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

GB 9706.213-2021

**Medical electrical equipment-Part 2-13: Particular requirements
for the basics safety and essential performance of an
anaesthetic workstation**

医用电气设备 第2-13部分：麻醉工作站的基本安全和基本性能专用要求
(English Translation)

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Foreword

This document was drafted in accordance with the rules given in GB/T 1.1-2020

"Directives for standardization - Part 1.Rules for the structure and drafting of standardizing documents".

This document is Part 2-13 of GB 9706 "Medical electrical equipment". The following parts of GB 9706 have been issued.

- Part 1.General requirements for basic safety and essential performance;
- Part 1-3.General requirements for basic safety and essential performance.
Collateral Standard. Radiation protection in diagnostic X-ray equipment;
- Part 2-1.Particular requirements for the basic safety and essential performance of electron accelerators in the range 1 MeV to 50 MeV;
- Part 2-2.Particular requirements for the basic safety and essential performance of high frequency surgical equipment and high frequency surgical accessories;
- Part 2-3.-- Particular requirements for the basic safety and essential

performance of short-wave therapy equipment;

- Part 2-5.Particular requirements for the basic safety and essential performance of ultrasonic physiotherapy equipment;
- Part 2-6.Particular requirements for the basic safety and essential performance of microwave therapy equipment;
- Part 2-8.Particular requirements for the basic safety and essential performance of therapeutic X-ray equipment operating in the range 10 kV to 1 MV;
- Part 2-11.Particular requirements for the basic safety and essential performance of gamma beam therapy equipment;
- Part 2-12.Particular requirements for basic safety and essential performance of critical care ventilators;
- Part 2-13.Particular requirements for the basic safety and essential performance of an anaesthetic workstation;
- Part 2-16.Particular requirements for the basic safety and essential performance of haemodialysis, haemodiafiltration and haemofiltration equipment;
- Part 2-17.Particular requirements for the basic safety and essential performance of automatically-controlled brachytherapy after-loading equipment;
- Part 2-18.Particular requirements for the basic safety and essential performance of endoscopic equipment;
- Part 2-19.Particular requirements for the basic safety and essential performance of infant incubators;
- Part 2-24.Particular requirements for the basic safety and essential performance of infusion pumps and controllers;
- Part 2-25.Particular requirements for the basic safety and essential performance of electrocardiographs;
- Part 2-26.Particular requirements for the basic safety and essential performance of electroencephalographs;
- Part 2-27.Particular requirements for the basic safety and essential performance

of electrocardiographic monitoring equipment;

- Part 2-28.Particular requirements for the basic safety and essential performance of X-ray tube assemblies for medical diagnosis;
- Part 2-29.Particular requirements for the basic safety and essential performance of radiotherapy simulators;
- Part 2-36.Particular requirements for the basic safety and essential performance of equipment for extracorporeally induced lithotripsy;
- Part 2-37.Particular requirements for the basic safety and essential performance of ultrasonic medical diagnostic and monitoring equipment;
- Part 2-39.Particular requirements for basic safety and essential performance of peritoneal dialysis equipment;
- Part 2-43.Particular requirements for the basic safety and essential performance of X-ray equipment for interventional procedures;
- Part 2-44.Particular requirements for the basic safety and essential performance of X-ray equipment for computed tomography;
- Part 2-45.Particular requirements for the basic safety and essential performance of mammographic X-ray equipment and mammographic stereotactic devices;
- Part 2-54.Particular requirements for the basic safety and essential performance of X-ray equipment for radiography and radioscopy;
- Part 2-60.Particular requirements for the basic safety and essential performance of dental equipment;
- Part 2-63.Particular requirements for the basic safety and essential performance of dental extra-oral X-ray equipment;
- Part 2-65.Particular requirements for the basic safety and essential performance of dental intra-oral X-ray equipment.

This document replaces GB 9706.29-2006 "Medical electrical equipment -- Part 2. Particular requirements for the safety and essential performance of anaesthetic systems". Compared with GB 9706.29-2006, in addition to the structural and

editorial changes, the main technical changes in this document are as follows.

- Add essential performance (see 201.4.3);
- Add gas flow rate and leakage specifications (see 201.5.101.2);
- Add mass of mobile equipment (see 201.7.2.21);
- Add devices containing phthalates (see 201.7.2.105);
- Add anaesthetic workstations intended to be mounted to a wall or ceiling pendant (see 201.7.9.3.102);
- Add mechanical hazards associated with moving parts (see 201.9.2);
- Delete the protection against the danger of ignition of flammable anesthetic mixtures in Clause 6;
- Delete Clause 43 Fireproof;
- Add hazardous situations and fault conditions of ME equipment (see 201.13);
- Add programmable electrical medical systems (PEMS) (see 201.14);
- Add additional requirements for signal input/output part (see 201.16.101);
- Add interface to interchangeable anaesthetic vapour delivery systems (see 201.101.10);
- Add additional requirements for an anaesthetic breathing system (see 201.102);
- Add additional requirements for an anaesthetic gas scavenging system (see 201.103);
- Add additional requirements for an anaesthetic vapour delivery system (see 201.104);
- Add additional requirements for an anaesthetic ventilator (see 201.105);
- Add display loops (see 201.106);
- Add clinical evaluation (see 201.107);

Medical electrical equipment - Part 2-13.Particular
requirements for the basic safety and essential performance
of an anaesthetic workstation