

# X-RAY Series Flaw Detector

Professional manufacturer, best quality with competitive price ●  
Recommended by the world UT NDT inspection association for training and examination ●  
Core technology with independent intellectual property rights, certificate of CE, GOST and etc.. ●



## Overview

MITECH inflatable X ray generator is a portable X-ray flaw detector for X ray nondestructive testing, it uses the the difference of degree of absorption to material thickness to detect the internal defects of materials. The detector has the advantages of small size, light weight, easy-carry, simple operation, especially suitable for cooperatively working with power generation units in various harsh environments ; film material can directly display the size and shape of internal defects in the workpiece , the defects image reflected on the film are true and clear and it can be long-term preserved; Without special requirements to the surface roughness of the workpiece . the effect of material grain size has little effect on the test results, applied to the internal defect detection of various materials. With strong anti-interference ability, good stability, reliable operation, it has obvious advantages in the construction and high-altitude operations, is widely used in shipbuilding, machinery manufacturing, aviation, railway, pressure vessels, boilers, oil, Chemical industry, national defense industry and other industries, is the ideal equipment for nondestructive testing.

## Technical Parameters

Sheet 1-1 Glass tube orientation series

Model	Output voltage (KV)	Capacity (kW)	Focus dimension (mm × mm)	Radiation angle	Maximum penetration (Q235)	Generator weight (kg)	Generator dimension (mm × mm × mm)
XXQ-1005	40-100	>1.0	1.0 × 1.0	(40+5) °	8	10	160 × 180 × 540
XXQ-1605	60-160	>1.5	1.5 × 1.5	(40+5) °	20	16	220 × 220 × 630
XXQ-2005	80-200	>2.0	1.5 × 1.5	(40+5) °	30	24	280 × 280 × 680
XXQ-2505	130-250	>2.5	2.0 × 2.0	(40+5) °	40	35	320 × 320 × 750
XXQ-3005	150-300	>3.0	2.5 × 2.5	(40+5) °	50	41	320 × 320 × 840

Sheet 1-2 Glass tube circumferential target series

Model	Output voltage (KV)	Capacity (kW)	Focus dimension (mm × mm)	Radiation angle	Maximum penetration (Q235)	Generator weight (kg)	Generator dimension (mm × mm × mm)
XXH-1605	60-160	>1.5	1.0 × 2.0	360° × 25°	18	15	220 × 220 × 630
XXH-2005	80-200	>2.0	1.0 × 2.4	360° × 25°	27	23	280 × 280 × 680
XXH-2505	130-250	>2.5	1.0 × 2.4	360° × 25°	37	33	320 × 320 × 750
XXH-3005	150-300	>3.0	1.0 × 3.4	360° × 25°	47	40	320 × 320 × 840

Sheet 1-3 Glass tube circumferential cone target series

Model	Output voltage (KV)	Capacity (kW)	Focus dimension (mm × mm)	Radiation angle	Maximum penetration (Q235)	Generator weight (kg)	Generator dimension (mm × mm × mm)
XXHA-1605	60-160	>1.5	1.0 × 2.5	360° × 40°	15	15	220 × 220 × 630
XXHA-2005	80-200	>2.0	1.0 × 2.5	360° × 40°	24	23	280 × 280 × 680
XXHA-2505	130-250	>2.5	1.0 × 2.5	360° × 40°	34	33	320 × 320 × 750
XXHA-3005	150-300	>3.0	1.0 × 3.5	360° × 40°	40	40	320 × 320 × 840

Sheet 1-4 Ceramic tube orientation series

Model	Output voltage (KV)	Capacity (kW)	Focus dimension (mm × mm)	Radiation angle	Maximum penetration (Q235)	Generator weight (kg)	Generator dimension (mm × mm × mm)
XXG-1605	60-160	>1.5	1.5 × 1.5	(40+5) °	20	18	210 × 210 × 560
XXG-2005	80-200	>2.0	1.5 × 1.5	(40+5) °	30	25	280 × 280 × 620
XXG-2505	130-250	>2.5	2.0 × 2.0	(40+5) °	40	33	320 × 320 × 650
XXG-3005	150-300	>3.0	2.5 × 2.5	(40+5) °	50	37	320 × 320 × 680
XXG-3505	200-350	>3.5	2.5 × 2.5	(40+5) °	59	37	320 × 320 × 680

### Sheet 1-1 Glass tube orientation series

Model	Output voltage (KV)	Capacity (kW)	Focus dimension (mm × mm)	Radiation angle	Maximum penetration (Q235)	Generator weight (kg)	Generator dimension (mm × mm × mm)
XXGH-2505	130-250	>2.5	1.0 × 2.4	360° × 25°	37	32	320 × 320 × 690
XXGH-3005	150-300	>3.0	1.0 × 3.4	360° × 25°	47	37	340 × 340 × 710

### Sheet 1-6 Ceramic tube circumferential cone target series

Model	Output voltage (KV)	Capacity (kW)	Focus dimension (mm × mm)	Radiation angle	Maximum penetration (Q235)	Generator weight (kg)	Generator dimension (mm × mm × mm)
XXGHA-2005	80-200	>2.0	1.0 × 2.5	360° × 30°	24	25	280 × 280 × 685
XXGHA-2505	130-250	>2.5	1.0 × 2.5	360° × 30°	34	33	320 × 320 × 690
XXGHA-3005	150-300	>3.0	1.0 × 3.5	360° × 30°	40	38	340 × 340 × 710

### Normal parameters(parameters all the detector have)

Power supply	AC220V±10% 50Hz
Max tube current	5mA
Insulation way	SF6
Controller weight	12kg
Controller dimension	320mm×280mm×160mm
Transmission condition	Focus to film:600mm
	Exposure time:5 minutes
	Film: Tianjin III film, two sides lead foil
	Darkroom disposal: temperature 20°C±2°C,development 5 minutes, blackness≥1.5

### Features

- Adopt microcomputer control, with reasonable internal structure, beautiful appearance, small size, light weight;
- Structure design is more lightweight, operate conveniently on-site;
- With over temperature protection device, the controller will automatically cut off the high voltage ,to avoid damaging the X - ray tube due to high temperature;
- mA (mA) stable unit can change with X ray tube filament voltage to adjust the unidirectional pulse frequency, to ensure the stability of X ray tube current;
- KV (kV) control unit can continuously control the tube voltage level, to adapt to the radiography requirements of different material;
- Anti interference circuit can effectively reduce the high voltage impulse of X ray generator to control system;
- Complete protection functions and the fault types can be displayed;
- The working time and rest time of the detector is in strict accordance with the proportion of 1:1;
- Delayed high pressure start function, convenient for the operator to leave the dangerous area;
- The high pressure and control are isolated to keep the generator work more safe and reliable;
- Special testing power grid and voltage function,suitable for generator unit.

## Application Fileds

The instrument can be widely used in shipbuilding, machinery manufacturing, aviation, railway, pressure vessels, boilers, oil, Chemical industry, national defense industry and other industries, is the ideal equipment for nondestructive testing.

## Configuration

NO	Name	QTY	Remarks
1	X ray flaw detector	1	
2	controller	1	
3	Connection cable ( 10 cores )	1	
4	Power cable ( 2 cores )	1	
5	Ground lead	1	
6	Fuse ( 3A )	5	
7	Attached files	1	



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