

INTERNATIONAL  
STANDARD

**ISO**  
**13397-3**

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**Periodontal cures, dental scalers and  
excavators —**

**Part 3:**

Dental scalers — H-type

*Cures parodontales, instruments dentaires pour détartrage et  
excavateurs dentaires —*

*Partie 3: Instruments dentaires pour détartrage — Type H*



Reference number  
ISO 13397-3:1996(E)

## 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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 13397-3 was prepared by Technical Committee ISO/TC 106, *Dentistry*, Subcommittee SC 4, *Dental instruments*.

ISO 13397 consists of the following parts, under the general title *Periodontal curettes, dental scalers and excavators*:

- Part 1: *General requirements*
- Part 2: *Periodontal curettes — Gr-type*
- Part 3: *Dental scalers — H-type*
- Part 4: *Dental excavators — Discoid-type*

It is anticipated that additional types of instruments will form the subject of future parts.

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# Periodontal curettes, dental scalers and excavators —

## Part 3:

## Dental scalers — H-type

### 1 Scope

This part of ISO 13397 specifies the dimensions for H-type dental scalers.

### 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 13397. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 13397 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 1942-3:1989, *Dental vocabulary — Part 3: Dental instruments*.

ISO 13397-1:1995, *Periodontal curettes, dental scalers and excavators — Part 1: General requirements*.

### 3 Definitions

For the purposes of this part of ISO 13397, the defi-

nitions given in ISO 1942-3 and the following definitions apply.

**3.1 dental scaler:** Hand instrument for removing calculus and other accretions from the surface of teeth.

**3.2 glaze surface:** Working surface of the instrument formed during production of the cutting edge(s).

### 4 Design and dimensions

General requirements for dental scalers are specified in ISO 13397-1.

Dental scalers shall have the designs shown in figures 1 to 5 and the dimensions as given in table 1. The points of measurement associated with the dimensions are listed in table 2.

Annex A of ISO 13397-1 provides details of one method of measurement applicable to most types of dental hand instrument.

#### 4.1 Overall length

The maximum overall length, irrespective of the design of the instrument, shall be 178 mm.

Dimensions in millimetres

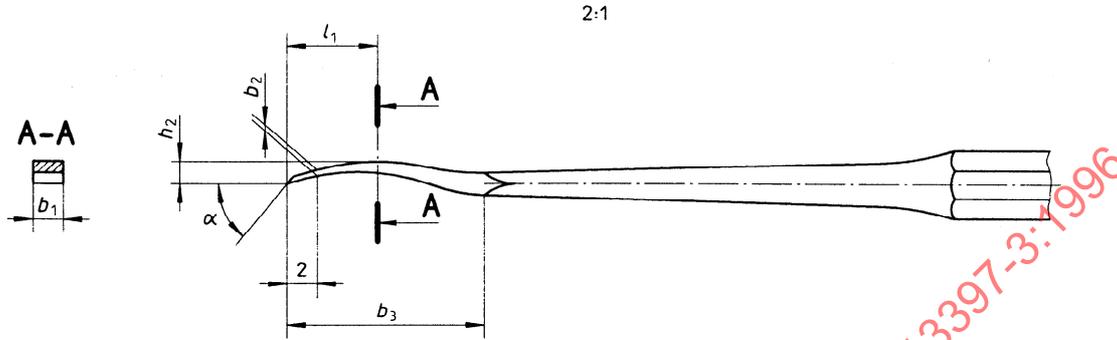


Figure 1 — Dental scalers — H-types 3 and 4 (chisel)

