Rhythm® Radiography

Total X-Ray Inspection Software

ASTM DICONDE-compliant software platform specifically for the NDT marketplace

Rhythm is a powerful PC-based DICOM/DICONDE software platform that provides scalable image and data management solutions for non-destructive testing applications. The Rhythm Review workstation has an easy-to-learn and intuitive user interface and runs on the popular Windows® 2000 or Windows® XP operating systems, making it easy for anyone with basic PC skills to get started.

Rhythm leverages a long established product line and carries forward a unique history of more than 10 years of global experience providing imaging workstations. This experience and continuous improvement has resulted in one of the most powerful and comprehensive imaging workstations available today. It is specifically designed to be scalable from isolated single workstation installations to global enterprise applications.

Enhance the business impact of NDT

The Rhythm platform positions your enterprise to unlock value through increased productivity. Its advanced image review and application-specific tools help you save time through quicker image evaluation and improved quality of inspections.
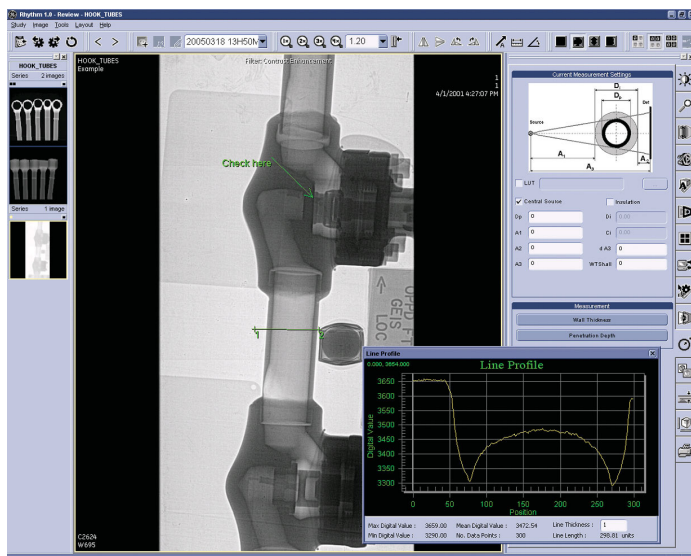
Its data management and data sharing capabilities streamline the retrieval of past inspection results, improve the quality and speed of image and data sharing, and move information to inspection specialists remotely. Rhythm gives you added value through future data mining and data correlation capabilities.

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Designed for industry

Designed for high throughput image examination and disposition, the software has been tailored specifically for industrial applications and complies with DICOM/DICONDE standards. The software layout and available controls can be configured for various classes of users, such as inspectors and supervisors.

Configurable features include:

- Data Selector and Pictorial Index for rapid image identification
- View Port with variable magnifier for reviewing related images and making comparisons to a master image or historical data
- Workflow for routing, archiving, and deleting images
- Toolbar and short cut keys providing access to key functions
- User-defined Stamps for streamlined image sentencing

Optional software modules

The Rhythm workstation is offered with optional software modules that provide additional functionality without having to purchase capability that is not needed. Following is a short description of the available software modules for Rhythm. Please see the individual product data sheets for additional details.

Single Media Archive (SMA)

Enables the Rhythm software to create DICOM/DICONDE compliant CDs or DVDs containing DICOM/DICONDE image and report data. A copy of the Rhythm Viewer can also be included on each disk, allowing the media contents to be viewed on any standard Windows® PC running Microsoft Internet Explorer 5.5 or higher. This module also includes the Archive Index Tool, which allows for the logging and tracking of each DICOM/DICONDE volume that is created via the local workstation.

Multi-monitor/mixed monitor

Allows the Rhythm workstation to support multiple monitors and mixed combinations of resolution and color depth (e.g. a high-resolution monochrome monitor and a low-resolution color monitor).

Quality control

Allows a user with sufficient privileges to modify almost any study or component information in a DICOM/DICONDE file. This helps ensure consistent information throughout the digital imaging environment. In addition to component information, all DICOM/DICONDE information, image order, series, window level settings and annotations can be modified. The Quality Contro module also provides the option of splitting images into separate series or studies. The Quality Control module allows users to access Study Status history.

DICOM print

Provides comprehensive DICOM print capabilities to the Rhythm workstation. Allows the user to compose a print job using pre-defined film layouts or to use a "virtual film sheet" that allows users to compose print jobs on the fly from within the Viewing Section of the application. Users can "drop" individual images from multiple studies onto the virtual film sheet, rearrange them if required, post-process them (window, zoom, pan, annotate and much more), and then send them to the printer.

The base Rhythm software package supports printing to a wide range of off-the-shelf Windows®–based printers or to high-end DICOM printers.

Feature overview

This section presents a high level overview of the general features and functionality of the Rhythm Review. This list is general in nature and is not intended to detail every specific feature and functionality of the workstation.

