

---

---

**Materials and articles in contact with  
foodstuffs — Cutlery and table holloware —**

**Part 8:  
Requirements for silver table and  
decorative holloware**

*Matériaux et objets en contact avec les denrées alimentaires — Coutellerie  
et orfèvrerie de table —*

*Partie 8: Exigences relatives à l'orfèvrerie de table ou décorative en argent*



Reference number  
ISO 8442-8:2000(E)

© ISO 2000

**PDF disclaimer**

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

© ISO 2000

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.ch](mailto:copyright@iso.ch)  
Web [www.iso.ch](http://www.iso.ch)

Printed in Switzerland

## 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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

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 member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this part of ISO 8442 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 8442-8 was prepared by the European Committee for Standardization (CEN) in collaboration with ISO Technical Committee TC 186, *Cutlery and table and decorative metal hollow-ware*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

Throughout the text of this standard, read "...this European Standard..." to mean "...this International Standard...".

ISO 8442 consists of the following parts, under the general title *Materials and articles in contact with foodstuffs — Cutlery and table holloware*:

- *Part 1: Requirements for cutlery for the preparation of food*
- *Part 2: Requirements for stainless steel and silver-plated cutlery*
- *Part 3: Requirements for silver-plated table and decorative holloware*
- *Part 4: Requirements for gold plated cutlery*
- *Part 5: Specification for sharpness and edge retention test of cutlery*
- *Part 6: Lightly silver-plated table holloware protected by lacquer*
- *Part 7: Requirements for table cutlery made of silver, other precious metals and their alloys*
- *Part 8: Requirements for silver table and decorative holloware*

Annexes B to F form a normative part of this part of ISO 8442. Annexes A and G are for information only.

## Contents

	Page
Foreword	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Material	2
5 Uniformity and absence of defects	3
6 Performance	3
7 Marking and labelling	4
Annex A (informative)	5
Annex B (normative)	6
Annex C (normative)	8
Annex D (normative)	9
Annex E (normative)	10
Annex F (normative)	11
Annex G (informative)	12

## Foreword

The text of prEN ISO 8442-8:2000 has been prepared by Technical Committee CEN/TC 194 "Utensils in contact with food", the secretariat of which is held by BSI, in collaboration with Technical Committee ISO/TC 186 "Cutlery and table and decorative metal hollow-ware".

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2001, and conflicting national standards shall be withdrawn at the latest by March 2001.

Attention is drawn to the European Community Directives relative to materials in contact with foodstuffs, in particular Directive 89/109/EEC

EN ISO 8442 consists of the following parts:

- Part 1 : Requirements for cutlery for the preparation of food
- Part 2: Requirements for stainless steel and silver plated cutlery
- Part 3: Requirements for silver-plated table and decorative holloware
- Part 4: Requirements for gold-plated cutlery
- Part 5: Specification for sharpness and edge retention test of cutlery
- Part 6: Lightly silver plated table holloware protected by lacquer
- Part 7: Requirements for table cutlery made of silver, other precious metals and their alloys

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.



## 1 Scope

This Standard specifies material, performance and marking requirements for silver table and decorative holloware, intended for use at or upon the dining table. This standard extends to decorative items such as vases and candlesticks and includes such items as jugs, dishes, tea- and coffee-pots, trays and tureens and wine-coolers.

## 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

prEN ISO 1904 : 1995 Precious metals - Solders used with precious metal jewellery alloys  
ISO 4481: 1977 Cutlery and flatware — Nomenclature

## 3 Terms and definitions

For the purposes of this European Standard the terms and definitions given in ISO 4481: 1977 apply together with the following.

### 3.1

#### **table holloware**

items generally formed into a hollow shape for the containment of food or drink

NOTE Annex A gives examples for different types of table holloware.

### 3.2

#### **decorative holloware**

items generally formed into a hollow shape but not performing a purpose with respect to food or drink and including items which may not have a discernible interior surface

NOTE Annex A gives examples for different types of decorative table holloware.

### 3.3

#### **attachment**

component of an item of holloware joined to it by a process such as welding or soldering

NOTE Examples of attachment are handles, knobs, feet, spouts, stems and hinges

### 3.4

#### **load-bearing attachment**

attachment upon which a force resulting from the support of the mass of the holloware and/or its contents will be applied in normal use.

NOTE Examples are handles, taps, feet, bases, spouts and goblet stems.

