



British Standard

Medical electrical equipment

Part 2. Particular requirements for safety

Section 2.22 Specification for general operating tables

Appareils électromédicaux

Partie 2. Conditions particulières de sécurité

Section 2.22 Tables d'opération pour interventions de chirurgie générale — Spécifications

Elektromedizinische Geräte

Teil 2. Besondere Sicherheitsanforderungen

Abschnitt 2.22 Operationstische für allgemeine Zwecke

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Foreword

This British Standard has been prepared under the direction of the Health Care Standards Committee at the request of the Department of Health and Social Security.

BS 6859 specifies those requirements other than safety for operating tables and is published in two Parts as follows:

Part 1. Specification for mobile general operating tables

Part 2. Specification for fixed-pedestal general operating tables

This Particular Standard specifies safety requirements for general operating tables, both mobile and fixed-pedestal, and should be read in conjunction with BS 6859 : Parts 1 and 2.

The format used in this British Standard follows that used in other standards in Section 2 of the BS 5724 series which themselves are identical to or based on Parts of IEC 601.

This Particular Standard is one of a series based on BS 5724 : Part 1 and it amends and supplements BS 5724 : Part 1, hereinafter called the General Standard. As stated in 1.3 of the General Standard, the requirements of this Particular Standard take precedence over those of the General Standard.

As in the General Standard the requirements are followed by compliance tests. The numbers of the sections and clauses in this Particular Standard refer to the related sections and clauses in the General Standard. Clauses, sub-clauses or figures that are additional to those of the General Standard are numbered starting from 101; additional appendices are lettered AA, BB, etc. and additional items are lettered (aa), (bb), etc. The changes from the text of the General Standard are specified by the use of the following words.

‘Replacement’ means that the clause, sub-clause or specified paragraph of the General Standard is replaced by the text of this standard.

‘Amendment’ means that the clause, sub-clause or specified paragraph of the General Standard is amended as indicated by the text of this standard.

‘Addition’ means that the text of this standard is additional to the requirements of the General Standard.

Where it is specified that a clause of the General Standard applies, it means that the clause applies only if the requirement is relevant to the general operating table under consideration.

Illustrations of typical table top positions are given in figure 101.

A rationale for the most important requirements is given in appendix AA. It is considered that a knowledge of the reasons for the requirements will not only facilitate the proper application of the standard, but will expedite any subsequent revision.

Terminology and conventions

The following print types are used in this standard.

Requirements, compliance with which can be tested, and definitions: in roman type.

Explanations, advice, general statements, exceptions and references: in small roman type.

Test specifications: in italic type.

Terms defined in clause 2 of the General Standard and this Particular Standard: small capitals.

NOTE. The titles of the publications referred to in this standard are listed on the inside back cover.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

British Standard

Medical electrical equipment

Part 2. Particular requirements for safety

Section 2.22 Specification for general operating tables

SECTION ONE – GENERAL

1. Scope and object

This clause of the General Standard applies except as follows:

1.1 *Scope*

Replacement:

This Particular Standard specifies safety requirements for FIXED-PEDESTAL GENERAL OPERATING TABLES and MOBILE GENERAL OPERATING TABLES, as defined in 2.12.103 and 2.12.107, whether or not having electrical parts. TRANSPORTERS, as defined in 2.12.113 are outside the scope of this Particular Standard.

1.4 *Environmental conditions*

Item b) *Operation*

1) *Environment*

Additional item:

aa) If the manufacturer claims that the GENERAL OPERATING TABLE is suitable for use in any special environmental conditions, including those outside the limits specified in items a) to d), all of the requirements of this Particular Standard apply in all such conditions.

2. Terminology and definitions

This clause of the General Standard applies except as follows:

Replacement:

2.1.3 *ACCESSORY*

An optional component necessary and/or suitable to be used on the operating table in order to facilitate or improve the intended use of the table or to provide additional functions.

2.1.5 *APPLIED PART*

The upper and lateral surfaces of the table top, including the accessory rail and any non-detachable clamps.

2.1.6 *BODY OF THE EQUIPMENT*

Addition:

– but excluding the APPLIED PART and all parts having a CONDUCTIVE CONNECTION thereto.

Additional definitions:

2.12.101 *CONTROLS*

Means of selecting and performing table movements.

2.12.102 *DIVIDED LEG SECTION*

LEG SECTION which is divided longitudinally.

