Robotic Non-Destructive Evaluation

Efficient Asset Inspection Using Your Robot of Choice

ORCA HUB
Offshore Robotics for Certification of Assets
Remote Safety and Integrity

The ORCA Hub has developed a Non-Destructive Evaluation (NDE) data acquisition platform for Electromagnetic Acoustic Transducer (EMAT) enabling the next generation of ultrasonic inspection capabilities.

Easily integrated into any robotic platform via the Robotic Operating System (ROS), the system allows users to survey structural thickness and detect cracks in critical infrastructure.

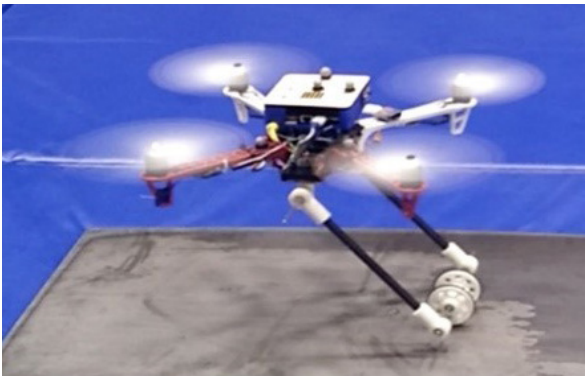
Without the need for couplant or any priming of the asset, the system makes robotic inspection in hard-to-reach and hazardous areas more accessible.

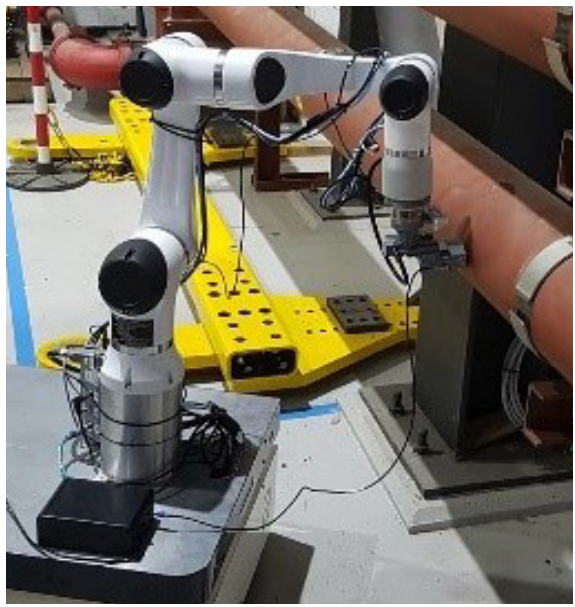
Benefits

- Improve inspection capabilities through its robot agnostic integration capability
- Reduce inspection time without the need for couplant or any priming of the asset
- Extend inspection reach by enabling the use of more agile and lighter robots
- Save money by carrying out inspection programmes more efficiently
- Instant inspection data through wireless transmission
- Removes human operators from hazardous environments
- Make more informed maintenance and repair decisions through improved asset integrity knowledge

Possible Applications

- Inspection of curved and flat metallic surfaces
- Splash-zone inspection using a crawler robot
- Flare Boom inspection using an Unmanned Aerial Vehicle (UAV)
- Wind Turbine jacket foundation and tower inspection using an Autonomous Underwater Vehicle (AUV) or Remotely Operated Vehicle (ROV)
- Subsea pipeline inspection using AUV or ROV





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