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FLOWD 8020
X-ray Flaw Detector

REGULAR X-RAY PROTECTIVE CLOTHING TESTING IN COMPLIANCE WITH DIN 6857-2 AND ÖNORM S 5213

Remote workstation
(OPTIONAL)

KEY FEATURES

- Automatic defects detection
- Smart software algorithms
- Full size image
- Compact and easy to relocate

CONFORMITY CERTIFICATES: CE № 201299122EN ISO 13485:2016,
ISO 9001:2015, ISO/IEC 27001:2013, ISO 45001:2018, ISO 14001:2015

THE X-RAY FLAW DETECTOR

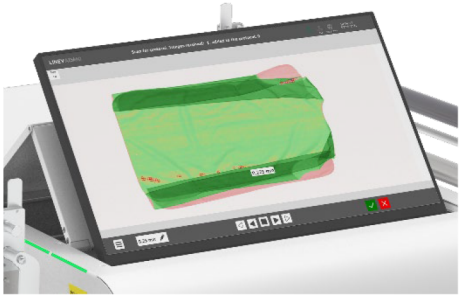
The detector is designed for non-destructive radiographic testing of the X-ray personal protective equipment (hereinafter referred to as the PPE) to approve its further using. The detector allows manufacturers to carry out quality control of X-ray protective materials.

Types of PPE: protective aprons, mittens, skirts, gonad aprons, vests, shadow shields and any protective materials in sheet form.

MAIN FEATURES

- Automatic defects detection
- Smart software algorithm
- Full size image of most items
- Reporting mode
- Plug and play
- Great portability and compactness

OPERATOR'S WORKSTATION

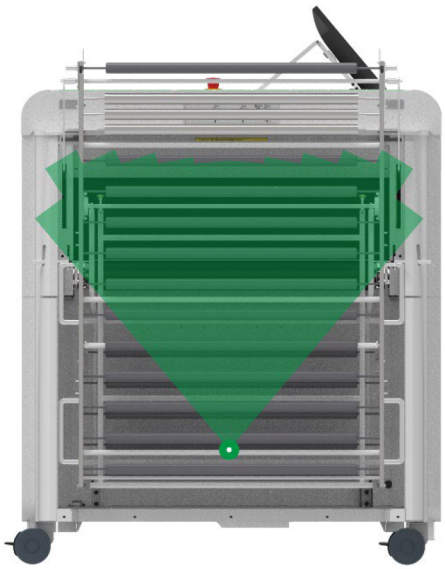


- Software complex "DefVision" with Windows 10
- The device operates by 24" touchscreen
- Self-diagnostic during every start
- Auto calculating of material relative heterogeneity
- Auto definition of areas where the lead equivalent thickness less than its permitted
- Coloring of images in different colors depending on actual lead equivalent thickness
- Data fill in editor and printing the testing report
- X-ray images and test report archiving
- User-friendly and self-intuitive interface

SPECIFICATIONS

TOTAL SPECIFICATIONS			
Weight		400 kg	
Size of the inspection window	height	240 ± 5 mm	
	width	870 ± 3 mm	
Dimensions of the inspection object	height	200 mm	
	width	750 mm	
	length	1300 mm	
Power Supply	number of phases	single-phase network of general purpose	
	voltage range	220/110 V	
	current frequency	50/60 Hz	
	maximum power consumption	0,5 kV · A	
Maximum distributed load per conveyor		25 kg	
Conveyor speed		0,22 ± 0,03 m / s	0,125 ± 0,03 m / s *
Detectability of the System (AWG), not worse (the minimum diameter of the copper wire detected by the X-ray unit, mm, not more)		0,08 (40 AWG)	
Spatial resolution	Along the detector line	1,0 mm	1,1 lp/mm*
	In the direction of scanning	1,5 mm	0,9 lp/mm*

* - FlowD 8020 version with enhanced spatial resolution



INTEGRATED X-RAY SOURCE	
Anode voltage	80/100 kV
Anode current	1,2/1,0 mA
The maximum radiation angle at the output of the collimator	82°
Generator Cooling System	oil
Anode type	fixed
Focal spot	0,8 / 0,8 mm
Output slit of the collimator (width), not more than	1,0 mm
X-ray protection	Fully protected
X-ray emission	Not more than 1 μSv/h at any point at 10 cm from the device

