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*भारतीय मानक मसौदा*

**घरेलू प्रयोजन की सिलाई मशीनों के लिए फ़ीड रॉक शाफ्ट — विशिष्टि**

*( आई एस 10304 पहला पुनरीक्षण )*

**DRAFT Indian Standard**

**FEED ROCK SHAFT FOR SEWING MACHINES FOR  
HOUSEHOLD PURPOSES — SPECIFICATION**

*( First Revision of IS 10304 )*

ICS 61.080

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**Sewing Machines  
Sectional Committee, MED 29**

**Last date for receipt of  
comments is 30 May 2022**

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**FOREWORD**

*(Adoption clauses to be added later)*

This standard was first published in 1982.

Major change in this revision is as follows:

- a) Pitch, radius, and thread dimensions have been modified.

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.

**DRAFT Indian Standard**

**FEED ROCK SHAFT FOR SEWING MACHINES FOR  
HOUSEHOLD PURPOSES — SPECIFICATION**

( *First Revision* )

**1 SCOPE**

This standard covers the requirements for feed rock shaft for sewing machines for household purposes.

**2 REFERENCES**

The standards listed below contains 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 subjected 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:

<i>IS No.</i>	<i>Title</i>
210: 2009	Grey iron castings — Specification ( <i>fifth revision</i> )
IS 2500 (Part 1) : 2000/ ISO 2859-1:1999	Sampling procedures for inspection by attributes: Part 1 Sampling schemes indexed by acceptance quality limit (AQL) for lot-by- lot inspection ( <i>third revision</i> )
IS 4905 : 2015/ ISO 24153: 2009	Random sampling and randomization procedures ( <i>first revision</i> )

**3 NOMENCLATURE**

The nomenclature shall be as shown in Fig. 1

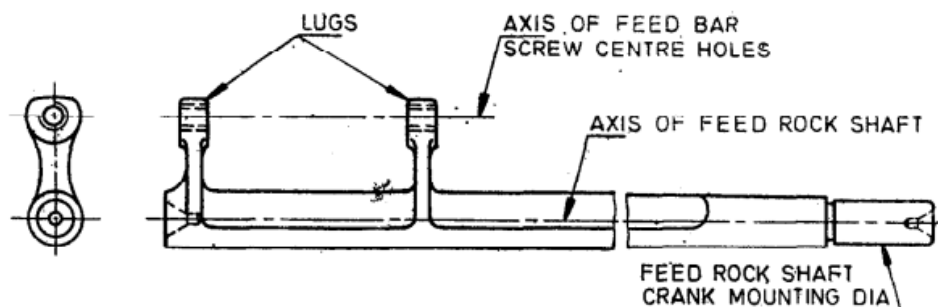


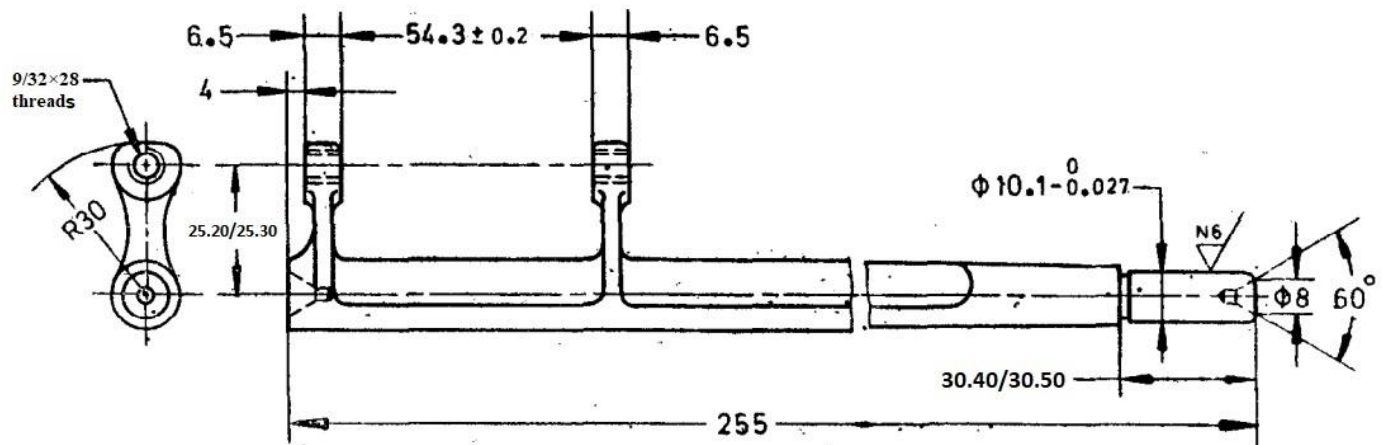
FIG. 1 NOMENCLATURE FOR FEED ROCK SHAFT

#### **4 MATERIAL**

The feed rock shaft shall be made from cast iron conforming to grade FG 150 of IS 210.

