

Test & Measurement



Application

The system was developed for the highly-precise non-contact vibration analysis of microstructures using microscope optics as well as large, industrial test objects such as engines and machines.”



Housing Challenge

The case had to be manufactured in accordance with the product design specified by the customer, with an angled front panel to improve usability. However, the entire case must be easy to dismantle so that a service technician can quickly access the inside of the case. On top of that, the case needs EMC shielding to keep electrical and/or magnetic fields away from the sensitive electronics in the system. The case requires portability and a complete cooling concept.



Solution



In order to reduce development costs for a non-standard case, nVent takes advantage of its flexible Interscale case concept. This concept already provides a tested and approved design, to guarantee EMC protection, by using a special interlocking of the panels. The case is closed with only four screws, and is therefore easy to assemble and disassemble. Two screws to hold the display holder and two for the cover. The front panel were designed with the brand colors of the customer, using powder coating and digital printing methods. To keep the system cool, nVent recommended active cooling with the installation of fans.

Project Details

Location	Germany
Industry	Test & Measurement
Application	Non-contact vibration analysis
Technology	Case
Client	Polytec
Date/Time frame	2019 / 2020
Contract scope	Serial Production started