AcuScreen Enterprise Platform

One platform for all NDT-Images and Reports
The new way of handling your NDT-Data Management
Quality management and especially traditional non-destructive testing workflows define the need for faster, simpler, cost effective modern workflows.

Keywords such as digitization, Industry 4.0 and Industrial Internet of Things (IIoT) are expected to provide digital connections to the already modernized production process. The objective is the continuous digital flow of information and a uniform documentation of all data, which also includes the results of the mandatory material testing.

Today digital methods enable secure data archiving, data exchange of NDT images, test reports and all relevant data, to be combined on one platform.
The material testing workflow today is characterized by many individually created solutions which are not standardised or could not be standardised. Unfortunately, everyday life is often characterized by paper reports, analogue X-ray films and proprietary systems, MS Excel spreadsheets, MS Word reports, etc., which make a combination of different data impossible.

In this context, we offer with AEP (AcuScreen Enterprise Platform) the first holistic solution for quality management and NDT, which meets your needs and requirements for secure, fast and cost-efficient NDT Data Management.

Our research shows that the unanimous opinion of users is that test data management requires a platform which should contain all image and report data, as well as order fulfilment, with connection to existing ERP systems (Efficient Resource Planning).

The question: „How to maintain the competitiveness in NDT and how can it be improved?” is inevitably present. Especially since the conventional work process increasingly burdened by the processing of physical data and „historically grown” systems that are not compatible with each other.

Digitally displayed NDT workflows offer high savings potentials, while at the same time optimizing quality management

As described above, the biggest obstacles in the NDT area are the substantial number of data formats and, to date, no uniform platform for NDT data.

With AEP, our AcuScreen Enterprise platform, we took the logical step of developing an open and vendor-neutral platform for any image and report data, based on the globally recognized and ASTM-developed DICONDE standard (ASTM 2339), for a wide variety of testing and test methods.
The central element is the AcuScreen Enterprise Server.

The integrated database of the AcuScreen Enterprise Server manages the stored data objects for as long as the data is required. Data objects are archived using the internationally recognized standard (DICONDE) protocol, whereby all image data, test reports, material certificates and manufacturing data (e.g. welding equipment data) are grouped together in a “container”.

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

Lost test reports, film bags and image files stored on various storage media are now a thing of the past. The tedious search for the required data is no longer necessary and the associated documentation is now complete in one place and directly available for retrieval to share with others.
The AEP server provides the necessary flexibility for mapping the required processes and their different characteristics. The user and rights management software support all the processes to be mapped and control authorized data access.

### Archiving

Digital Storage is an integral part of the AcuScreen Enterprise Platform Server. Scanned orders and data from other image and video sources such as ultrasound, thermography, photography and video endoscopy are now standardised and can be managed in the same archive.

The generated test reports are stored together with the picture objects using the DICONDE standard.
Order Management

With the AcuScreen Enterprise Order Management you can say goodbye to the usual order tables in Excel spreadsheets. The order acceptance interface receives new orders from the leading information system, often referred to as ERP (for example, SAP), and displays them as order lists in the AcuScreen Enterprise Platform.

Centralized and semi-automatic or fully automated order creation is possible. Especially in the area of recurring inspections (e.g. in refineries, petrochemical plants, power plants, etc), where operating parts and components must be inspected regularly (once a year or every three years, etc.) and the performed tests must be documented with image data and the associated test reports.

We have developed a feature that automatically assigns such recurring tests, which brings high efficiency and considerable time savings. Simple filter functions sort jobs for individual employees, workstations, departments and locations. It can be seen easily which orders are being processed or are completed. In a further step, a cost calculation can be integrated here or a connection can be made to the invoice department.
We can also directly extract processing data from different devices, such as: data from welders or from various CR systems or digital detectors. Our latest project includes data from ultrasound systems.

For the user, the search function is of crucial importance, so that research can be carried out quickly and reliably and the documents archived over many years.

“We have seen enormous improvements in our daily work”

“The software is very easy and intuitive to use”

“We’re saving a lot of time and improving our QM, it’s fantastic”

Information security is an integral part of our work. To ensure the availability, integrity and confidentiality of your information, our partner data centre has been certified to DIN ISO / IEC 27001 for many years. This gives your data the most reliable security and long-term accessibility.
Test Report Management

Of central importance is the professionalism of the service provided. Test reports are usually forms that are filled out manually.

The AcuScreen Enterprise Report Management manages report templates that are customized to meet the requirements of the audit report. In addition to the master data already transferred with the work list, further measurement data can be transferred from production systems. Interactive text fields open the X-ray image to be checked. The measurements made by the inspector are automatically transferred to the text fields of the test report. The inspector can also select interesting image areas (RoI = Region of Interest), which are included as additional information in the test report.

Final work steps such as the submission of the test report to the Level 3 Examiner are automatically initiated by the Test Report Management before a transfer to third-party systems or archiving takes place and the test report can no longer be changed and assigned directly to the corresponding image data and archived.

With further evaluation options in the test reports and the integration of maintenance reports of the test equipment into our platform we are taking the next step in providing a complete platform for all kind of inspection service equipment.

With the ability to save data in one format and also to digitize physically existing films and papers, the basis is created to merge, display and retrieve all this data in our vendor-neutral AcuScreen Enterprise Platform (AEP).
With AcuScreen Exchange, we have developed a self-contained web application and software which can be integrated into the AcuScreen Enterprise Platform, making it easy to exchange large image data (such as x-rays, microscope images or CT data, etc.) along with the specific reports and make them available only for authorised and invited persons.

Only invited and registered users can view and share individual projects or test data of individual components.

Please do not confuse this with a classic FTP server share, where the user must be told where to find the relevant data.

- Accessible from every web browser
- On any device (IOS, Android, Windows)
- Anytime
- Anywhere
- Highly secured
- No up or download is needed
With the PACSESS Cloud, we offer a completely secure solution for storing data in the medium and long term according to all legal regulations on data security. Our partner data centre is TÜV- and ISO-certified for this and assumes all responsibility for your data.

The advantage here is that you, as the data owner and responsible person, do not have to worry about the corresponding hardware and its protection, maintenance and the exchange of hardware components.

It also eliminates the need for „mirroring“ the data across multiple servers across multiple sites, resulting in a huge initial cost saving and allowing you to fully focus on your profitable work.

If you prefer an in-house solution for your sensitive data, we will gladly help you find the right set-up and set up the necessary software modules for you.

Information security is an integral part of our work. To ensure the availability, integrity and confidentiality of your information, our partner data centre has been certified to DIN ISO / IEC 27001 for many years. This gives your data the most reliable security and long-term accessibility.
AcuScreen Enterprise Platform

Hardware Management

All DICONDE-compatible devices can be integrated today.

If you have devices that are not yet DICONDE-enabled by the manufacturer, contact us and we can also connect these devices to the AcuSreen Enterprise platform. The list of devices already supported today ranges from detector plates (DX) to CT (tomography), CR (imaging plate systems) and SC (film scanners) to video import (JPEG / MPEG, etc.) and any type of data import based on the DICONDE standard.

Changing your working methods to include new evaluation tools (CT, ultrasound, etc.) does not make sense, that's why we can integrate your user software from other manufacturers into our platform.

Note: Integrating a web server is always beneficial when you have multiple locations, when service providers need to visit different locations, or simply share your generated data with other specialists, customers or colleagues.