

## Offshore and Marine Case Study

### Background

Ambient noise on offshore platforms often exceeds a specified minimum throughout the electrical workshop, store room, hydraulic workshop, subsea office and mechanical workshop, reaching its highest levels in the mud pit room. Factor in the additional noise that would be generated by operating pumps, cranes and machinery and it is not a quiet place to work. Controlling noise levels on offshore operations is always a challenge as the ambient noise level starts at a higher point than onshore, and the acoustic performance of a products and design have to be balanced with robustness and fire protection

### Opportunity

Because of the remote locations and limited development rigs for offshore platforms, laboratory testing of new designs is essential to provide designers with a check on the performance characteristics of any new designs in a certified air flow facility.

### Solution

As part of the ongoing development of our air flow testing portfolio we recently changed our facilities to enable the testing of attenuators to BS EN ISO 7235:2009 – Acoustics- Laboratory measurement procedures for ducted silencers and air-terminal units. The new set up was used to test for static insertion loss, pressure drop and flow generated noise in a range of new attenuators being designed for use on offshore installations. We were able to quickly change the development attenuators in the air flow rig so that comparable data was quickly provided. Whilst the data collected is not as accurate as in situ data it does give a good indication of likely performance without going offshore.

