

## **COMETE, a versatile lab cobot for NDT**

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COMETE, a 'cobotized multi-technique non-destructive testing module', is part of an approach that aims to improve flexibility, reduce the human factor and develop digital functionality in the field of NDT. COMETE is a R&D unit invented by the IRT Jules Verne, a mutualised technological research centre dedicated to manufacturing. It aims to improve industrial competitiveness and can serve in the development of automated NDT activities. COMETE was designed and built with the goal of creating the ultimate versatile cobotised means for performing a full range of non-destructive testing. It intends to cover the entire inspection chain, from simulation and acquisition, to analysis and digital outcome. COMETE is an ideal prototype for implementing solutions to digitalise quality control operations. In a single module, many different inspections can be performed, using the various resources it has been equipped with. It has a cobotised arm and an immersion tank used for classic UT methods. It also has a work surface for dry coupled or wide field techniques, as well as electromagnetic, air coupled ultrasonic, dimensional and visual NDT. IRT Jules Verne leverages its expertise in robotics and NDT on COMETE to develop 'zero programming' inspection trajectories. This approach offers user-friendly solutions for scanning intricately shaped components, applicable to a wide range of inspection methods implementable within this module.