four continents.

## Tata Steel Tubes

Tata Steel Tubes is part of Tata Steel and manufactures steel tubes in the UK and Netherlands for many different applications, such as construction, automotive, mechanical engineering and building services. Tubes employs 1,800 people at its locations throughout the UK and the Netherlands.

## Maintaining continuous operations

"Our manufacturing execution systems (MES) are absolutely business-critical," comments Chris Glen, Senior IT Analyst at Tata Steel Europe. "According to our business continuity plan, we simply can't afford downtime in these systems, because it would bring our production line to a halt and could potentially cost us millions."

To ensure complete availability for these vital systems, the company runs them on HP NonStop servers, which use a combination of redundant components, self-healing and automatic reconfiguration technologies to eliminate single points of failure.

"The boxes themselves are about as reliable as it's possible to get, and we haven't had a single problem in nearly 20 years of operation," explains Chris Glen. "However, NonStop is a relatively niche operating system, and it is quite difficult to find people with the right skills to manage it. In a business environment where it's important to be agile enough to make the most of emerging opportunities and new technologies, we increasingly need to be able to integrate the NonStop with other systems – and this was proving to be a challenge."



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## Business Benefits

- Increases flexibility, making it easier to integrate the NonStop solution with new systems and eliminating complex workarounds
  - Simplifies the communications infrastructure, allowing Tata Steel Europe to retire old and unreliable network hardware
  - Provides an intuitive user interface increasing ease of management
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## Reducing complexity and boosting flexibility

The company's existing messaging infrastructure lacked flexibility, and required a number of staging points and workarounds to enable communication between the NonStop servers and other important systems such as SAP ERP.

“Although the NonStop servers themselves are extremely robust, a lot of the surrounding infrastructure wasn't as reliable, and the fact that data had to be transferred from point to point between systems added complexity and increased the risk of something going wrong,” explains Chris Glen. “We wanted to standardise and simplify the messaging infrastructure, and we realised that an upgrade to the latest version of IBM WebSphere MQ for HP NonStop was the best way to achieve this.”

## Getting help from the experts

Moving to the new version of the WebSphere MQ software was a major step forward for Tata Steel Europe, so the company decided to find an expert technology partner to help them design the new architecture, install the software, and train the internal IT team to help them make the most of the new functionalities the solution offered.

“The supplier of our NonStop hardware recommended working with Orbital Integrated Solutions,” says Chris Glen. “Orbital is one of the few IBM Business Partners in the UK with skills in WebSphere MQ for NonStop, and we were impressed by the team's experience of previous NonStop projects. What we really appreciated was Orbital's willingness to provide training to help our in-house team get up to speed on the new version – they taught us a lot of tips and tricks, and helped us become self-sufficient very quickly.”

## Streamlining the messaging infrastructure

With the new solution, data can be transmitted directly between the MES and SAP via WebSphere MQ, instead of taking a circuitous route via the company's mainframe. This not only eliminates possible points of failure, but also simplifies queue management and improves performance.

“SAP needs to be able to access data from the MES for production planning and financial purposes, and the MES needs to get delivery addresses and other information from SAP – so it's very important to make sure that the two systems can communicate rapidly and reliably,” says Chris Glen. “With the new version of WebSphere MQ for NonStop, we are much more confident in our messaging infrastructure, and we also have a lot more flexibility in terms of aligning it with new requirements.”

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## Solution Components

### Software

- IBM® WebSphere® MQ for HP NonStop

### Servers

- HP Integrity NonStop NS1200

### IBM Business Partner

- Orbital Integrated Solutions
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— Chris Glen, Senior IT Analyst, Tata Steel Europe

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## Standardising technologies and reducing costs

The solution will also enable the Tubes Division to retire some of its existing network infrastructure and standardise on a smaller, more reliable and cost-effective set of technologies.

“Currently, we rely on a Kilostream leased line to transmit quality assurance data from our Lackenby plant to the MES,” explains Chris Glen. “This data is vital, because it enables us to test each batch of steel and make sure it meets the requirements for our products. In the near future, WebSphere MQ will enable us to phase out these legacy systems and transmit the data over the wide area network instead. This will not only be much more reliable – it will also create operational cost savings by eliminating the need to maintain the Kilostream equipment.”

He concludes: “By moving to this new version of IBM WebSphere MQ for NonStop, we have opened up a world of new possibilities for our NonStop systems – removing a number of obstacles that were starting to hinder the agility of our business. Thanks to the expertise and knowledge transfer provided by Orbital, our team is now capable of providing a much more dynamic messaging infrastructure that can adapt to meet the needs of our business.”

## About Orbital Integrated Solutions

Orbital has been a leading IT solutions provider since 1997, with a focus on delivering world-class IT solutions on-time, on-budget and to consistently exceed our client’s expectations.

The company maintains a strong partnership with IBM in order to provide best-of-breed technology offerings in the enterprise integration and systems and storage management arenas. Orbital also offers a uniquely flexible approach to IT consultancy – with an experienced pool of resource constantly being refreshed and updated with the latest skills as per market demands.

## For more information

To learn more about IBM WebSphere software, contact your IBM sales representative or visit: [ibm.com/websphere/](http://ibm.com/websphere/)

To learn more about products, services and solutions from Orbital Integrated Solutions, visit: [www.orbital-ltd.co.uk](http://www.orbital-ltd.co.uk)



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