



How an award-winning manufacturer has used ISO 14001 certification to drive up environmental efficiency and boost competitiveness

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Bill Longley-Cook
Environment Manager,
TC Industries of Europe

Customer Objectives

- Meet customer requirements
- Reduce energy consumption and costs
- Self-manage solvent emissions
- Comply with industry regulations
- Maintain competitiveness

Customer benefits

- Fulfilled customer expectations
- Increased energy efficiency and reduced bills
- Self-managed emissions
- Improved waste management
- Regulatory compliance
- Enhanced competitiveness

Customer Background

TC Industries of Europe (TCIE) is the UK subsidiary of a 130 year-old, family-owned US firm, TC Industries, based in Illinois. TCIE was established in the North East of England in 1985 on the site of Tata Steel’s rolling mill at Skinningrove, Saltburn. The company employs around 90 people, specializing in the fabrication and heat treatment of ground engaging tools and cutting edges for manufacturers of construction and mining equipment, including Caterpillar.

In 2013 TCIE beat several household-name companies to win the Future Manufacturing Award for the North of England for Environmental Efficiency. This prestigious award, run by leading industry body the EEF, is for manufacturers that have implemented programmes to improve their operational efficiency, while reducing their environmental impact or carbon footprint. TCIE’s certification to ISO 14001 has formed a cornerstone of this success.

Why certification?

At the heart of TC Industries' values lies an explicit commitment to "take care of our customers, our employees, our safety, the environment and quality". Gaining certification to two key management system standards – ISO 9001 for quality management and ISO 14001 for environmental management – helps it to deliver on this promise.

While the company's admirable philosophy has been a spur towards certification, there have also been other more pressing drivers. Bill Longley-Cook, Environment Manager for TCIE, sums up one succinctly, "Some customers simply won't do business with you if you can't show that you operate to these standards – you're just not in the game," he says.

Another key driver was the need for TCIE to reduce its gas consumption in the face of spiralling energy prices. ISO 14001 provided the means to do it. The standard also ensures that the company remains compliant with environmental legislation – particularly in relation to solvent emissions and waste management.

Longley-Cook says, "We're a relatively small company and everyone here is under constant production pressure. ISO 14001 makes us take a step back and focus on the environmental aspects of the business. It keeps us straight, ensuring that things get done properly, and it fits the company's philosophy of continual improvement."

Benefits

Certification to ISO 14001 has given TCIE a robust environmental management framework, enabling it to: identify the different ways in which it impacts on the environment; understand and abide by environmental legislation and regulations that affect it; and seek efficiency savings.

Chief among the benefits felt by the company has been vastly improved energy efficiency, with reduced energy wastage, major cost savings and enhanced competitiveness. This has been achieved by investing in two new, more efficient furnaces, and by optimizing furnace operation and improving production scheduling – measures that ISO 14001 helped to identify. "We've about halved the amount of energy we use per tonne of product over the last 18 months," says Longley-Cook.

Another major benefit of ISO 14001 is that it enables TCIE to take responsibility for solvent emissions from its industrial painting processes. "It helped us avoid having to obtain a Part B environmental permit [under Local Authority Pollution Prevention and Control], which would have been a costly and onerous task for us," says Longley-Cook. "With certification, we are able to manage the emissions ourselves, retaining control over our own processes."

ISO 14001 has also ensured that a well-structured process is in place for recycling metallic waste, again keeping the company on the right side of the law in another heavily-regulated area.

Implementation

TCIE found implementing the standard straightforward. Everyone was totally committed to gaining ISO 14001," says Longley-Cook. "The journey to certification only took about six months.", TCIE already had many similar system requirements in place from its earlier certification to ISO 9001.

The ISO 14001 standard offers a systematic approach to environmental management. "The standard helped us to get us a firmer grasp of our gas consumption through improved metering and usage analysis," says Longley-Cook. "If you can't measure it, you can't manage it."

Having established its energy use clearly, TCIE was able to put operating controls in place, addressing wasteful practices and ensuring employees were aware of the part they could play. "There's a strong culture here of doing the right thing for the business, so we were pushing at an open door," says Longley-Cook. "There is very high awareness of energy use throughout the company, from management to the shopfloor."

As for the financial costs of implementing ISO 14001, he says these are "a drop in the ocean" relative to the benefits, while the ongoing time and effort "is now just part of what we do".

BSI's role

TCIE has received strong support from BSI in achieving certification. This included a BSI Gap Analysis day to review the company's management systems and provide guidance on addressing weak areas. "BSI picked up things that needed improving and we had a very experienced auditor who provided us with a lot of constructive challenge," says Longley-Cook. He adds, "And our BSI auditor provides valuable support in making us aware of new developments."

TCIE is in no doubt that ISO 14001 has helped it win its recent EEF Future Manufacturing award, "by starting us on the road to really understanding the energy efficiency of our heat treatment process," says Longley-Cook. "Now we're using it to improve the process further – I think we can achieve another 20-30% of efficiency gains. We're also looking to reduce the amount of water we consume." But the issue that matters most is survival," he concludes. "Competition in our industry is brutal and we have to contain our costs – that's really where the rubber hits the road."



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