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SRI LANKA STANDARD 413 : 1977

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SPECIFICATION FOR STAINLESS STEEL SPOONS AND FORKS

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BUREAU OF CEYLON STANDARDS

SPECIFICATION FOR STAINLESS STEEL SPOONS AND FORKS

S. L. S. 413 : 1977
(Attached AMD 47)

Gr. 4

BUREAU OF CEYLON STANDARDS
53, Dharmapala Mawatha,
COLOMBO 3.

SRI LANKA STANDARD SPECIFICATION FOR STAINLESS STEEL SPOONS AND FORKS

FOREWORD

This Sri Lanka Standard Specification has been prepared by the Drafting Committee on Table Cutlery. It was approved by the Mechanical Engineering Divisional Committee of the Bureau of Ceylon Standards and was authorised for adoption and publication by the Council of the Bureau on 1977-05-11.

This Specification covers spoons and forks made of stainless steel. Spoons and forks manufactured using other materials will be covered in separate specifications. This standard is in two parts. Part 1 specifies the general requirements, sampling and marking. Part 2 covers specific patterns which are mainly intended for the guidance of public institutions. However, provisions have been made for the manufacture of any other design by agreement between the purchaser and the supplier.

All standard values in this specification are in the International System of Units (SI Units).

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with CS 102 : 1971*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

The assistance derived from the publications of the British Standards Institution and the Indian Standards Institution in the preparation of this standard is acknowledged.

1. SCOPE

This Sri Lanka Standard specifies the requirements for spoons and forks made of stainless steel. The following types are covered in this standard.

1.1 Spoons : Table spoon
Dessert spoon
Tea spoon

* C. S. 102 : 1971 - Presentation of Numerical Values.

Fruit spoon
Soup spoon
Coffee spoon

1.2 Forks : Table fork
Fish fork

PART 1 — GENERAL REQUIREMENTS, SAMPLING AND MARKING

2. GENERAL REQUIREMENTS

2.1 Material — The stainless steel used for the manufacture of cutlery shall have one of the following compositions.

		Steel 1 *Weight per cent*	Steel 2 *Weight per cent*	Steel 3 *Weight per cent*
Carbon	—	0·10 max.	0·12 max.	0·16 max.
Silicon	—	0·80 max.	0·20 — 1·00	0·20 max.
Manganese	—	1·00 max.	0·50 — 2·00	2·00 max.
Nickel	—	0·50 max.	7·5 — 9·5	11·0 — 14·0
Chromium	—	16·0 — 18·0	17·5 — 19·5	11·0 — 14·0
Sulphur	—	0·05 max.	0·05 max.	0·05 max.
Phosphorous	—	0·05 max.	0·05 max.	0·05 max.

Note : The sum of the Chromium and Nickel contents for Steel 3 shall be not less than 23·0 per cent.

2.2 Manufacture — Spoons and forks shall be forged or pressed to shape in one piece.

Alternatively, when separate handles are fixed they shall be of hollow stainless steel. Hollow stainless steel handles shall be welded at the ends and attached to the rest of the article by welding or hard soldering.

2.3 Dimensions and design

2.3.1 Spoons

2.3.1.1 Bowls—The bowls of spoons shall be of the finished thickness specified in Table 1, according to their overall length ; the thickness measurement shall be taken at the widest part of the bowl and 6·4 mm from the edge.

Table 1 — Thickness of Spoon Bowls

Spoon linear length		Bowl thickness
mm		mm
Over	Upto	
65	100	0·63 to 0·89
100	140	0·89 to 1·14
140	180	1·02 to 1·27
180	230	1·14 to 1·40
230	295	1·40 to 1·65
295	355	1·52 to 2·03

2.3.2 Forks

2.3.2.1 Prongs—Fork prongs shall be equal in length uniformly aligned and shall be separated by evenly spaced gates. Permissible tolerances for length of prongs and gates shall be $\pm$ 1 per cent and + 3 per cent respectively. They shall be uniformly tapered at the points as shown in Fig. 1. The prong roots shall be smoothly radiused and chamfered to procure a satisfactory blending of prongs with the bosom.

