

SITE-X 250 PORTABLE X-RAY GENERATOR

OUR CHALLENGE...

"...to increase the reliability of on-site X-ray techniques and reduce their operating costs."

To effectively meet this challenge, ICM engineers have improved on what are largely tried and tested techniques.

The technological options were determined every development stage on the bases of quality, general reliability and the need to substantially increase the life of the X-ray tube.

If you are impressed by the reliability of the SITE-X Generators, you will be totally astounded by the exceptional level of their performance. A performance which will enable you to take advantage of the most favourable overall operating costs on the market.

A SIMPLE AND EFFECTIVE PRINCIPLE

For the first time on a panoramic generator, all SITE-X units have a rod anode: the focal spot outside the SF6-insulated high-voltage generator.

Because maximum advantage is derived from this ideal configurations, for one and the same thickness, the volume of lead needed for standard radiation protection is considerably reduced.

The reduced weight thus achieved makes it possible to invest more effectively in the quality and general improvement of the level of performance (robustness, cooling, accessories, etc).

SITE-X 250 units weigh 17.8 kg.

They are among the lightest portable X-ray generators on the market!



PERFORMANCE

A high-efficiency heat exchanger has been developed in collaboration with the institute of Thermo-mechanics of the University of Liege. This permits a 100% working cycle under completely safe conditions and at the same time reduces the anode temperature by 50 %.

DETAILS WHICH CHANGE EVERYTHING...

This particular generator is equipped, in its directional version, with an internal « carousel » containing a lead cap, 3 diaphragms calibrated for the most used films as well as a laser pointer for maximum user-friendliness.

Being protected from accidental on-site losses and having a total weight of 0.8 kg, this very practical device replaces approximately 15 kg of fragile and space-consuming accessories.

SITE-X panoramic generators have an off-centre position with respect to the focal spot making it possible to inspect the circumferential weld of practically all tank bottoms.

UNEQUALLED DIMENSIONS

The already famous range of 200 to 250kV Site-X has been drastically reduced in weight and size. The result is this new Site-X, offering 200 to 250kV, extremely light and small whilst benefiting even though from the reliability and performances of the existing range.

INNOVATORY OPTIONS

Beside the traditional options, this new Site-X can be equipped on demand with a new insert, designed by the ICM R&D engineers with a Beryllium window allowing very low kV levels. From now on and especially in the aeronautics field, the inspection of composite materials with lightweight and reliable equipments has made possible.

SITE-X 250 FEATURES	UNITS	C2503 with CCU186	C2504 with SCU286	D2504 with SCU286
Output voltage range	kV	20 to 250	20 to 250	20 to 250
Output voltage selection step	kV	1	1	1
Tube current range (constant power output up to 5mA)	mA	1 to 3.0	1 to 4.0	1 to 4.0
Tube current selection step	mA	0.1	0.1	0.1
Radiation geometry	-	Pan. Orthog.	Pan. Orthog.	Directional
Maximum useful angle of X-ray beam	(°)	360 x (2x20)	360 x (2x20)	60x40
Dimension of optical focal spot	mm	Ø 5 x 0.8	Ø 5 x 0.8	2.5 x 2.5
Inherent filtration (Ni Window)	mm	2.5 (Alu) + 0.4 (Ni)	2.5 (Alu) + 0.4 (Ni)	0.4 (Ni)
Inherent filtration (Be Window)	mm	2.5 (Alu) + 1.0 (Be)	2.5 (Alu) + 1.0 (Be)	2.5 (Alu) + 1.0 (Be)
Carousel of internal diaphragms with lead cap and laser pointer		no	no	yes
Working cycle at 40°C ambient temp.	%	100	100	100
Operating temperature range	°C	-25 to +70	-25 to +70	-25 to +70
Storage temperature range	°C	-40 to +80	-40 to +80	-40 to +80
SF6 insulation pressure at 20°C	Kg/cm2	5.0	5.0	5.0
Cooling fan supply voltage	VDC	48	48	48
Weatherproof level	-	IP65	IP65	IP65
Penetration into steel at max. power (FFD=700mm/Film D7pb/D=1.5/T=20 min)	mm Fe	42	44	47
Guard rings	-	no	yes	yes
Position of interconnection socket	choice	Axial/Radial	Axial/Radial	Axial/Radial
Number of telescopic centring device (FFD=700mm)	-	-	3	1 (laser)
Maximum leakage dose at 1 m according to DIN at 260 Kv	mSv/h	10	10	10
Microcontroller HT measurement circuit (kV and mA)	-	yes	yes	yes
Overall dimensions (Ø rings x length)	mm	Ø180 x 640	Ø305 x 716	Ø305 x 716
Total weight (without guard rings)	kg	17.8	17.8	17.8

