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## Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

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|                  |                        |
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| 1  | 2                                          | (3)                          | 4               | 5                                                                                                                                  | (6)                                                                      | 7                                                  |
|----|--------------------------------------------|------------------------------|-----------------|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------|
| MB | Clause No./ Subclause No./Annex (e.g. 3.1) | Paragraph/ Figure/Table/Note | Type of comment | Comment (justification for change) by the MB                                                                                       | Proposed change by the MB                                                | Secretariat observations on each comment submitted |
|    | 3.1                                        | Definition 1                 | ed              | Definition is ambiguous and needs clarifying.                                                                                      | Amend to read '...so that the mains connector to which no connection...' |                                                    |
|    | 6.4                                        | Paragraph 2                  | te              | The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK. | Delete reference to UV photometer.                                       |                                                    |



# DRAFT International Standard

## ISO/DIS 7554-1

### Surgical instruments — Terms, measuring methods and tests —

#### Part 1: Vocabulary

*Instruments chirurgicaux — Termes, méthodes de mesurage et  
essais —*

*Partie 1: Vocabulaire*

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ISO/TC 170

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**2025-04-21**

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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This document was prepared by Technical Committee ISO/TC 170 *Surgical instruments*.

A list of all parts in the ISO 7554 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

# Surgical instruments — Terms, measuring methods and tests —

## Part 1: Vocabulary

### 1 Scope

This document specifies terms and definitions for surgical instruments and their components.

### 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:

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

#### 3.1 stop pin

mounting part for the restriction of the radius or range of action of the *working end* (3.2)

Note 1 to entry: This term is common for clamps, needle holders, tweezers, forceps, scissors and shears.

#### 3.2 working end

anterior functional part of an instrument

Note 1 to entry: This term is common for clamps, needle holders and forceps.

Note 2 to entry: This part is also referred to as distal end or jaw.

#### 3.3 distal end

part of the instrument facing to the patient

#### 3.4 cutting edge

part of the *working end* (3.2) that severs tissue, organs, ribs, bones and medical supplies

Note 1 to entry: This term is common for scalpels, knives, scissors and shears.

#### 3.5 biseau

support surface for the tissue to be severed

### 3.6

#### **blade**

anterior functional part for severing or holding

Note 1 to entry: This term is common for scissors and retractors.

### 3.7

#### **leaf spring**

element of instruments with *branches* (3.9) to open or close the *working end* (3.2) using spring force

Note 1 to entry: This term is common for clamps, forceps and needle holders and scissors and shears.

### 3.8

#### **blade back**

part of the *blade* (3.6) that is opposite to the *cutting edge* (3.3)

Note 1 to entry: This term is common for scissors and shears.

### 3.9

#### **branch**

part of the instrument from the end of the joint to the *proximal end* (3.12) or *ring* (3.32)

Note 1 to entry: This term is common for clamps, needle holders, forceps, scissors and shears.

Note 2 to entry: The branch is also often called shank.

### 3.10

#### **latch**

fixture to hold the instrument in a locked state

Note 1 to entry: This term is common for retractors and forceps.

### 3.11

#### **double leaf spring**

multi-part element of instruments with *branches* (3.9) to open or close the *working end* (3.2) using spring force

Note 1 to entry: This term is common for needle holders, clamps and forceps, scissors and shears.

### 3.12

#### **proximal end**

part of the instrument facing the user

Note 1 to entry: This term usually designates the handle of the instrument and is common for clamps, needle holders, tweezers and forceps.

### 3.13

#### **wire cutter**

groove in a cutting edge (3.3) to cut wire

Note 1 to entry: This term is common for clamps and forceps, scissors and shears..

### 3.14

#### **spring**

part of the tweezer between mirror (3.34) and connection part

Note 1 to entry: This term is common for tweezers.

### 3.15

#### **fenestration**

recess or opening in the *working end* (3.2)

Note 1 to entry: This term is common for clamps and forceps, needle holders and tweezers.

Note 2 to entry: The fenestration is also called window.

**3.16**

**sliding block**

protection and guide sleeve

Note 1 to entry: This term is common for clamps, needle holders, tweezers and forceps.

**3.17**

**gripping surface**

part of the *branch* (3.9) used to hold and operate the instrument

Note 1 to entry: This term is common for clamps, needle holders, tweezers, forceps and scissors.

**3.18**

**hook**

bent or angled tip at the *working end* (3.2)

Note 1 to entry: This term is common for clamps and forceps, retractors, scissors and shears.

Note 2 to entry: The hook is also called prong.

**3.19**

**horn**

protrusion on the *branches* (3.9) to prevent slippage of the hand

Note 1 to entry: This term is common for scissors, shears and forceps.

**3.20**

**groove**

longitudinal or circular-concave recess of *jaw surfaces* (3.29) or handles

Note 1 to entry: This term is common for clamps and forceps, needle holders and tweezers.

**3.21**

**club handle**

hollow handle used to grip and operate the plaster scissors

Note 1 to entry: This term is common for scissors and shears.

