



### LONG MANUFACTURING HISTORY

In 1964, the first portable flaw detector was born in Aolong group. Today, Aolong group has more than 50 years of manufacturing history. During this period, the design is constantly improved and innovated, the function is becoming more and more reasonable and perfect, and the quality is reliable and durable.

### **CAREFUL SELECTION OF PARTS**

This type of portable X-ray flaw detector adopts the selected ceramic X-ray insert carefully. As we all know, X-ray insert is the core part of the whole set of machine. The performance and quality of the insert directly determine the quality of the whole set of machine. Selected ceramic X-ray insert is more suitable for field construction, low temperature and other badly working environment, to ensure that the machine can work normally in badly environment.

### **IMPROVEMENT OF MATERIAL SELECTION**

In addition to the X-ray insert, the core part of the whole set of equipment is the high voltage coil. However, after the products are put on the market, there has been a dilemma that high voltage coil quality accidents occur frequently, but it can't be solved. In 2006, through the continuous exploration of engineers, we finally found the key to the quality problem of high voltage coil. The uneven diameter of enameled wire used in high voltage coil led to the damage of high voltage coil. After repeated tests, the quality problem of high voltage coil was solved after replacing the enameled wire imported from Germany.

# 160kV X-ray Machine Directional & Ceramic Insert

# SOLID AND DURABLE STRUCTURAL DESIGN

The generator of portable flaw detector is protected by end ring, which is made of nearly 30mm solid steel and wrapped with rubber to prevent vibration and slipping. The end ring prevents damage to the core components in the event of a collision.

# SUPER PENETRATION

A portable flaw detector equipped with the selected 160 kV ceramic X-ray insert with the beam angle of 40+5°. Under the working voltage of 160kV and focal distance of 600mm, it can penetrate 19mm Q235 steel.

# POWER SUPPLY CONDITIONS

The AC-mains voltage range spans from 220 to 240 VAC and the frequency is 50Hz. The improved power factor correction module ensures stable operation, where AC-mains are unstable.

# CERTIFICATES

CE (No. 3J190703.DARTQ22, Technical Construction File no. TCF-GGC-190625-064)

Verification to:

Standard: EN61010-1:2101, EN 61326-1: 2013

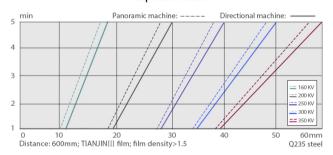
Related to CE Directive:

2014/35/EU (Low voltage)

2014/30/EU (Electromagnetic Compatibility)



# Exposure chart



# SPECIFICATIONS FOR XXG-1605

WEIGHT		14.5kg		
HEIGHT		550mm		
FOCAL SPOT SIZE EN 12543		0.8×0.8mm		
HIGH VOLTAGE ADJUSTMENT		80~160kv		
mA ADJUSTMENT		5.0mA		
MAX.PENERATION	19mm/Q235 steel	19mm/Q235 steel, 600mm focal distance		
BEAM ANGLE	M ANGLE 4			
TEMPERATURE RANGE		-10°C to +40°C		
CONT.EXPOSURE 35 °C, 160kv/5.0mA		Max.5min		

# MAIN CONFIGURATION

No.	Item	Specification	Qty
1	X-ray generator(with ceramic tube)	160kv, 5mA	1
2	Controller	T4777	1
3	Connection cables with two plugs	25m	1
4	Power supply cable with one plug	10m	1
5	Grounding cable	5m	1
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6	Accessories bag		1