

### Standard Delivery Scope

- Radiation protection cabinet, complete with charge opening, service door, and dual safety switch
- Manipulator
- ERESKO 160 MFR3 X-ray unit
- VISTALUX 7-CCD X-ray image intensifier system (incl. 7" image intensifier and 44 cm (17") b/w monitor)
- System control electronics
- Control console with integrated ERESKO MF3 digital control
- Monitor support
- 1 set connecting cables

### Options

- Water-cooled version of ERESKO MFR3 for high temperature environments
- ISOVOLT 160 HS X-ray unit with following choice of X-ray tube:
  - ISOVOLT 160 M2/0.4-0.4 dual focal spot X-ray tube, each 1.00 mm (EN 12543) [0.4/0.4 (IEC 336)] capable of 4 mA at 160 kV
  - ISOVOLT 160 MM2/0.2 single focal spot X-ray tube of < 0.5 mm (EN 12543) [0.2 (IEC336)] capable of 2 mA at 160 kV
- VISTAPLUS image enhancement system
  - Image enhancement functions
  - Pre-programmed process routines
  - Image archiving
  - Network capable
  - Measurement functions
  - XVGA Monitor

### The DP 150.10 is designed to meet or exceed domestic and interational standards and regulations, including, but not limited to:

- |   |                           |                          |
|---|---------------------------|--------------------------|
| • ISO 9001  | • CFR 1020.40             | • DIN EN 954-1           |
| • UVV   | • CE Konformität          | • DIN EN 60529 / IEC 529 |
| • VBG 4   | • VDE 0100                | • DIN 54113              |
| • German X-Ray Regulations RöV in their updated version | • DIN EN 60204 (VDE 0113) |                          |

# SEIFERT DP 150.10

## Radioscopic Inspection System



### Application

The DP 150.10 is a compact design self-contained real-time X-ray unit suitable for the inspection of small parts.

The DP 150.10 inspection system satisfies by good basic-functionality, low floor space and easy operation. The excellent price-performance ratio of this turnkey system for basic inspection tasks makes it an ideal machine for process control and small parts checking. Transportation and installation at the production site is easily done using standard lifting gear.

### Features

- 5 Axis manipulator
- Motorized in 4 axes with joy stick control
- Maximum workload 10 kg / 22 lbs
- Inspection diameter up to 300 mm / 11.8" \*)
- Inspection height up to 300 mm / 11.8"
- ± 30° tilt capability
- Hinged access door for ease of loading
- Lead glass viewing window (300 x 300 mm)
- Mobile control console
- Compact design to minimize floor space
- Easy installation or relocation
- Minimal maintenance required
- Manufactured under ISO 9001 certified Quality Management System

\*) The penetrable inspection volume varies with the total material thickness and material density

## Description

The DP 150.10 is a self contained real-time X-ray inspection system designed to meet current international radiation safety standards including DIN, EN 954-1, CFR 1020.40.

Its compact design and built in safety features allow for placement nearly anywhere within the manufacturing process by forklift truck.

The DP 150.10 features sturdy steel/lead/steel construction. The loading door is large enough to allow easy access for

loading of the manipulator. A full size hinged service door is provided for ease of maintenance.

The five (5) axes manipulator consists of four (4) motorized axes with fixed speed setting and one manually adjustable axis (geometrical magnification). The motorized axes are controlled by joysticks conveniently placed on the control console.

An ERESKO 160 MFR3 air-cooled X-ray unit with small focal spot of 1.0 mm according to standard EN12543 (0.5

IEC 336) and a Beryllium window is the integrated X-ray unit used in the standard DP 150.10.

The DP 150.10 features the VISTALUX imaging system, which includes a high resolution X-ray image intensifier coupled to a CCD camera with wide dynamic range. Display is by a 44 cm / 17" high-resolution b/w monitor, which provides superior imaging capabilities.

## Technical Data

### Manipulator

- Horizontal motion (Tx)
- Vertical motion (Tz)
- Tilt (Rx)
- Rotation (Rz)
- Manual setup axis (Ty)

### Travel

- 150 mm / 5.9"
- 300 mm / 11.8"
- ± 30°
- n x 360°
- Maximum 780 mm / 30.7"

### Speed

- 24 mm/sec / 0.94"/sec
- 20 mm/sec / 0.78"/sec
- 8°/sec
- 15°/sec
- 

### Workpiece

- Maximum dimensions 300 x 300 mm / 11.8" x 11.8" (diameter x height) \*)
- Maximum weight 10 kg / 22 lbs

### Cabinet

- Dimensions See drawing/layout plan
- Weight Approximately 1550 kg / 3400 lbs
- Lead glass window 300 x 300 mm / 11.8" x 11.8"
- Maintenance door 1010 x 1260 mm / 39.8 x 49.6 "

