The NDT Validation Centre








The NDT Validation Centre is an independent organisation with the objective of assessing the accuracy and consistency of the non-destructive testing (NDT) methods used in manufacturing and construction industries.

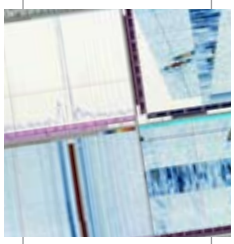
It addresses the need to verify and improve the accuracy of inspection techniques and flaw detection to increase the confidence of manufacturers, regulators and users alike.

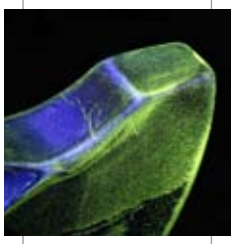
Housing a wide variety of state-of-the-art equipment, The NDT Validation Centre is well placed to provide expertise in advanced inspection techniques, including:

- Digital radiography
- Laser shearography
- Eddy current array inspection
- Time of flight diffraction
- Phased array ultrasonics
- Immersion ultrasonics
- Thermography
- Tomography
- Long range guided wave ultrasonics

The techniques available permit the inspection of all engineering and construction materials (metals, composites, plastics and ceramics), and are acceptable methods for inspecting products made using a wide range of manufacturing and fabrication processes.

This opens up the services on offer to the majority of industrial sectors, from aerospace to construction, from oil and gas to medical.





What is validation?

The use of non-destructive testing (NDT) is a key part of the manufacturing process, and vital in ensuring the integrity of products and their components throughout their service.

Validation aims to assess the acceptability of the techniques used, the procedures and equipment, training criteria and personnel for specific engineering components and inspection scenarios. The validation process should be able to demonstrate that the entire inspection process accurately and consistently meets the requirements of relevant codes and standards, regulators, customers and users.

Who is involved?

The NDT Validation Centre is a collaboration between TWI Ltd and the Faculty of Applied Design and Engineering at Swansea Institute of Higher Education, and was set up with financial support from the DTI, the WDA's Knowledge Exploitation Fund (KEF) and the Welsh European Funding Office (WEFO). This collaboration brings together experience in research and development of NDT techniques, and training and certification of operatives, and can draw on the knowledge of technical experts and academics specialising in the area of NDT.

In addition to validation activities, the Centre will be active in an NDT Technology Transfer Network, managed by Swansea Institute, to stimulate collaborative research activities between higher education establishments, research centres and industry. Swansea Institute have also developed an MSc in Non-destructive Testing and Evaluation with the aim of developing new NDT techniques and applications.

The Centre is part of the National Composites Network, a Knowledge Transfer Network managed by TWI, which facilitates knowledge sharing, networking and technology transfer in all areas of composite materials.

For more information on the activities of the Centre, contact:

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ncn
National Composites Network

PRIFYSGOL CYMRU ABERTAWE
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