GE
Inspection Technologies

ISOVOLT mobil

Industrial X-ray Equipment

The ISOVOLT mobil is designed for operations where access to the inspection point is difficult.

It is ideal for site use in the energy, mineral and petro-chemical industries where pipelines and container tanks require X-ray inspection.

The ISOVOLT mobil is equipped with a small X-ray tube and high voltage cable up to 20 m (64 ft) in length to allow positioning in hard to reach places not accessible by other types of X-ray equipment.

GE imagination at work

Standard Delivery Scope

1 High voltage generator 160 kV	2510940
1 ISOVOLT mobil control unit	2522860
1 WL 2001 water cooling pump	2540390
1 ISOVOLT 160 M2 X-ray tubehousing	2530360
1 High voltage cable, length 10 m (32 ft)	2512465
1 PVC protective hose for high voltage cable and water hoses	9340110
1 Cart	2551340
1 Set cooling water hoses and accessories	7261020

Options

- Pipe inspection stand for tubehousing
- Extra-length high voltage cable (15 m (48 ft), 20 m (64 ft))
- Diaphragm and centering device
- External fail-safe warning flash lamp
- External fail-safe warning blinker lamp

Technical Equipment Data (not considering tube limit values)

Connected load:	230 V ±10%; 50/60 Hz; 3.0 kVA; max. 16 A
Tube voltage:	5 - 160 kV, (in 1 kV steps)
Tube current:	0.5 - 10 mA, (in 0.1 mA steps)
Exposure time to be set:	0.1 to 99.9 min in 0.1 or 1 second increments (optional display in min or sec)
Cooling output of WL 2001*:	1600 W at an ambient temperature of 25°C

*) For further details see product information WL2001.

Dimensions

High voltage generator:	870 x 300 mm (34.3” x 11.8”) (without clamp lever) 1020 x 300 mm (40.2” x 11.8”) (with clamp lever)
WL 2001 water cooling pump:	320 x 305 x 510 mm (12.6” x 12.0” x 20.1”) (WxDxH)
Control unit:	390 x 319 x 169 mm 15.4” x 12.6” x 6.7”) (WxDxH)
Cart:	Maximum width approximately 620 mm (24.4”)
High voltage cable:	10 m (option: 15 m (48 ft) / 20 m (64 ft))
Mains cable:	10 m (32 ft)

Total weight

With high voltage cable, 10 m:	approx. 151 kg (333 lbs)
With high voltage cable, 15 m:	approx. 158 kg (348 lbs)
With high voltage cable, 20 m:	approx. 165 kg (363 lbs)

Available X-ray Tubehousings:

X-ray Tubehousing ISOVOLT 160 M2 0.4 / 1.5

Direct radiating unit

Maximum tube voltage	160 kV	
	Small Focus	***Large Focus***
Maximum anode dissipation:	640 W	1600 W
Tube current (at U_{max}):	4 mA	10 mA
Focal spot size (EN 12 543):	1.00 mm (≈ 0.4 IEC 336)	3.0 mm (≈ 1.5 IEC 336)
Emergent beam angle:	40°	
Inherent filtration:	1 mm Be	
Weight:	approx.. 8.5 kg (19 lbs)	

For further details see separate Product Information.

X-ray Tubehousing ISOVOLT 160 MC 2

Panoramic radiating unit

Maximum tube voltage	160 kV
Maximum anode dissipation:	1000 W
Tube current (at U_{max}):	6 mA
Focal spot size (EN 12 543):	0.4 x 4.0 mm (at radiated angle of 0°)
Former focal spot designation:	0.3 x 3.0
Emergent beam angle:	40° x 360°, symmetrical
Inherent filtration:	0.5 mm Ti + 2 mm Al + 2 mm H_2O
Weight:	approx. 8 kg (17.7 lbs) (with optional cable quick-lock)

For further details see separate Product Information.

At present, the control unit comes in two versions with eight languages each.

Version A:	Western Europe	German, English, French, Spanish, Portuguese, Italian, Norwegian, Swedish
Version B:	Eastern Europe	German, English, Slovenian, Russian, Polish, Roumanian, Czech, Hungarian

High Voltage Generator

The high voltage generator is oil-insulated. It features power and monitoring electronics, a filament transformer, electro-magnetic focus change-over and a key switch to select the tube that is connected at the time.

High Voltage Cable

The high voltage cable, the cooling water hoses and the ground wire form a bundle that is sheathed in a plastic jacket for handling and protection.

Transport Cart

The ergonomic transport cart is light-weight and moves on air tires. An eyebolt allows easy lifting by a crane. The compact design enables access even through narrow doors. Horizontal transportation in a station wagon with adequate clearance is permissible.

Characteristics

- Low weight
- Simple compact design
- Access through narrow doors (> 650 mm)
- Short exposure times
- Dual-focus mode
- Change-over to operate different tube types
- Horizontal transportation possible
- Modern power electronics
- Microprocessor-controlled
- SMD technology
- Designed for continuous operation
- Fully automatic warm-up program with real-time clock
- Storage of 250 pre programmed exposure programs in a non-volatile memory
- Four-line LCD display with back light for clear text messages
- EMC-certified in compliance with EN 55011 / IEC 801 (electromagnetic compatibility)
- Produced under ISO 9001 certified quality management system