### Control console

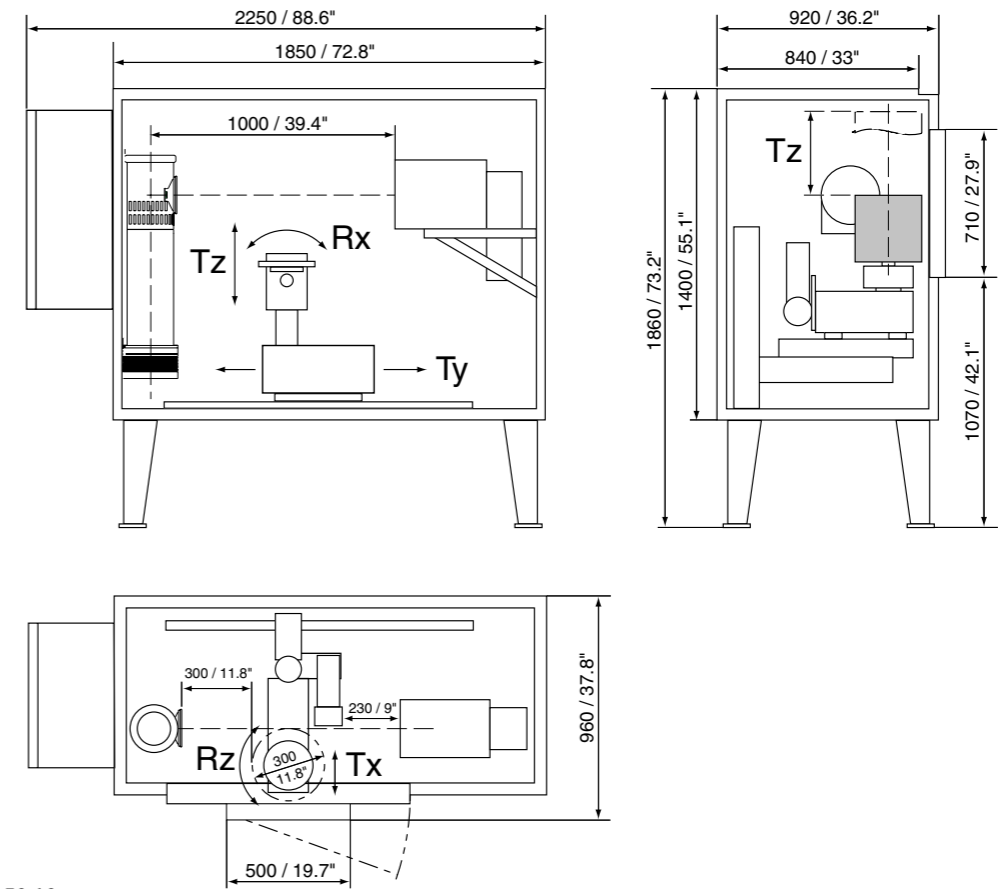
- Dimensions 500 x 600 x 320 mm / 19.7" x 23.6" x 12.6 " (W x D x H)
- Weight Approximately 70 kg / 154 lbs

### X-ray unit (standard)

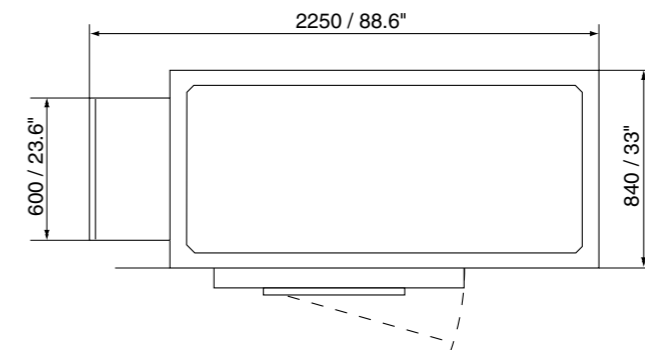
- Tube voltage 5 kV to 160 kV, adjustable in 1 kV increments
- Tube current 0.5 mA to 10 mA, adjustable in 1 kV increments
- Focal spot size EN 12 543 : 1.0 mm (corresponds to 0.5 per IEC 336)
- Inherent filtration 0.8 mm Be

### Power requirements

- Supply voltage 3 NPE 400/230 V ± 10%, 50/60 Hz
- 3-phase, grounded neutral, star connected system (optional 3-phase isolation transformer)
- Supply power approx. 2 kVA
- Power supply fuse (customer-provided) max. 25 A



Dimensions DP 150.10



Layout DP 150.10