Fig. 1 — Typical Fork Prong Point Profile.

2.4 Finish and Alignment — All metal surfaces except prong insides, which shall be finely ground right down to the roots, shall be supplied with a mirror finish or satin finish at the option of the purchaser.

All edges including those of shanks, bowls and prongs both inside and outside shall be free from any flash and roughness.

All non-metallic surfaces shall be perfectly smooth and free from file or glazing marks and flash. They shall be brought to either a high gloss or satin finish at the option of the purchaser.

All surfaces shall be free from cracks, pits and other defects. All articles shall be symmetrical except when lack of symmetry is an intentional feature of the design. Like items within a batch shall show no noticeable variation in shape and form.

2.5 Rigidity of Handles — When tested by the method given in Appendix A, applying a load of 27·0 N, the permanent deflection shall not exceed 1 mm.

2.6 Resistance to Corrosion and Staining — Stainless steel spoons and forks shall show no sign of corrosion, etching or staining when subjected to the test described in Appendix B.

3. SAMPLING

The number of spoons and forks to be selected from a lot for ascertaining conformity to this specification shall be as agreed to between manufacturer and purchaser. A suitable sampling scheme and criteria for conformity are given in Appendix C.

4. MARKING

Each item shall be legibly and indelibly marked on the underside of the handle with the words "Stainless Steel" or "SS" and the manufacturer's name or trade mark.

* PART 2 — SPECIFIC PATTERNS

5.

Spoons and forks supplied in accordance with Part 2 of this standard shall comply with the general requirements specified in Part 1, and in addition shall be made to the dimensions and shapes shown in Tables 2 and 3 and Figs. 2, 3, 4, 5 and 6 accordingly. When an order is placed the purchaser should state whether the designs given in this part or any other design is required.

