



CONTINUING OVER A CENTURY OF INNOVATION IN HIGH PRESSURE CYLINDERS

Photo courtesy of BAE Systems Ltd.



## Widening our horizons for aircraft cylinders

### - new initiatives, new information

After nearly 75 years, Chesterfield Special Cylinders continues to supply small, lightweight, high-pressure cylinders for aircraft applications - mostly in the defence sector.

This is an aspect of our business that is not as widely known as our ultra-large cylinders for naval and offshore industry applications, but it accounts for a significant and regular slice of turnover. Currently, cylinders are being supplied for the Hawk trainer UK and export programmes, the JSF, Saab Gripen and a number of other airframe builds.

Almost equally important is the constant stream of cylinders returned to us for mandatory re-test, reconditioning and upgrading. Many thousands of these cylinders have very long service histories with the RAF and other air forces, and have clocked up hundreds of flying hours.

The principal applications for the cylinders range from the functionally useful to the downright critical -

- **tyre inflation**
- **fuel tank inerting**
- **emergency generator starters**
- **back-up actuation for systems including undercarriage, flaps and canopy**
- **emergency escape equipment**
- **aircrew breathing supply**

> [continued overleaf](#)

**Chesterfield Special Cylinders (and its antecedents) over its 110-year history have always maintained strong links with the armed forces. Indeed, the company was first established to supply weldless steel tube for boilers in ships of the Royal Navy.**

New overseas and domestic contracts for both naval (watch this space!) and airborne cylinder applications have shown the continuing potential of these markets. To underline this, Chesterfield participated in the Defence Systems & Equipment International Exhibition (DSEI) held at ExCel in London's Docklands this September.

This was the company's first foray into

defence sector exhibitions in recent years, participating on the group stand of Northern Defence Industries (NDI).

The show is the largest tri-services exhibition of its kind held in Europe and was attended by military and ministerial delegations from all over the world. Sales Director, Phil Redfern, and his team reported a number of very useful contacts during the week. Phil is seen here in discussion on the NDI stand with General Sir Kevin O'Donoghue KCB CBE, Chief of Defence Materiel, who is responsible in the UK for procurement and through-life support for equipment for all three services.

If you were at DSEI and missed us, we're sorry. Please get in touch anyway.



'Widening our horizons' - continued

All Chesterfield's cylinders are made from high-strength chrome-molybdenum or nickel alloy steels. It is a testimony to their efficiency and life expectancy that such cylinders continue to be specified in the age of aluminium, plastics and composites in airframes.



Aircraft cylinders from 3.6 to 10.6 litres water capacity are made from deep drawn plate. Cylinders as small as 0.44 litres up to 2.4 litres are forged from seamless tube.



**Whether made from plate or tube, all our aircraft cylinders are forged in our Sheffield works.**

Made by either process route, these cylinders conform to DEFSTAN 970 / DOT / BS EN 1964 / ISO 9809. For re-testing, Chesterfield is fully conversant with DEFSTAN 81-121. Commercial standards BS EN 1968 and DOT are also covered.

We have produced a new data sheet specifically on aircraft cylinders which includes full size range and technical details, including finishing options such as wire-winding, and details of fittings, the manufacturing records database and our reconditioning services. For a copy, please contact us at the address below.

**New Arrivals...**

The Chesterfield staff register continues to lengthen - one or two replacing colleagues who have left, but most newcomers shown here are additions, as we keep pace with new cylinder orders and newly introduced services.

**But, first - the not-so-new**

We try to introduce everyone before too long after their arrival, so how did we omit a mention of one of the most important people at Chesterfield - to our suppliers at least - the man who sends the cheques!?

**John Martin** AFA is the company's Financial Controller and has only been here 30 months - in other words, shortly before we re-located to Sheffield. Apologies, John - it's not even as if you put a cross in the box for 'no publicity'. Of course, for John, who has 30 years' experience of the function, paying the bills is only a small part of the job, credit control being the key role. But whether a customer or a supplier; if you need to contact him, you'll find him unfailingly helpful.



John Martin

Another key appointment, although not overlooked for quite so long, is that of **Tom Berry** B Eng as Manufacturing Engineer. Tom's role is to complement our team looking at the continuous improvement of our production processes, particularly in terms of 5S practice, throughput efficiency and its beneficial effect on lead and delivery times.

Tom joined LINPAC Plastics Limited, initially as a gap year placement in through the 'Year In Industry Scheme' organised by the Institute of Mechanical Engineers.

Having gained his Honours Degree in Mechanical Engineering from the University of Hull, Tom returned to LINPAC Plastics - the UK's largest manufacturer of packaging for the food industry - where he went on to become a Shift Cell Leader, in charge of a team of 10 operators and 5 thermoforming lines producing LINPAC's fast food range of products. From 2005 he worked as a Continuous Improvement Technician in the warehouse and logistics department, working towards improving OTIF (On Time, In Full) performance.



Tom Berry

**Glad to welcome these new arrivals**



**Neil Bodsworth** - Production Fitter - ultra-large cylinder final assembly and leak testing



**Paul Chrimes** - Storeman



**David Cooper** - Production Operator - aircraft cylinders and reconditioning area



**Malc Hill** - Production Operator - aircraft cylinders and reconditioning area