

United Cast Bar Group



United Cast Bar, a global pioneer in cast iron bar production



James Brand, managing director of foundries

Formed in February 1998, United Cast Bar (UCB) is the result of the merger of three of Europe's most prestigious continuous cast iron bar foundries and their associated stockists and service centres. Between them, the group boasts 120 years of casting experience and is now Europe's largest manufacturer of continuously cast iron bar. Production capacity currently stands at 80,000 tonnes annually across foundries in Spain and Britain. The UK foundry and worldwide headquarters are based in Chesterfield, Derbyshire. It is from here that approximately 90 per cent of production is exported, with Germany being their largest market. James Brand, managing director of UCB Foundries, discusses attributes that have been key to their success over the past 20 years.

Quality and product diversification are key factors to our dominance in the market. The industries and countries we supply recognise they need a quality product from a company that has the rigorous quality control procedures in place. There is no margin for error in the products we produce.

Process improvement and strategic partnerships are enabling us, the UK's largest manufacturer of continuously cast iron bar, to improve yield, reduce energy costs and establish ourselves as a global pioneer in bar production.

Record-breaking production

We capitalised on our manufacturing capability at our UK facility in 2012, when we produced a record-breaking 635mm diameter bar of cast iron using the

FACTS ABOUT UNITED CAST BAR GROUP

- » Managing director of foundries: James Brand
- » Established in 1998
- » Based in Chesterfield, Derbyshire
- » Europe's largest producer of continuously cast iron bar
- » No. of staff: 260 across EU, 105 in the UK
- » Holds world record for largest diameter cast iron bar produced
- » www.unitedcastbar.com

continuous casting process. We are the only company in our marketplace to attempt production on this scale. We surpassed our own record-breaking feat in 2015 by casting a 700mm diameter bar, a record we still hold today.

This record-breaking production run marked the culmination of many years of hard work in the design of our equipment and process flow. It pushed the boundaries of innovation and engineering design, opening up yet more doors for our sales team.

Thanks to its proximity to Sheffield, a stronghold for British metal manufacturing, Chesterfield has served us well in the 20 years we have had premises here. It provides a central location with strong road, rail and air links, as well as an excellent and ready supply of skilled employees.

The workforce of the future

With an eye on future workforce needs, we have developed partnerships with local schools through Made in Chesterfield, an initiative bringing together the education, engineering and manufacturing sectors. UCB has been an instrumental part of this, by establishing both the Chesterfield

Manufacturing Forum and regularly inviting school children to the foundry.

If we are to develop our young people and retain their talent in the UK, schools must start bringing manufacturing and engineering careers to their attention. To look forward we must look back; getting young people interested in the sector is a great first step.

Partnerships with local schools have reaped rewards and we now have a strong apprenticeship programme funded through our Apprenticeship Levy. We see apprenticeships as key to succession planning and closing the skills gap at the company.

We are certainly making the most of our Levy, and I believe the investment in the skills of our workforce will pay dividends in the years to come. Having the people in place to replace older employees retiring or scaling back provides us with the confidence to further develop our product offering.

Efficiency and sustainability

With 105 people employed at UCB's Chesterfield site, our workforce accounts for only 15 per cent of the company's overheads – raw materials and energy make up the bulk of our costs.

Our continuous drive for efficiency has led to a partnership with ESB Smart Energy Services and GridBeyond to deliver a best-in-class energy solution. This partnership has resulted in us becoming one of the first in the UK metals industry to adopt a hybrid battery and demand network solution, enabling us to reduce energy costs across the UK business. We're also benefitting from increased revenues as a result of the National Grid's Dynamic FFR programme.

We've installed a 500kW Tesla battery at our Chesterfield site. By storing energy during the foundry's off-peak operational hours, the battery alleviates

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Chesterfield has served UCB well in the 20 years it has had premises there



the pressure on the National Grid during peak consumption times and generates additional revenue for UCB.

Since December 2016, we have also benefitted from the government's support of energy intensive industries (EIIs). Thanks to strong lobbying and support from UK Steel, of which we are an active member, renewables obligation (RO) and feed-in tariffs (FIT) are now subject to rebate. This has had a positive impact on balancing energy costs, enabling us to remain competitive within the European marketplace.

UCB's resilience

UCB's operational efficiency, combined with our clever thinking and smarter management, has enabled us to survive economic downturns over the years. I personally believe it is the manufacturing industry's ability to adapt and evolve during the economic crises of the last couple of decades that has enabled so many companies in the sector to survive and actively support the UK economy during periods of turmoil.

We are constantly striving to be ahead – whether that's through quality of product or reducing operational costs – and this has served us well. The fourth industrial revolution is already alive and kicking at UCB; our longstanding "Right First Time" initiative has evolved and thrived under Industry 4.0. Real-time data capture is leading to a wider understanding of our production process, helping drive sustainable manufacturing.

UCB has the broadest range of product of any continuous cast iron bar producer. It is our improvement of the process and significant investment in tools and machinery that has enabled us to create new products and cast profiles. Our ability to innovate and quickly deliver to market ensures we are ready for emerging sectors, like the fracking industry. The growth of



UCB is Europe's largest producer of cast iron bar

fracking in the UK will prove to be an exciting opportunity for us, and we are ready to spring into action when demand hits our order books.

A post-Brexit future

UCB is optimistic about the future of manufacturing after Brexit. I personally see Brexit as an opportunity for both the company and the sector itself. We manufacture great products in this country and there has been a shift, both at home and abroad, towards buying British. UK demand for our product is increasing and I am confident that the final agreement with the EU will have few or no barriers for trade.

Manufacturing in this country is not the dying industry people have been led to believe. Many UK companies, like ourselves, are leading the world in what they do. Like us, they have learned valuable lessons about survival which have strengthened their operation and created a bright, positive future which young people can become an integral part of.

We're very proud of what we do here. If any MPs or ministers would like to come and see first-hand northern manufacturing in action, then I invite them to come and see it here. I think they'll be surprised.

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