

SCANROBOT®

turn the Page



**AUTOMATIC BOOK SCANNER
TO SPEED UP YOUR PRODUCTIVITY**

SYSTEM OVERVIEW

ScanRobot® 2.0 MDS

High quality - Automatic Book Scanner

- Fast - Up to 2,500 pages per hour
- Distortion free & Gentle scanning (prism technology)
- Unique 60° V-shape book cradle
- Single scan technology (for covers, folded maps, loose pages, ...)
- Self standing unit on wheels for easy relocating
- Highly ergonomic design



Unique hardware features



Patented capturing technology

- * Unique 60° prism
- * One central capturing unit
- * Equal and constant focus
- * No mechanical shutter

Only one mechanical moving part

- * Robust and simple design
- * Built for 24h shift operation
- * Low maintenance
- * Very long life cycle

Wooden 60° V-shape book cradle

- * Self centering
- * Adjustable between 60° and 100°
- * Minimum load/unload time
- * Suitable for hard and soft covers

ADVANTAGES

ScanRobot® 2.0 MDS

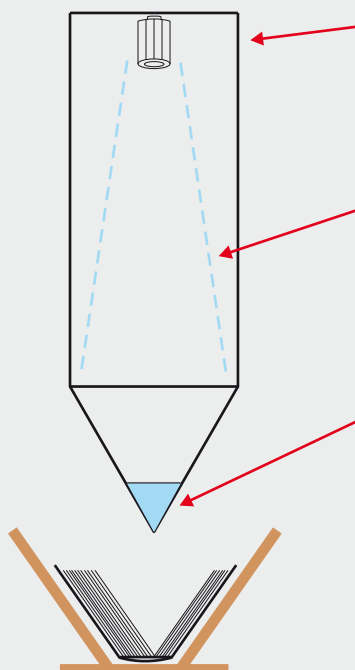


Page turning technology



- Most gentle & touch free page turning by air flow
- Automatic (up to 2,500 pph) with process monitoring & double sheet control
- Semi-automatic / weightless mode
- No clamps
- No fingers
- No glass plates

Patented capturing system



Closed capturing unit (optical 300/400 dpi)

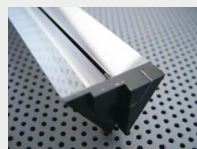
- * Independent from ambient light
- * Minimum calibration (static white balance)
- * Constant distance between object and focal plane

Inside LED illumination

- * Perfect homogenous page illumination
- * High color reproduction index value (CRI)
- * No radiation of heat, infrared or UV light
- * Long life cycle LED technology

High quality 60° prism technology

- * Distortion free scanning
- * Smallest book opening angle - unique 60° V-shape



The ScanRobot® can scan every page with the exact, equal and maximum resolution independent of the book size, thickness and the paper quality.

UNIVERSAL, GENTLE & ROBUST

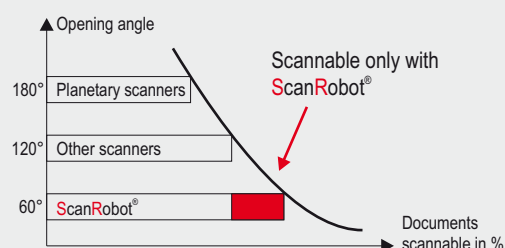
ScanRobot® 2.0 MDS

Universal - suitable for any bound material



Gentle - suitable for books up from the 14th century

- Book opening angle 60°
- No overstretching of the book binding
- Pressure free scanning
- Touch free page turning by air flow
- LED illumination without any radiation of heat, infrared or UV



Robust - low maintenance

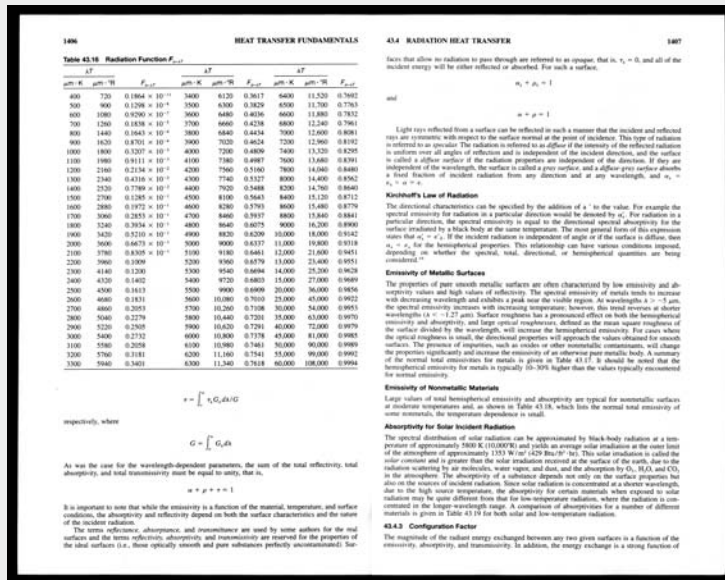
- Designed for 24h-shift operation
- Only one active moving part
- High quality industrial components
- Very long system life cycle
- Worldwide customer proven



