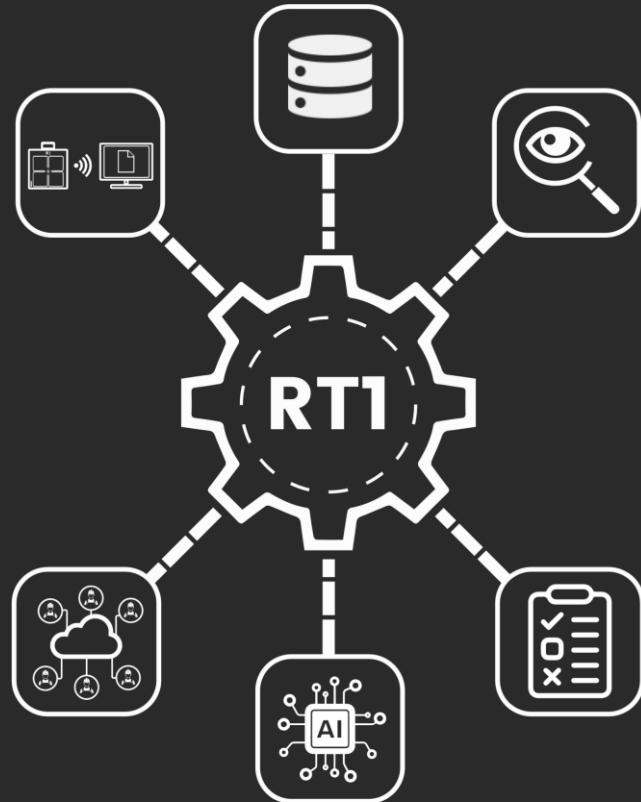




RTI Software

*The ultimate application for RT
image acquisition, analysis,
reporting and sharing*

Introduction



FLEXIBILITY

- Modular concept
- Customizable
- Intuitive UI

RELIABILITY

- Cutting – edge image processing tools
- Advanced measurements
- Auto Recognition of Defects (ADR)

WORKFLOW OPTIMIZATION

- Data management and sharing capabilities
- Boost of productivity
- Customizable DB architecture

RTI Modules



IMAGE ACQUISITION

- Intuitive UI valid for FD, CR and DR
- Basic set of imaging tools
- Rapidly check image quality before archiving/exporting



IMAGE VIEWER

- Toolset of cutting-edge image processing tools
- Adapted to any type of user
- Easily save annotations and measurements



REPORT SYSTEM

- Totally customizable to your workflow requirements
- Multi-user & roles management
- Electronical signature



ADR

- Based on the most advanced deep machine learning (DML)
- Verify thousands of images within seconds
- Boost productivity and security
- >99% proven accuracy



DATABASE MANAGER

- Based on DICOM standards
- Hierarchical DB architecture
- Totally customizable
- Include attachments of any kind



CLOUD SERVICE

- Easily share data with other inspectors and asset owners
- Assign rights & roles to different type of users
- Public / Private cloud setups available

RT1 Portal

Always in perfect sync thanks to our PACSESS Portal, we can configure our software to your exact needs:



- PACSESS Portal ensures the most efficient organization of your daily work by accessing all modules and functionalities provided by RT1 Software
- Get notified about Software updates available
- Upgrade your license with extra modules or features directly from the Portal within seconds

