BUREAU OF INDIAN STANDARDS

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भारतीय मानक मसौदा

औद्योगिक सिलाई मशीनें (लाइट ड्यूटी) — स्टैंड — विशिष्टि

(पहला पुनरीक्षण)

DRAFT Indian Standard

INDUSTRIAL SEWING MACHINES (LIGHT DUTY) — STAND — SPECIFICATION

(First Revision)

ICS 61.080

Sewing Machines Sectional	Last date for receipt of comments:
Committee, MED 29	07 July 2025

FOREWORD

(Formal clause will be added later)

This standard was first published in 1997. This standard is being revised to keep pace with the latest technological developments and international practices. Also, in this revision, the standard has been brought into the latest style and format of Indian Standards, and references of Indian Standards, wherever applicable have been updated. BIS certification marking clause has been modified to align with the revised *Bureau of Indian Standards Act*, 2016.

This standard is one of the series of Indian Standards published on industrial sewing machines.

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 or analysis, shall be rounded off in accordance with IS 2:2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded-off value should be the same as that of the specified value in this standard.

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DRAFT Indian Standard

INDUSTRIAL SEWING MACHINES (LIGHT DUTY) — STAND — SPECIFICATION

(First Revision)

1 SCOPE

This standard lays down the requirements for treadle/electric motor driven stand used with wooden table for light duty sewing machines for industrial use.

2 REFERENCES

The standards listed below contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards listed below.

IS No.	Title
IS 210: 2009	Grey iron castings – Specification (fifth revision)
IS 1570 (Part 2/Sec 1): 1987	Schedules for wrought steels: Part 2 Carbon steels (unalloyed steels): Section 1 Wrought products (other than wires) with specified chemical composition and related properties (<i>first revision</i>)

3 TERMINOLOGY

The terminology for the stand shall be as indicated in Fig. 1.

4 MATERIALS

- **4.1** Cast iron parts shall be manufactured from cast iron corresponding to Grade FG 150 of IS 210.
- **4.2** Steel parts shall be manufactured from any suitable steel, such as designation 20C8 or 40C8 of IS 1570 (Part 2/Sec 1).

5 HARDNESS

Steel parts manufactured from 40C8 or 20C8 steel shall have a minimum hardness of 400 HV. Bearing surface of band wheel crank and hinge pins for treadle shall have a minimum hardness of 400 HV.

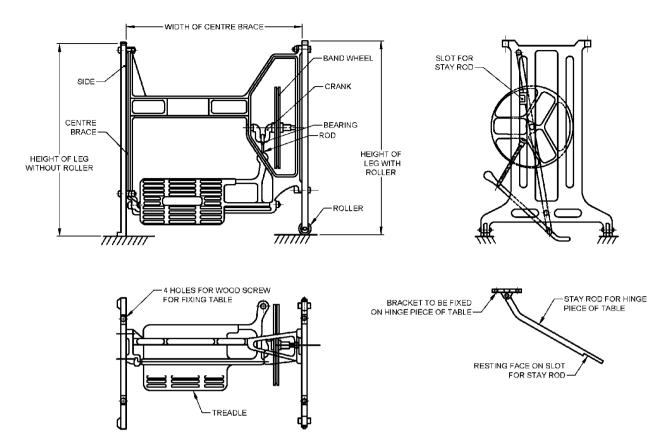


FIG. 1 NOMENCLATURE OF INDUSTRIAL SEWING MACHINE - STAND

6 DIMENSIONS

Dimensions of main parts shall conform to the following:

Height of leg (including rollers)	720 mm, <i>Min</i>
Height of leg (without rollers)	720 mm, <i>Min</i>
Width of centre brace	625 mm, <i>Min</i>
Diameter of band wheel (bottom of belt groove)	440 mm, <i>Min</i>
Size of treadle	$330 \text{ mm} \times 250 \text{ mm}$

7 WORKMANSHIP AND FINISH

- **7.1** Wheel groove and wheel rim shall have a smooth finish.
- **7.2** Parts shall be assembled firmly and shall function satisfactorily.
- **7.3** Band wheel crank shall function smoothly with minimum play.
- **7.4** Treadle shall function smoothly with minimum play.
- **7.5** All the hinge and bearing parts shall be properly lubricated.

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- **7.6** Right-hand leg shall be fitted with rollers and the rollers shall turn smoothly. Left-hand leg shall be without rollers. The two rollers and two legs shall sit firmly on the floor. Suitable vibration dampers may be provided for damping the vibrations transmitted to the operator.
- **7.7** Treadle shall have provision for spring loaded rod for starting, speed variation and stopping the electric motor (fitted on the underside of wooden table) with clutch unit. The electric motor shall be properly earthed and insulated.
- **7.8** All parts shall be sufficiently strong and rigid.
- **7.9** Castings shall be free from detrimental defects such as sand drops, blow holes, cracks, fins, burrs, etc. Casting shall be painted with stoving paint and shall be even baked. The paint contains shall be smooth and free from run, dust, marks, peelings, etc.
- **7.10** Steel parts shall be given antirust surface finish treatment.

8 MARKING

8.1 Each piece of the stand shall be legibly and indelibly marked with the source manufacture and trademark, if any.

8.2 BIS Certification Marking

The product may also be marked with the Standard Mark.

8.2.1 The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act*, 2016 and the Rules and Regulations framed thereunder, and the products may be marked with the Standard Mark.

9 PACKING

- **9.1** Each item of the painted cast iron component shall be wrapped separately in polyethylene bag after proper cleaning and removing dust, etc. in such a manner that no dust can enter it.
- **9.2** All the hardware items, pitman bearing, etc. shall be packed in a polyethylene bag.
- **9.3** Wrapped items of the stand shall be packed in a strong wooden/corrugated paper packing box along with a spanner, as per best prevailing practice in the trade. The number of stand sets to be packed in a packing box shall be as agreed to between the supplier and the purchaser.