**The** [**National Composites Centre**](http://www.nccuk.com/) **(The NCC)**

**Providing solutions for the design, manufacture and application of thermoplastic & thermoset composites and multi-materials, in an open-access centre, focusing on research, technology development, transferring knowledge and people development.**

The [NCC](http://www.nccuk.com/) is the UK’s leading centre of excellence and innovation in composites technology and is part of the HVMC Catapult with the purpose of supporting the UK composites industry technologically. As such there are 200+ composites specialists supported by state of the art advanced manufacturing equipment to enable industrial-scale development and prototyping. The centre provides collaborative, open-access, research, technology and people development, delivering world-class innovation and knowledge transfer for the design, manufacture and application of composites.

Fibre Reinforced Plastics (FRP) composites have seen steady use in the construction sector for decades, in diverse applications including water tanks, bathroom pods, feature cladding, roofing, house features.

The increasing drive to offsite modular construction plays to the benefits of composites:

* Automated or semi-automated precise factory processing
* Lightweight-high stiffness
* Multifunctional complex one-piece parts

Coupled with this FRP composites are:

* Natural insulators
* Fire resistant
* Can incorporate aesthetic and smart finishes such as anti-bacterial or hydrophobic

**The NCC capability includes:**

* Design, analysis and simulation of advanced composites applications
* Product and process development and optimisation
* Materials through intermediates and preforming to end product
* Extensive range of deposition and curing technologies
* Application of digital technology to composites manufacturing (Industry 4.0)
* Prototyping and validation
* Manufacturing, inspection and testing
* Collaborative and confidential working environments

***5 minute video summary of the NCC here:***

[***https://www.youtube.com/watch?v=ojnXeBFG-Ic&feature=youtu.be***](https://www.youtube.com/watch?v=ojnXeBFG-Ic&feature=youtu.be)

**The wider HVM Catapult network provides:**

* 1,180 engineers, technicians and support staff employed by HVM Catapult to support industry
* 1,012 projects, involving 1,515 private sector industrial clients
* 1,500 SME’s contacted within 12 months &SME’s assisted to access £60m of annualised project value
* £180m sales order book & 50% of order book is collaborative R&D
* £3.50 industry and collaborative funding for every £1.00 of core funding from Innovate UK

**Additional info on the NCC:**

* The NCC has c.240 employees – 180 or so permanent staff the others on contracts
* **22 of our staff are *Trainees* so c. 15% (14.6%) of our staff.** Those 22 break down into:
* 8 Apprentices = 4 Workshop/technical and 4 Business Apprentices.
* 9 Graduate Engineers, 3 Full-time Eng. Docs, 2 Trainees in Machining & Non-destructive testing, 1 Year in Industry (YINI) student.

**Background History:**

Initiated by the 2009 Composites Strategy with £25m of government (BIS, RDA and ERDF) support, and hosted by the University of Bristol, the NCC opened for business in mid 2011. The NCC helped create the High Value Manufacturing Catapult ([HVMC](https://hvm.catapult.org.uk/)) network of 7 Technology and Innovation Centres. Subsequent Catapult investment in new facilities and capability has enhanced the NCC offering to industry and as a consequence it has exceeded ambitious targets for growth and diversification. Current NCC Industry Membership has grown to over 50 Member companies, with an initial bias towards Aerospace, but with an increasing interaction with Automotive, Rail, Oil & Gas, Marine, Renewables, Materials, Simulation, Tooling and Equipment.

In response to Industry demand HM Treasury awarded the NCC an additional £28m in 2012 to double its size. The new building opened in October 2014 and provides extensive new facilities, including a Training and Skills centre, with additional equipment and capability.