GE
Inspection Technologies

Rhythm Enterprise Archive
Long-Term Storage Solution for NDT Information

Key features & benefits

- DICONDE / ASTM compliant
- Vendor neutral archival of NDT data
- Secure data management
- Use your own IT infrastructure
Rhythm Enterprise Archive

Rhythm Archive is an extremely efficient data management and storage solution, which allows ready and easy access to large volumes of inspection information. More than 300 million images can be stored at a central location, in the industry standard: a DICONDE-compliant format. It accepts images from remote workstations, and stores these using various compression techniques to save storage space without sacrificing image quality. Input and retrieval of information is quick and easy, as a simple DICONDE tagging system eliminates the need for the complex image file naming conventions often associated with high volume information storage. Furthermore, Rhythm Archive not only stores the raw inspection data but also any enhancements made during analysis at the Rhythm Workstation, never altering the original raw data.

Storing for the Future

Rhythm Archive is a totally DICONDE-based archival solution. DICONDE (Digital Imaging and Communication in NDE) is an extension of the DICOM standard which was developed for the medical sector by vendor companies and user groups and is now used by virtually every medical profession that utilizes images.

By using the vendor neutral Rhythm Enterprise Archive, users can enjoy a range of benefits. They can avoid legacy data issues and will not have to maintain old systems or convert old data in the future. They will also be able to use inspection data from various DICONDE-compliant equipment manufacturers, including Rhythm workstations, as DICONDE is nonproprietary. And it will be possible to review historical inspection data with future software tools.

Flexibility and scalability are further advantages of Rhythm Archive, as the system can be integrated with a number of long term storage solutions, such as HP & EMC’s VNXe or Isilon data storage appliances. Alternatively, you can choose the new option to deploy the Rhythm Enterprise Archive software directly onto your own enterprise server with your chosen data storage solution.

Sharing More Information, Faster

Rhythm Archive offers a significant step-change in information sharing over the existing Rhythm platform. Currently, data is archived at Rhythm Review workstations by storing on the hardware’s limited hard disc capacity or on near-line DVD/CD. Consequently, locating particular inspection data in a multiple workstation configuration can be rather complicated and time-consuming. With Rhythm Archive information from all workstations is available at one central repository so that data searching is more efficient.

The Rhythm platform can control image information workflow so that data can be routed to other Review workstations to allow further analysis and back to Archive again.

Virtual archiving is yet another feature of Rhythm Archive. This allows information managers to automatically segregate data, on a customer basis, on a department basis or on any storage specific basis, to provide customized, secure archives within the Enterprise Archive.

Companies require global DICONDE data management solutions like Rhythm Enterprise Archive that can be integrated into their own infrastructure/enterprise network.

Improving the Bottom Line

By improving data sharing and providing a central, safe, long term information repository, Rhythm Archive can significantly affect profitability, with immediate benefits in time-saving and reliability. However, Rhythm Archive can also bring important productivity improvements of as much as 50%, as pre-inspection plans can now be formulated more efficiently by taking actual inspection history into account. A similar order of productivity improvement can also be achieved in post-inspection, as only relevant inspection data needs to be sent for further analysis.
Realizing the Potential

Rhythm Archive completes GE Inspection Technologies’ Rhythm software suite. This is a cohesive platform developed to provide an efficient and effective solution to the acquisition, analysis, management and storage of multimodal digital inspection data. Rhythm is made up of three integrated modules, all of which use off-the-shelf hardware.

These modules are:

**Rhythm Radiography, Rhythm UT, Rhythm EM, and Rhythm Visual:** interacts with the relevant inspection source to collect the digital inspection information. Current Rhythm Modules include Rhythm Radiography, UT, EM, and Visual, which provide limited-reporting capability, in easy-to-understand formats.

**Rhythm Review:** accepts data from Rhythm RT, other Rhythm Review workstations and removable media, such as DVD and USB flashdrive. Rhythm Review has the capability to enhance and manipulate the digital data and also features application tools for the analysis, measurement and further enhancement of images. Rhythm Review allows information to be stored on-line using the its hardware disc capacity, CD, DVD, USB flashdrive or network storage.

**Rhythm Archive:** expands the operating potential of Rhythm enormously. Now, all information can be made globally available to every Rhythm user within a network, simplifying the introduction of techniques such as image stitching, data fusion, and data base mining to provide the basis of future condition-based maintenance programs. This will assume increasing importance as the Rhythm platform extends to other inspection modalities.

**Rhythm Enterprise Web:** Rhythm Enterprise Archive gives the foundation for using Rhythm Enterprise Web, providing on-demand access to NDT inspection data maintained in a central server from anywhere in the world with just a web browser and login information. Rhythm Enterprise Web brings DICONDE viewing capabilities to the internet and provides a convenient distribution engine with web-based functionality.

Rhythm Archive drives inspection productivity in various industries.

In **aerospace**, all inspection data can be stored for upwards of 50 years and still be quickly retrieved when required.

In **oil & gas**, weld inspection data can be transmitted to the Rhythm Archive, where it is globally accessible to expert resources for review and analysis.

In **power generation**, in-service assets can be better managed to help improve their operating life and reliability. As past inspection data can be used to feed predictive analysis algorithms.

In **transportation**, inspection planning can be faster, more meaningful, and targeted, by referring to the last inspection period.
Rhythm Enterprise Archive

The DICONDE compliant solution to storing high volumes of vendor neutral NDT inspection data on a global company IT network.

Feature Summary - Your Advantages

• **A totally DICONDE-based vendor-neutral archival solution.** Ensures that multi-modal inspection data will never become obsolete or inaccessible.

• **Customer focused.** Provides small to large solutions from standalone workstation up to global enterprise network integration.

• **Simplified information sharing.** Data can now be readily accessed from a single storage source by any number of remote interrogation sites.

• **Interfaces with a wide range cutting edge technology, long term data storage solutions.** Allows operator to select long term storage equipment to meet particular present and future needs.

• **Provides foundation for data mining.** Ready access to large volumes of data at one central storage point allows operators to compare inspections carried out at different times using different inspection modalities.

• **Robust and secure.** Disaster-recovery plans are incorporated and built-in redundancy can be included to ensure constant data availability.

For the most up-to-date technical specifications and hardware requirements, please contact your account manager, email us at geit-info@ge.com.

GE Inspection Technologies: productivity through inspection solutions

GE Inspection Technologies provides technology-driven inspection solutions that deliver productivity, quality and safety. We design, manufacture and service Ultrasonic, Remote Visual, Radiographic, Computed Tomography and Electromagnetic equipment and systems. Offering specialized solutions that will help you improve productivity in your applications in the Aerospace, Power Generation, Oil & Gas, Automotive, Metals and other Industries.