IMAGE QUALITY - 1/3

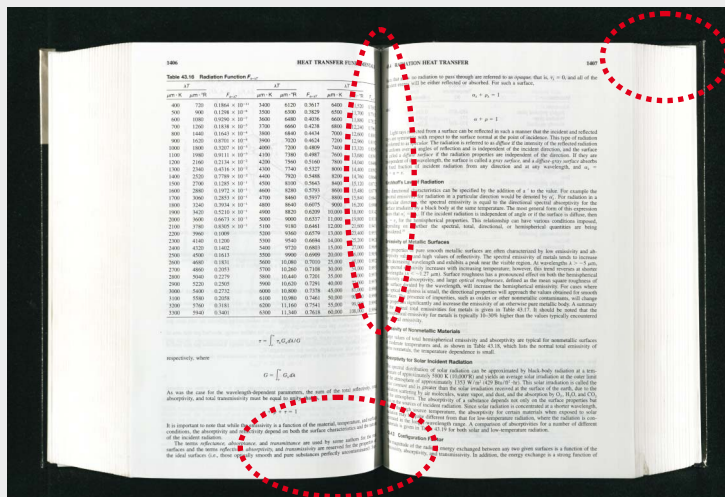
ScanRobot® 2.0 MDS

ScanRobot®



- No distortions
- No curvature
- No waves
- Exact page margin scan
- Perfect illumination

Planetary scanner



- Distortions
- Curves
- No exact page margin
- Inhomogeneous illumination

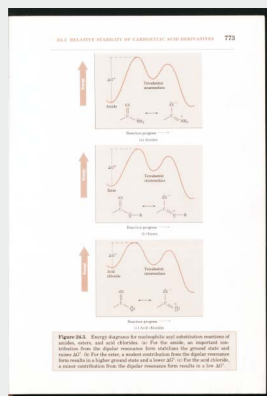
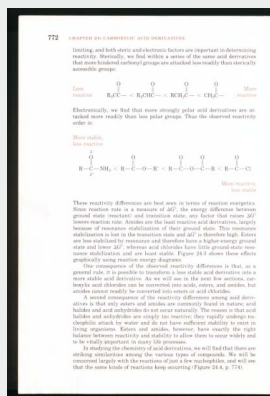
Upcoming challenges

- Page cropping
- Changing page sizes
- More post processing
- Uncertain OCR results

IMAGE QUALITY - 2/3

ScanRobot® 2.0 MDS

ScanRobot®



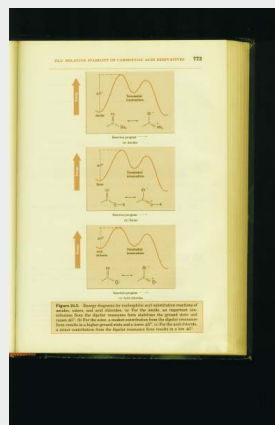
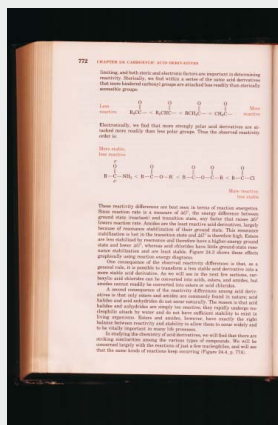
- No size & resolution variation
- No colour variation
- No focus & sharpness variation
- No white point variation

Result

- No corrections needed

1 capturing unit = 1 scan result

Camera devices*



- Varying sizes & resolutions
- Varying colours
- Varying colours
- Varying white point

Upcoming challenges

- Resolution correction
- Colour correction
- Focus & sharpness correction

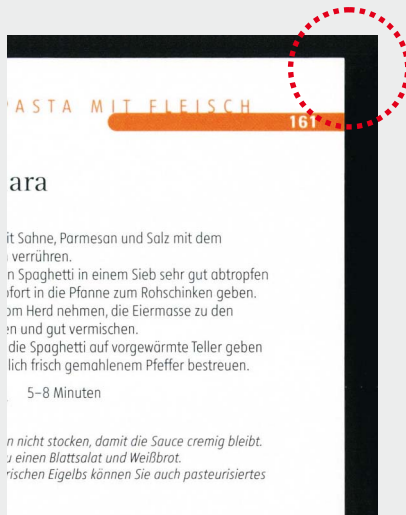
2 cameras = 2 scan results

* Effects are amplified for demonstration reasons

IMAGE QUALITY - 3/3

ScanRobot® 2.0 MDS

ScanRobot®



- Single page image
- Easy page edge detection
- Easy cropping

- Artefact free
- No clamps / fingers
- No removing needed

Other scanner

Disturbing book block



- Page edge detecting challenge
- Cropping & deskewing challenge

Image artefacts



- Artefacts like clamps or fingers
- Removing challenge

SCANROBOT® 2.0 MDS

MASS DIGITIZATION SYSTEM

Customer feedback

“The ScanRobot® can scan almost any types of book, binding or paper (e.g. Leather-covered wooden bindings, flexible parchment bindings, cardboard bindings, thick, thin or rigid paper).”