Database Manager

Pacsess Manager 1.8
Connections Appearance


Project
Add New Add Below Edit Delete
Properties Attachment Scan Open Images

General
Import Project Export Project
Filter Projects

Project Name	Description	Serial Number	Part Number	Asset Owner	Inspector	Creation Date	Project ID
Troy Met	DR images with Xrays			TUBITAK		17/5/2022	
DR Test	gammas			Athens		18/5/2022	
▼ Double wall FEature!	DR images with gammas			Alpeya-Aurubis		18/5/2022	
TEST II						18/5/2022	
▼ Hungarian DEMO	DR test with Xrays	3456709-FG	ASD33	PRIMAS	JOAQUIN	18/5/2022	
AI Plates 35mm						18/5/2022	
Steel Plate 12mm						18/5/2022	
▶ TRENTO	Fosil test	YRTNJ-TYTRS	REYTIWRUES345	DIMART	LUCA	18/5/2022	DFASDF3333
REsearch Center	Ankara, Dr test with xrays			Troy met		18/5/2022	
▼ Weld part scan	NDT2000	TB5739-IO879	23b	Lariviere	John	18/5/2022	
▼ Visual inspec			23b			24/5/2022	
▶ RO87-J32		658J-ITY6	23c		Michael	24/5/2022	
Montevil Refinery	DR PANELS	GN34578	Y67-102	PACSESS	Martha	18/5/2022	12359
▼ SUBMARINE ii23		3475HGT-JHFG34	123zx	NAVALIA	Torsten	24/5/2022	123647gfr
SUBMARINE ii24	70mm steel plate welding	5646876543	254524adgf5re4w		Torsten	24/5/2022	123124


Attachments

Filetype - DCM



2.16.840.1.1142... 2.16.840.1.1142... 2.16.840.1.1142... 2.16.840.1.1142... 2.16.840.1.1142... 2.16.840.1.1142... 2.16.840.1.1142... 2.16.840.1.1142... 2.16.840.1.1142... 2.16.840.1.1142... 2.16.840.1.1142... 2.16.840.1.1142... 2.16.840.1.1142... 2.16.840.1.1142... 2.16.840.1.1142... ASTM HPX-1 CR... Test2.current.c...

Filetype - PDF



Database Manager

- Database field names can be totally customized to your daily workflow
- Maximum flexibility for your database architecture by simply adding as many hierarchy levels as you need to your projects & subprojects
- Assign and manage user's roles & rights
- Import & Export images to/from database manager (dcm, tiff, jpgs, bmp)
- Save any other type of file formats into your DB: pdf, doc, jpg, tiff, wav, mp4, etc...
- Reordering of images within one study, move images from one project to another

PROPERTIES BOX

- Store any other type of extra relevant information into your projects such as voltaje, distance, type of source, etc...
- Fully editable by any type user

Creation Date	Inspector	Weld part scan Properties	
17/5/2022		Source	X-rays
18/5/2022		Voltage	250 Kv
18/5/2022		mA	1.5
18/5/2022		FOD	350mm
18/5/2022	JOAQUIN	Material	Aluminium
18/5/2022		Thickness	20mm
18/5/2022		Weld length	205mm
18/5/2022	LUCA	Welder	Pedro R.
18/5/2022		Name	Value
18/5/2022	John		
24/5/2022			
24/5/2022	Michael		
18/5/2022	Martha		
24/5/2022	Torsten		
24/5/2022	Torsten		

Image Acquisition

The screenshot shows the PACSESS software interface. The main window displays a grayscale image of a mechanical part. A yellow box highlights the 'Inspect' panel on the right, which contains the 'NDT 2000 Simulation' configuration options. A yellow arrow points from this panel to a larger, detailed view of the configuration options on the far right.

- Easily select resolution needed for the scan process
- It supports three different scanning modes: single scan, autofeeder and multi-strip film feeder
- Scan films of virtually any length without any stitching process a posteriori
- Name your image files as you wish right before starting the scanning process (this files names will appear on your further export files into jpg, tiff, etc...)

