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**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

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**Calibration Specification for Non-invasive X-ray Tube Voltage
Meters Used in Medical Diagnosis
(English Translation)**

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Introduction

This specification based JJF 1071-2010 "National Calibration Specifications writing rules" establishment.

This specification reference to IEC 61676:2009 "Medical electrical equipment used in diagnostic radiology non-intrusive measurement of X-rays Ray tube voltage of dose measurement instruments ", JJG744-2004" Medical Diagnostic X-ray radiation "on the non-invasive tube Technical requirements voltmeter, JJG496-1996 "frequency high voltage divider", JJG1007-2005 "high voltage DC the method of high pressure on the relevant traceability of "on in.

The specification for the first time to develop.

Medical Diagnostic X-ray non-intrusive Tube voltmeter calibration specifications

1 Scope

This instruction applies to 40kV ~ 150kV Medical Diagnostic X-ray non-intrusive (also known as non-access type) tube voltage

Table calibration tube voltage measurement part of the X-ray machine multifunction measuring instrument.

This criterion does not apply calibration mammography X-ray tube voltage non-intrusive table.

2. References

The main specification references the following documents.

JJG496 frequency high voltage divider JJG744-2004 diagnostic X-ray radiation JJG1007 DC high voltage divider IEC 61676:2009 Medical electrical equipment used in diagnostic radiology non-intrusive measurement of X-ray tube voltage agents Measuring instruments (Medicalelectricalequipment-Dosimetricinstrumentsusedfornon-invasivemeasurementofX-raytube voltageindiagnosticradiology) for dated references, only the dated edition applies to this specification; undated reference documents Member, the latest edition (including any amendments) applies to this specification.

3 terminology and units of measurement

3.1 Terms

3.1.1 X-ray tube voltage X-raytube voltage Loading in between X-ray tube anode and cathode potential difference, also known as exposure voltage.

3.1.2 Effective range Instrument to meet their performance requirements statement indicated value range. The maximum (minimum) value of a valid indication corresponding to the maximum range End (lowermost end).

3.1.3 Exposure time irradiationtime Prescribed method measured the duration of the irradiation X-ray machine, the radiation dose rate typically exceeds a specified level time. Also known as the irradiation time.

3.1.4 Intrinsic error Under standard test conditions, the size of the measured values deviate from the reference value.

3.1.5 intervention measure invasivemeasurement to obtain an X-ray tube voltage value measured by a suitable instrument or an external high-impedance voltage divider.

3.1.6 Non-intrusive measurement of non-invasivemeasurement to obtain an X-ray tube voltage value measured by analyzing X-ray radiation emitted by the X-ray tube.

3.1.7 The maximum peak voltage the maximum value within a predetermined time interval of the X-ray tube voltage.