

SeeDOS Ltd - Information Factsheet



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QUANTITATIVE QA

Explicitly designed for quality assurance of Electronic Imaging Devices and for automating the analysis of routine QA tasks

QUANTIFY THE QUALITY OF YOUR IMAGING SYSTEMS

PIPSpro helps ensure accuracy by showing you what you can't see — the slow degradation in imager performance over time. With PIPSpro, combined with QC-3 and QCKV-1 Phantom test patterns, baselines are created that set the standard for future QA testing. Using these baselines you'll recognize deviations in the data. That's how you'll know whether you should calibrate, repair or upgrade your system. Simply put, PIPSpro helps ensure your imaging systems operate at or above clinical specifications.



PIPSpro™ Software QC-3 Phantom

NEW! AUTOMATE YOUR CONE BEAM CT TESTING

PIPSpro 4.2 automatically analyzes the CATPHAN phantom and in less than a minute gives quantitative results for spatial resolution, pixel size, CT# linearity, slice thickness, contrast, noise, and image uniformity.

EASILY INCREASE YOUR STEREOTACTIC ACCURACY

The PIPSpro stereotactic module automates the process of isocenter accuracy testing by using your EPID. Images are automatically analyzed for quantitative and reproducible isocenter positioning accuracy.

MORE THAN JUST IMAGER QA

PIPSpro is more than just imager QA software. You'll save time performing other routine QA tasks such as light field/radiation field congruence tests and star

shot analyses. Image enhancement tools specifically designed for EPID images give you more control over image quality for clinical applications. Use the PIPSPRO registration tool for both patient setup and for the QA of your online patient positioning systems.

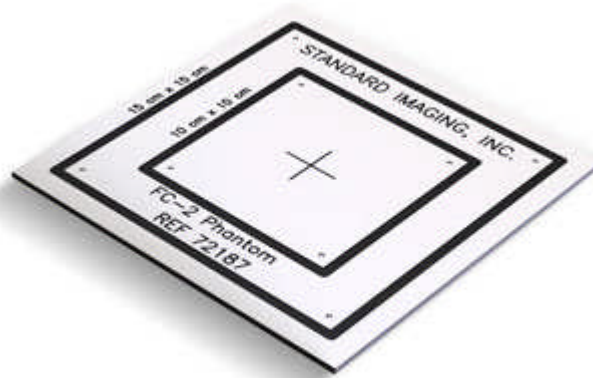
Features and Benefits

QC Module

- Automatic analysis of acquired QC-3 and QcKv-1 Phantom images provide powerful quantitative information for spatial resolution, contrast-to-noise ratio and overall noise of imaging systems
- Automatic analysis of acquired FC-2 Phantom images provide instantaneous quantitative information for light field/radiation field congruence including values for displacement, rotation and area analysis
- Automatic analysis of acquired star shot images provides instantaneous quantitative information for displacement caused by rotation of collimator or gantry
- Automatic analysis of the CATPHAN phantom included with most systems capable of cone-beam CT imaging provides quantitative information for spatial resolution, pixel size, CT# linearity, slice thickness, contrast, noise, and image uniformity Stereotactic module
- Automatic analysis of the Winston-Lutz ball marker test utilizing EPID images gives accurate and reproducible results which can be used to adjust laser position to minimize the size of the radiation isocenter diameter



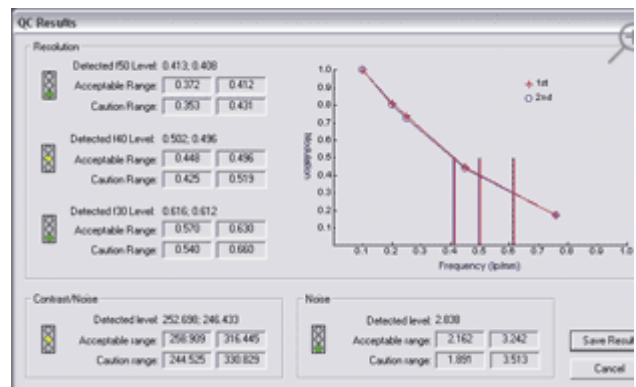
PIPSpro™ Software QcKv-1 Phantom



PIPSpro™ Software FC-2 Phantom

Trending and Analysis

- Automated creation of baseline values
- User defined time frames for trending
- Easy to read graphical user interface
- Warning and reject levels represented on all graphs for quick evaluation of results



