

इंटरनेट

मानक

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“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 6861 (1973): Engineers' Scrapers [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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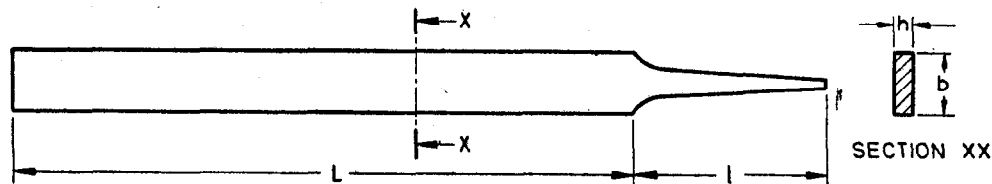


Indian Standard
**SPECIFICATION FOR
ENGINEERS' SCRAPERS**

1. Scope — Covers the requirements for engineers' scrapers.

2. Dimensions

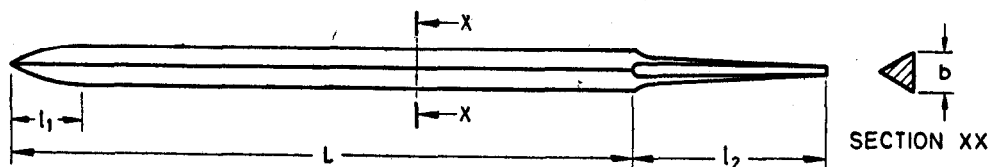
2.1 Flat Engineers' Scraper, Type A



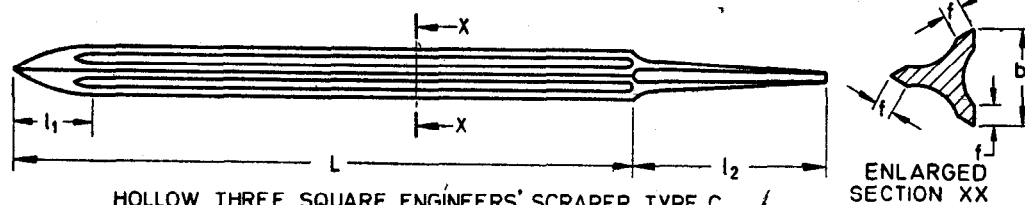
All dimensions in millimetres.

Nominal Size <i>L</i>	Tolerance on <i>L</i>	<i>l</i>	Tolerance on <i>l</i>	<i>b</i>	<i>h</i>
160	±4.5	50	±4.5	16	4
200	±5	60	±5	20	5
250	±5.5	70	±5.5	25	6.3
315	±6.5	80	±6.5	31.5	8

2.2 Three Square Engineers' Scraper, Types B and C



SOLID THREE SQUARE ENGINEERS' SCRAPER, TYPE B



HOLLOW THREE SQUARE ENGINEERS' SCRAPER, TYPE C

All dimensions in millimetres.

Nominal Length <i>L</i>	Tolerance on <i>L</i>	<i>f</i>	<i>l</i> ₁	<i>l</i> ₂	Tolerance on <i>l</i> ₂	<i>b</i>	
						Solid Scrapers (Type B)	Hollow Scrapers (Type C)
80	±3	2	12.5	35	±3	5	6.3
100	±3.5	2	14	40	±3.5	6.3	8
125	±4	2.5	16	45	±4	8	10
160	±4.5	2.5	18	50	±4.5	10	12.5
200	±5	3	20	60	±5	14	16
250	±5.5	3	25	70	±5.5	17	18
315	±6.5	3	30	80	±6.5	20	20

