

Maritime Acoustics

Environoise Consulting Limited has completed many projects in the marine sector.

Work undertaken between 2014 and 2017 includes the following:

Holyhead Marine, Anglesey:



Undertaking of wheelhouse noise measurements using measurement procedure given in section 6.4.4.2 of C080 P3 2/09: 'Code of Practice for Controlling Risks due to Noise on Ships' of three 16m Pilot ships destined for Sydney Harbour and built by Holyhead Marine. The ships were named 'Sever', 'Sharp' and 'Sinclair' and the work was undertaken during sea trials off Anglesey to confirm that a noise level of 75dB $L_{Aeq,T}$ was not exceeded when the vessels were travelling at 22 knots.

Cammell Laird Shipbuilders, Ireland and England



We measured noise and vibration levels of the Strangford Lough Ferry to inform us in the design of a new ferry constructed at the Birkenhead shipyard. Advice was given on engine isolation, suitable surface finishes and floor types with required sound insulation performance for wheelhouse, crew quarters, passenger lounge etc. plus ventilation system. Commissioning in 2016 showed that all noise and vibration design targets had been met.

Stena Baltic



Stena's ship Norman Asturias was being re-assigned to duty in the Baltic Sea from the English Channel. A noise and vibration assessment was completed for the entire vessel in accordance with the requirements of the Danish Maritime Authority.

In addition to the engine room, vehicle decks and plant areas, an assessment of crew and passenger cabin was included.

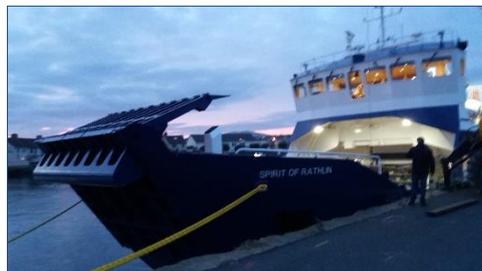
Stena Line – UK Ferry Fleet



In total, twelve of Stena’s ferries operating between UK, Irish and Continental ports have had noise and vibration assessments completed by Environoise in accordance with the Maritime Control of Noise and Vibration at Work regulations.

Surveys included assessment of noise exposure and Whole Body Vibration (WBV) in engine rooms and other plant areas. An assessment of noise exposure to crew during vehicle loading operations was done and a engine room noise contour map for to inform the client of areas of high noise level.

Arklow Marine



Arklow Marine, County Wicklow invited Environoise to advise them on construction details so that they could achieve on board and environmental (at sea and in port) noise level targets set by the client. Rathlin Island is the northernmost inhabited island of Northern Island and quiet operation of the vessel is desirable to preserve the tranquillity of the area. Commissioning of the ship in December 2017 showed that noise and vibration targets had been met.

Isle of Man Steam Packet Company



Noise and vibration assessments were completed for the crew members operating the Manannan, a high speed catamaran (shown) and the Ben-My-Chree ferry (traditional single hull) serving the route between northern England and the Isle of Man.