**3.22**

**fenestrated handle**

handle used to pull

Note 1 to entry: This term is common for retractors.

**3.23**

**hollow handle**

handle used to reduce weight

Note 1 to entry: This term is common for retractors.

**3.24**

**knob**

blunt element protruding the *working end* (3.2)

Note 1 to entry: This term is common for probes, scissors and shears.

**3.25**

**moveable part**

part of an instrument with a *ring* (3.32) where the joining element (screw or pin) is not fixed

Note 1 to entry: This term is common for scissors, shears and forceps.

**3.26**

**rigid part**

part of an instrument with a *ring* ([3.32](#)) where the joining element (screw or pin) is fixed

Note 1 to entry: This term is common for scissors, shears and forceps.

**3.27**

**jaw**

functional component of *working end* ([3.2](#))

Note 1 to entry: This term is common for clamps and forceps, needle holders and tweezers.

**3.28**

**jaw width**

width of the *working end* ([3.2](#))

Note 1 to entry: This term is common for clamps, needle holders, tweezers and forceps.

**3.29**

**jaw surface**

part of the *working end* ([3.2](#)) that grips, holds or severs tissue, organs, medical supplies or medical equipment

Note 1 to entry: This term is common for clamps, needle holders, tweezers and forceps.

**3.30**

**jaw serration**

profile of the *jaw surfaces* ([3.29](#))

Note 1 to entry: This term is common for clamps, needle holders, tweezers and forceps.

**3.31**

**mouse tooth**

sharp tapered teeth for traumatic gripping of tissue

Note 1 to entry: This term is common for clamps, tweezers and forceps.

**3.32**

**ring**

circular part at the *proximal end* ([3.12](#)) for entry of the fingers

Note 1 to entry: This term is common for clamps, needle holders, forceps and scissors.

**3.33**

**scraper**

sharp angled edge at the end of the connection part

Note 1 to entry: This term is common for tweezers and knives.

**3.34**

**actuator**

moveable component in sliding shaft instruments that activates the function

Note 1 to entry: This term is common for scissors, shears, bone punches, rongeurs and conchotomes.

**3.35**

**lock**

component to hold the instrument in a locked state

Note 1 to entry: This term is common for tweezers.

**3.36**

**joint**

part of the instrument with which the two halves are rotatably hinged

Note 1 to entry: This term is common for clamps, needle holders, forceps, scissors and shears.

**3.37**

**interlock**

component to lock the instrument in a defined position

Note 1 to entry: This term is common for clamps, needle holders, tweezers and forceps.

Note 2 to entry: The interlock is also often called ratched.

**3.38**

**set screw**

component to variably lock the *working end* ([3.2](#))

Note 1 to entry: This term is common for tweezers and forceps.

**3.39**

**guiding pin**

component that prevents escape of the working end from the intended position

Note 1 to entry: This term is common for clamps and forceps, needle holders and tweezers.

## **4 Designations**

### **4.1 General**

In the [Tables 1](#) to [30](#) designations, explanations and figures to types and forms of different instruments and instrument components are given.

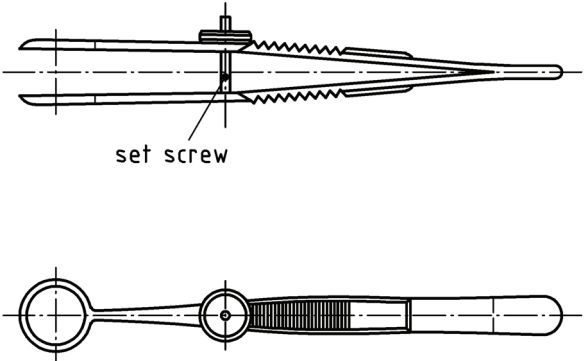
4.2 Tweezers

4.2.1 Tweezer types

Table 1 — Tweezer types

| Se-<br>qu-en-<br>tial-<br>num-ber | Desi-gnation                                             | Explanation                                                                                                                      | Figure |
|-----------------------------------|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|--------|
| 1                                 | tweezer with<br>or without<br>pin (standard<br>assembly) | instrument with a jaw that is<br>pushed apart by spring force                                                                    |        |
| 2                                 | tweezer with<br>lock                                     | instrument with a jaw that<br>is pushed apart by spring<br>force and that can be locked<br>in a defined position with<br>an lock |        |
| 3                                 | tweezer with<br>lock                                     | instrument with a jaw that is<br>pushed apart by spring force<br>and that can be locked in a<br>defined position with a lock     |        |

Table 1 (continued)

| Se-<br>qu-en-<br>tial-<br>num-ber | Desi-<br>gna-tion         | Ex-<br>pla-na-tion                                                                                                                       | Figure                                                                             |
|-----------------------------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| 4                                 | tweezer with<br>set screw | instrument with a jaw that is<br>pushed apart by spring force<br>and that can be locked by<br>being pressed together with<br>a set screw |  |