

Portable Industrial X-Ray Flaw Detectors

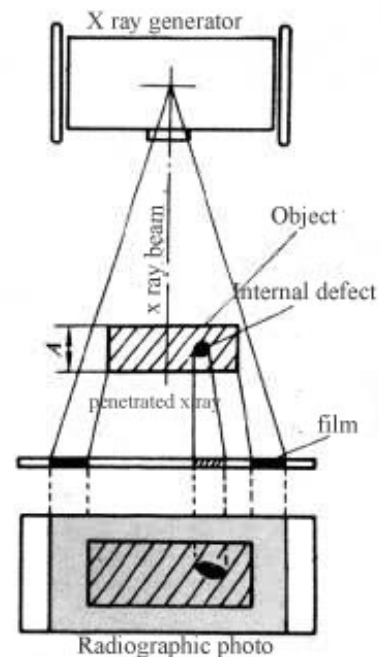
1. Name: Frequency conversion gas insulated Portable x-ray Flaw Detectors

2. Model:XXG-2505(With directional ceramic x-ray tube insert)

3. Manufacturer: Dandong Aolong Radiative Instrument Group Co., Ltd.

4. Basic Principles of X-ray flaw detector:

Radiography is widely used in industry to detect defects in the workpiece, Analysis of the causes and laws of its formation, Evaluate the impact of these defects on workpiece performance, to improve the design or process ,and improvement of product quality, reducing production costs, avoidance of malignant accidents. To use of radiation to penetrate the material has a certain ability and in the process of penetrating the material, different substances and different object structures have different degrees of attenuation of rays. So the defect to form an image on a photographic film or television screen, to determine the internal defects and integrity of the workpiece.



Working principle diagram

The principle of Ray detection (as show picture), Radiation source irradiate workpiece, X-ray film is placed on the bottom of the workpiece, because a defective material is different from a non-defective material that absorbs rays, the defect of the workpiece is developed on the film. Use this defective picture, we can determine the quality of the workpiece.

5. Main character:

- ◆ Compact x-ray generator, anode grounded, forced air cooling
- ◆ Light weight, portable, easy to operate
- ◆ delayed exposal,guarantee the safety of operator
- ◆ Anti-jamming strong which is suitable for the dynamo working together.

- ◆It can choose the expose parameter accurately by setting the press-button.
- ◆Has the delaying time function which makes the operator leave the dangerous radioactive operating room when the X-ray unit generate the X-rays.
- ◆The high voltage risen and fallen smoothly which makes the X-ray generator work effectively.
- ◆According to 1:1 ratio of work and rest automatically, the longest exposed time is 5 minutes.
- ◆The complete protect measure and the protection function when there is over KV, over mA, short mA, and over current, over temperature which avoid destroying the whole machine.
- ◆Exposing time and error code is displayed by counter.
- ◆The design of the structure is more reliable and reasonable and operate easily.
- ◆Tube Voltage range is broad, used to test any workpiece with different material and thinckness;
- ◆The enamel-insulated wire of Coil is imported, quality is trustiness,life is longer;

6. Main configuration:

◆Directional ceramic X-ray tube insert	1Pc	250KV, 5mA	Aolong
◆Generator (included above tube)	1Pc		Aolong
◆Interconnection cable with two plugs	1Pc	25 Meters	Aolong
◆Controller	1Pc	T4777 model	Aolong
◆Power supply cable with one plug	1Pc	10 Meters	Aolong
◆Grounding cable	1Pc	5 Meters	Aolong
◆Accessories bag	1set		Aolong

(Including: alarm lamp, 1 Pcs; lead letter, 1 box; dark bag, 5 Pcs; intensifying screen,5 Pcs; Image quality indicator,1 set; fuse,1 set;)

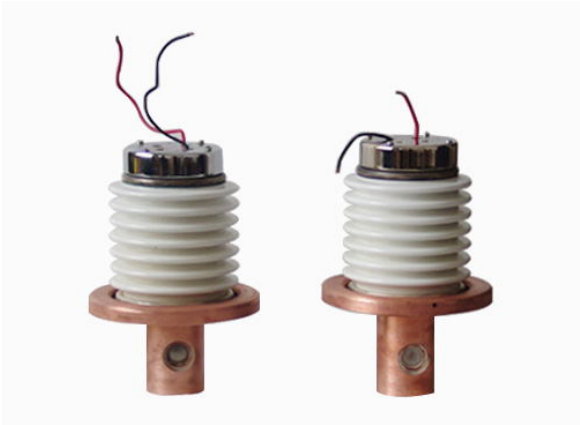
7. Main technical parameter:

