

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 5167 (1981): Punched Open-Jaw Wrenches (Spanners) [PGD  
5: Assembly 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  
PUNCHED OPEN-JAW WRENCHES  
( SPANNERS )*( First Revision )*

**1. Scope** — Specifies the requirements for single and double-ended punched open-jaw wrenches (spanners) conforming to torque series D of IS : 6131-1980 'Technical requirements for hand-operated wrenches (spanners) and sockets (*first revision*)'.

**2. Dimensions**

**2.1** The main dimensions for single and double-ended spanners shall be as given in Tables 1 and 2 respectively.

**2.2** The width across flats and the corresponding tolerances for the punched open-jaw wrenches (spanners) shall be in accordance with IS : 2027-1980 'Widths across flats for spanners and sockets (*second revision*)'.

**2.3** The illustrations are diagrammatic only and are not intended to indicate the details of design.

**3. Material** — The punched open-jaw wrenches (spanners) shall be manufactured from those steels which after suitable heat-treatment fulfil the requirements of hardness and torque test as laid down in 4 and 5 respectively. Some of the suitable steels are C35 and C40 of IS : 1570-1961 'Schedules for wrought steels for general engineering purposes'.

**4. Hardness** — The punched open-jaw wrenches (spanners) shall be hardened over the entire length, and the hardness measured at any point on the wrench (spanner) shall be within the limits specified in IS : 6131-1980.

**5. Workmanship and Finish, Sampling, Torque Testing, Marking, Preservation and Packing** — shall be in accordance with IS : 6131-1980. The test torque value shall conform to series 'D' of this standard.

**6. Designation**

**6.1** The spanners shall be designated by:

- a) commonly used name,
- b) whether single ended (SE) or double ended (DE),
- c) nominal widths across flats, and
- d) number of the standard.

*Example:*

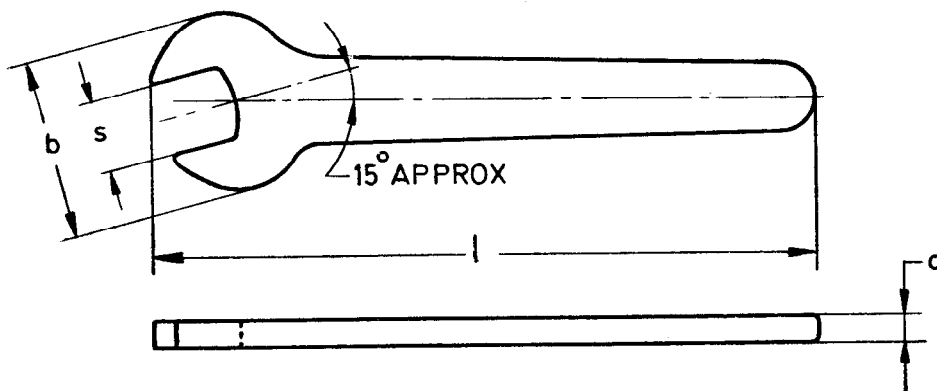
A punched open-jaw spanner, single-ended having nominal width across flats = 8 mm shall be designated as:

Spanner SE 8 IS : 5167

**TABLE 1 DIMENSIONS FOR SINGLE-ENDED PUNCHED OPEN-JAW WRENCHES ( SPANNERS )**

( Clause 2.1 )

All dimensions in millimetres.



