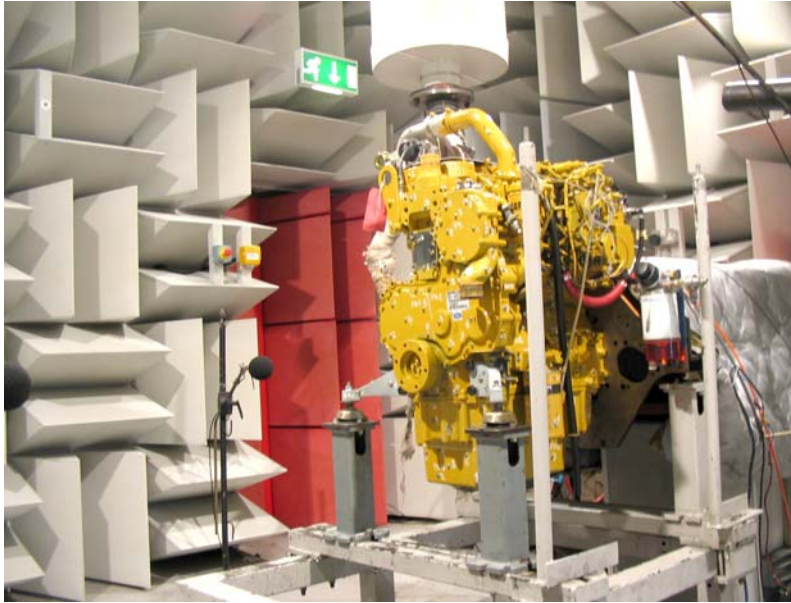


PROJECT FOCUS - PERKINS ENGINES

50 YEARS OF SERVICE TO INDUSTRY

ISO9001 REGISTERED FIRM

Anechoic Test Cell Treatment



Project Information

CASE STUDY

A new metallic wedge hemi-anechoic chamber, designed and manufactured by ECKEL Noise Control Technologies using their unique EMW metallic anechoic wedge system, has been supplied and fitted at the Peterborough Facility of Perkins Engines Co. Ltd. The chamber is used for the testing and development of a range of existing and new diesel engines.

The chamber has nominal internal dimensions of 5400mm x 4500mm x 3900mm high and when tested to ISO 3745 a cut off frequency of 100 Hz was recorded.

ECKEL's EMW wedges have a perforated metallic profile with the acoustic absorptive material within the wedge being encapsulated in an acoustically transparent non-woven fabric which is chemically resistant and has a Class One Fire Rating. This encapsulating material prevents fibre migration from the wedges without reducing its acoustic performance.

The metal profile of the EMW wedge produces a robust and hardwearing component which is ideal for everyday use in a non-forgiving environment such as the automotive industry.

The location of the chamber was within an existing building constructed from brick and concrete. ECKEL used its know-how to refurbish the existing cell structure, fitting the walls and ceiling with EMW anechoic wedges.

The existing single leaf personnel access and emergency escape doors were also fitted with EMW wedges to ensure a uniform appearance within the cell when closed.

In the case of the main personnel access door, the door mounted wedges were located on a sliding frame which allowed the wedge structure to be slid out when the door was open to maximise clearance for the transit of the test engine loading cradle.

The wedges on the Emergency Escape Door were painted a contrasting colour {red} for identification.

Steve J. Marshall, Manager Global Sound Solutions European NVH, has expressed satisfaction with the finished product and with ECKEL's commitment to providing a class leading test facility which enhances Perkins Engines' position as a market leader in their field.

ECKEL Noise Control Technologies has over 50 year's experience in the provision of engineered noise control solution to Industry worldwide.

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