

Metaltech Ltd

Managing Director Dr Graeme Forster describes the ever-growing capabilities of the Consett-based CHTA member.

The death knell sounding for the local steelworks in 1980 provided the stimulus for Ron Scott to form a heat treatment company. Ron (who coincidentally studied for his metallurgy degree at Aston University in the same era as Wolfson's Derek Close) was employed at British Steel Consett, principally as a research metallurgist. With the drive and ambition to retain some of the well-established metallurgical knowledge in the area, in 1981 he founded Metaltech Ltd on Delves Lane Industrial Estate, Consett. This has been the home of the company ever since.

Another metallurgist and ex-employee of British Steel's Consett and Teesside works, I was recruited by Ron to become Managing Director of Metaltech Ltd in 1989. Working together for over 20 years, we have dedicated ourselves to providing and maintaining a comprehensive heat treatment facility in the North East of England.

Growth

Metaltech started with a few electric box furnaces. Since then, the company has introduced plant and equipment continuously to upgrade and diversify the range of specialist treatments offered to both UK and international clients. With accreditation to ISO 9001:2008, AS 9100C:2009 and the recently-achieved ISO 14001:2004, today we are heavily involved in the following:

Controlled-atmosphere heat treatment facilities include a fully-integrated line, comprising numerous sealed-quench units, with associated tempering furnaces, wash facilities and shot blasting, providing volume heat treatment for the automotive industry.

Induction heat treatment was introduced in the mid-1980s with the purchase of a high-frequency motor generator set and several radio-frequency units. Continuous investment has seen this activity grow to such an extent that the current inventory contains over 25 pieces of induction equipment, including vertical and horizontal scanners, shaft and pin hardeners, along with gear and sprocket hardening facilities. Additionally we hold an extensive portfolio of innovative purpose-built ancillaries, constructed in-house by our engineers to meet the needs of individual drawing requirements; challenging processing criteria of complex components often require novel/bespoke mechanical solutions.



Ron Scott and Graeme Forster with Metaltech's recently-awarded ISO 14001 certificate.

Vacuum heat treatment capabilities have expanded significantly since the procurement of our first furnace in the early 80s. Historically serving mainly the tool and die industry, accreditation to AS 9100C has enabled Metaltech to diversify into the aerospace market. Several of the vacuum units now conform to the stringent pyrometric requirements of AMS 2750D.

Plasma processing has been developed since the 1990s when, in conjunction with an eminent plasma and radiation physicist (a former colleague of the late Prof. Tom Bell), a plasma boriding project was initiated. A DTI Smart Award enabled Metaltech to undertake the research work and help develop a plasma processing chamber. A spin-off from the project was the ability to plasma nitride, a process offered to customers since.

The plasma processing capability has been expanded significantly with the recent acquisition of a Rübige 85/150 Duo Unit. This has the capability of plasma nitriding with or without controlled oxidation to

enhance the wear and corrosion properties of components. In addition, to further increase nitriding capacity, a conventional gas nitriding facility has been installed recently.

With this comprehensive array of equipment, Metaltech offers a broad range of cost-effective heat treatment services as detailed at www.metaltech.co.uk. The company also has a fully-automated manganese and zinc phosphate line and shot-blast facilities for metal-finishing requirements.

Despite the many industry closures (particularly in the North East of England over the last 30 years), the philosophy of giving our customers a first-class service, combined with rapid response/turnaround and competitive pricing, has enabled Metaltech to continue to provide diverse heat treatments with state-of-the-art processing. The factory is currently operating on a 24-hour shift system Monday through Friday, with weekend working as required.

The future

The future is always difficult to predict, particularly in these uncertain economic times. Nevertheless, the Directors of Metaltech are committed to invest continuously in the key areas of the business that have stood them in good stead over the last 30 years.

Through ongoing R&D, the company will continue to innovate in order to improve its overall competitiveness in the marketplace, with focus on enhancing process efficiency, reducing energy consumption and improving product quality.

Investment in youth and their training is seen as an essential part of the company's future ethos. Two apprenticeships began recently in the areas of electrical engineering and business administration. Further recruitment has taken place in the metallurgical laboratory where Ron and I hope to pass on the knowledge, gained from a combined 50+ years in heat treatment, to the younger generation. With over 25% of the current workforce under the age of thirty, hopefully the building blocks are in place to enable Metaltech to trade successfully for the next 30 years.

Whilst almost all trace of the steelworks has been removed from the Consett landscape, the Directors have successfully created a company that has a strong base in metallurgy and has retained some metal processing knowledge in the area. Thanks to the wisdom of Ron Scott, who in his dark days of 1980 (when unemployment here exceeded 30%) had the drive, ambition and self-sacrifice to succeed in building a business, Metaltech has clearly stood the test of time.

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