



PRESS RELEASE – for immediate release
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ESR Technology and Quasset partner to launch digital workflow solution for non-intrusive inspections (NII)

ESR Technology and Quasset announce a strategic partnership to make 3D workflow software for non-intrusive inspections (NII) available for the global market. NII is a key strategy to drive production efficiency and reduce plant down time, as well as increasing human safety by avoiding man entry in confined spaces. The digital workflow solution, called **NIIMax**, creates single asset digital twins as a user interface to facilitate efficient and effective implementation that addresses relevant integrity threats. NIIMax manages information and data across each project phase, guides process activity, facilitates interfaces, and gives access and visibility to project participants.

The ESR Technology-Quasset partnership brings together NII process knowledge and industry application experience with expertise in digital twins and software development. ESR Technology manages HOIS, a well-established joint industry project (JIP), which spearheaded HOIS-RP-103, a widely used industry best practice guideline for NII implementation. Quasset has a proven track record of developing innovative digital tooling, including AssetBuilder, web-based 3D visualization software which allows users to create digital twins of assets. NIIMax is set for release in October 2020.

Mark Stone, Manager Engineering Services (Energy) at ESR Technology commented:

“We are delighted to be partnering with Quasset on NIIMax which represents the next step for the industry in implementation of non-intrusive inspection. The project brings together ESR Technology’s in-depth knowledge and experience of NII best practice with Quasset’s digitalisation skills. NIIMax streamlines implementation and simplifies the project interfaces, making NII best practice readily available to asset owner/operators and their service companies.”

A digital approach to NII

With the current low oil price and additional restrictions imposed on working practices due to COVID-19, many turnarounds originally planned for 2020 have been strategically postponed until at least 2021. To manage the increasing backlog of inspection and maintenance activities, operators are increasingly considering using NII as a replacement for internal visual inspection (IVI). While IVI requires an asset to be shutdown, isolated, cleaned internally, and requires confined space entry (an activity with increased complexity in a socially distancing world), NII can typically be carried out while the vessel is in-service, with less people involved, and the work can be delivered in packages at times convenient for the facility.

NIIMax offers a digital approach to integrity, inspection and corrosion engineers who are in search of a structured process for NII implementation. This is particularly important given that pressure vessels are typically high hazard items and failure can result in very severe consequences.

Tjibbe Bouma, CEO of Quasset remarked: “We are very excited about our new partnership with ESR Technology. At Quasset we are passionate about driving innovation that adds real world value. We do it by building partnerships and bringing our competences to the table to implement powerful solutions. This new partnership is yet another excellent example of this successful approach.”

Leveraging single asset digital twins

A digital twin of a pressure vessel is used as the basis for NIIMax. The 3D model is marked up with different inputs such as process flows or degradation zones and can be easily updated over time. To develop a clearly defined work scope, instructions are marked up on the 3D vessel and used as a basis for progress reporting. Inspection results such as corrosion mapping data are displayed with colourgraphic maps at actual locations and can be integrated with previous results. In the evaluation phase, the digital twin provides a basis for efficient NII conformance assessment, and outputs of the model support further analysis, e.g. using statistical methods and for derivation of integrity parameters.

Both parties are excited about this new partnership and the potential benefits it brings to operators and their service providers around the globe who are eager to implement NII.

Learn more about NIIMax

<https://quasset.com/nii-max>

For more information on ESR Technology’s NII consultancy services, please visit:

<https://www.esrtechnology.com/index.php/services/integrity-and-inspection-analytics/non-intrusive-inspection-services>

or email integrityteam@esrtechnology.com

About ESR Technology

ESR Technology provides independent and specialist technical consultancy and services in the Energy, Space, Industrial, and Transport markets. With our heritage dating back to the 1960’s, our specialists support clients with value-adding solutions in key areas including asset integrity. Our solutions bring together innovation and in-depth knowledge of best practice to ensure clients’ needs are best met.

About Quasset

Driving innovation, building networks, and assessing and implementing pioneering technologies for business impact are at the core of Quasset. To help companies optimize the balance between cost, performance, and risks of capital-intensive infrastructure, Quasset provides advanced solutions in asset management. Since its inception, Quasset has been part of a number of joint industry projects, pulling the value chain together to help companies accelerate their progress and create a competitive advantage.

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