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Keighley Association of Engineers

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NEWSLETTER, APRIL 2018

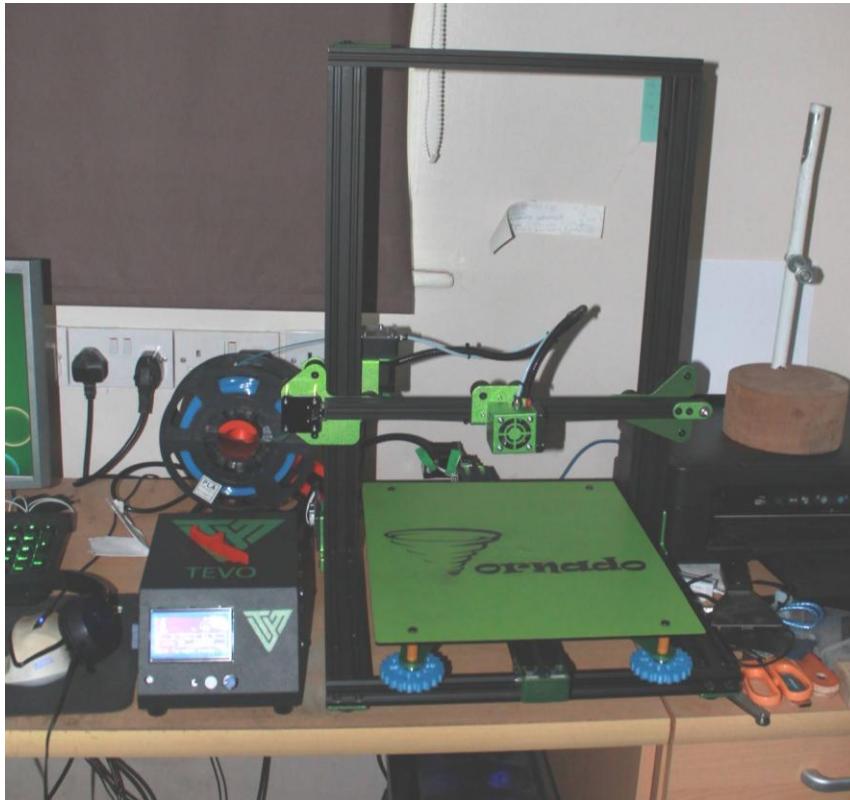
KEIGHLEY ASSOCIATION OF ENGINEERS - AGM

The 118th Annual General Meeting of the Keighley Association of Engineers was held at Keighley College on Wednesday 14th March. John Richardson remains in office for 2018/19 as President and John Pankhurst continues as both Secretary and Treasurer whilst the Council was augmented by member David Armstrong joining it. Please note that two places on Council remain unfilled, members who feel they may have something to offer should contact an officer or council member. As in previous years the meeting was well attended and was supported by guests and by a display of 3D printing arranged by Alfie Moore. Alfie is still in Grammar School and 14 years old, he programmes the machine himself in Auto-Cad for complicated shapes, including both internal and external threads and programmes are stored on and run from an SD card. The actual printer is his second and of substantial capacity, the machine was running throughout the evening, viewing continued until 9.30pm with questions coming thick and fast after the formal proceedings. Meanwhile Rob Moore, his father, demonstrated a laser etching machine that produced our logo burnt into wood in fine detail so that the title could be read easily. Also displayed were fine pewter casts made from wooden masters produced by the laser.



Both decorative and useful products from the printer (left) and from the laser (right) where the actual image is 25mm wide.





The 3D printer as demonstrated. Work is built on the green platform from plastics materials held on the large spool on the left. Axis drives are electric, one such motor can be seen on the crossrail.

Good applications include product parts, tooling both permanent and temporary. One off bespoke electrical parts, electrical enclosures shaped to suit locations and templates for marking other parts to be machined.



There are numbers of simpler, smaller and much less expensive 3D printers that are very suitable for "getting your feet wet". This one here has a capacity of a few centimeters on each axis.

A visit to Cirteq at Glusburn

A visit to Cirteq Ltd. made a great start to the 2018 syllabus of visits and lectures for the Association. A group of members and guests saw how this international company organized manufacture of several thousand different products in quantities ranging from one single part at a time to hundreds of thousands per batch per year. They found it interesting to see how the one-time Hayfield Knitting Wool mill had been used to make a very efficient engineering unit despite its multi level layout. Their circlip products are used worldwide and have an enviable reputation for quality and reliability in many industries, motor car manufacturing being only one of them.

Small examples in the range are dwarfed by a child's little finger nail whilst the largest is around a meter diameter.



Our party in the dispatch bay at Cirteq with our guide, Mr. A. Firnigl on the right.

One of the company's larger range of products but still a circlip - right

Examples from the smaller ranges below



Coming events

Tuesday 10th April, 7.30pm

Meeting of Council at A1Roper,

Wednesday 25th April at 2.00pm

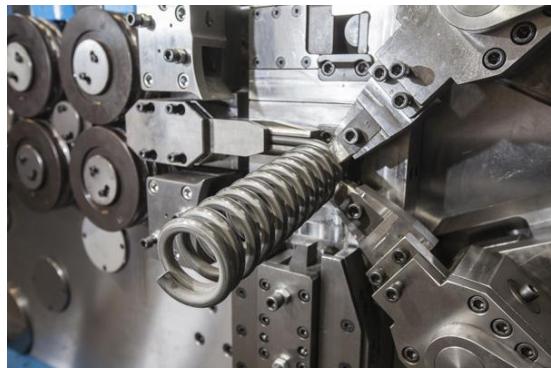
Visit to J.B. Springs, Skipton.

John Binns & Son (Springs) Ltd.

Airedale Business Centre

Ghyll Way,

Skipton. BD23 2TZ



"The increased investment in technology over recent years is testimony to the company's commitment to stay at the forefront of spring manufacturing in the UK. By tackling the challenges of the modern global manufacturing marketplace, JB Springs is able to offer its customers the highest standard of product and service, whilst maintaining a competitive edge."

Friday 11th May, 7.00pm for 7.30pm

The 118th Anniversary Dinner.

To be held at Newholme Manor, Slack Lane, Oakworth. BD22 0RQ.

Invitations have been circulated to members along with Menu choices. Chief Guest is our recent speaker, Ian McKay F.I.Exp.E., Hon. Secretary of the Bancroft Mill Engine Trust.

Tuesday 22nd May, 7.30pm prompt.

Talk on "Modern Transit Systems", 7.30pm at Phoenix Service Solutions, Aire Valley Business Centre, Lawkholme Lane Keighley. BD21 3BB. Speaker is Bruce McDougal who is an internationally renowned expert in this field and a member of this Association.

"The consequences of a collision between trains in the confines of an underground railway have always been recognised as particularly severe and high levels of traffic increase the risk. Mass transit railways must provide a fast and frequent as well as safe and reliable service. Train control systems for such railways have therefore always been at the leading edge of railway signaling technology and this is still very much the case today. The talk will explain and describe their evolution to the very latest processor based systems being adopted worldwide and look at how they are being implemented without service interruption on the Hong Kong Mass Transit Railway that currently moves around 5.2 million passengers every day".

Queries should be addressed to

John Pankhurst, 01535 642964, most of these visits have room for a few guests.

More about us on: <https://www.kaoe.org.uk>