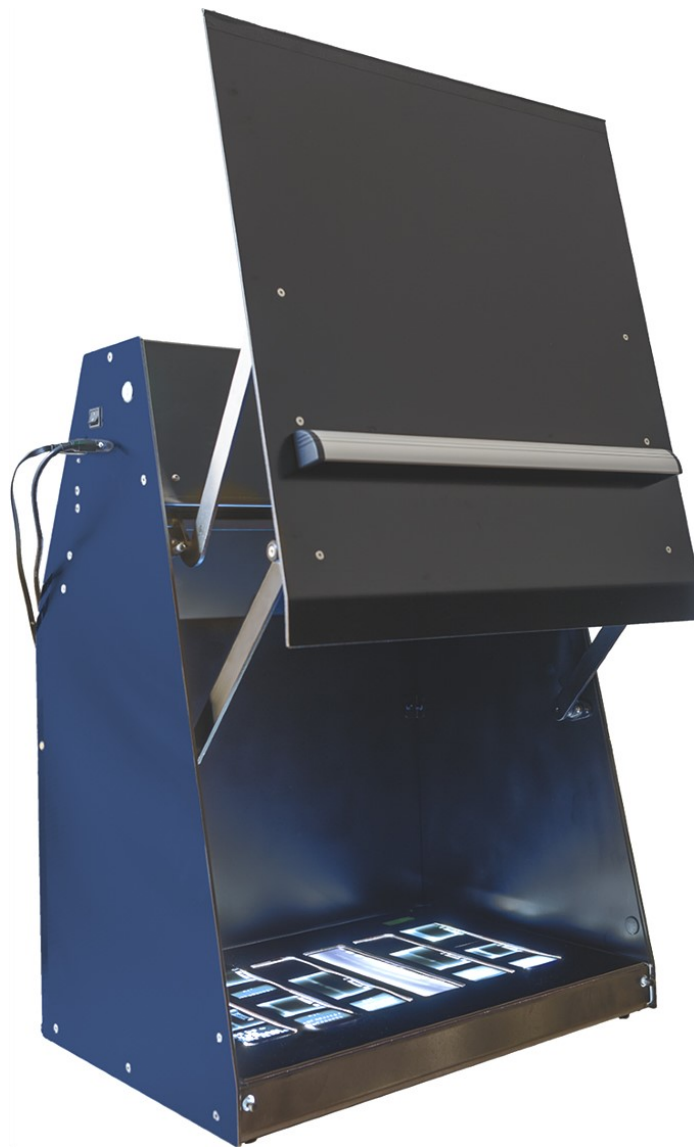# KOWOSCAN X50

KOWOSCAN X50

X-ray HiRes Film Digitizer
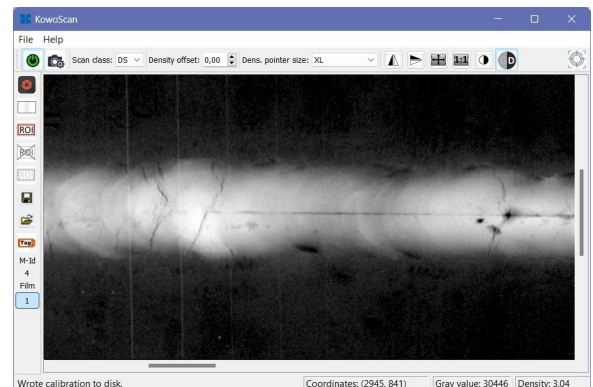
according to DIN EN ISO 14096

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.
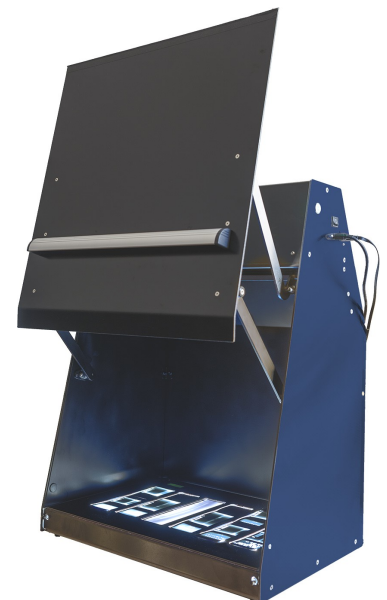
Features and advantages:

◊ 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 a "mouse pointer"
◊ magnification and window leveling with the mouse
◊ magnification, mirroring, rotating, display 1:1 and full screen function
◊ scanning of films with density D<0.5 or D>4.5
◊ DICONDE tag editor with automatic functions
◊ easy linking to any evaluation software

Specification:

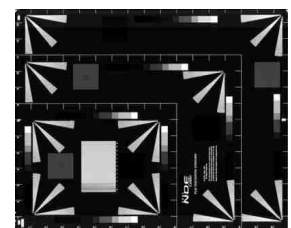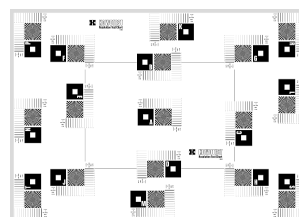|	
Scanning size:	300 x 450 mm - max. width: 360 mm, length: 480 mm *)
Digitization quality class:	DS **) according to EN ISO 14096 and ASTM E1936
Native scanner pixel size:	49 µm
Scanning resolution (vSR$_b$):	50 µm (with Duplex wire type IQI or MTF)
Scanning time:	class DS 15 s - class DB 10 s - class DA 6 s (for film 30x40 cm)
Density range (DWR):	D 0.2 … D 5.0 with linearity of D 0.02
Contrast sensitivity (ΔD):	ΔD 0.02 - D 0 … 4.5
Data format:	DICONDE or TIFF (16 Bit density or gray value images)
Camera resolution:	9576 x 6388 pixel; 22 Bit image sampling (eff.)
Communication port:	USB 3.0 / USB B plug
Power Supply:	100 … 240 V, 50 … 60 Hz / 24 V DC, 160 W
Dimensions:	57 x 44 x 79 cm (W x D x H)
Weight unit:	25.8 kg plus 1.0 kg (external power supply)

*)   films larger 45 cm in length or 30 cm in width must be scanned in two steps and stitched

**)   class DS cannot be reached for films exposed lower 100 kV (SR$_b$ 40 µm)

Scope of supply:

KOWOSCAN X50 Film Digitizer, complete with:	*Art. No.: 13 42100*
KowoScan Software	*Art. No.: 13 42110*
KOWOSCAN Resolution Test Chart	*Art. No.: 13 42120*
Mask for films - 10x24 cm (4-fold)	*Art. No.: 13 42133*
Test certificate, Certificate of Conformity	

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.:
10x12 cm (8-fold)	*13 42131*	6x40 cm (4-fold)	*13 42145*
10x16 cm (4-fold)	*13 42132*	6x48 cm (1-fold)	*13 42146*
10x24 cm (4-fold)	*13 42133*	8x18 cm (4-fold)	*13 42151*
10x40 cm (2-fold)	*13 42134*	8x36 cm (3-fold)	*13 42152*
10x48 cm (1-fold)	*13 42135*	15x40 cm (1-fold)	*13 42155*
6x12 cm (8-fold)	*13 42141*	18x24 cm (2-fold)	*13 42156*
6x16 cm (6-fold)	*13 42142*	24x30 cm (1-fold)	*13 42157*
6x24 cm (6-fold)	*13 42143*	30x40 cm (1-fold)	*13 42158*
6x32 cm (4-fold)	*13 42144*	14x17 in (1-fold)	*13 42159*