

KOWOSCAN X50

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X-ray HiRes Film Digitizer

according to DIN EN ISO 14096



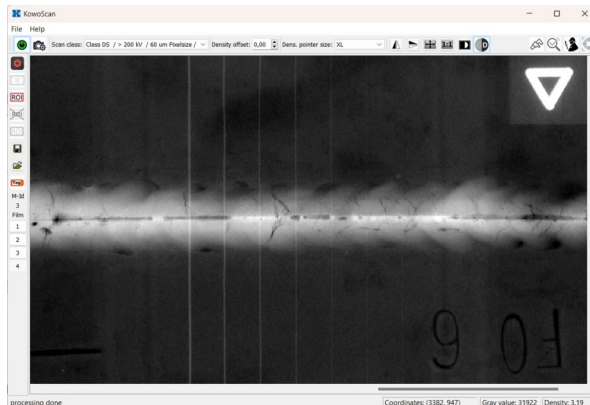
Digitization of X-ray films within seconds
meeting digitization quality class DS (ISO 14096)

KOWOSCAN X50 NDT Film Digitizer

The KOWOSCAN X50 is a very effective and fast tool for digitizing X-ray films in digitization quality class DS using completely new technique. An Ultra HighRes 2D digital camera takes images of X-ray films which are placed on a highly uniform illuminated screen within seconds. Several smaller films can be placed on the large scanning area for simultaneous scanning. The easy to use KowoScan software recognizes the film size and separates multiple films to single images automatically to store in DICONDE or TIF format. A sophisticated filter function enables to find smallest details in the images for instant evaluation and an automated Test Report function provides verification of most important parameters of the system.

Features and advantages:

- ◇ very high throughput for fast digitization of high amount of films
- ◇ several smaller films within one scan, automatic film size recognition
- ◇ very low maintenance efforts, no movable parts
- ◇ Region Of Interest (ROI) function for perfect film region
- ◇ measurement of optical density with the "mouse pointer"
- ◇ magnification and window leveling with the mouse
- ◇ magnification, mirroring, rotating, display 1:1 and full screen function
- ◇ automatic calibration in density and geometry (with test chart)
- ◇ DICONDE tag editor with automatic functions
- ◇ easy linking to any evaluation software



Specification:

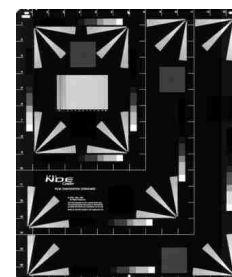
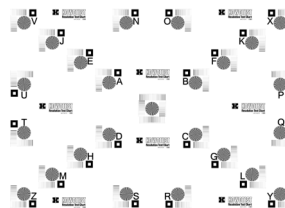
| | |
|--|---|
| Scanning size: | 300 x 450 mm - max. length: 480 mm (with max. width of 10 cm) |
| Digitization quality class: | DS *) according to DIN EN ISO 14096 and ASTM E1936 |
| Scanner pixel sizes: | class DS: 30 µm, 60 µm, 100 µm; class DB: 50 µm, 70µm, 85 µm |
| Scanning resolution (vSRb): | 40 µm (with Duplex wire type IQI using 30 µm pixel size) |
| Scanning time (film 30x40 cm ²): | class DS 30 µm: 45 s; 60 µm: 24 s; fast scan (no class): 8 s |
| Density range (DWR): | D 0.2 ... D 5.0 with linearity of D 0.02 (all classes) |
| Contrast sensitivity (ΔD): | D 0.2 ... D 4.5 with ΔD _{CS} < 0.02 (class DS) |
| Data format: | DICONDE or TIFF (16 Bit density or gray value images) |
| Scanner resolution (30µm): | 14870 x 9920 pixel (full area); 22 Bit image sampling (eff.) |
| Scanner resolution (60µm): | 7435 x 4960 pixel (full area); 22 Bit image sampling (eff.) |
| Communication port: | USB 3.0 |
| Power Supply: | 100 ... 240 V, 50 ... 60 Hz / 24 V DC, 120 W |
| Dimensions: | 57 x 44 x 79 cm (W x D x H) |
| Weight unit: | 29.8 kg plus 1.0 kg (external power supply) |



*) class DS cannot be reached for films exposed lower 100 kV due to 30µm min. pixel size

Scope of supply:

| | |
|---|---------------------------|
| KOWOSCAN X50 Film Digitizer | Art. No.: 13 42100 |
| complete with Test certificate, Certificate of Conformity | |
| KowoScan Software | Art. No.: 13 42107 |
| KOWOSCAN Resolution Test Chart | Art. No.: 13 42110 |
| KOWOSCAN Density Step Tablet | Art. No.: 13 42115 |
| Mask for films - 14x17 inch (1-fold) | Art. No.: 13 42161 |



Accessories:

| | |
|---|---------------------------|
| Reference Radiograph, ASTM E1936 (EPRI) | Art. No.: 11 00340 |
| Mask for Reference Radiograph, ASTM E1936 | Art. No.: 13 42125 |

| Mask for films | Art. No.: | Mask for films | Art. No.: | Mask for films | Art. No.: |
|-------------------|-----------|------------------|-----------|-------------------|-----------|
| 10x12 cm (8-fold) | 13 42131 | 6x16 cm (6-fold) | 13 42142 | 8x18 cm (4-fold) | 13 42151 |
| 10x16 cm (4-fold) | 13 42132 | 6x24 cm (6-fold) | 13 42143 | 8x36 cm (3-fold) | 13 42152 |
| 10x24 cm (4-fold) | 13 42133 | 6x32 cm (4-fold) | 13 42144 | 13x18 cm (4-fold) | 13 42154 |
| 10x40 cm (2-fold) | 13 42134 | 6x40 cm (4-fold) | 13 42145 | 15x40 cm (1-fold) | 13 42155 |
| 10x48 cm (1-fold) | 13 42135 | 6x48 cm (1-fold) | 13 42146 | 18x24 cm (2-fold) | 13 42156 |
| 10x20 cm (4-fold) | 13 42136 | 6x30 cm (4-fold) | 13 42147 | 24x30 cm (1-fold) | 13 42157 |
| 10x30 cm (2-fold) | 13 42137 | 6x36 cm (4-fold) | 13 42148 | 30x40 cm (1-fold) | 13 42158 |
| 6x12 cm (8-fold) | 13 42141 | 6x16 cm (8-fold) | 13 42149 | 14x17 in (1-fold) | 13 42161 |