### 3.5

#### **burrs**

metal in excess of that required to shape an article and which forms a thin plate at its edges.

### 3.6

#### **usable capacity**

volume of liquid required to fill a tank (e.g. tea-pot) to 15 mm  $\pm$  1 mm of its rim.

### 3.7

#### **popping**

sudden transformation of an apparently flat surface of an item of holloware from convex to concave when a load is applied to the convex side, usually accompanied by a distinctive sound.

## 4 Material

### 4.1 General

Table and decorative holloware shall be made of silver or its alloys with a minimum fineness of 800 (expressed in parts per thousand) that enable the finished product to meet all of the performance requirements of this standard and which shall be neither detrimental to health nor have any detrimental organoleptic effects.

### 4.2 Soldering

Precious metals in an article shall be soldered according to prEN 1904 : 1995.

### 4.3 Non-metals

Non-metal parts of silver table and decorative holloware may be made of such materials as glass, ceramics, wood, wood-plastics laminates, impregnated wood or similar materials provided that the finished holloware complies with the relevant performance requirements of clause 6. Non-metal parts of table holloware shall be capable of withstanding washing processes in aqueous solutions at 60 ° C.



## **5 Uniformity and absence of defects**

**5.1** All surfaces shall be free from cracks and other defects.

**5.2** All accessible edges shall be free from burrs and the roughness of blanked edges shall have been removed by a suitable operation.

**5.3** There shall be no gaps in excess of 0,4 mm between components. Seams joining hollow sections together shall be watertight unless required by the design.

**5.4** Compliance with the requirements of 5.1 to 5.3 shall be checked by touch or by visual inspection with the unaided eye and 5.3 with a feeler gauge of appropriate thickness.

## **6 Performance**

### **6.1 Strength under load**

#### **6.1.1 Resistance of rectangular and square trays and dishes to twisting**

The temporary deflection of a rectangular or square tray or flat dish exceeding 300 mm at its maximum axis shall not exceed 3,5 mm in 100 mm deviation from flat in any diagonal across the surface of the base when tested in accordance with the method described in Annex B.

#### **6.1.2 Resistance of trays and dishes to popping**

A tray or dish shall not exhibit popping when tested in accordance with the method described in Annex C.

### **6.2 Attachment strength**

There shall be no breakage, visible deformation or disengagement of any load bearing attachment when it is tested in accordance with the method described in Annex D.

### **6.3 Stability**

When placed on a hard plane surface an item with feet shall be stable within the clearance limit given in table 1 and no flat item shall be capable of being freely spun around by the application of a tangential force.

**Table 1 — Stability criteria**

Overall width of item at its widest axis mm	Maximum permitted clearance between any foot and a plane surface mm
< 100	0,25
100 to 150	0,40
> 150	1,0

#### 6.4 Pouring

Spout openings shall pour cleanly without dribbling when tested in accordance with the method described in Annex E.

#### 6.5 Handle temperatures

The maximum temperature of any point which is contacted by the hand in normal use on a handle of a vessel intended to contain hot liquid shall not exceed the following when tested in accordance with the method described in Annex F:

- for handles of plastics, wood or similar material: 70° C;
- for glass, porcelain or similar: 60° C;
- for insulated metal handles: 50° C.

### 7 Marking and labelling

Each item of silver table and decorative holloware shall be legibly and indelibly marked with the name and/or trade mark or other means of identifying the manufacturer or responsible supplier.

The following information should be made available at the point of sale:

- the number of this European Standard and
- a statement that the item meets the requirements of the standard.

This information may be provided as leaflets on the packaging or by means of labelling or on a display card or in any other suitable form.

**Annex A**  
**(informative)**

**Table A.1 — Classification by product type**

Typical Products	Classification	
	Article in contact with foodstuffs <sup>1)</sup> (Table holloware)	Article not in contact with foodstuffs (Decorative holloware)
Food plates, dishes, trays, bowls, baskets, containers and any lids thereof	+	
Trays (general purpose), ashtrays		+
Finger bowls, knife rests, napkin rings		+
Cups, mugs, goblets	+	
Saucers, coasters, mats, stands		+
Teapots, coffee pots, strainers	+	
Jugs, pitchers, ewers, sauceboats	+	
Condiment and sugar containers and dispensers	+	
Condiment and cruet stands		+
Bread, fruit and vegetable baskets, bowls and plates	+	
Food tongs, skewers, crackers, scissors, squeezers, graters	+	
Nutcrackers, cork tongs		+
Cocktail shakers, preparation tools and serving equipment	+	
Wine bottle stoppers, pouring lips, tasting and decanting equipment	+	
Wine baskets, buckets, trays, racks, corkscrews, bottle openers		+
Place markers, menu holders, centrepiece accessories		+
Flower holders, vases, bells, candle holders, lamps		+
Hotplates		+
Trophies, display plates, photo frames		+
<sup>1)</sup> If unlined		