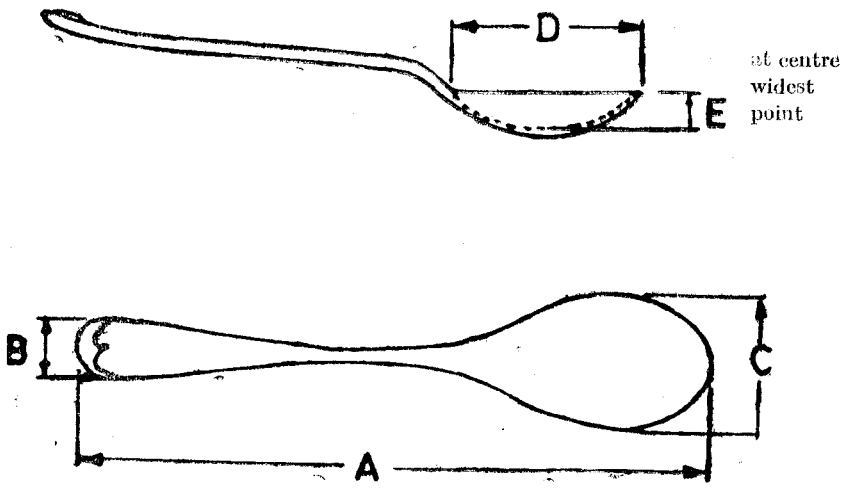


Fig. 2 - Spoons

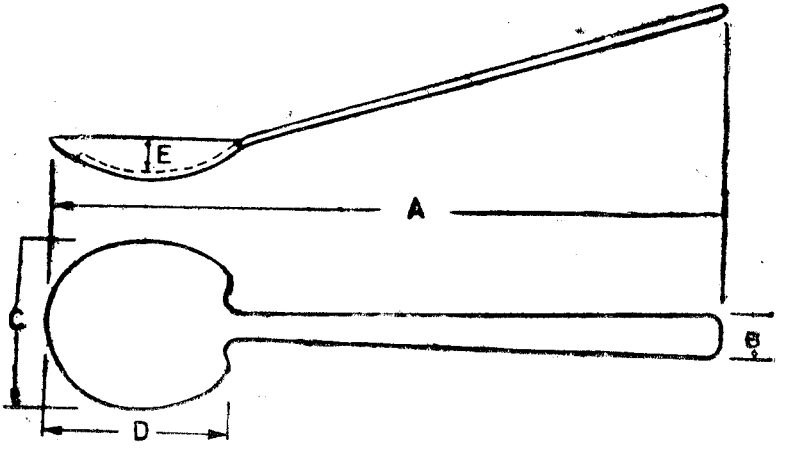


Fig. 3 - Fruit Spoon

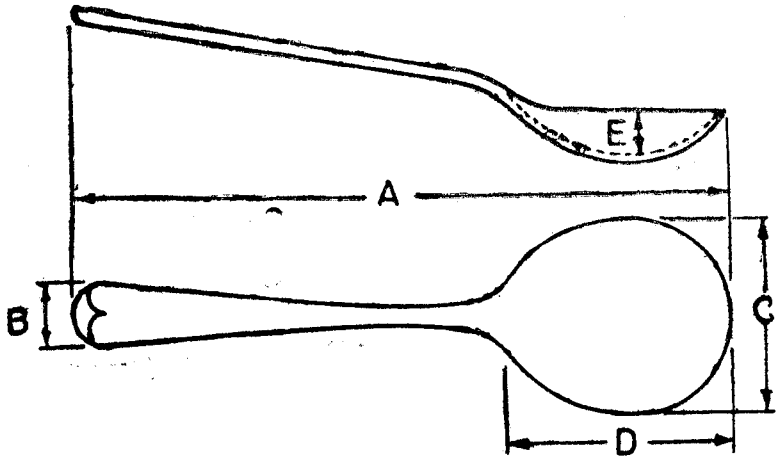


Fig. 4 - Soup Spoon

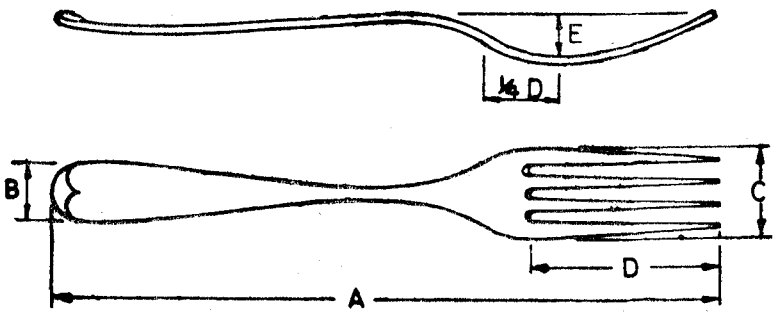


Fig. 5 - Fork

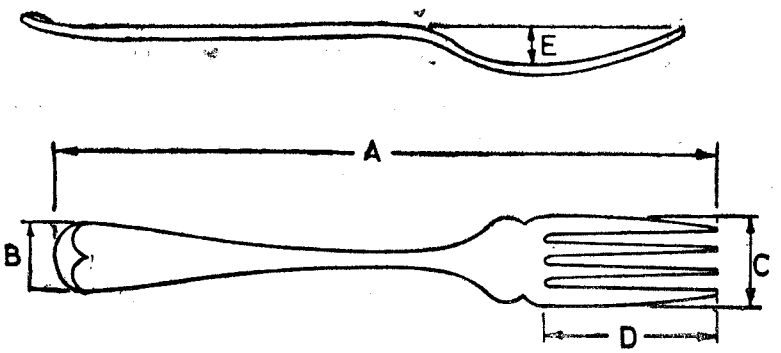


Fig. 6 - Fish Fork

Table 2 — Dimensions of Spoons (Clause 5)

Description	A	B	C	D	E
	mm	mm	mm	mm	mm
Table spoon	216 ± 1·5	19	49	76	13
Dessert spoon	175 ± 1·5	19	43	64	10
Tea spoon	134 ± 1·5	14	32	49	7
Fruit spoon	150 ± 1·5	11	38	42	8
Soup spoon	180 ± 1·5	18	51	62	15
Coffee spoon	111 ± 1·5	11	24	36	7