#### **5 DIMENSIONS**

The dimensions shall be as shown in Fig. 2



All dimensions in millimetres.

FIG. 2 DIMENSIONS FOR FEED ROCK SHAFT

#### **6 TOLERANCES**

The error in parallelism of the axis of feed rock shaft with the axis of feed bar screw centre holes shall not exceed 0.3 mm per 100 mm.

#### **7 WORKMANSHIP AND FINISH**

**7.1** The feed rock shaft crank mounting diameter and the centre holes shall be ground to a fine finish.

**7.2** The casting shall be free from defects, such as cracks, flaws or blow holes, and shall be suitably plated.

#### **8 MARKING**

The feed rock shafts shall be marked with the manufacturer's name or trade-mark if required.

##### **8.1 BIS Certification Mark**

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 product(s) may be marked with the Standard Mark.

## **9 PACKING**

Each feed rock shaft shall be either given a suitable antirust coating or wrapped in vapour phase inhibitor paper (commonly known as VPI paper). Wrapped feed rock shafts shall be securely packed in accordance with best prevalent trade practices. Each packing shall bear the manufacturer's name or trade-mark, the type, and description of the content.

## **10 SAMPLING**

**10.1** Unless otherwise agreed between the supplier and the purchaser, the sampling plan as given in Annex A shall be followed. For further information, reference may be made to IS 2500 (Part 1) / ISO 2859-1.

**ANNEX A**  
( *Clause 10.1* )  
**SCALE OF SAMPLING AND CRITERIA FOR CONFORMITY**

**A-1 SCALE OF SAMPLING**

**A-1.1 Lot**

In any consignment, all the feed rock shafts of the same type and manufactured from the same material under essentially similar conditions of manufacture shall be grouped together to constitute a lot.

**A-1.2** For ascertaining the conformity of the lot to the requirements of the specification, tests shall be carried-out for each lot separately. The number of feed rock shafts to be selected at random for this purpose shall be in accordance with column (2) and (3) of Table 1.

**A-1.3** If the feed rock shafts are packed individually, in order to ensure the randomness of selection, IS 4905 shall be used.

**A-1.4** If the feed rock shafts are packed in different cartons, a suitable number of cartons (not less than 20 percent of the total in the lot subject to a minimum of 2) shall be chosen at random. From each of the cartons so chosen, an approximately equal number of feed rock shafts shall be picked up from its different parts so as to obtain the required number of feed rock shafts specified in column (3) of Table 1.

**A-2 NUMBER OF TESTS AND CRITERIA FOR CONFORMITY**

**A-2.1** The feed rock shafts selected according to **A-1.2** and **A-1.3** or **A-1.4** shall be examined for dimensions (*see 5*), tolerances (*see 6*) and workmanship and finish (*see 7*). If number of feed rock shafts failing to meet one or more of the requirements mentioned above is less than or equal to the permissible number of defectives given in column (4) of Table 1, the lot shall be declared as conforming to the requirements of these characteristics.

**Table 1 Scale of Sampling and Permissible Number of Defectives**

(*Clauses A-1.2, A-1.4 and A-2.1*)

SI No.	Number of Feed Rock Shaft <i>N</i>	For Dimensions, Tolerances, Workmanship and Finish	
(1)	(2)	Sample Size <i>n</i> (3)	Permissible Number of Defectives* (4)

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i)	Up to 15	5	0
ii)	16 to 40	8	0
iii)	41 to 110	13	0
iv)	111 to 300	20	1
v)	301 to 500	32	1
	501 to 800	50	2
vi)	801 to 1 300	80	3
vii)	1 301 and above	125	5

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\*This ensures that lots containing only 1.5 percent or less defectives shall be accepted most of the time.