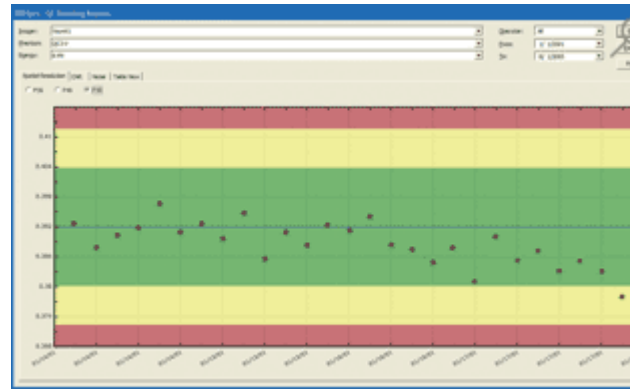
QC Results

Image Handling

- Open or import many types of image files with the ability to manipulate and compare images from a variety of imaging systems
- Advanced image enhancement routines specifically designed for EPID images provide more control over image quality than most commercial systems

Image Registration

- Choose between registration routines including fiducial, template or chamfer matching
- Easy and accurate measurement of treatment setup errors with detailed results including rotational analysis
- Can be used as a QA tool for online patient positioning systems by performing an offline check of transformations



Trending Results

Specifications

REF Number	91310 - PIPSpro QC™ Software with QC-3 and FC-2 Phantoms 91320 - PIPSpro Comprehensive™ Software with QC-3 and FC-2 Phantoms 91310 - PIPSpro QC™ Software with QC-3 and FC-2 Phantoms, additional site license 91320 - PIPSpro Comprehensive™ Software with QC-3 and FC-2 Phantoms, additional site license
Current Released Version	4.1
System Requirements	
Operating System	Microsoft® Windows® 98SE Microsoft® Windows® Me Microsoft® Windows® NT4 SP6 Microsoft® Windows® 2000 Microsoft® Windows® XP
Processor	Intel® or AMD®, 350 MHz or greater
Memory	64 MB (256 MB recommended)
Hard Drive	50 MB or greater
Screen Resolution	800 x 600 (1024 x 768 recommended)
CD-ROM Drive	2X speed or greater
Screen Color Depth	16-bit or greater
Product Standards	CE, Designed to meet IEC 60601-1-4

Publications

Quality Assurance Measurements of a-Si EPID Performance

G.V. Menon and R.S. Sloboda
Medical Dosimetry 29(1) (2004)

Clinical Use of Electronic Portal Imaging: Report of AAPM Radiation Therapy Committee Task Group 58

M.G. Herman, J.M. Balter, D.A. Jaffray, K.P. McGee, P. Munro, S. Shalev, M. Van Herk, and J.W. Wong
Medical Physics 28(5) 712 (2001)

A Quality Control Test For Electronic Portal Imaging Devices

R. Rajapakshe, K. Luchka, and S. Shalev
Medical Physics 23(7) 1237 (1996)

Assessing Radiation and Light Field Congruence with a Video Based Electronic Portal Imaging Device

K. Luchka, D. Chen, S. Shalev, G. Gluhchev, and R. Rajapakshe
Medical Physics 23(7) 1245 (1996)

Initial Comparison of Three AM-SI EPIDs Using the QC-3V Phantom

R. Clements, K. Luchka, J. Pouliot, J. Sage, and S. Shalev
7th International Workshop on Electronic Portal Imaging, Vancouver (2002)