

# Spotlight on ...

## Denford Limited



Simon Moorhouse, Managing Director, Denford Limited



In this series of articles we hope to give the companies that work with design and technology education in whatever way the opportunity to give some of the interesting background as to who they are and how they support D&T in schools. This issue we are featuring Denford Limited.



### How does Denford Limited work for design and technology in schools?

For over fifty years Denford Limited has striven to bring together the very best CAD/CAM and CNC manufacturing solutions for design and technology in schools. Denford is one of the few businesses operating within the educational sector, which can truly claim to be a British Manufacturing Company. We have a history of design and manufacture and were one of the very first companies to develop a Computer Numerically Controlled (CNC) lathe specifically for education and training.

Our belief at Denford is that a 'hands-on' approach to cross-curricular activities lies at the heart of design

and technology. As such, Denford Limited are 'proud founders and sponsors' of a number of educational projects, including the '4x4 in Schools Technology Challenge'; the 'GT in Schools – The Sports Car Challenge' and, most importantly, the 'F1 in Schools Technology Challenge'. These projects are aimed at stimulating students' interest in, and understanding of design and manufacture and clearly demonstrate our dedication and financial commitment to encouraging and promoting student selection and enjoyment of design and technology (and engineering) courses.

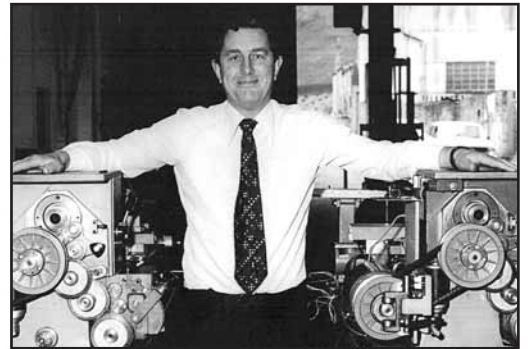


Mr HSF Denford who founded the company

### How did Denford Limited start up?

Denford Limited's credential as a historically-based British Manufacturer of CAD/CAM machines and technology dates back to the years before World War II. Denford was founded by Horace Denford, grandfather of the present Chief Executive. Horace was already an experienced engineer when he came to Halifax from London to escape the bombing during the blitz. He established Denford Engineering and moved part of their manufacturing operation to Boxtree Mills in Halifax, in the closing years of the war. Initially they manufactured a range of engineering inspection/measuring equipment and tool holders. A new company started in the 1950's named 'Denford Machine Tools' and manufacture commenced of two small precision bench lathes. These machines were offered for sale at the suggested price of £175 and had a production run in excess of four-hundred units. In the 1950's Denford moved their manufacturing operation to Brighthouse (the site that Denford Limited occupies to this day), and by the end of the 1950's Denford were manufacturing a variety of metal and wood turning lathes, tool sharpening equipment,

grinders and polishers. Viceroy lathes (wood and metal) manufactured by Denford can still be occasionally found in D&T departments today. Horace's son Gerald Denford took over the company in 1962 and had a huge influence in steering the company into the start of the CNC machine tool era up until the current (3rd) generation of the Denford family took over in 1987 and again developed new technologies for use in D&T education. Gerald's son Andrew is the present Chief Executive and his daughter Nicola is Corporate Affairs Director.



Mr G H Denford (Horace's son) who became MD in 1962 and ran the company until his death in 1987.

 **DENFORD**



## How has the Company evolved over the years?

In recent times, Denford Limited have developed and expanded their product range, to include the design and manufacture of a comprehensive range of CNC milling machines, lathes and routers, which have been specifically designed for education; and these Denford products are a familiar feature in design and technology laboratories throughout the world.

As for the future, Denford continues to focus on the educational market and to invest in the company's manufacturing facilities. We recently installed a new production facility and trained our skilled fitters, electricians and design engineers in 'workplace continuous manufacturing strategies' such as 'Kaizen' and '5S'.