Image Viewer

The screenshot displays the Pacsess Viewer 1.8 software interface. The main window shows a grayscale image of a metal part with text and a barcode. A yellow box highlights a region of interest, and a magnified view of this region is shown on the right. The interface includes several toolbars and panels:

- Top Left:** Histogram (16 bit, 11340 x 256) and a thumbnail grid with 10 images.
- Top Center:** Intensity profile graph for image 2.16.840.1.114226.1563354225.10619931.112.14.current.current...
- Bottom Left:** Calibration dialog box with fields for Size (Length in mm: 100.0, DPI: 7.53), Resolution (Spatial resolution: unkno...), and buttons for Set and Cancel.
- Bottom Right:** Measure, Manipulate, Filter, and Layout toolbars.
- Bottom Center:** Metadata for the selected image, including position, DPI, tool, zoom, and calibration status.

Metadata for the selected image (0005801):

- Pos : 1574x, 3782y
- DPI : 300.0
- Tool : Intense profile
- Zoom : 0.25062633
- OD : 4.00
- Calib : false

Metadata for the magnified image (0005801):

- Pos : 290x, 2633y
- DPI : 300.0
- Tool : Intense profile
- Zoom : 0.38542047
- OD : 3.88
- Calib : false

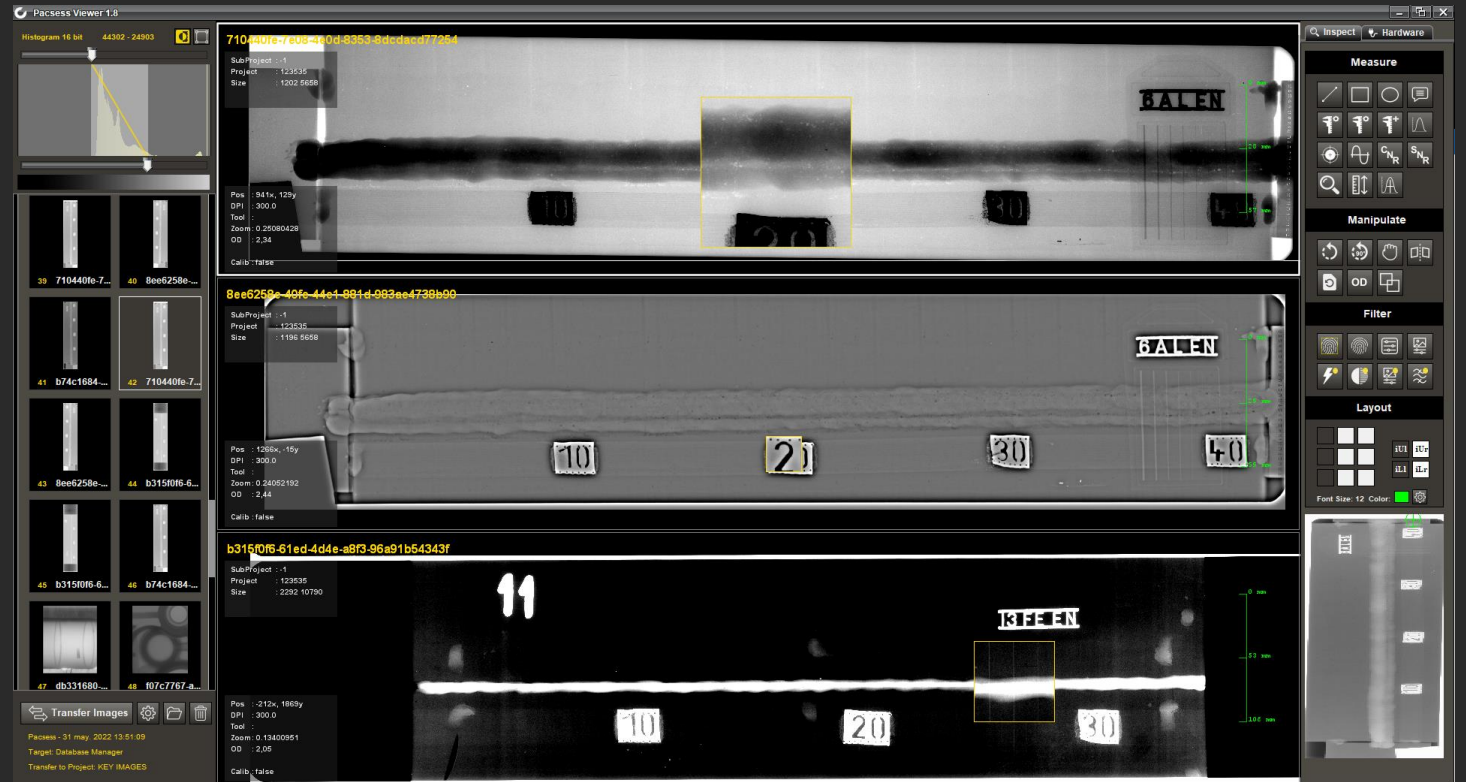
Image Manipulation Tools

- Spatial transformations:

- Flip
- Rotate (90° and free angle)
- Panning
- Smart zooming

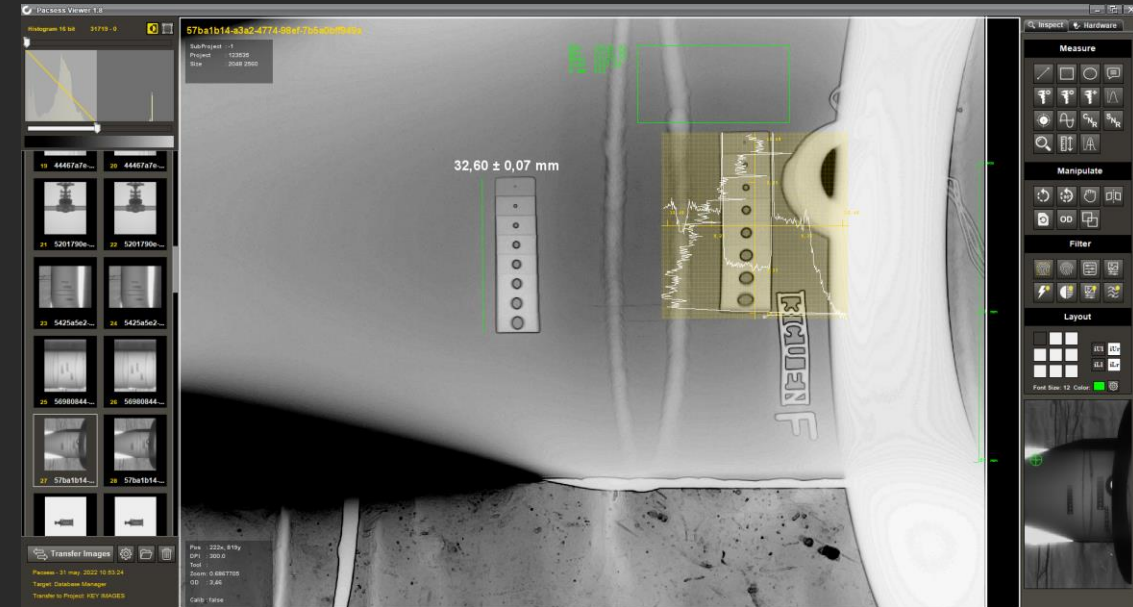
- Brightness & contrast adjustments:

- Inverting grayscale values
- Right click of the mouse (Manual adjustment)
- Adjusting values on Histogram (Manual adjustment)
- **Local Histogram Optimization:** automated and dynamic adjustment of B/C by ROI (Region of Interest)



Measurements & Annotations

- Measurements: straight line, areas, etc..
- Annotations & comments as overlaid text:
 - Edit colors, position and font size of all annotations and measurements values
 - Export function as overlaid text on jpgs, tiff and bmp images
- Easily switch from Optical Density values to Grayscale values
- Metric calibration based on a known-size artifact in the image
- Dynamic intensity profile features:
 - Measuring distances (automated detection of edges)
 - Calibrating metric values
 - Wall thickness measurement (ADR)
 - Cross intensity profile
- CNR & SNR values (normalized)
- Dynamic magnifier (loupe)
- Overlaid yardstick on the image for metric reference