Table 3 — Dimensions of Forks (Clause 5)

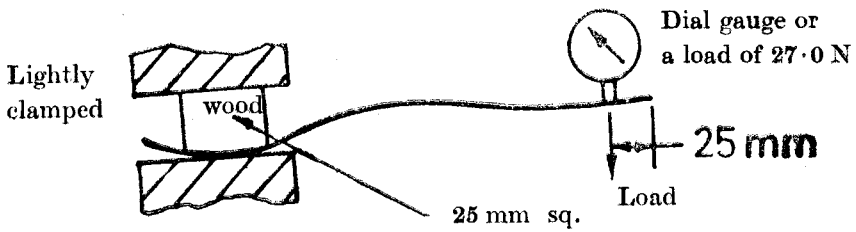
Description	A	B	C	D	E
	mm	mm	mm	mm	mm
Table fork	181 ± 1·5	19	24	48	13
Fish fork	184 ± 1·5	19	26	45	15

* APPENDIX A — RIGIDITY OF HANDLES

(Clause 2·5)

The item to be tested shall be rigidly clamped from its bowl or prongs as the case may be (see Figure A — 1). A load of 27·0 N shall be applied at the end of the handle for two minutes and then removed. The permanent deflection shall be measured after removal of the load.

Arrangement for Spoons



Arrangements or Forks

Fig. A-1 Arrangements for test for rigidity of handles (Appendix A)

APPENDIX B — STAINING TEST

(Clause 2·6)

Wash the article thoroughly in hot, soapy water using a soft cloth, rinse in clean hot water and air dry it after the loose water has been shaken off. Then immerse the article for half-an-hour in 5 per cent acetic acid (by volume) in distilled water, rinse, wipe and examine.

APPENDIX C — SAMPLING SCHEME AND CRITERIA FOR CONFORMITY

(Clause 3)

C - 1 Scale of Sampling

C - 1.1 **Lot** — In any consignment, all items of the same type of handle, shape and size manufactured from the same material under relatively similar conditions of manufacture shall be grouped together to constitute a lot.

C - 1.2 For ascertaining the conformity to the requirements of this specification, the tests shall be conducted separately for each lot.

C - 1.3 The number of items to be selected from a lot for ascertaining conformity with the requirements of this specification shall be according to Column 2 of Table C - 1. The items in the sample shall be selected at random from the lot. If the items are packed in cartons, as a first step at least 25 per cent of the cartons shall be selected at random and then from each selected carton, equal number of items as far as possible shall be taken out at random so as to make the required sample size.

C - 2 Number of Tests and Criteria for Conformity

C - 2.1 The items selected at random according to Clause C - 1.3 shall be examined for the requirements of Clauses 2·3 and 2·4. An item failing to satisfy any one or more of these requirements shall be regarded as defective. The lot shall be considered as conforming to the requirements of Clauses 2·3 and 2·4, if the number of defective items in the sample does not exceed the number given in Column 3 of Table C - 1.

C - 2.2 If the lot conforms to the requirements of Clauses 2.3 and 2.4, a sub-sample of size given in Column 4 of Table C - 1 shall be taken from the items selected as in Clause C - 1.3. The sub-sample shall be divided into two equal parts. One part shall be tested for Clause 2.5 and the other for Clause 2.6. An item not satisfying any one or more of the requirements of Clauses 2.5 and 2.6 shall be regarded as defective. The lot shall

be considered to conform to the requirements of Clauses 2.5 and 2.6 if the number of defectives in the sub-sample does not exceed the number given in Column 5 of Table C - 1.

C - 2.3 The lot shall be considered as conforming to the requirements of this specification if after the inspection of the samples as laid down in Clauses C - 2.1 and C - 2.2, the lot is found in conformity with the requirements of Clauses 2.3, 2.4, 2.5, and 2.6 and otherwise not.

