



CONTINUING OVER A CENTURY OF INNOVATION IN HIGH PRESSURE CYLINDERS

# Our new identity unveiled... and explained

**Our impending move to a new site, along with our new trading name, calls for a fresh identity for the company. But, as we outline in this Newsletter, we are proud of our manufacturing past and aspire to retain many of the worthy characteristics associated with the Chesterfield name.**

### Why CTCO?

Our new logo revealed above is one we hope you will soon come to readily recognise in our contacts with you.

But, if we are now Chesterfield Special Cylinders, why the CTCO?

It is all a matter of the history of manufacturing assurance.

The company's origins can be traced to the last years of the 19th century. The Derbyshire Times reported in April 1897 that 'a Mr AW Byron of Duckmanton is floating a company to manufacture weldless steel tube for warships of the Royal Navy.'



The first known photograph of the works, dated 1901

So it transpired that, in February 1899, the first Ordinary General Meeting of The Universal Weldless Steel Tube Company was held in London, when it was announced that the site chosen on which to build the factory was in Chesterfield.

Local coalfields were a consideration for powering the plant and processes. In fact coal was discovered when digging the factory foundations.

Tubes were produced by the Ehrhardt Process, which involved punching a heated billet and then subsequently drawing it to thin the wall to the required thickness and diameter. Amazingly, the fundamental process was used at Chesterfield until the last year of production of industrial size cylinders in 2004.

It was not much of a leap of imagination in those early days to heat, form and close the ends to make a seamless cylinder. Today we no longer make tube. But our large diameter 'jumbo' cylinders are still made from weldless, extruded tube, supplied by a limited number of tube mills who can meet the specification and quality standards.

### Back to our historical roots.

The first change of ownership after the company was established took place in 1902. Shortly afterwards, Engineering magazine

reported on the product range: 'A large number of gas cylinders for heavy pressures are made.' This is the first known mention of gas cylinder making at Chesterfield.

In 1906, The Universal Weldless Steel Tube Company was in turn acquired by The Chesterfield Tube Company, whose directors first met in December that year. The business was to retain that

same name for another 60 years, even though it was taken over by The Tube Investments Group in 1929.

After 1906, it appears the company became known locally as 'the tube works'. Nevertheless, it is recorded that, in 1919, it had an annual production of nearly 8,000 cylinders, as well as many thousands of pressure tubes.

The years between the World Wars saw a rapid increase in the uptake and applications for high pressure gas cylinders, with a consequent increase in statutory regulation and much refinement of technical specifications and safety standards.

Part of this process eventually involved cylinder manufacturers in the requirement to issue a Certificate of Manufacturing & Test, validating each individual cylinder's process history, including its initial test results. But the most basic initial requirement to be introduced was the stamping of the cylinder with a marque showing its origin which could be identified through a registry.



Interior in 1914, showing it was very much a tube works at that time.

Continued overleaf >>

*New identity continued*

Naturally the chosen marque for The Chesterfield Tube Company was CTCO.

Although styles have varied over the years, all our cylinders - even today's - on close inspection will bear the CTCO. The soft, 'melted' lines of the design adopted for our new logo suggest a type which was always impressed during the hot forging process.



The main works entrance in the 1920's with the 'CTCO' name on the roof

Records show it was first used in 1927. We are currently amending all our statutory references and approvals to be valid at our new site.

Thus the new logo harks back to our industrial heritage and forward to our future intentions – continuing innovation in high pressure cylinders

**PROGRESS ON THE NEW SITE**

The move to Sheffield is now gathering pace with equipment leaving the Chesterfield site daily. All the foundations are complete and all but a couple of the cranes installed and operational. The new compressors are now commissioned; the ultra-large cylinder shot blast machine and hydro test equipment is being installed/commissioned; and the painting/drying area being completed. This will enable us to finish and recondition ultra-large cylinders in the very near future.

Our forging press is dismantled and is being refurbished in readiness for installation at the new Sheffield site and the recently refurbished cold drawing bench, for aircraft cylinders manufactured from steel plate, is ready to be transferred.

The new offices are complete and awaiting the installation of the telephone/computer system We expect to be operating from the Sheffield site by mid-June.

**Last forged cylinders comes off the press at the Chesterfield works**

The last cylinders to be forged on the 424 Forging Press, before its strip down and transfer, are shown here. These 500 litre capacity cylinders are destined for a prestigious submarine rescue project.

The next time the press is operational at Sheffield it will be starting on a major order to forge cylinders for a new customer as part of an Indian space research programme.

The forging of the last batch of cylinders brings to a close nearly a century of cylinder production by this process at the Derby Road site in Chesterfield, the origins of which are outlined in the main story on the front of this newsletter.



**AIRCRAFT CYLINDER MANUFACTURE**

In anticipation of our move, and in order to ensure continuity of supply during the transition period, we engaged in a major programme to manufacture a buffer stock of cylinders for aircraft use for our major customers. The production team involved in their production are photographed here. In all, more than 12 people's input is required in a complex manufacturing process from cold drawing the steel plates, through hot forging/heat treatment, machining and finishing, to wire winding and final inspection.



- A** - Tony Hill & Paddy Harvey
- B** - Mick Smith & David Walker
- C** - Matthew Levers, Ken Jarvis, Neil Barber, Peter Blackburn & Martin Levers
- D** - Grant Hemstock, Peter Davey & Keith Bowmer



**PLEASE NOTE OUR NEW CONTACT DETAILS**

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