2.12.103 *FIXED – PEDESTAL GENERAL OPERATING TABLE*

A GENERAL OPERATING TABLE which has the base or pedestal permanently fixed to the floor.

2.12.104 *GENERAL OPERATING TABLE*

An operating table intended for general procedures, not primarily designed for any specialist procedure.

2.12.105 *HEAD SECTION*

Section or sections of the table top articulating with the TRUNK SECTION and intended to support the PATIENT'S head.

2.12.106 *LEG SECTION*

Section or sections of the table top articulating with the TRUNK SECTION and intended to support the PATIENT'S legs.

2.12.107 *MOBILE GENERAL OPERATING TABLE*

A GENERAL OPERATING TABLE intended to be moved from one location to another supported by its own wheels or equivalent means.

2.12.108 *NORMAL POSITION*

The position of the table top with all sections set in the horizontal position.

2.12.109 *BRAKED MODE*

The mode in which a MOBILE GENERAL OPERATING TABLE is immobilized.

2.12.110 *UNBRAKED MODE*

The mode in which a MOBILE GENERAL OPERATING TABLE can be moved from one location to another supported by its wheels or other means.

2.12.111 *TABLE FULLY ASSEMBLED*

The operating table complete with top but not including mattress or any accessories not permanently attached to the table.

2.12.112 *TRUNK SECTION*

Section or sections of the table top in the centre position of the table top.

2.12.113 *TRANSPORTER*

A device intended for the transportation of the table top to and from the base or pedestal of a FIXED-PEDESTAL GENERAL OPERATING TABLE.

3. **General requirements**

This clause of the General Standard applies except as follows:

Amendment:

3.3 does not apply.

4. **General requirements for tests**

This clause of the General Standard applies except as follows:

4.6 *Other conditions*

Additional items:

aa) Mechanical loads shall be progressively applied.

Loads shall be applied for 5 min over an area of 250 mm × 250 mm unless otherwise stated.

For the stability tests it may be necessary to use an additional member to carry the load if the design of the table does not allow the test load to be applied directly to the HEAD or LEG SECTION.

bb) Tolerances shall be as follows.

On loads: ± 2 kg

On specified measurements and centre line positions: ± 2.5 mm

On times: 0 min to 5 min: ± 30 s
over 5 min: ± 1 min

cc) Unless otherwise stated, tests shall be carried out:

- with the TABLE FULLY ASSEMBLED;*
- with all sections set in the NORMAL POSITIONS;*
- with the table set at its highest position;*
- with the table in the BRAKED MODE.*

dd) Except for clauses 21 and 24, tests shall be carried out with the mattress supplied or recommended by the manufacturer in place on the table top.

5. Classification

This clause of the General Standard applies except as follows:

5.1 Item a)

Replacement:

If the GENERAL OPERATING TABLE has electrical parts, it shall be CLASS I EQUIPMENT, CLASS II EQUIPMENT or EQUIPMENT with an INTERNAL ELECTRICAL POWER SOURCE.

5.3 Replacement:

Parts of the EQUIPMENT intended for use in the operating room shall comply with the requirements of the General Standard for DRIP-PROOF EQUIPMENT, SPLASH-PROOF EQUIPMENT or WATERTIGHT EQUIPMENT.

5.5 Addition:

See also sub-clause 37.2 of this Particular Standard.

6. Identification, marking and documents

This clause of the General Standard applies except as follows:

6.1 Marking on the outside . . .

Item e) Indication of origin

Addition:

The number and date of this British Standard, i.e. 'BS 5724 : Section 2.22 : 1987*'.
Item l) Classification

Amendment:

In 3rd dash, GENERAL OPERATING TABLES classified as TYPE BF EQUIPMENT or TYPE CF EQUIPMENT shall be marked with the appropriate symbol shown in figure 102.

6.3 Marking of controls

Item d)

Replacement:

All controls shall be marked by words or symbols to indicate their functions. The markings shall be clearly legible and permanently affixed.

It is recommended that the selected mode be identifiable by touch.

Compliance shall be checked by the tests given in 6.1(x) of the General Standard.

*Marking BS 5724 : Section 2.22 : 1987 on or in relation to a product represents a manufacturer's declaration of conformity, i.e. a claim by or on behalf of the manufacturer that the product meets the requirements of the standard. The accuracy of the claim is therefore solely the responsibility of the person making the claim. Such a declaration is not to be confused with third party certification of conformity, which may also be desirable.