Table C - 1

Scale of Sampling and Permissible Number of Defectives

(Clauses C - 1.3, C - 2.1 and C - 2.2)

No. of items in a lot	For Clauses 2.3 and 2·4		For Clauses 2.5 and 2·6	
	Sample size	Permissible number of defective items	Sub-sample size	Permissible number of defective items
(1)	(2)	(3)	(4)	(5)
Up to 50	5	0	2	0
51 to 150	18	1	4	0
151 to 500	32	3	6	0
501 to 1000	50	5	8	0
1001 to 3000	80	7	12	1
3001 to 10000	125	10	16	1
10001 and above	200	14	20	2

AMENDMENT NO. 1 APPROVED ON 1981-07-28.

SLS 413:1977 SPECIFICATION FOR STAINLESS STEEL SPOONS AND FORKS

Page 6 Clause 2.3.1.1 Bowls

Add following sentence to the end of the paragraph.

'Unless otherwise specified, spoons shall be manufactured according to the dimensions given in Table 2.

Page 7 Clause 2.3.2.1 Prongs

Add the following sentence to the end of the paragraph.

'Unless otherwise specified forks shall be manufactured according to the dimensions given in Table 3'.

Page 9 Fig. 2 - Spoons

Delete the existing figure and substitute the following figure.

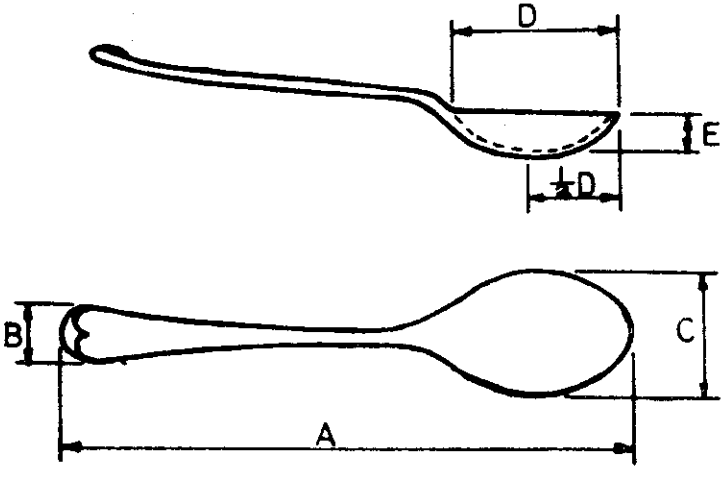


FIGURE 2 - Spoons

Fig. 3 - Fruit spoon

Delete the existing figure and substitute the following figure.

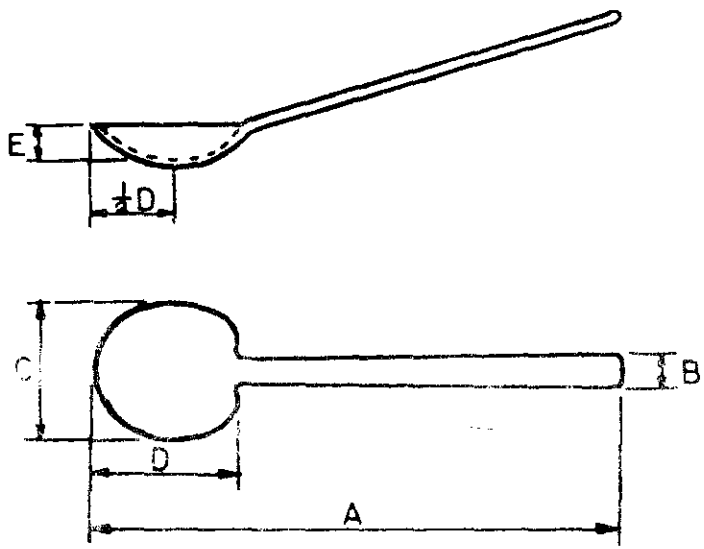


FIGURE 3 - Fruit spoon

Page 10 Fig. 4 - Soup spoon

Delete the existing figure and substitute the following figure.

