

NDT Pro Film Digitizer AcuScreen Edition

It's in the details

NDT Pro Film Digitizer AcuScreen Edition

- Up to 500% increased productivity
- Extended software driver AcuScreen NDT Gateway
- Best NDT Price/ Performance
- Unlimited file size feature
- ISO 14096 compatible (Class DA, DB and DS)
- ASME Section V conformance
- Evaluated by BAM Institute



IT'S IN THE DETAILS

VIDAR Systems Corporation (a 3D Systems Company) is introducing a cost-effective scanner to digitize/ scan radiographic films with its NDT Pro industrial film digitizer specifically designed to meet the most stringent demands of the nondestructive testing (NDT) market. It addresses the unique needs of aerospace, petrochemical and other industrial testing applications as a lower-cost alternative to expensive laser scanners currently used throughout the industry.

The NDT Pro offers the NDT industry a product that not only carries a smaller price tag, but also is much lighter and has a smaller footprint. It can handle films as narrow as 2.36" wide and up to 51" long.

Additionally, it features VIDAR's renowned High-Definition CCD (HD-CCD™) solid state technology, as well as its unique ADC (Automatic Digitizer Calibration) mechanism. The latter makes certain there is virtually no variation in image quality and ensures excellent grayscale reproduction in every image.

KEY FEATURES

- HD-CCD solid-state technology
- Removable/ field replaceable LED long-life light source
- 0,5 to 4,5 OD, based on ISO 14096
- 11 line pairs per mm with geometric accuracy better than 1% or two pixels, whichever is greater, in both axes
- Handles film from 2,36" to 14" wide by 8" to 51" long
- Digitize up to 25 films of various sizes in batch mode, allowing more productivity and greater efficiency

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MULTI-STRIP FILM FEEDER



Typical weld inspections produce narrow (<10cm) and long filmstrips which, when fed into a digitizer one by one, leaving major scanning areas idle. Scanning of weld radiograph X-rays, using only a fraction of NDT PRO's scanning area is inefficient and time consuming. Projects fall behind, backlogs pile up, additional computer storage space is required, and operating costs increase.

SOLUTION: PACSESS MULTI-STRIP FILM FEEDER prevents these issues, increasing productivity of film digitizer.

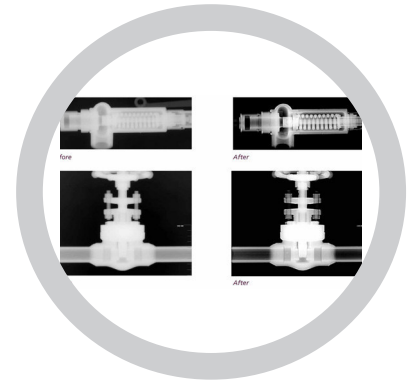
THE MULTI-STRIP FILM FEEDER:

- Scans up to five filmstrips simultaneously per pass
- Multiplies a project's productivity up to five times (5x)
- Reduces transition time dramatically
- Customization of the number and slot width is available upon request from PACSESS NDT engineers.

SCANNING TIPS:

- To reduce idle time, when filling slot for an upcoming scan, ensure all X-ray films are of (approximate) similar length.
- If a scan load includes strips of different lengths, simply align the longest length in leftmost slot (NDT Pro requires left-alignment input).
- Pre-determine optimal scanning resolution for films. This saves time, expedites the process, and frees-up memory.

ACUSCREEN NDT GATEWAY SOFTWARE



PACSESS MULTI-STRIP FILM FEEDER accurately recognizes simultaneously scanned films, seamlessly integrating with AcuScreen NDT Gateway - the proprietary software developed by PACSESS specifically for NDT applications:

- Ensures smooth interaction between digitizer and MULTI-STRIP FILM FEEDER
- Provides an interface for user scanning control module
- Conforms to DICOM standards
- Image Archiver function allows all essential operations with digital images and entire studies: create, add, delete, retrieve, export, send, etc.

Weld inspectors appreciate the functionality of image viewer. Its tool set allows the user to apply grayscale and spatial transformations to images. AcuScreen NDT Gateway performs the following normally painstaking jobs:

- Region of Interest (ROI) may be cropped** and a B/C auto-adjustment algorithm applied to reveal minute details-vital for correct interpretation of radiographs.

- No weld discontinuity escapes AcuScreen NDT-Gateway's enhanced scrutiny:** Porosities, burn-throughs, cracks, offsets and undercuts.

All important measurement functions are available:

- AcuScreen NDT Gateway allows accurate measure of lengths and distances, area and angles. Optional modules estimate the percentage of discontinuities in specific ROIs-adding a reporting system to the standard package, enabling report creation and storage with images, within the database for future reference and comparison.

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DB STANDARD MODE

NOMINAL RESOLUTION	PIXELS (14" x 17" FILM)	SPOT SIZE (µm)	DPI	LINE PAIRS / mm	SCAN SPEED
2K x 5K*	2100 x 2550	170	150	3	27.8 seconds
4K x 5K	4200 x 5100	85	300	6	55.6 seconds
8K x 10K	7980 x 9690	44	570	11	105.6 seconds

* ACR Standard for Teleradiology Guidelines [Revision 35 (1998)] recommends 2.5 line pairs/mm minimum

Optical Density Range	0.5 to 4.5, based on ISO 14096 (DS Slow Mode)
Bit Depth	8, 12 and 16 bit grayscale output
MTBF	>50,000 hours
Film Sizes	Width: 2.36" to 14" Length: 8" to 51" Specialty film sizes quoted are in single-sheet mode
Auto Film Feeder	Standard 25-film capacity (mixed-size batches – no presorting necessary) "Light Box" loading: head-up, normal reading, left justified
Translation Tables	Linear OD
Geometric Accuracy	Better than 1% or 2 pixels, whichever is greater, in both axes
Scan Rate	92 lines/second
Hardware Interface	USB 2.0
Software	Windows® scanning modules and software development tools available
Power Requirements	Voltage: 85~264 Vac Frequency: 47~63 Hz Power: <100 Watts
Operating Environment	50° to 95° F (10° to 35° C), 20% to 85% relative humidity, non-condensing
Storage Environment	0° to 140° F (-18° to 60° C), 20% to 85% relative humidity, non-condensing
Light Source	LED Illuminator
Detector	Next-generation Solid-State High-Definition CCD
Dimensions	With Feeder & Exit Tray: 19" W x 22 ¾" D x 32 ½ " H (48 cm x 58 cm x 83 cm) Without Feeder & Exit Tray: 19" W x 15" D x 12" H (48 cm x 38 cm x 32 cm) Shipping: 24" W x 29" L x 24" H (61 cm x 74 cm x 61 cm)
Weight	45 lbs. (21kg); shipping weight: 60 lbs. (27 kg)

Specifications are subject to change without notice

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