The Bavarian State Library

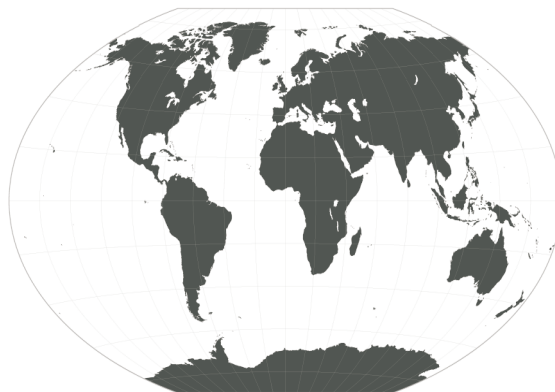
“Treventus Mechatronics GmbH submitted a tender that offers some very clear advantages. [...] The evaluation group’s assessment is that no other supplier can match the tender from Treventus Mechatronics GmbH.”

Swedish tender evaluation committee (8 specialists)

“The unique image-taking and page-turning technique of the ScanRobot® shows its benefits in particular with thick books. [...] the pages can be scanned [...] absolutely distortion-free and without any shadows [...] up to just a few mm into the fold.”

Digitization Center Regensburg

**WORLDWIDE ESTABLISHED
IN OVER 60 COUNTRIES**

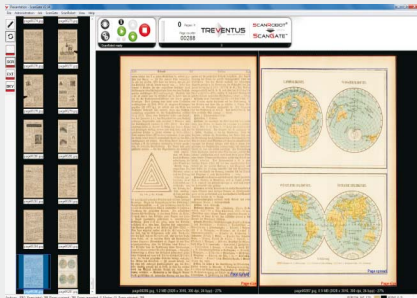


CAPTURING SOFTWARE OPTIONS

for ScanRobot® 2.0 MDS

SCANGATE™ RT (Real-Time processing edition)

Included with ScanRobot® 2.0 MDS as a stand-alone software package.

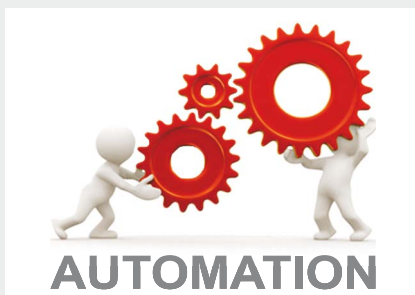


- Capturing & treatment in one automated step
- Live view of scanned & treated images
- Ready to use output (= time saving & intuitive)
- Parameter profiles administration (storage of parameters for fastest book changeovers)
- Additional flatbed scanner interface (to scan loose pages, folded maps, covers, etc.)
- Multi language user interface

Please find more information about ScanGate™ RT in the separate ScanRobot® solution comparison chart.

SCANGATE™ SF (ScanFlow™ edition)

Only available for ScanRobot® 2.0 MDS with a ScanFlow™ workflow solution package.



- Includes all functionalities of ScanGate™ RT
- Fully integrated within ScanFlow™
- Separates the scanning from image treatment
- Enables the highest scanning productivity
- Offers multiple quality check options

Please find more information about ScanGate™ SF in the separate ScanRobot® solution comparison chart.



SPECIFICATIONS & SCOPE OF DELIVERY

ScanRobot® 2.0 MDS

Specifications

• Speed	up to 2,500 pages/hour* (automatic mode)
• Page turning	automatic with process monitoring (incl. double sheet control), semi-automatic / weightless mode and single scan technology
• Aperture angle	60 degrees (steplessly adjustable between 60 and 100 degrees)
• Illumination	user- and book-friendly LED illumination (without any exposure to heat, IR or UV)
• Resolution	constant and independent of the page format optical 300 dpi (included) optical 400 dpi (optional)
• Colour depth	36-bit
• Image types	colour, greyscale, b&w
• Page format (scanning area)	minimum (2 times - automatic mode): 5 x 5 cm (1.97 x 1.97 in) maximum (2 times - automatic mode): 32 x 32 cm (12.6 x 12.6 in) single scan area: 30 x 43.2 cm (11.8 x 17 in)
• Book size (maximum)	35.5 x 34.0 cm (13.98 x 13.39 in)
• Book thickness	up to 15 cm (5.91 in)
• Paper thickness	no restrictions (recommended spectrum: 40 g/m ² to 260 g/m ²)
• Paper quality	all pages, also acid damaged and wavy pages
• Covers	all covers (soft and rigid)
• Book age	14th century up to now
• Storage formats	jpg, jpg2000, tiff, tiff G4, png, gif, bmp, pdf
• Dimensions	l/w/h (without monitor): 0,78 x 0,78 x 1,90 m (30.7 x 30.7 x 74.8 in)
• Weight	260 kg (573 lbs)