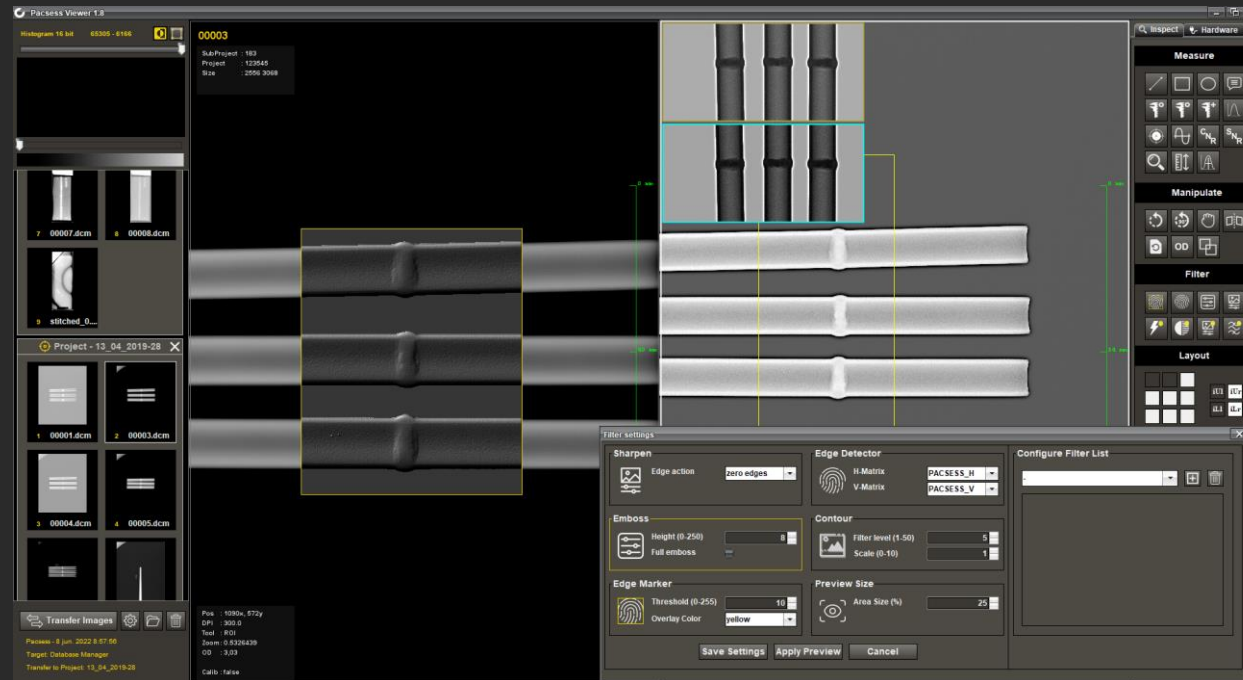


Stitching



- Stitch unlimited frames into one new image
- Smart zooming feature with the stitching dialogue
- Overlaid areas with transparency for an optimal result
- Tilt the images with free angle rotation in order to get a perfect alignment of the object under inspection

Filters & Image Processing Tools



- Extensive toolkit of basic NDT Filters: Shapen, Edge Enhancement, Reduction of Noise, Contrast Enhancement, etc...
- Dynamic previewer window for intuitive adjustment of intensity of selected filter
- Create your own pallet of “one-click” custom filters
- Advanced NDT Filters: **Snap!® Toolkit**

Original Image



Snap! Filter



Bandpass Filter

The screenshot displays the Pacsess Viewer 1.8 software interface. The main window shows a grayscale image of a bandpass filter with a central label that reads "KICUEN". The filter has a rectangular shape with four circular holes along its length. The image is framed by a black border.

