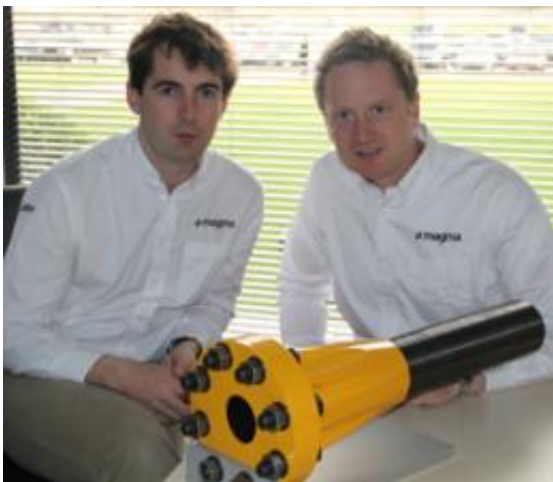


New carbon fibre polymer pipe will recover hydrocarbons from the most challenging offshore fields

February 20 2012



Alumni Charles Tavner (left) and Ed Vernon-Harcourt

Deepwater production is the fastest growing source of oil and gas reserves. Cambridge engineers are currently solving many of the formidable challenges in accessing these fields. One group, at Magma Global, is leading the work to improve the reliability and operating envelope of sub-sea pipe. Magma's work is simplifying subsea architecture and lowering costs.

Magma is building on some of Professor James Gordon's pioneering work at Cambridge on composites to develop a monolithic carbon fibre

[polymer](#) pipe to deliver the world's most reliable risers, jumpers, spools and flowlines for sub-sea exploration and production. Magma is working with the University of Cambridge's Department of Engineering to build their team and continue to develop their products.



Magma has developed a unique manufacturing process that produces high performance oil and gas pipes from carbon and Victrex PEEK™ polymer. Called m-pipe, these pipes offer improved reliability, increased performance, lighter weight and longer life than conventional unbonded flexible pipe or steel solutions.

Magma already employs several alumni from the Department of Engineering including Charles Tavner, their IP & Qualification Director and Ed Vernon-Harcourt, Robotic Production Manager. Magma has worked closely with the Department's Institute for Manufacturing to optimise their manufacturing processes and continues to identify individuals and research to extend their offering.

Magma's patented product, m-pipe, exploits the benefits of [carbon fibre](#) to enable the reliable recovery of hydrocarbons from the most challenging offshore fields. m-pipe is lighter, stronger, more fatigue resistant, more resistant to sour service and better insulated than current

solutions. [Magma](#) is backed by energy specialists Kern Partners and NES Partners.

Martin Jones, Magma's CEO, commented: "We are delighted to be working with the University of Cambridge's Department of Engineering. m-pipe will help unlock the next stages of deep water production and the University of Cambridge and its alumni are helping us address these challenges."

More information: Magma website: magglobal.com

Provided by Cambridge University

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