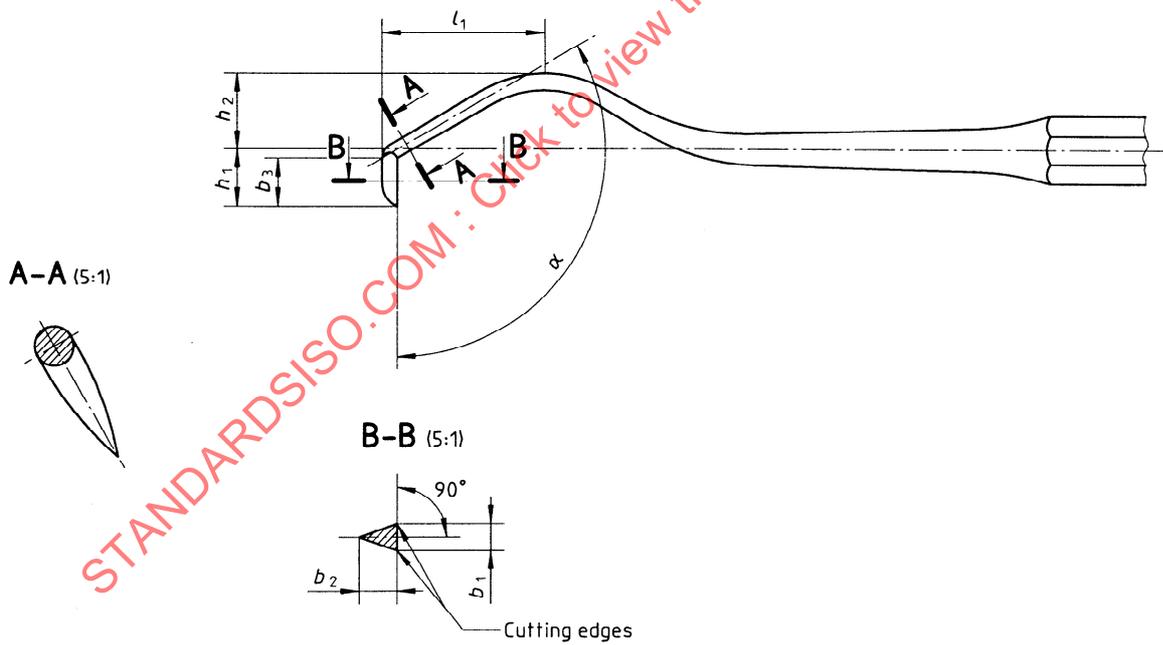


Figure 2 — Dental scalers — H-type 5 (cleoid)

