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HVM Catapult news

Newsletter of the High Value Manufacturing Catapult

CATAPULT High Value Manufacturing

Technology Strategy Board
Driving Innovation

CATAPULT
High Value Manufacturing

Investing in the future

Welcome to the tenth newsletter in the current series. In October 2010, the Prime Minister announced that over £200m will be invested in a network of elite technology and innovation centres, now named Catapult centres, to be established and overseen by the Technology Strategy Board. The Catapults will be an important part of the UK's innovation system. They will allow businesses to access equipment and expertise that would otherwise be out of reach.

They will also help businesses access new funding streams and point them towards the potential of emerging technologies. The new investment will further bridge the gap between universities and businesses, helping to commercialise the outputs of Britain's world-class research base. This newsletter keeps you informed about the development of the first of these centres which was officially launched in October 2011. In this edition, we update you on the first six months of work of the new centre and the handover of the building at The Manufacturing Technology Centre.

First six months of Catapult operation

The HVM Catapult centre opened for business in October 2011 and the first six months of operation have been busy with key achievements including:

- AFRC has leveraged Scottish Enterprise funding to help expand the Centre's capabilities
- AMRC is matching Catapult funding with ERDF to build a Design, Prototyping and Testing Centre (DPTC) to open in September 2013
- CPI has significantly increased industrial participation in the Industrial Biotechnology facility and in the Printable Electronics facility to work directly with the companies that are seeking to exploit the benefits of this novel technology
- MTC has introduced high power computing for simulation and modelling as part of a manufacturing modelling theme
- Nuclear AMRC has placed orders for essential new equipment that was not provided as part of the original investment
- NCC is accelerating the development of its competency base, enhancing existing equipment, and introducing thermoplastic capability into its fibre placement lines
- WMG has equipped its Energy Storage and Energy Management Centre with further specialist equipment required by automotive sector partners

For the first 6 months of operation, it is projected that the £21m of Catapult Core Funding will leverage a further £29m of industry and other regional funding. Industrial clients include global leaders: Rolls-Royce, Airbus, BAE Systems, Boeing, Tata, Jaguar Land Rover, Ford, Nissan, Westinghouse, Areva, Proctor & Gamble, Unilever, Siemens and Hewlett Packard. The HVM Catapult also works with many SMEs like Ecosyl, OC Robotics, Gripple, Plaxica, Oxford Advanced Surfaces, and Polyphotonix. In their first year of operation, MTC has now signed up 22 industrial members, NCC 10, and Nuclear AMRC 31. CPI and WMG do not have a membership model, but work directly with a range of partners of all sizes. Members at each of the centres with a membership structure help shape the development programmes in the centres through their advisory board structures. CPI and WMG have similar industrial advisory boards in place that are actively steering programmes.

CONSORTIUM MEMBERS

Advanced Forming Research Centre
Location: *Glasgow*
Key Competencies: *Billet Forging / Sheet Forming / Precision Forging*
Contact: *Bill Ion*
w.j.ion@strath.ac.uk

Advanced Manufacturing Research Centre with Boeing
Location: *Rotherham*
Key Competencies: *Machining / Materials and Component Testing / Hybrid & Metallic Composites / Assembly*
Contact: *Keith Ridgway*
k.ridgway@sheffield.ac.uk

Centre for Process Innovation
Location: *Wilton, Sedgefield*
Key Competencies: *Chemical Processing / Biotechnology / Printable Electronics*
Contact: *Nigel Perry*
nigel.perry@uk-cpi.com

Manufacturing Technology Centre
Location: *Coventry*
Key Competencies: *Automation & Tooling / Fabrication, Joining & Assembly / Additive & Net shape / Process Modelling*
Contact: *Clive Hickman*
clive.hickman@the-mtc.org

National Composites Centre
Location: *Bristol*
Key Competencies: *Design & Manufacture of Composites*
Contact: *Peter Chivers*
peter.chivers@nccuk.com

Nuclear Advanced Manufacturing Research Centre
Location: *Rotherham*
Key Competencies: *Fabrication of Civil Nuclear Components*
Contact: *Stephen Court*
stephen.court@namrc.co.uk

WMG
Location: *Coventry*
Key Competencies: *Lightweight Product System Optimisation /Energy Storage and Management / Digital Verification and Validation*
Contact: Alan Curtis
Alan.Curtis@warwick.ac.uk

A number of centres also offer competencies in: *Measurement & Verification / Cost Modelling / Design & Manufacturing Systems / Materials Analysis*

MTC Building Handover

From left to right: Clive Hickman (CEO, MTC); Mick Laverty (CEO, Advantage West Midlands); Terry Morgan (Chairman, MTC); and Jeff Moore (EMDA) at the formal handover of keys

The Manufacturing Technology Centre (MTC), after 4 years of planning and a 16 month build, the 12,000m² facility was formally handed over to the MTC team at the end of 2011. Nearly 150 people attended the event, including representatives from MTC's founder research partners and industrial members. They were joined by many others who had been involved in the creation of MTC.

The MTC is the result of the foresight, commitment and perseverance demonstrated by a number of individuals and as Dr. Clive Hickman, CEO of MTC remarked: "You should never underestimate what can be achieved by a small number of committed people."

The formal handover of keys from the MDs of Advantage West Midlands, Michael Laverty, and the East Midlands Development Agency, Jeff Moore, started the day's proceedings. The day included tours of the facility and a series of presentations, each designed to showcase an area of MTC's technical expertise including:

- Net Shape Manufacturing
- Intelligent Automation
- Tooling & Fixturing
- Manufacturing Simulation
- Electronics
- High Integrity Fabrication

Later the same week, the MTC was delighted to receive its first royal visit when HRH, the Duke of York, toured the facility and expressed his continued support for high value manufacturing in the UK.

The MTC currently has 53 employees and this is expected to double over the next year. Whilst high value manufacturing will require qualified engineers, the success of the sector will also depend on the availability of practical skills such as those gained through the apprenticeship route. The MTC management team has acknowledged the importance of vocational skills and in September 2011 launched its apprenticeship scheme. This is a long term initiative and MTC intends to work with its industrial members to recruit at least ten new apprentices every year.

Enquiries on the High Value Manufacturing technology and innovation centre should be addressed to: Margo Hutchison, margo.hutchison@strath.ac.uk or +44 (0) 141 534 5200
For enquiries about the overall programme of technology and innovation centres please contact centres@tsb.gov.uk