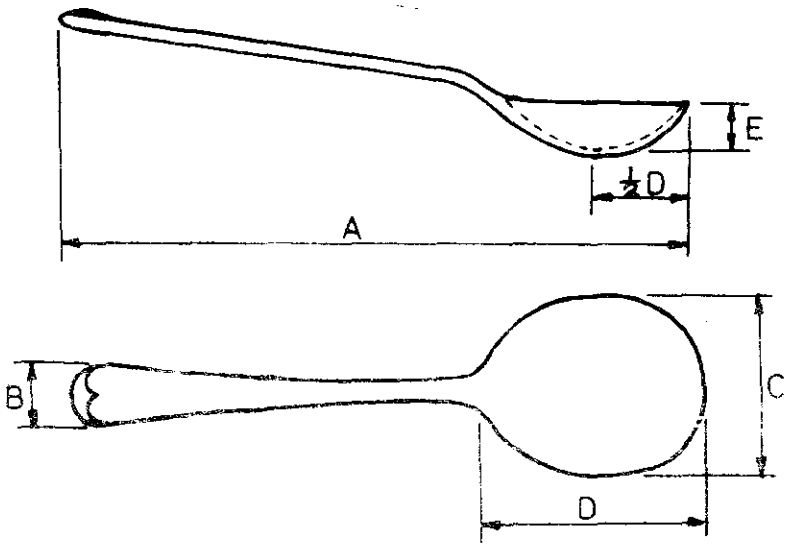


FIGURE 4 - Soup spoon

Fig. 5 - Fork

Delete the existing figure and substitute the following figure.

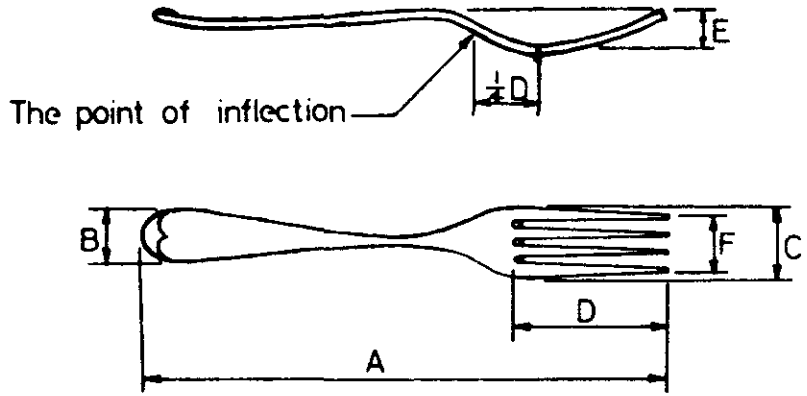


FIGURE 5 - Fork

Fig. 6 - Fish fork

Delete the existing figure and substitute the following figure.

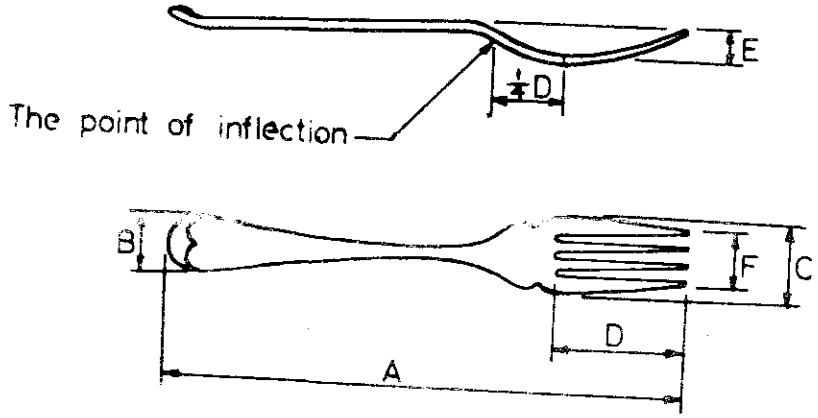


FIGURE 6 - Fish fork

Page 11 Table 3 - Dimensions of forks (clause 5)

Delete the existing table and substitute the following table.

Description	A	B	C	D	E	F
	mm	mm	mm	mm	mm	mm
Table fork	181 ± 1.5	19	24	48	13	16
Fish fork	184 ± 1.5	19	26	45	15	17

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