AUTOMATIC SOFTWARE ALGORITHMS

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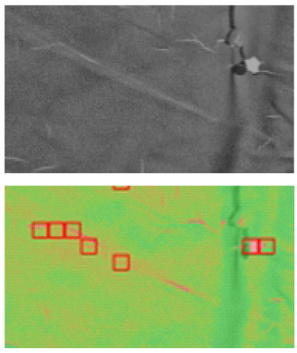
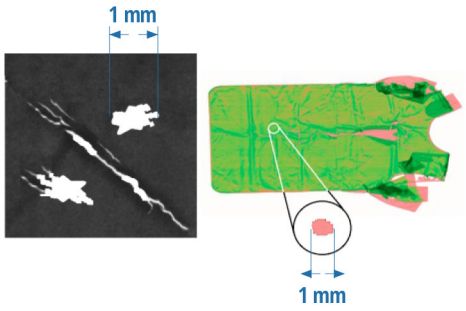
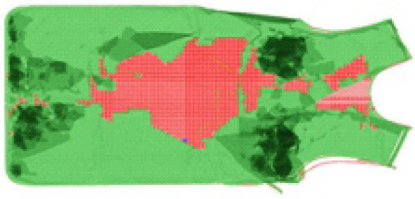
1. DEFECTS (CRACKS, BREAKS, LACERATIONS, TEARS, ETC.)



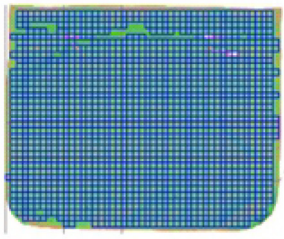
2. IDENTIFICATION OF ANY DEFECTS LESS THAN 1 MM IN SIZE



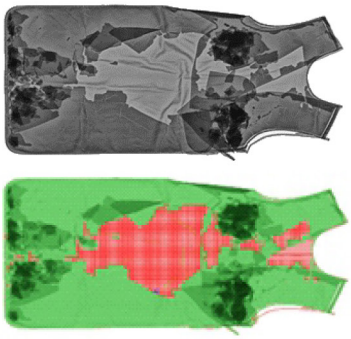
3. DETECTION OF SMALLEST THICKNESS ZONE LEAD EQUIVALENT



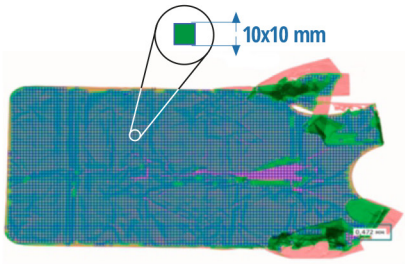
4. CALCULATION OF THE NONHOMOGENEITY OF THE X-RAY PROTECTIVE MATERIAL

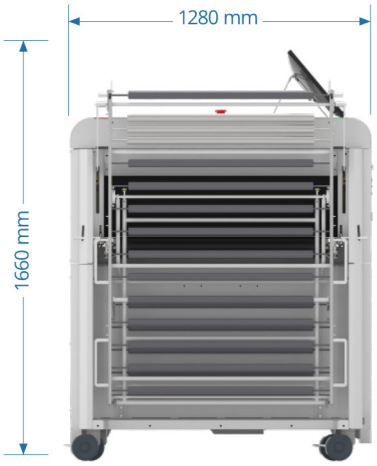


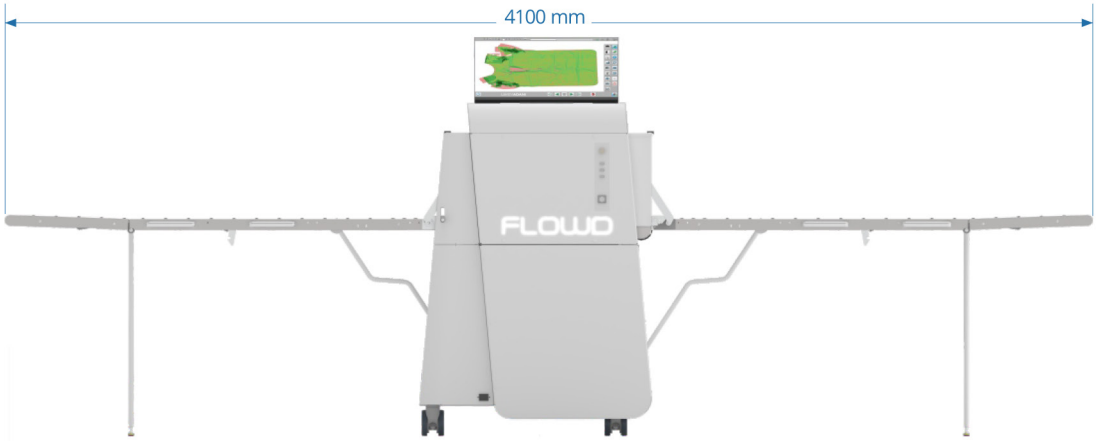
5. HIGHLIGHTING OF SEVERELY DAMAGED ZONES WITH COLOR



6. DRAWING A DIMENSIONAL GRID (10X10 MM), ALLOWING TO DETERMINE THE DEFECT SIZE VISUALLY







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