

# Macalloy

## Business Information Modelling technology sparks digital growth for established Sheffield steel business

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McCalls Special Products Limited trading as Macalloy, has a trading history spanning over 100 years. Located in Dinnington near Sheffield, Macalloy is established as a leading global manufacturer of tension bars and tension rod systems, their high-quality products have found applications in significant civil engineering projects and sports stadium developments worldwide.

### The Challenge

Macalloy has always been proactive in seeking growth opportunities and exploring solutions to support their expansion. They became aware that their global competitors were being chosen for projects over them, because their products and components were accessible to customers and supply chains through the Business Information Modelling (BIM) warehouse. BIM warehouse is a platform that gives easy access to specification data, ensuring greater clarity and consistency for design and construction purposes.

### The Solution

In order to keep up with competitors, Macalloy leveraged support of Made Smarter in Yorkshire and Humber (delivered by Oxford Innovation Advice) to overcome this skills gap and engage an agency to create product schematics for the BIM warehouse.

After completing an Edge Digital Diagnostic (EDD) and a Made Smarter digital road mapping analysis, Macalloy received guidance throughout the Made Smarter grant application process, the grant enabled them to partner with Trimble Solutions, an innovative industrial technology company, to enhance their operations and unlock the benefits of digital transformation.

Trimble Solutions worked with Macalloy to help them leverage core technologies such as positioning, modelling, connectivity, and data analytics to bridge the gap between the digital and physical worlds, leading to improvements in productivity, quality, safety, transparency and sustainability.

### The Benefits

The adoption of BIM warehouse technology is expected to have several positive impacts on the company in the short and long term. Some of the key benefits are:

**Global competitiveness:** By embracing this technology, Macalloy can enhance their competitiveness on a global scale. It will allow the company to meet the needs of customers worldwide, including designers, architects, developers, and other stakeholders. This increased accessibility to Macalloy's products and components can help expand their market reach and attract more customers.

**Integration with BIM warehouse:** By being part of the BIM ecosystem, Macalloy can enhance its visibility and increase the chances of being selected for various construction projects.

**Streamlined internal processes:** The software systems associated with this technology are expected to streamline internal processes at Macalloy. This could reduce wasted time caused by design changes and other inefficiencies. By optimizing their internal workflows, Macalloy can improve productivity and efficiency, leading to cost savings and enhanced competitiveness.

**Improved product range management:** The adoption of this technology will likely bring about fundamental changes in how Macalloy manages its product

02 Dome Prague, Czech Republic. The original thick section steel truss roof was re-designed to a thinner section steel truss roof, tensioned with Macalloy Tie Rods around a central wheel.



range and components. This could involve better inventory management, tracking, and analysis of product performance, allowing them to make data-driven decisions and optimize their offerings. These improvements can lead to better customer satisfaction and increased sales.

**Growth opportunities:** The positive impacts resulting from this technology adoption present growth opportunities for Macalloy. By becoming more competitive, expanding their market reach, and improving internal processes, the company can position itself to win more projects and secure new business opportunities. While the financial impact may not be immediate due to industry timings and long lead times, Macalloy can expect to see significant returns in the following year(s) as these benefits start to materialize.

In summary, embracing this digital technology will provide Macalloy with a range of benefits, including global competitiveness, increased accessibility to customers, streamlined internal

processes, improved product range management and growth opportunities for the business.

### The Future

Macalloy's business ambitions are focussed on achieving significant growth in turnover over the next two years. The company has set their sights on reaching £12m by the next financial year, demonstrating their determination to expand rapidly.

Moreover, they have a long-term vision to surpass this milestone, aiming for sales exceeding £13m by 2025. The business remains steadfast in their commitment to sustained growth and their capability to thrive in the market.

Peter Hoy, Managing Director of Macalloy commented, "Macalloy are indebted to the Made Smarter scheme, these schemes are the lifeblood to companies such as Macalloy. They help us progress and fund the kind of projects that ordinarily would simply just not get done!!!"

Marcus Pearson, Digital Manufacturing Advisor for Made Smarter Yorkshire & Humber commented, "Macalloy is an established business with a strong reputation in their market, but they are constantly looking at ways to improve – in every aspect of their business. Their foresight to investigate how increasing the use of digital technology could support in this is exactly the reason that Made Smarter is such an important programme for SME Manufacturing Companies. By being able to work closely with other agencies in the South Yorkshire area, particularly their local authority account manager, Dave Grimes, we were able to include access to Made Smarter as part of a wider package of business support which is exactly the collaborative approach that businesses value."

88 Wood Street, London 2007. A series of Macalloy architectural products were used for the construction of this high rise building. From Macalloy tension bars / tie rods to architectural adjustable compression struts.