On the left side, there is a "Histogram 16 bit" panel showing a peak at 92320 - 30613. Below it is a "Project - 123532/-1" panel with a thumbnail of the image. At the bottom left, there are "Transfer Images" buttons and a status bar with the following information:

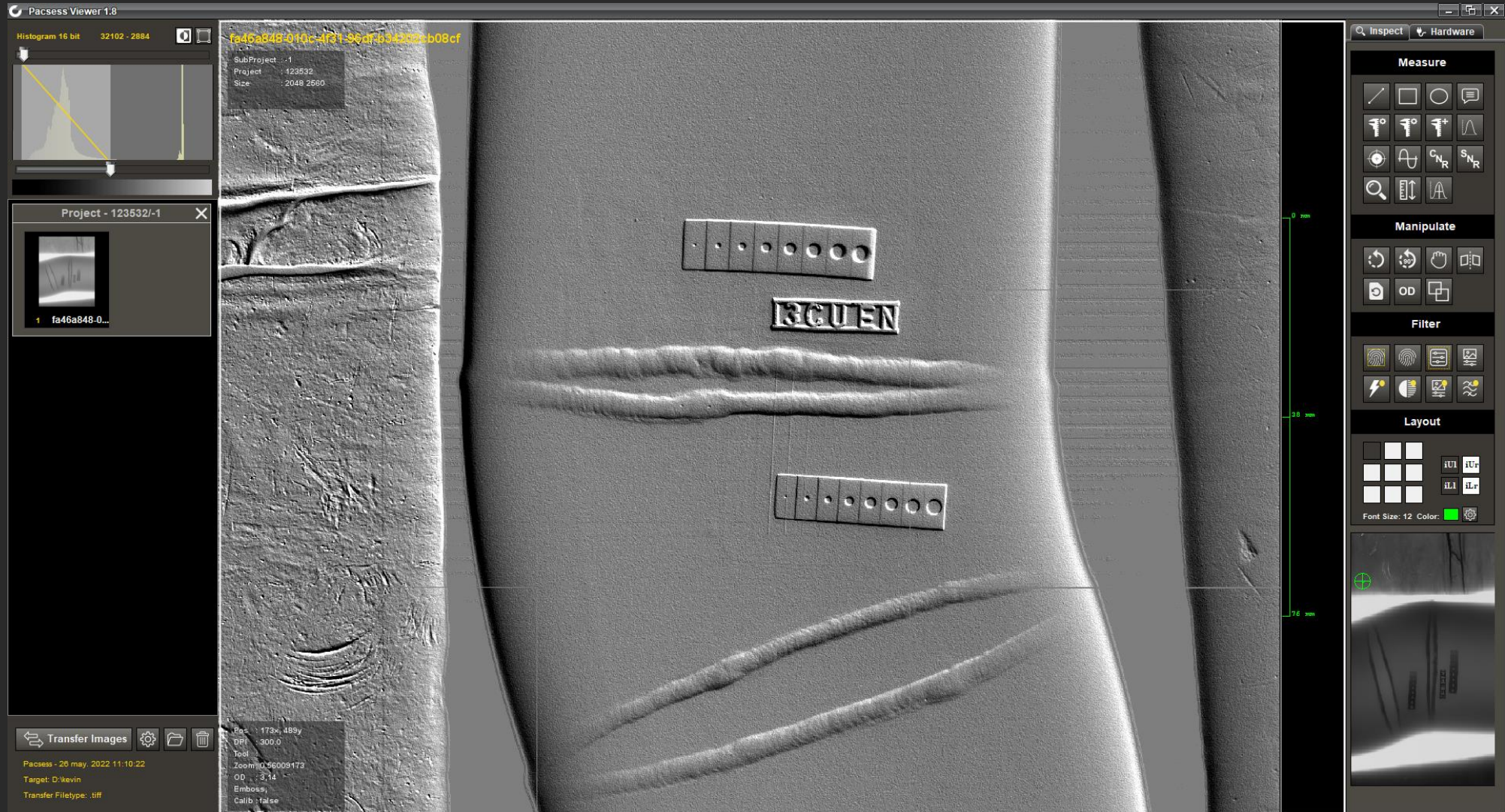
- Pacsess - 26 may, 2022 11:12:24
- Target: D:\kevin
- Transfer Filetype: .tiff