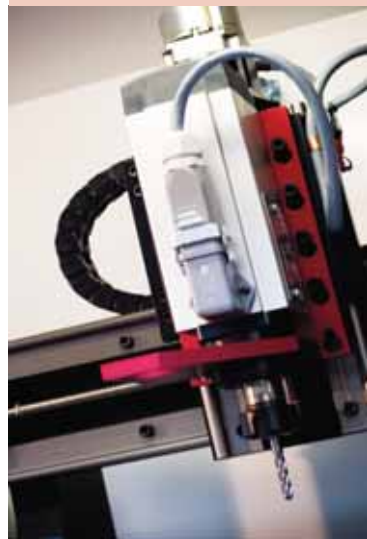
Innovation and new product development continue as key strategies for Denford; and, in line with this, we recently announced the launch of the MRC 40, an affordable, versatile, router, miller and engraver.

## What is your best line and most popular service?

Traditional CAD/CAM software and hardware solutions are our core business, with the Router 2600 Pro machine being our best-selling machine. The all-round flexibility of the product appeals to schools, who also appreciate the fact that it can also cut non-ferrous metals, as well as the more popular resistant materials such as hardwood, softwood, plastic, modelling foam and acrylic.

The recent introduction of the Engineering Diploma has stimulated a resurgence in demand for 'cast iron' machines – and Denford's Turn 270 Pro CNC Lathe (and its sister product, the VMC 1300 CNC Milling Machine) are proving to be very popular with those delivering the 14-19 Engineering Diploma.

Rapid Prototyping is also a major focus for schools, and to tie in with this, Denford offer the Dimension rapid prototyping machines, including the new uPrint 3D Printer, which provides highly affordable, hassle-free and durable ABS models direct from .stl files.



## What does Denford Limited interact with D&T teachers.

Education exhibitions and shows have been (and remain) an important part of the mix, but teachers are finding it more and more difficult to get time away from teaching to visit these events. Therefore Denford employ a full range of above and below the line marketing activities to keep D&T teachers up to date with the latest product innovations and customer support activities.

Our commitment to the educational projects we sponsor also provides us with an opportunity to meet and interact with teachers and students. We attend several of the regional, national and international events each year; and on these occasions, we take the opportunity to offer workshops so that teachers can see first-hand the versatility of our machines and software.

## How do you feel D&T is changing in your area of the subject?

As stated earlier, Denford's belief is that a 'hands-on', problem solving and real life approach to cross-curricular activities lies at the heart of design and technology today, and that is why we have supported a number of educational projects. F1 in Schools Curriculum Resource material is now available on-line to support hard-pressed staff by allowing them to benefit from well-structured, ready to use resources, which can be used across the school, in a range of subjects.

At the same time, we all know young people that have asked for, and deserve, greater choice from the education system, in terms of the development of personal, thinking and problem solving skills, and for school-based learning to have more relevance to the world of work. Employers have been crying out for recruits who understand their sectors and who possess the transferable skills to succeed in it.

Managing Director, Simon Moorhouse, recently joined the Diploma Employer Champions Network, and is an active and involved supporter of the new 14-19 Diplomas. In addition, Denford Limited continue to support several Educational 'Design & Make' projects, aimed at engaging students in a full simulation of the actual processes used in industrial design and manufacture. These projects and the Diplomas,



such as the Diploma in Manufacturing and Product Design, encourage students to experience real life processes and problems in more areas of education and learning, and to develop an informed view about careers in science, technology, engineering, design and marketing, as well as gaining valuable qualifications along the way. Denford are proud to support these valuable initiatives and we will continue to work to improve educational opportunities for young people.

## Where do you see the Subject going?

Design and technology teaching appears to be moving from teaching the design and manufacturing process through subject based closed projects to developing process skills, subject knowledge and understanding through real life problem solving, cross curricular projects. These projects centre around developing solutions for real problems (and simulate existing industrial applications) through team work and development of ideas, thinking skills and the application of cross curriculum knowledge.

Denford Limited firmly believe that design and technology will become a major lead subject in the development of enterprise activities and cross curricular learning, where the D&T project is the vehicle for developing school-wide subject thinking and knowledge. Such projects will become a key focus in the delivery of Enterprise Education across the age ranges.

## Useful links

[www.denford.com](http://www.denford.com) • [www.4x4inschools.co.uk](http://www.4x4inschools.co.uk)

[www.f1inschools.co.uk/page--gt-in-schools.html](http://www.f1inschools.co.uk/page--gt-in-schools.html) • [www.f1inschools.co.uk/](http://www.f1inschools.co.uk/)