

इंटरनेट

मानक

### Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 8671 (1977): Nail Puller [PGD 6: Earth, Metal And Wood Working Hand Tools]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”



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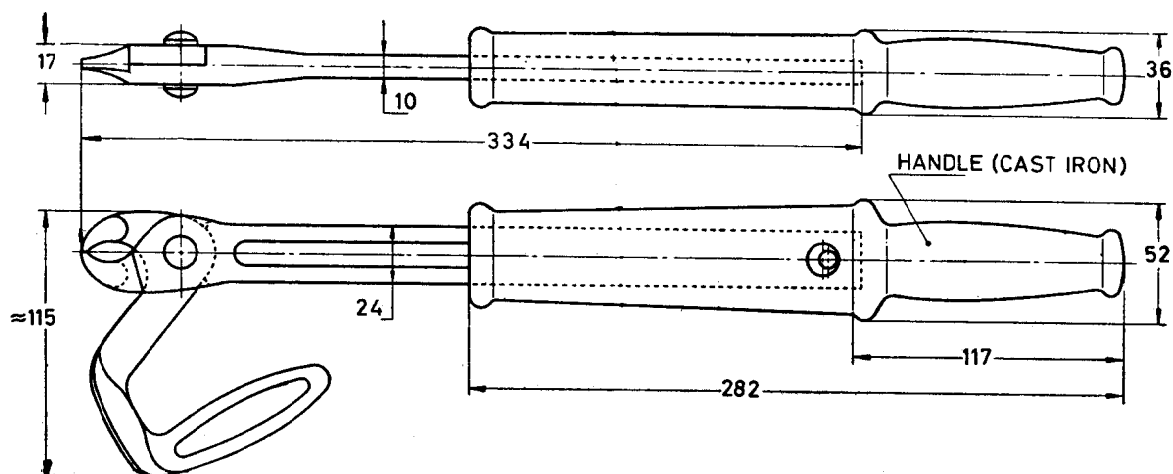


Indian Standard

## SPECIFICATION FOR NAIL PULLER

**1. Scope** — Covers requirements for nail puller.

**2. Dimensions**



All dimensions in millimetres.

FIG. 1 DIMENSIONS FOR NAIL PULLER

**3. Material** — Suitable material meeting the requirements laid down in 4 and 7.

*Suitable Examples:*

Component	Material
a) Straight shank and bend shank	C35Mn75, C45 specified in IS : 1875-1971 'Specification for carbon steel billets, blooms, slabs and bars for forgings (third revision) '.
b) Handles	Grey cast-iron grade 16 to 18. Mass about 1 to 1.5 kg.
c) Rivets	Conforming to IS : 2155-1962 'Specification for rivets for general purposes (below 12 mm diameter) '.

**4. Hardness** — A length of at least 15 mm from the tips of both the shanks shall have a hardness of 430 to 500 HV ( $\approx$  43 to 48 HRC).

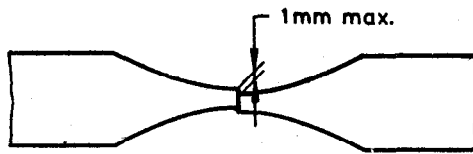
**5. General Requirements** — The straight and bend shanks shall be forged from steel bars. They shall be free from surface pits, cracks, overlaps, underfillings, left over flash, blow-holes, burning or overheating in process. The shanks and handle shall be protected against rust by a suitable surface coating like phosphating, blackening, painting, etc.

**5.1** The maximum opening at the tips shall be at least 10 mm.

**6. Tests**

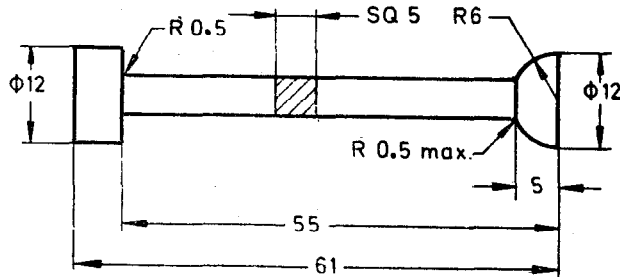
**6.1 Movement** — Both the shanks shall move freely about one another. When the nail puller is held vertical with tips upwards and full open by holding the bend shank with one hand, the bend shank shall close the opening by itself when it is released.

**6.2 Play** — When one shank is held firmly and the other shank is moved right and left as shown in Fig. 2, the amount of movement at the tip shall be 1 mm maximum.



**FIG. 2 PLAY AT TIP**

**6.3 Torque**—The pin for holding the tips while testing for torque shall be as shown in Fig. 3. The hardness of the pin shall be within 665 to 700 *HV* ( $\approx 58$  to 60 *HRC*).



**All dimensions in millimetres.**

FIG. 3 TORQUE TESTING PIN

**6.3.1** The handle shall be pulled out to its maximum position after the tips hold the nail pin as shown in Fig. 4. The testing torque 295N.m shall then be applied at the end of the handle for about one minute. At the end of the test, there shall be no crack, breakage, deformation and unsatisfactory movement of the shanks thus making the nail puller unfit for use.

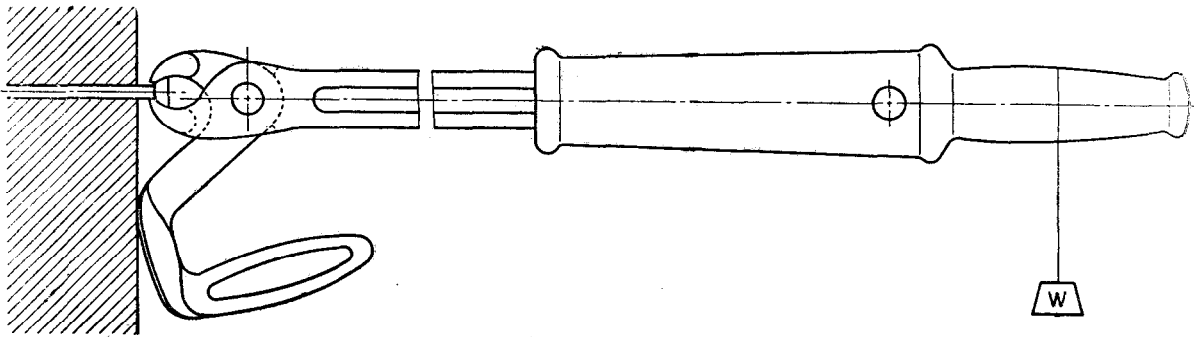


FIG 4 TORQUE TESTING

**7. Packing** — Each nail puller shall be wrapped in grease paper to prevent it from rusting, and packed in suitable cardboard.

## 8. Sampling

**8.1** Unless otherwise agreed to between the buyer and the seller the procedure given in IS:2500 (Part I)-1973 'Sampling inspection tables: Part I Inspection by attributes and by count of defects (first revision)' shall be followed for sampling inspection. The sampling plan given in 8.1.1 and 8.1.2 shall be followed for various requirements.

**8.1.1** For inspection of dimensions and general requirements the sampling plan corresponding to inspection level IV and acceptable quality level (AQL) of 4 percent given in Tables 1 and 2 of IS: 2500 (Part I)-1973 shall be followed.

**8.1.2** For hardness and tests the sampling plan corresponding to inspection level I and AQL 2.5 percent given in Tables 1 and 2 of IS : 2500 ( Part I )-1973 shall be followed.

**9. Marking** — The nail puller shall be marked with the manufacturer's name, initials and/or recognized trade-mark.

**9.1 ISI Certification Marking** — Details available with the Indian Standards Institution.