## Annex B (normative)

### Test method for the resistance of rectangular and square trays and dishes to twisting

#### B.1 Principle

Rectangular and square trays and dishes are examined for twisting deformation during the application of a load simulating that likely to occur in normal use.

#### B.2 Apparatus

**B.2.1 Supports**, rigid rectangular bars with one side  $70 \text{ mm} \pm 5 \text{ mm}$ .

**B.2.2 Loads**, cylindrical weights of diameter  $80 \text{ mm} \pm 5 \text{ mm}$  and a mass  $2,5 \text{ kg} \pm 0,1 \text{ kg}$ .

NOTE The supporting area of the bars and the base area of the weights may be covered by, for example, felt or baize to minimize scratching of plated surfaces.

#### B.3 Procedure

**B.3.1** Support the test specimen on two bars placed at diagonally opposite corners, as shown in figure B.1 and load the supported test specimen with two weights disposed at the adjoining extreme corners of the test specimen. After not less than 30 s measure and record the temporary deflection of the loaded surface.

**B.3.2** Move the supporting bars to the adjoining corners of the test specimen and repeat.

#### B.3.3 Expression of results

Calculate the total deflection under load from the following:

$$d = \frac{100(a + b)}{L}$$

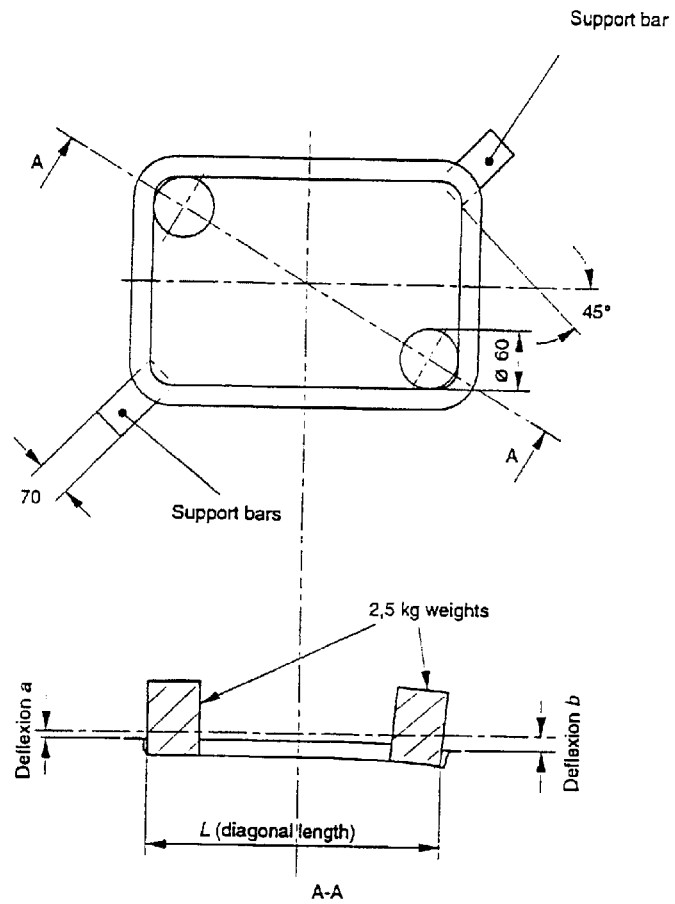
where

*d* is the total deflection under load expressed as millimetres of deflection per 100 mm of tray length (mm / 100 mm)

*a* is the temporary deflection of the loaded surface at point a

*b* is the temporary deflection of the loaded surface at point b

*L* is the diagonal length.



NOTE Corners of support bars are coincident with the edge of the flat base area

**Figure B.1 — Twist test for trays and dishes**

**Annex C**  
**(normative)**

**Test method for the resistance of trays and dishes to popping**

**C.1 Principle**

Trays and dishes are examined for popping by the application of a load simulating that likely to occur in normal use.