Powerful display, measurement and analysis tools

- Interactive windowing
- Grayscale invert
- Zooming
- Flip/rotate
- ROI tool for fast windowing and leveling
- Linear, exponential, logarithmic and sigmoid windowing
- Measurement—distance, angle, profile, and ROI
- Nine pre-set filters including sharpening and edge enhancement
- Pictorial Index (thumbnails) for easy navigation through large datasets
- Resizable shutter in various forms
- Export of ROI statistics to Excel®
- Proprietary latitude/contrast full-field image optimization algorithm
- Histogram equalization

Viewing section features

- Configurable Hanging protocols, by means of scripting and Wizards
- Create and apply Presentation States
- Configurable View Port layout
- Configurable desktop (toolbars, command buttons, shortcut keys)
- Create and display integrated Structured Reports
- "Boilerplate" templates for report creation
- Scroll to next series
- Mixed-monitor system (monitors can have different resolution and color depth)
- Support for monochrome, 24-bit true color images, color palettes and YBR coloring, coding
- Unlimited maximum viewing matrix
- Image, series, study and component compare
- Cut/copy/paste annotations and shutters
- Print images to DICOM and Windows® NT printers

Data selector features

- View list of studies by component
- Image thumbnails in data selector for study preview prior to remote archive retrieval or viewing
- Configurable views on a work list
- Flexible viewing options for data on remote archives
- Sorting and filter options on the selected work list
- Display all DICOM/DICONDE information
- Display of Structured Reports
- Auto column width work list view
- Direct View from CDs using work list
- Auto deletion option (rule based)
- Import images and view them as they arrive

Usability and service features

- Context-sensitive, on-line help and user guide
- User profile settings (individual preferences)
- Configurable shortcut keys for frequent tasks
- Comprehensive reference guide
- Comprehensive configuration and installation guide

Language support

Rhythm Review is available in the following languages:

- English
- French
- German
- Italian
- Spanish
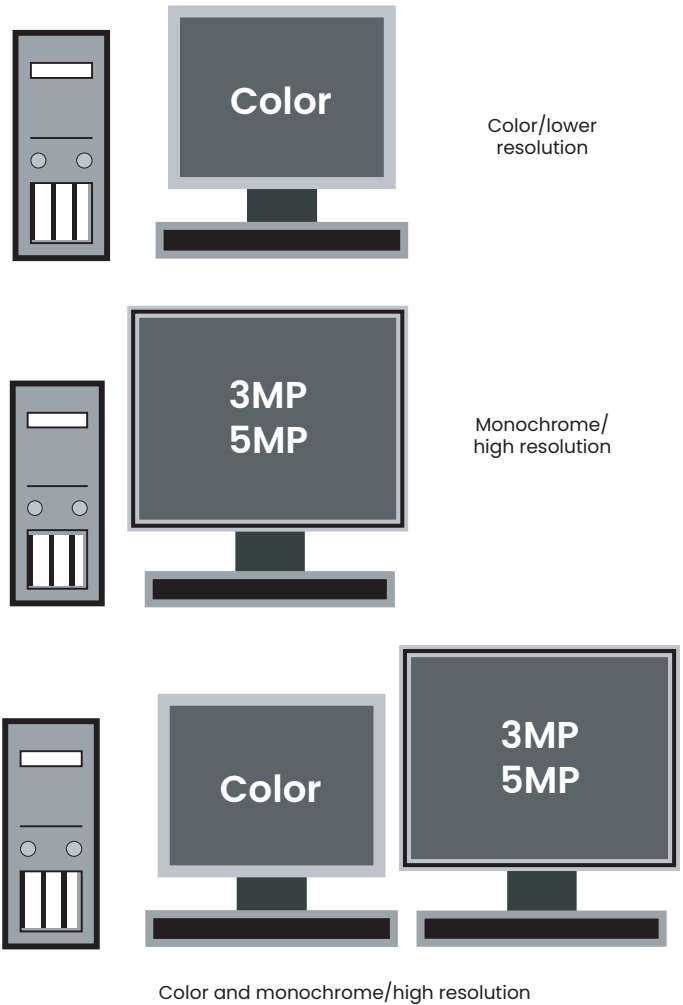- Chinese (Simplified)
- Japanese

Monitors

Rhythm workstations are offered with different monitors and associated video boards to meet a variety of image viewing needs. The following monitor types are available as a part of Rhythm turnkey solutions.

Model	Orientation	Color depth	Resolution	Type	Size
Color	Landscape	Color	1280x1024	Flat panel	19"
3 MP	Portrait	Monochrome	1536x2048	Flat panel	21"
5MP	Portrait	Monochrome	2048x2560	Flat panel	21"

Monitor configurations

The following monitor configurations are available in combination with Rhythm software to form a turnkey solution.

Color/lower resolution

Monochrome/ high resolution

Color and monochrome/high resolution

Warranty information

The published company warranty in effect on the date of order shall apply. Software will be provided and warranted under the terms of a Software License Agreement. Waygate Technologies reserves the right to make changes to the applicable warranty.

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