

CREATING THE FUTURE OF NDT



PACSESS Plant Service Platform

Centralized Software Platform for all NDT-related data

PLANNING HANDLING ARCHIVING SHARING

Main Challenges in Energy Plants

 Quick overview of the current qualitative status of all assets
Fast and easy access to reports, images and all NDT related data
Share of information such as orders, service jobs and material certificates
Integration of all information systems into one platform Nowadays, new technologies and initiatives like digitization, Industry 4.0 and Industrial Internet of Things (IIoT) are expected to provide digital connections to the already modernized production processes. The objective is the continuous digital flow of information within an uniform documentation system. This includes the results of the mandatory quality testing, mostly in the form of reports. Furthermore, required digital methods are widely implemented but oftentimes acting isolated from each other.

In order to enable a secure data storage and instant exchange of information, we need a software platform to handle all data generated, regardless its orgin. Todays digital methods enable secure archiving, data exchange of NDT images, test reports and all relevant data, to be combined in one platform. However, very often data or file formats are not fitting. One example is the RT field, where still a lot of analog films are in use.

It seems clear that Inspection service workflows are characterized by many solutions which are not standardised. As a result, everydays jobs in the plant are often forced to be done by paper reports and analogue X-Ray films, with very difficult storage and handling of information.

PACSESS Plant Service Platform

On the existing IT side, things get messy too, dealing with multiple proprietary systems, MS Excel spreadsheets, and MS Word reports. All these facts mentionded above make a combination of different input which seems impossible to have under proper control. In this context, we developed PEP (PACSESS Enterprise Platform), the first holistic solution for quality management in the Energy/Oil&Gas.

The main goal is to make all this unstructured data digitally available in an organized manner. Also, to optimize all workflows leading to far more efficient communications between the asset owner, plant suppliers, repair/maintenance companies, inspection services providers and regulators.



Structured data

Easy access

Process optimization

Iterative learning

Database Explorer within the PACSESS Enterprise Server manages the stored data and all assest's information, whereby any image, test reports, material certificates and production-related documentation in one central database.

Communication interfaces to the imaging devices are provided via system configurations as well as interfaces of the information systems to be connected.

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PEP server provides the necessary flexibility to map all required processes and their different manifestations. User roles & rights management supports and controls the authorized access to the platform, monitoring how data is handled.

Sharing & Archiving

Existing digital archives, plus scanned jobs and test files providing from other devices such as ultrasound, thermography, Visual Inspection photos and ndoscopy videos are taken into account holistically and can be managed in the same enviroment. The generated test reports are processed together with the image objects complying to DICONDE standard.

Sharing instantly images, reports and certificates can be done easily within PEP, where both public and private cloud setiups are possible.



Thus, sharing of information with external parties is now easy, fast and secured. The PACSESS Free Viewer allows external people to open DICONDE images without qualitative losses, empowered with different image processing tools to get an optimized vision of the images.

Order Management

With the PACSESS Enterprise Job Management, you can move away from the usual job tables in the form of Excel spreadsheets. The order acceptance interface receives new orders from the asset owners information system, often also called ERP (Enterprise Resource Planning) or IDMS (Infrastructure Data Management System) and provides it in the PACSESS Enterprise Platform as worklist for the inspection service providers or the service / maintenance outsourcing companies.

The control of orders to inspections jobs is easier when the parties are interconnected through a server, which is always under total control of the asset owner. Those orders will land at the inspection service company in a structured and clear fasion . Now, it's easy for the QM Managers to know which objects/parts must be inspected and/or need to be repaired.



A semi- or fully automatic order creation is possible, specially relevant in the context of periodic inspections, typically needed in refineries, petrochemical plants, power plants. But also important for outsourced players such as welders, production task and service support companies.

Certain components must be inspected regularly and the performed tests must be well documented with image, documents and test reports associated to them. As a feedback from handling this information, cost-calculation stats are given and can be integrated as welll, connecting to other departments of the plant such as Procurement or Finance.



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