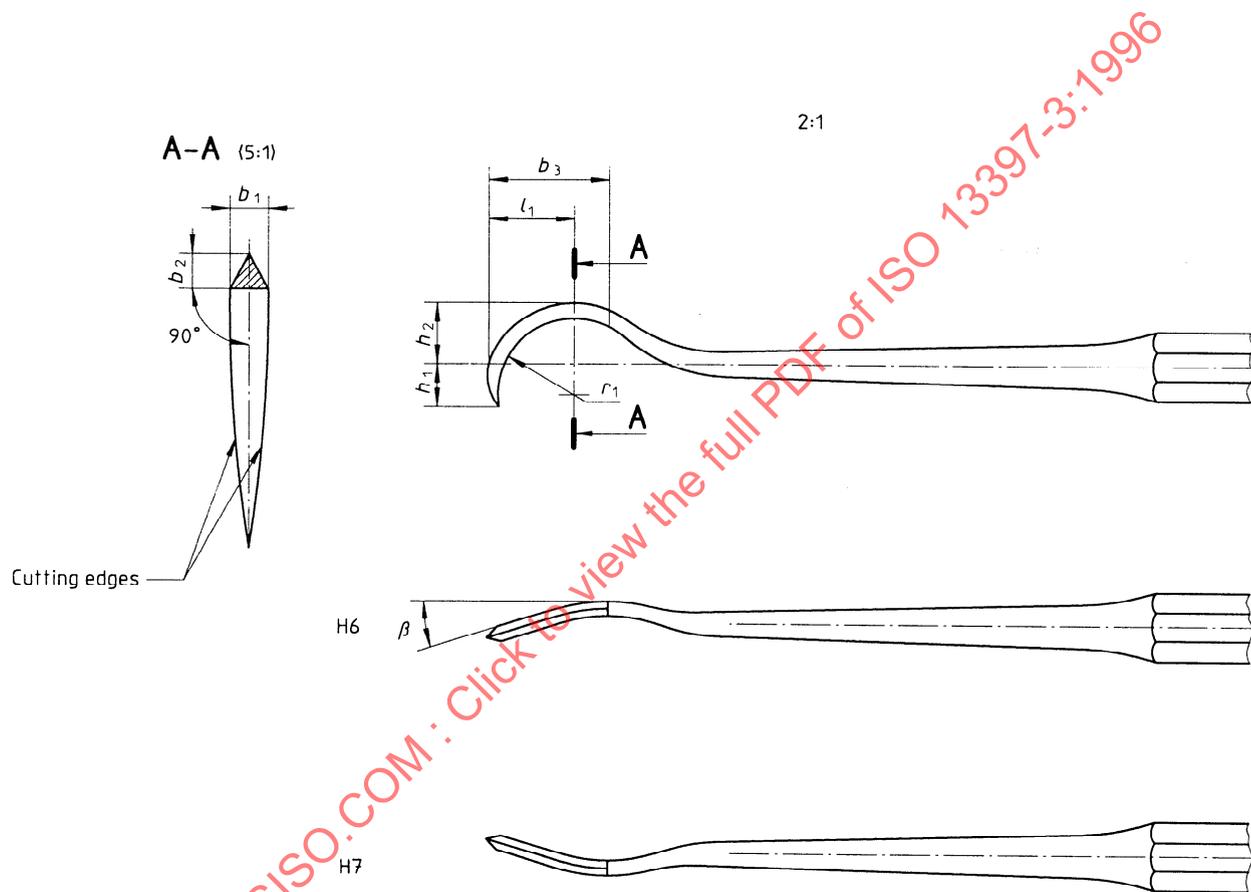


Figure 3 — Dental scalers — H-types 6 and 7 (sickle)

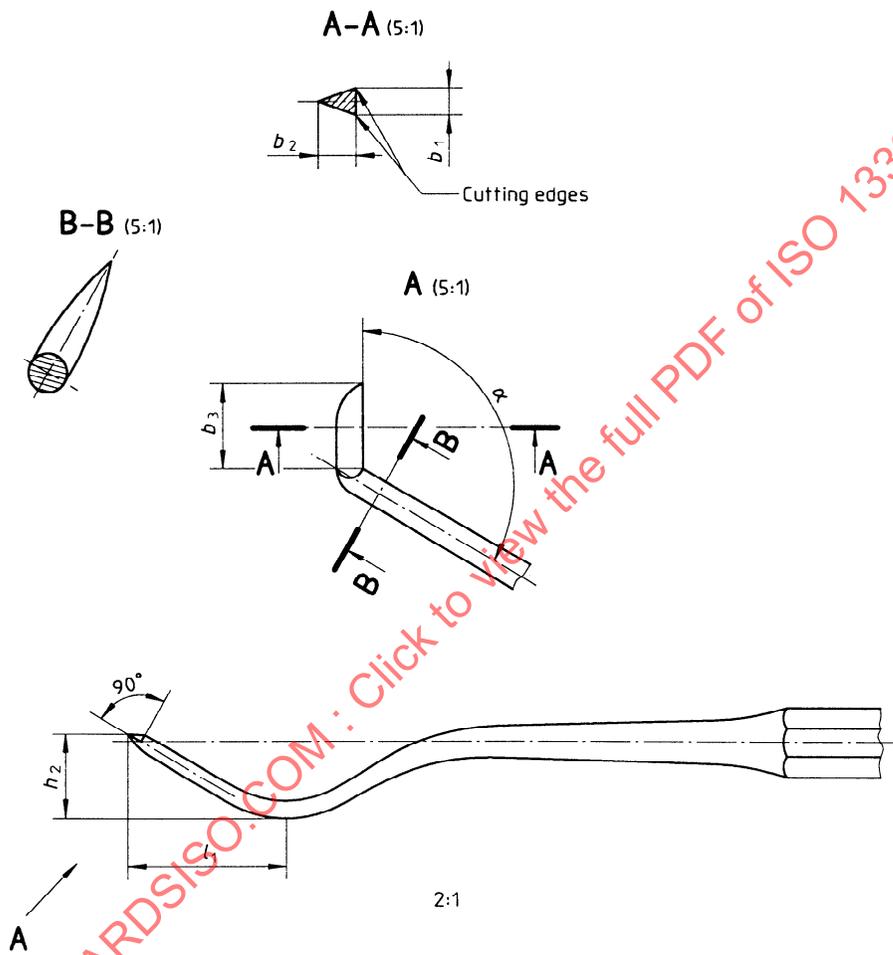


Figure 4 — Dental scalers — H-type 8 (cleoid)