**C.2 Apparatus**

**C.2.1 Load**, according to Annex B.2.2.

**C.3 Procedure**

**C.3.1** Raise the test specimen clear of any supporting surface by its normal means of lifting and apply the cylindrical weight to any appropriate point on the flat surface of the test specimen and then remove it. Record whether any popping of the loaded surface occurs during application and/or removal of the load.

**C.3.2** Turn the test specimen over and repeat C.3.1.

## **Annex D** **(normative)**

### **Test methods for strength of attachments**

#### **D.1 Principle**

Attachments to holloware are examined for breakage, deformation or disengagement resulting from the application of a force simulating that likely to occur as the result of a minor abuse such as dropping.

#### **D.2 Apparatus**

**D.2.1 Load,** metal weight of mass  $10 \text{ kg} \pm 0,01 \text{ kg}$  suspended from a cord terminating in a loop or clamp.

#### **D.3 Procedure**

**D.3.1** Loop the cord around, or clamp it to, the attachment to be tested and raise the test specimen so that the weight is in free suspension with its mass acting vertically downwards.

**D.3.2** Rotate the test specimen so that the force is transferred to all relevant points on the attachment and record any breakage, deformation or disengagement of the attachment.

## Annex E (normative)

### Test method for pouring

#### E.1 Principle

The pouring efficiency of spouts is evaluated by tilting the vessel, filled to its usable capacity with water, at a controlled rate.

NOTE Traces of detergent from washing processes promote dribbling; any vessel which has been washed with the aid of a detergent should be thoroughly rinsed not less than five times in deionized water prior to testing for pouring efficiency.

#### E.2 Apparatus

**E.2.1 Tilt platform**, capable of traversing an angle of  $70^\circ$  at  $(5 \pm 1)^\circ/\text{min}$ .

#### E.3 Procedure

**E.3.1** With the platform in the horizontal position, place the specimen under test upon it (suitably restrained, e.g. by means of a large rubber band) and fill it to within  $15 \text{ mm} \pm 1 \text{ mm}$  of the rim with deionized water at  $20^\circ\text{C} \pm 5^\circ\text{C}$ . Tilt the platform at  $5^\circ \pm 1^\circ$  per minute so that water emerges only from the spout, until an angle of  $10^\circ \pm 1^\circ$  to the horizontal is reached. Record the form of pouring which takes place. Return the platform to the horizontal position at the same speed and record whether dribbling down the outside of the test specimen occurs.

NOTE If water emerges over the rim of a vessel in this test, the pouring angle should be reduced progressively until this no longer occurs.

**E.3.2** Repeat the procedure described in E.3.1 for angles increasing successively by  $10^\circ \pm 1^\circ$  to a maximum of  $70^\circ$ .



## **Annex F** **(normative)**

### **Method of test for handle temperature**

#### **F.1 Principle and apparatus**

Fill the tank (e.g. tea-pot) to its usable capacity with hot water simulating its use in service and measure the maximum temperature reached by the handle using a thermocouple, accurate to  $\pm 3$  °C in the range 30 °C to 100 °C and consisting of a surface contact probe capable of being held in intimate contact with the handle.

**Annex G**  
**(informative)**

**A-deviations**

A-deviation: National deviation due to regulations, the alteration of which is for the time being outside the competence of the CEN/CENELEC member.

This European Standard does not fall under any Directive of the EU. In the relevant CEN/CENELEC countries these A-deviations are valid instead of the provisions of the European Standard until they have been removed.

<u>Clause</u>	<u>Deviation</u>
<b>4.2</b>	<b>United Kingdom</b> Hallmarking act 1973: Chapter 43 Section 4 Subsection 3 paragraph (b)(ii)  The minimum fineness of solders used with silver articles shall be 650.
<b>4.2</b>	<b>Denmark</b> Order governing the activities of the Precious Metals Inspectorate 1995: Section 3 Subsection 8 Paragraph b)  The minimum fineness of solders used with silver articles of fineness 925 shall be 650.



**ISO 8442-8:2000(E)**

---

---

**ICS 67.250; 97.040.60**

Price based on 12 pages

© ISO 2000 – All rights reserved

Copyright International Organization for Standardization  
Provided by IHS under license with ISO  
No reproduction or networking permitted without license from IHS

Not for Resale