On the right side, there is a "Measure" panel with various measurement tools (line, rectangle, circle, etc.), a "Manipulate" panel with navigation tools, a "Filter" panel with image processing options, and a "Layout" panel with window management icons. A vertical scale bar on the right indicates 0 mm, 30 mm, and 76 mm. At the bottom right, there is a "Transfer Images" button and a status bar with the following information:

- Pacsess - 26 may, 2022 11:12:24
- Target: D:\kevin
- Transfer Filetype: .tiff

At the bottom right corner of the entire image, the PACSESS logo is visible.

Emboss Filter



Filters: Contrast Enhance

Pacsess Viewer 1.8

Histogram 16 bit 0 - 65535

00003
SubProject : 177
Project : 123541
Size : 3288 8980

RAW

00004
SubProject : 177
Project : 123541
Size : 3288 8980

PROCESSED

Project - test2

1 00001.dcm 2 00002.dcm
3 00003.dcm 4 00004.dcm
5 00005.dcm 6 00006.dcm
7 00007.dcm 8 00008.dcm

Transfer Images

Pacsess - 8 Jun, 2022 8:47:31
Target: Database Manager
Transfer to Project: test2

Pos : 2340x, 4209y
DPI : 300.0
Tool : ROI
Zoom : 0.14482624
OD : 1.62
Calib : false

Pos : 3860x, 4368y
DPI : 300.0
Tool : ROI
Zoom : 0.15206548
OD : 1.46
Contrast:
Calib : false

Inspect Hardware

Measure

Manipulate

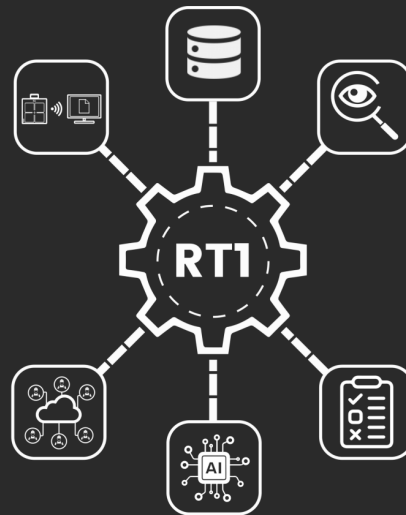
Filter

Layout

Font Size: 12 Color: [Green]

Hardware Requirements

	MINIMUM	RECOMMENDED
Processor (AMD/Intel)	4 Cores / 8 Threads	8 Cores / 16 Threads
RAM	16 GB	32 GB
SSD/HDD	500 GB	1 TB
OS	Windows 10	Windows 11





Julius-Bamberger-Str. 4
28279 Bremen
GERMANY
www.pacsess.com

A grayscale image of an industrial machine, possibly a turbine or engine component, with a yellow highlight on a specific part.

**Digital
Radiography**

A close-up image of a white, circular industrial component, possibly a valve or flange, resting on a wooden surface.

**RX Film
Digitization**

A screenshot of a software interface showing a 3D model of a mechanical part with various data points and graphs overlaid.

**RTI
Software**

A stylized image of a human head in profile, with a blue, glowing network of lines and nodes overlaid on the face, representing artificial intelligence or data processing.

**Automatic
Defect
Recognition**

A photograph of a server room with rows of blue server racks and doors.

**Enterprise
Platform**

A photograph of a computer workstation with a large monitor displaying a software interface, a keyboard, and a mouse.

**Workstations
& Monitors**