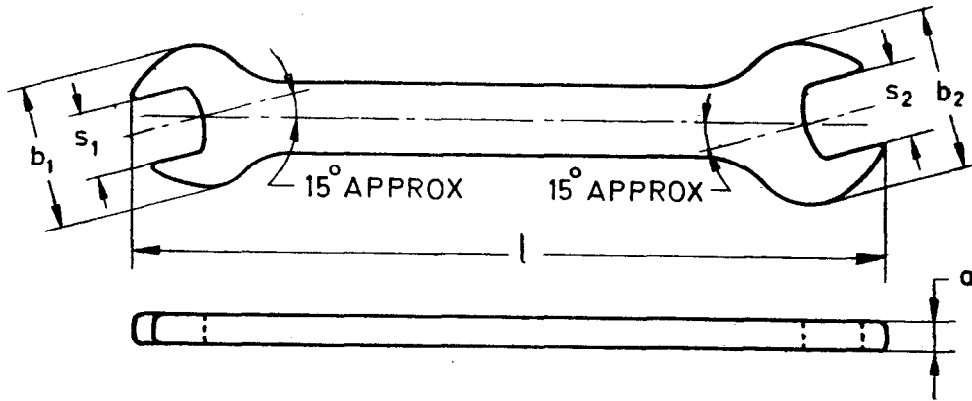
Nominal Width Across Flats <i>s</i>	<i>a</i> Max	<i>b</i> Max	<i>l</i>		Nominal Width Across Flats <i>s</i>	<i>a</i> Max	<i>b</i> Max	<i>l</i>	
			Max	Min				Max	Min
(3)	1.5	12	65	50	(17)	6	40	160	135
3.2					18		185	160	
(3.5)					(19)				
4	1.5	12	65	50	(20)	6	46	185	160
(4.5)	2	16	75	60	21	8	52	205	180
5					(22)				
5.5	3	16	75	60	(23)	8	52	205	180
(6)					24		230	205	
7					21		100	80	(25)
8	4	21	100	80	(26)	8	58	230	205
(9)					27		240	215	
10					25		90	(28)	63
11	5	30	125	105	30	10	70	265	240
(12)					(32)				
13	6	36	145	120	36	10	90	320	295
(14)	6	36	145	120	41		90	320	295
(15)					46				
16	6	40	160	135	50	108	390	360	

**Note** — Sizes given in paranthesis are non-preferred.

**TABLE 2 DIMENSIONS FOR DOUBLE-ENDED PUNCHED OPEN-JAW WRENCHES ( SPANNERS )**

( Clause 2.1 )

All dimensions in millimetres.



Nominal Width Across Flats $s_1 \times s_2$	a Max	$b_1$ Max	$b_2$ Max	l	
				Max	Min
( 3 × 3.5 ) 3.2 × 4 ( 3.5 × 4.5 )	1.5 1.5 2	10 10 11	11 12 13	65 65 75	55 55 65
4 × 5 5 × 5.5 5.5 × ( 6 )	2 2.5 2.5	12 14 16.5	14 16.4 18	75 90 105	65 80 90
5.5 × 7 ( 6 ) × 7 7 × 8	3 3 4	16.5 18 19	19 19 20.5	110 115 120	95 100 100
8 × ( 9 ) 8 × 10 10 × 11	4 5 5	20.5 20.5 24.5	22.5 24.5 26.5	120 130 140	100 110 115
11 × 13 ( 12 × 14 ) 13 × ( 17 )	6 6 6	26.5 29 31.5	31.5 33 38.5	160 160 175	135 135 150
( 17 × 19 ) ( 19 × 22 ) ( 22 ) × 24	6 8 8	38.5 43 49	43 49 53	200 230 235	170 195 210
24 × 27 27 × 30 30 × ( 32 ) ( 32 ) × 36	8 10 10 10	53 60 66 70	60 66 70 80	260 290 305 320	230 250 260 270

**Note** — Sizes given in paranthesis are non-preferred.

**EXPLANATORY NOTE**

This standard was first published in 1969. The revision of this standard has been taken up to bring it in line with IS : 6131-1980 'Technical requirements for hand-operated wrenches (spanners) and sockets (*first revision*)' and IS : 2027-1980 'Widths across flats for spanners and sockets (*second revision*)'. In this revision, the non-essential dimensions which were covered earlier for guidance only have been deleted.

While preparing this standard, assistance has been derived from DIN 658-1976 'Punched engineers wrenches, double head, open end' and DIN 902-1967 'Punched single-ended open-jaw wrenches' issued by Deutsches Institut für Normung (DIN).