* The page speed can vary depending on paper quality, book size and the book condition in general.

Scope of delivery

- 1 pc Automatic book scanner ScanRobot® 2.0 (300 dpi standard, 400dpi optional)
- 1 pc Single-scan book scanner (flatbed A3)
- 1 pc Control Computer System (high-end PC-workstation)
- 1 pc EIZO 23" widescreen monitor (colour calibrated)
- 1 pc Integrated holder for monitor, keyboard and mouse
- 1 pc Capturing software with real-time processing - ScanGate™ RT (available in many languages)

OPTIONAL: various IPP (image post processing), WORKFLOW and OCR solutions

SCANROBOT® 2.0 MDS

MASS DIGITIZATION SYSTEM

World Wide References



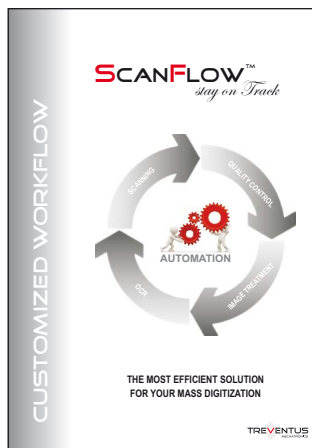
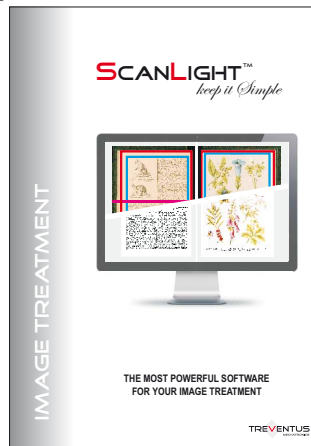
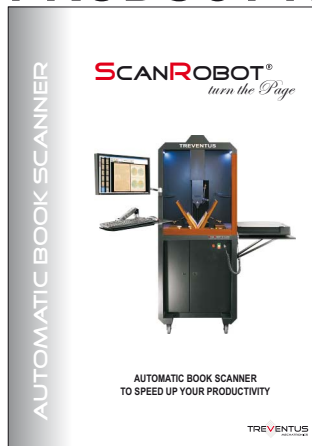
National University, AUSTRALIA
University of Queensland, AUSTRALIA
Federal Office of Metrology and Surveying, AUSTRIA
National Library, AUSTRIA
University of Graz Library, AUSTRIA
University Library of Liege, BELGIUM
Brazilian Institute of Agronomic Research, BRAZIL
University of Prince Edward Island, CANADA
National Archive, COLOMBIA
Academy of Science, CZECH REPUBLIC
National Library, CZECH REPUBLIC
University of Jyväskylä, FINLAND
Bavarian State Library, GERMANY
State Library of Berlin, GERMANY
University Library Regensburg, GERMANY
NUEPA National University, INDIA
Trinity College Library, IRELAND
Meteo Operation Center, JAPAN
Nazarbaev University, KAZAKHSTAN
Ministry of Awqaf and Islamic Affairs, KUWAIT
National Library, KUWAIT
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University, LUXEMBOURG
Universidad Autonoma Metropolitana, MEXICO
National Library, MONGOLIA

GMS Service Provider, NETHERLANDS
National Library, NORWAY
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Moscow State University, RUSSIA
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Universidad Complutense de Madrid, SPAIN
National Library, SWEDEN
Stockholm University Library, SWEDEN
Umeå University Library, SWEDEN
ETH Library of Zürich, SWITZERLAND
Zentralbibliothek Zürich, SWITZERLAND
Ankara Social University, TURKEY
National Library, TURKEY
Ukrainian Institute of Industrial Property, UKRAINE
The Getty Research Institute, UNITED STATES
Scanarkist Service Provider, UNITED STATES
Utah State University, UNITED STATES
Vietnam Institute of Social Sciences Information, VIETNAM
Vietnam National University, VIETNAM

... and many more ...

Alphabetical order by countries.

PRODUCT FAMILY



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Awards

Winner of the European ICT Grand Prize
Innovation prize of the Theodor Kery foundation
1st place in Genius Innovation Award



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