

Dimensions in mm

Reserving the right to improve and modify

RESEARCH LABORATORIES acknowledged "Highly Qualified" with decree D.M. 9-10-1985 – L.46/82 art.4

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REFERENCE REGULATIONS EC, IEC, TSA



Cod. 64804163 - Rev. 1 - X/04 - Grafica Comense





NEWLY DEVELOPED INSPECTION SYSTEM. IDEAL FOR SECURITY SCREENING OF PALLETS AND LARGE PACKAGES. FEATURES THE MOST UP-TO-DATE DETECTION TECHNOLOGY, ACQUISITION ELECTRONICS AND PC DATA MANAGEMENT SOFTWARE. ERGONOMICALLY DESIGNED CONTROL CONSOLE ALLOWS FOR FASTER SCREENING.

- Real time image processing at 24-bit
- Resolution and penetration at maximum levels
- Visualization of black and white and color images on single switchable monitor
- "On the fly" implementation of principal enhancements
- Innovative digital image archiving system
- Ability to store working sessions

## TECHNICAL SPECIFICATIONS

### Inspection unit

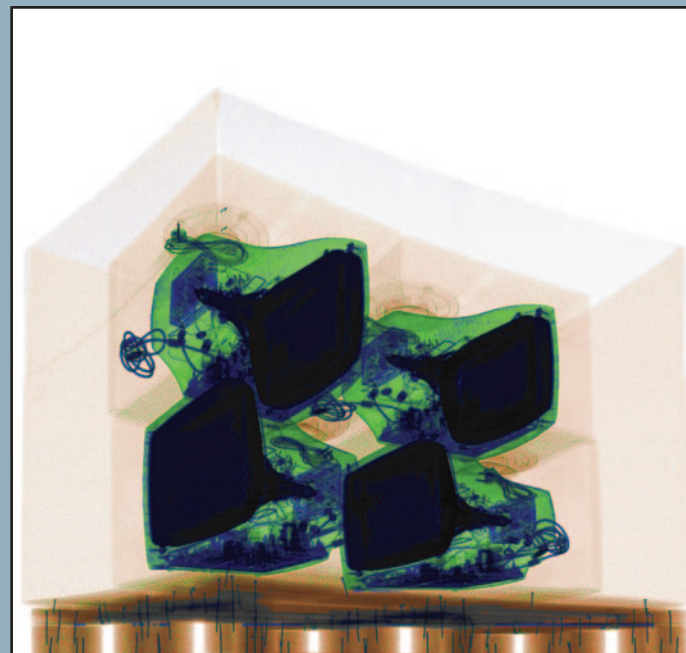
- Dimensions: 6875 mm (L) x 2781 mm (W) x 2279 mm (H)
- Tunnel dimensions: 1550 mm (W) x 1650 mm (H)
- Weight: 2400 kg
- Maximum baggage dimensions: 1500 mm (W) x 1650 mm (H)
- Conveyor belt height: 350 mm (adjustable)
- Belt speed: 0,1-0,2 m/sec
- Maximum bag weight: 3000 kg
- Power supply: monophase 230 VAC or 110 VAC +/- 10%
- Frequency: 50/60 Hz +/- 3 Hz
- Duty cycle: 100%

### Console / Control unit

- Table size: 900 mm (L) x 800 mm (W) x 750 mm (H)
- Weight: 30 kg
- Controls:
  - Start key
  - Belt start button
  - Processing buttons
  - Zoom buttons
  - Alarm button
  - Emergency stop
- Monitor: 19" SVGA, 1600x1200

### X-ray generator

- High frequency monoblock: 30 kHz
- Voltage at X-ray tube: 150 kV
- mA at X-ray tube: 1 mA



Color image of a pallet where materials are presented as: orange for organic, blue for inorganic, green for amorphous objects



Black and white image of the same pallet

### Detection characteristics

- Resolution:
  - 36 AWG guaranteed
  - 38 AWG typical
- Penetration:
  - 26 mm steel guaranteed
  - 28 mm steel typical
- Photodiodes:
  - double L shaped array, 2240 photodiodes

### Standard image enhancement features

- Material type display
- Contrast optimization
- Edge enhancement
- Image reversal
- Removal of low color levels
- Energy stripping
- Histogram equalization
- Pseudo colors
- Zoom x2 ... x64
- All features available "on the fly"

### Advanced functions

- Density alarms (adjustable threshold)
- Organic materials (adjustable threshold)
- Digital archiving of images

### Regulation information

- The system is in conformity with the applicable international regulations for X-ray equipment
- Average baggage dose:
  - <1,4  $\mu$ Sv / inspection (with a conveyor speed of 0,2 m/sec)
  - <2,5  $\mu$ Sv / inspection (with a conveyor speed of 0,1 m/sec)
- Leakage dose at 10 cm: <1,0  $\mu$ Sv / h (0.1 mR/h)
- Film safety: guaranteed up to ISO 1600/33 DIN

### Environmental compliance

- Operational temperatures:
  - from 0° C to +40° C
- Storage temperatures: from -20° C to +60° C
- Humidity: 95% without condensation

