

Technology Design Innovation Award 2011 'Johannes Hertel's Award Winning Rotary Moulding Machine'

Johannes Hertel, aged 17 from Langley Independent School in Loddon, has beaten over 90 other students to gain an award at the coveted National Final of the Technology Design Innovation Awards 2011. The competition is run by TEP – Technology Enhancement Programme and MTA – Manufacturing Technologies Association. Students compete by entering their GCSE and A'level work in the subject of design, technology, engineering, manufacturing, product design and electronics. Students travelled from all over England and as far as Scotland, Ireland and Wales to compete for in this competition which is often seen as the essential title to aid access to top universities.

Johannes Hertel's award winning product is a Rotary Moulding Machine capable of making complex 3D shapes due to having the ability to control the speed of rotation in both axis of movement. The machine is specifically designed to promote the teaching of rotary moulding technology in schools as the industry is underrepresented.

The machine was originally designed, manufactured and tested as part of Johannes's A' Level course in Product Design. Johannes scored maximum marks in his coursework and spent much of his spare time redesigning the unit to make it lighter, more reliable, as well as easier to operate. The standard of manufacture is exceptional and the type of product you would expect to see in the final year of a university course.

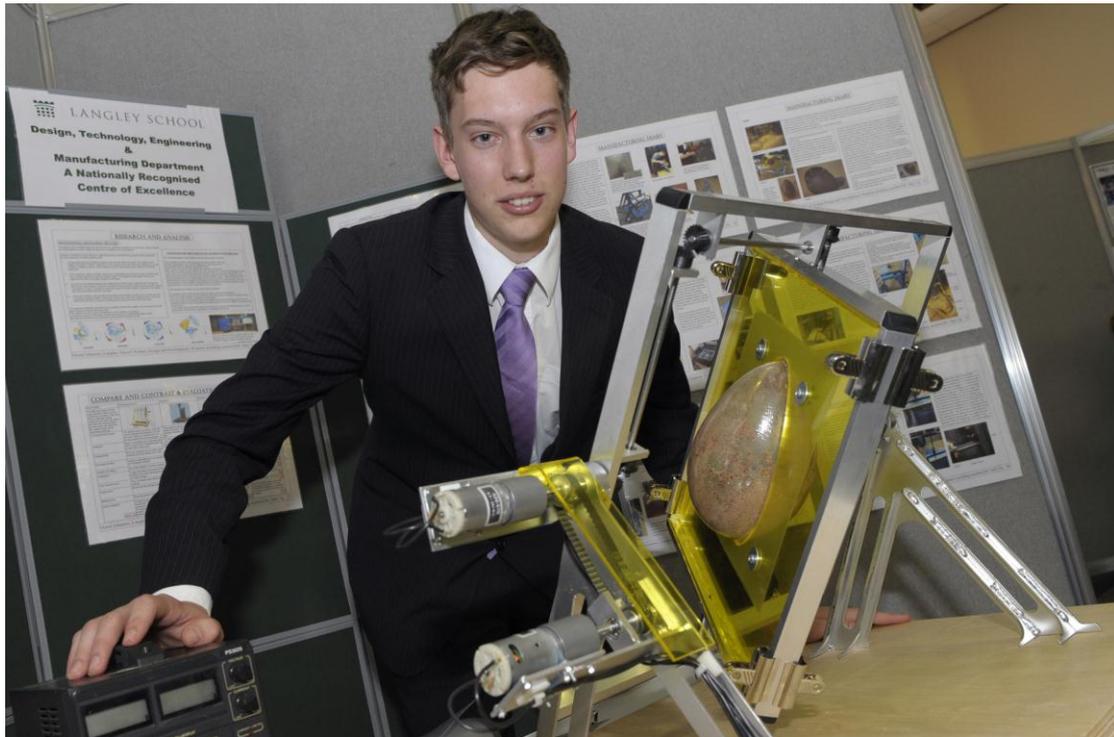
The final, fully functional product was presented to the judges at the TDI final, held at Mazak in Worcester on Tuesday 13th July. Yamazaki Mazak U.K. Ltd is the official supplier to the F1 McLaren Mercedes team. Mazak is the world's largest supplier of CNC lathes, machining centres and manufacturing systems. Their European HQ and manufacturing is based in Worcester and uses the most advanced manufacturing techniques in the industry, providing machine tools and sophisticated manufacturing systems to customers in more than 30 countries throughout Europe. The judges were very impressed by the performance of the unit but he was just pipped to the post by another competitor and gained 2nd place.

Johannes won a digital camera, a plaque and vouchers. Mr Daly, Head of Design and Technology at Langley School said 'the overall standard of students work at the competition was very high. He has done exceptionally well, he has beaten many students from top performing schools, from all over of the UK, Langley School is very proud of nurturing such talent.'

Johannes will be providing a case study of his product which will be published in the Technology Enhancement Programme Magazine and website to show how he used advanced computer aided design software and computer aided manufacturing to an industrial standard to achieve his success.

Johannes has a bright future ahead of him in the world of product design. Like many students who study at Langley Independent School's, Nationally Recognised Centre of Excellence in Design, Technology, Engineering and Manufacturing, he will be attending Loughborough University to study a BSC in Product Design & Technology. Johannes will be joining other successful students like Thomas Pritchard, who is about to start his PhD in Design & Technology in Education.

Johannes Hertel and his award winning Rotary Moulding Machine.



Johannes Hertel's Presentation Stand at Mazak in Worcester with his Rotary Moulding Machine.