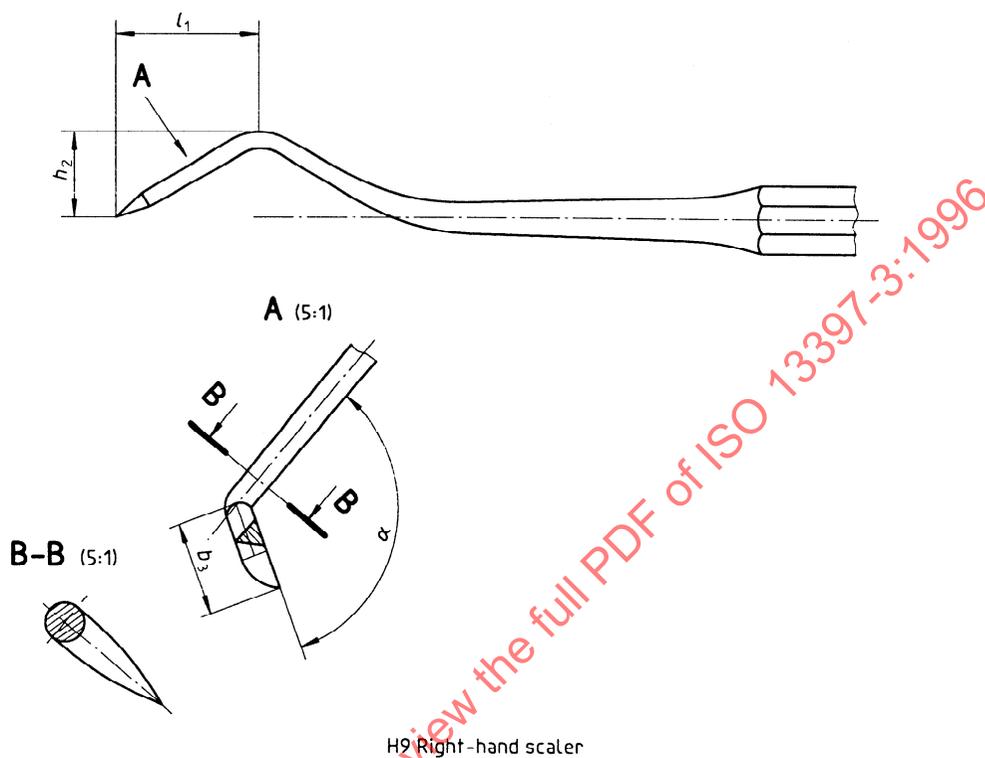


Figure 5 — Dental scalers — H-type 9 (cleoid)

Table 1 — Dimensions of H-type scalers

Dimensions in millimetres  
(angular dimensions in degrees)

Type	$b_1$ $\pm 0,15$	$b_2$ $\pm 0,1$	$b_3$	$h_1$ $\pm 0,3$	$h_2$ $\pm 0,5$	$l_1$ $\pm 0,7$	$r_1$	$\alpha$ $\pm 5$	$\beta$ $\pm 3$
H3 (chisel)	2	0,4	12 min.	—	1,5	6	—	50	—
H4 (chisel)	1,5	0,4	12 min.	—	1,2	6	—	50	—
H5 (cleoid)	0,7	1	$3,2 \pm 0,3$	3,8	5	10,7	—	120	—
H6 (sickle)	1	0,9	7 min.	2,8	4	5,7	5	—	17
H7 (sickle)	1	0,9	7 min.	2,8	4	5,7	5	—	17
H8 (cleoid)	0,7	1	$3,2 \pm 0,3$	—	5,5	10,1	—	120	—
H9 (cleoid)	0,7	1	$3,2 \pm 0,3$	—	5,5	10,1	—	120	—

Table 2 — Points of measurement for H-type scalers

Dimension		Point of measurement
$b_1$	Blade width	Measured at the widest point, unless a specific cross-section is indicated by AA, BB, ..., ZZ at a set distance from the datum point.
$b_2$	Blade thickness	Measured at the thickest point, unless a specific cross-section is indicated by AA, BB, ..., ZZ at a set distance from the datum point.
$b_3$	Blade length	Distance measured from the extreme tip of the blade, parallel to the centreline of the blade, to the blade/shank interface.
$h_1$	Blade height	Distance measured from the datum point, at right angles to the centreline of the instrument, to the farthest extremity of the blade.
$h_2$	Shank height	Distance measured from the datum point, at right angles to the centreline of the instrument, to the farthest external surface of the first bend of the shank.
$l_1$	Length to first bend	Distance measured from the datum point, parallel to the centreline of the instrument, to the highest point on the first bend.
$r_1$	Radius of blade	Radius of curvature of the inside of the blade (reference dimension only).
$\alpha$	Blade angle	Angle of glaze surface to the centreline of the blade, shank or instrument, whichever is appropriate.
$\beta$	Offset angle	With the instrument viewed at 90° to the standard position (i.e. a plan view) the angle between the centreline of the shank and a line, parallel to the centreline of the instrument, forming a tangent with the first bend of the instrument.

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