North of England Evening Meeting: High Performance Offshore Systems

Evening Meeting, Newcastle Department of Marine Technology, Armstrong Building, Newcastle University

Wednesday 13th March 2019

By Nick McLeish, PDL Solutions (Europe) Ltd

SUT North of England’s second evening meeting of 2019 was kicked off by Tom Blanchford (shown below) of Royal IHC Limited, who took to the floor to deliver a presentation about J-lay towers.

Blanchfords’ presentation addressed the work that IHC are doing to reduce the size of their J-laying towers. This would offer a plethora of benefits to the company, not least in the economic sector, with smaller towers allowing for smaller vessels and fewer crew, reducing the running costs of each vessel. Blanchford then addressed several questions from the audience regarding the place of these smaller vessels in the current climate which is dominated by larger ones.
In addition to downsizing, Blanchford described a new 'Hex-joint' system that was being used to reduce the weld time of the pipes by a third and hence increase productivity.

Second to the floor was Jamie Fletcher-Woods of TechipFMC. The presentation, about Dynamic Steel Tube Umbilicals, began with some impressive statistics relating to the depth to which these umbilicals could function. Apparently current operating depths have reached 3000m, but according to Fletcher-Woods, 4000m might even be possible.

Fletcher-Woods emphasised the use of a flooded construction of Technips' umbilicals, meaning that sea water must be in contact with all components within the umbilical for the sake of reducing friction. This emphasis prepared the way for the fatigue analysis that Fletcher-Woods is involved in and which was the subject of this presentation. The various aspects of Fletcher-Woods' fatigue analysis was discussed followed by answers to questions from the audience.

The evening as a whole showcased some very interesting and highly relevant work and achieved the goal of inviting people to share knowledge and resources. As testified by the group of people clustered round the speakers afterwards, the evening had provided the necessary environment to stimulate thoughts and questions from a mix of engineers, leading on to discussion. Our thanks go to the meeting chair for organising the event, the speakers for preparing and delivering informative presentations and the SUT sponsors for their sponsorship.