- ◆Cooling mode:forced wind
- ◆Insulating Medium:SF₆ gas
- ◆Power supply:220VAC, 50Hz
- ◆Input power:2.5KW
- ◆Output voltage range:150~250KV, Continuously adjustable
- ◆Tube current: 5mA
- ◆Focus spot size:2.0×2.0mm
- ◆Radiation coverage: 40+5°
- ◆Working cycle:50%(i.e work time:rest time= 1:1)
- ◆Exposal time setting:6 sec~5 min
- ◆Photography condition: Focus 600mm;
Exposal time 5 minters;
Double-face lead intensifying.
Industrial x-ray film
- ◆Sensitivity:≤1.5%
- ◆Film density: > 1.5
- ◆Penetration material:A3 steel
- ◆Max penetration thickness: 40mm
- ◆Generator size:320×320×640mm(included handle)
- ◆Controller size:365×300×165mm
- ◆Generator weight:30.5kg
- ◆Controller weight:11.5kg
- ◆Safe working pressure:0.35Mpa~0.45Mpa(20℃)
- ◆Operating temperature range:-10~35℃
- ◆Relative humidity: < 85%

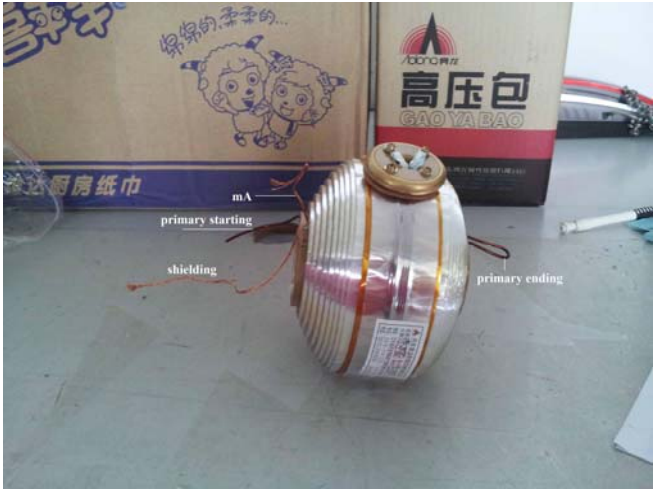
8. Overall unit picture



9. Main part picture



X-ray tube insert



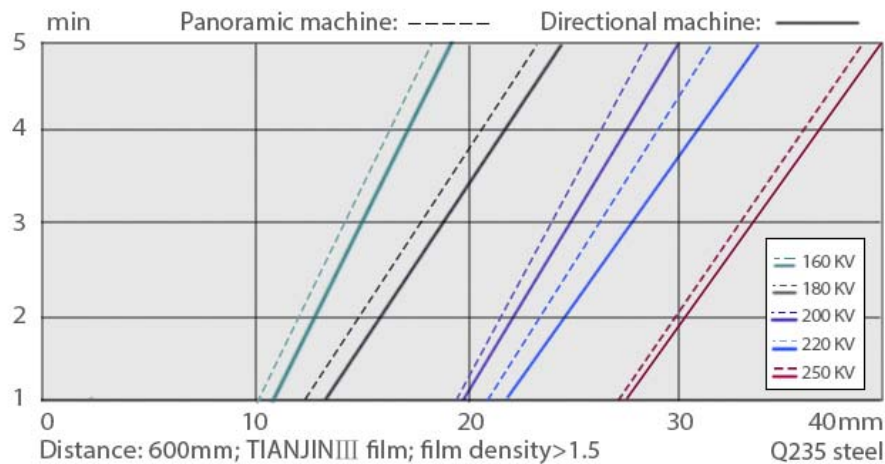
High voltage coil

10.The main qualification certificate



11. Exposal chart(only for reference)

2505 Exposure chart



Condition:

Film:Industrial x-ray film(Industrial X-ray film)

Film to X-ray focus distance:600mm

double-face lead intensifying.

Time:5 minutes

Film density:1.5

Sensitivity: <1.5%

----- Panoramic machine; _____ Directional machine

12.The contact information of manufacturer

Dandong Aolong Radiative Instrument Group Co.,Ltd.

No.46 Fumin Street,Lingang Industrial Zone,Dandong 118009, Liaoning Province,China

TEL:(86)415-3458137

FAX:(86)415-3458588

E-MAIL: dehengjiang@163.com

jdh@cn-ndt.cn

Contact person:Jiang Deheng

Mobile:13841568139

Wechat:j634424

Dandong Aolong Radiative Instrument Group Co.,Ltd.