Adopted 15 February 1973

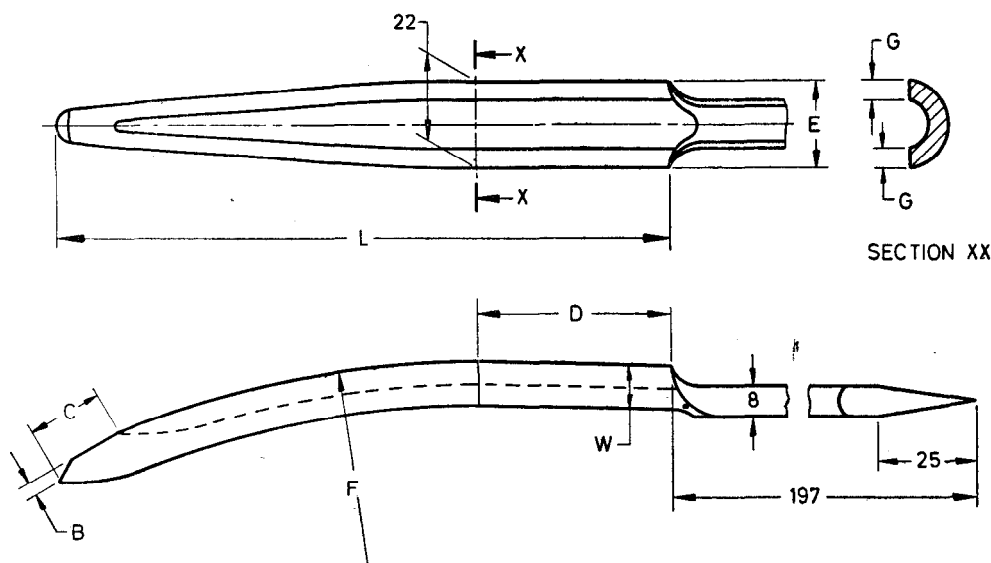
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INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110001

Revised Price

Rs. 6.00

2.3 Half Round Engineers' Scraper, Type D



All dimensions in millimetres.

Nominal Length <i>L</i> +5	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>W</i>
160	3	19	50	22	250	4.7	11
200	4	25	69	25	325	5.5	12.5

2.4 Tolerances on untoleranced dimensions shall be in accordance with the best engineering practices.

3. **Material** — The scrapers shall be manufactured from suitable steels meeting with the requirements laid down in 5. The scrapers may also have the scraping edges of carbides.

Examples:

Ti33Cr45, T123W14Co5crV4 and T70W18CrV1 with a maximum of sulphur and phosphorus content of 0.05 percent each of Schedule VI of IS : 1570-1961 'Schedules for wrought steels for general engineering purposes. Carbides to the designation P10, M20, M30 or K10 of IS : 2428-1964 'Application of carbides for machining, ranges of application and colour code'.

3.1 **Ferrules** — The ferrules may be manufactured either from the mild steel or brass.

4. **Hardness** — The hardness of the cutting edge of the scrapers shall be within the range of 700 to 800 HV [see IS : 1501-1968 Method for Vickers hardness test for steel (*first revision*)].

5. **Handles** — The handles shall conform to the requirements laid down for handles of class 5 of IS : 620-1965 ' General requirements for wooden tool handles (*second revision*) '.

6. **Workmanship and Finish** — The blades shall be free from cracks, burrs, seams pits, scales, rust and other manufacturing defects. The blades shall be co-axially fitted on to the handle. The tangs shall be well drawn and the ferrules and blades shall be securely fitted to the handle.

7. **Designation** — The engineers' scraper shall be designated by its type, nominal size and number of this standard.

Example:

Engineers' scraper of Type A and of nominal size 200 mm shall be designated as:
Scraper A 200 IS : 6861

8. Marking — The scrapers shall be marked with the nominal size, type and the manufacturers' name or recognized trade-mark.

8.1 ISI Certification Marking — Details available with the Indian Standards Institution, New Delhi 110001.

9. Sampling — Unless otherwise agreed to between the supplier and the purchaser, the procedure given in IS : 2500 (Part I) - 1963 ' Sampling inspection tables: Part I Inspection by attributes and the count of defects ' shall be followed for sampling inspection. The sampling plan for various characteristics shall be as given in **9.1** and **9.2**.

9.1 For dimensions and workmanship and finish, the sampling plan with inspection level III and acceptable quality level (AQL) 2.5 percent given in Tables 1 and 2 of IS : 2500 (Part I) - 1963 shall be followed.

9.2 For hardness, the sampling plan with inspection level I and acceptable quality level (AQL) 2.5 percent given in Tables 1 and 2 of IS : 2500 (Part I) - 1963 shall be followed.

EXPLANATORY NOTE

This standard lays down the requirements for four types of engineers' scrapers. The flat scrapers are used on flat surfaces for obtaining smooth and accurate surfaces of high precision.

The half round engineers' scrapers are used for comparatively smaller flat surfaces and holes, whereas three square engineers' scrapers are used for half round surfaces, such as halves of bearings and similar other jobs.

While preparing this specification, assistance has been derived from DIN 8350:1971 ' Schaber (scrapers) ' issued by Deutscher Normenausschuss and the specification issued on the subject by the Chief Inspectorate of General Stores, Kanpur.