



BSI Standards Publication

**High frequency surgical equipment and  
high frequency surgical accessories -  
Operation and maintenance**

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## National foreword

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A list of organizations represented on this committee can be obtained on request to its secretary.

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# TECHNICAL REPORT



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**High frequency surgical equipment and high frequency surgical accessories –  
Operation and maintenance**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**HIGH FREQUENCY SURGICAL EQUIPMENT AND HIGH FREQUENCY  
SURGICAL ACCESSORIES – OPERATION AND MAINTENANCE**

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IEC 61289, which is a technical report, has been prepared by sub-committee 62D: Electromedical equipment, of IEC technical committee 62: Electrical equipment in medical practice.

This second edition cancels and replaces the first edition published in 2011. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) general adaption to IEC 60601-2-2:2017;
- b) refinement and additions to the defined terms;

- c) separation of HF SURGICAL EQUIPMENT and HF SURGICAL ACCESSORIES;
- d) consideration of the HIGH CURRENT MODE;
- e) update of symbols.

The text of this technical report is based on the following documents:

Enquiry draft	Report on voting
62D/1652/DTR	62D/1662A/RVDTR

Full information on the voting for the approval of this technical report can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

In this document, the following print types are used:

- TERMS DEFINED IN CLAUSE 3: SMALL CAPITALS.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

**IMPORTANT – The “colour inside” logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this publication using a colour printer.**

## INTRODUCTION

This document gives guidelines to personnel in charge of operation of equipment covered by IEC 60601-2-2:2017 to enable them to attain the best conditions of safety for their PATIENTS and themselves.

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# HIGH FREQUENCY SURGICAL EQUIPMENT AND HIGH FREQUENCY SURGICAL ACCESSORIES – OPERATION AND MAINTENANCE

## 1 Scope

This document contains guidelines for medical and nursing personnel regarding the safe and effective operation of HIGH FREQUENCY SURGICAL EQUIPMENT and HIGH FREQUENCY SURGICAL ACCESSORIES (also referred to as HF SURGICAL EQUIPMENT in this document). It is also of use to scientific/technical staff who have responsibility for the maintenance of this equipment.

The application guidelines in this document deal with the safe operation of HIGH FREQUENCY SURGICAL EQUIPMENT constructed according to the safety requirements of IEC 60601-1 [1]<sup>1</sup> and IEC 60601-2-2 [4].

Not all existing HIGH FREQUENCY SURGICAL EQUIPMENT meets the minimum requirements of current international standards, however, the guidelines in this document is still helpful in utilizing these devices.

## 2 Normative references

There are no normative references in this document.

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

### 3.1

#### ACCESSORY

additional part for use with equipment in order to:

- achieve the INTENDED USE,
- adapt it to some special use,
- facilitate its use,
- enhance its performance, or
- enable its functions to be integrated with those of other equipment

[SOURCE: IEC 60601-1:2005, 3.3]

### 3.2

#### ACTIVE ACCESSORY

HF SURGICAL ACCESSORY intended for manipulation by the OPERATOR to produce an effect by electrical conduction adjacent to the ACTIVE ELECTRODE at the intended site on the PATIENT,

<sup>1</sup> Numbers in square brackets refer to the Bibliography.