

BUREAU OF INDIAN STANDARDS

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**Draft Indian Standard**

**SPECIFICATION FOR TOWING HOOK FOR USE BETWEEN TRAILERS OF UP TO 16 TONNES GROSS  
MASS AND TRANSPORT TRACTOR**

*(First Revision)*

(ICS 43.040.70)

**Transport Tractors, Trailors and Industrial Trucks Sectional  
Committee, TED 22**

**Last Date for Comments: 28/10/2022**

Transport Tractors, Trailers and Industrial Trucks Sectional Committee, TED 22

## FOREWORD

*(Formal clause to be added later on)*

This standard was first published in 1976. This first revision incorporates the experience gained with the use of this standard and brings the standard in line with the latest development in the field.

The requirements of this standard, which relate only to vehicles used on the public highways, are intended to ensure the maximum degree of compatibility between commercial and government department standards.

The material specifications are for the minimum qualities acceptable, and do not exclude the use of other materials provided that these are at least equal in quality so that road safety is not impaired.

This standard should be used in conjunction with IS 8274 :1976The hook has been designed to accommodate a drawbar eye of 51 mm internal diameter and 40 mm stock, or 76 mm internal diameter and 40 mm stock.

The standard applies to connections to trailers of up to 16 tonnes gross mass. The specification for a towing hooks for connections to trailers of up to 35 tonnes gross mass is given in IS 8300: 1976 for trailers of up to 5 tonnes gross mass is given in IS 8752 : 1978.

In the preparation of this standard, considerable assistance has been derived from BS AU 25 : 1964 'Specification for towing hook for use between trailers of 5-14 tonnes gross weight and towing vehicle', issued by the British Standards Institution.

The composition of the committee responsible for formulation of this standard is given as Annex A. (Will be added later on)

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 (revised)'. 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***SPECIFICATION FOR TOWING HOOK FOR USE BETWEEN TRAILERS OF UPTO  
16 TONNES GROSS MASS AND TRANSPORT TRACTOR***(First Revision)***1 SCOPE**

**1.1** This standard specifies the basic dimensions and quality of materials for a towing hook and its mounting, for use in connections between a transport tractor and a trailer of up to 16 tonnes gross mass.

**1.2** The gross mass refers to gross laden train masses where more than one trailer is drawn.

**2 REFERENCES**

The standards given below contain provisions which, through reference in this text, constitute provision 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 these standards.

<i>IS No</i>	<i>Title</i>
IS 1875 : 1992	Carbon steel billets, blooms, slabs and bars for forgings - Specification ( <i>Fifth Revision</i> )
IS 1364 (Part 1): 2018	Hexagon Head Bolts, Screws and Nuts of Product Grades A and B Part 1 Hexagon Head Bolts (Size Range M 1.6 to M 64)

**3 MATERIALS**

**3.1** The hook shall be made from a material of quality not less than Grade 30C8 of IS 1875 in normalized condition.

**4 DIMENSIONS**

**4.1** Dimensions shall be as shown in Fig. 1 and Fig. 2.

Note — The dimensions specified are based upon a forged hook, and have been calculated on the basis of the total yield strength being equal to two-thirds the gross mass being towed. It is necessary that any other parts not covered by this standard, connecting the coupling to the towing tractor shall have a similar strength.

## 5 DESIGN

**5.1** An efficient safety catch, preferably of the automatic or semi-automatic type, shall be provided as indicated in Fig. 1 to prevent accidental detachment of the drawbar from the hook.

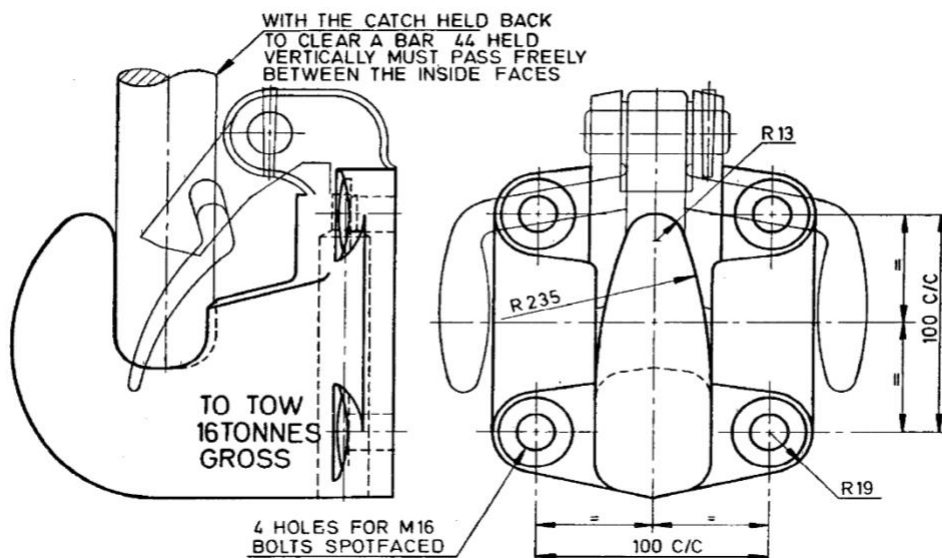
**5.2** The hook shall be so designed that a bar of 44 mm diameter, when held vertically, shall pass freely between the inside faces of the hook with the catch held back to clear (*see* Fig. 1)

## 6 MOUNTING

**6.1** The hook shall be mounted with four bolts, 16 mm diameter at 100.0 × 100.0 mm centers.

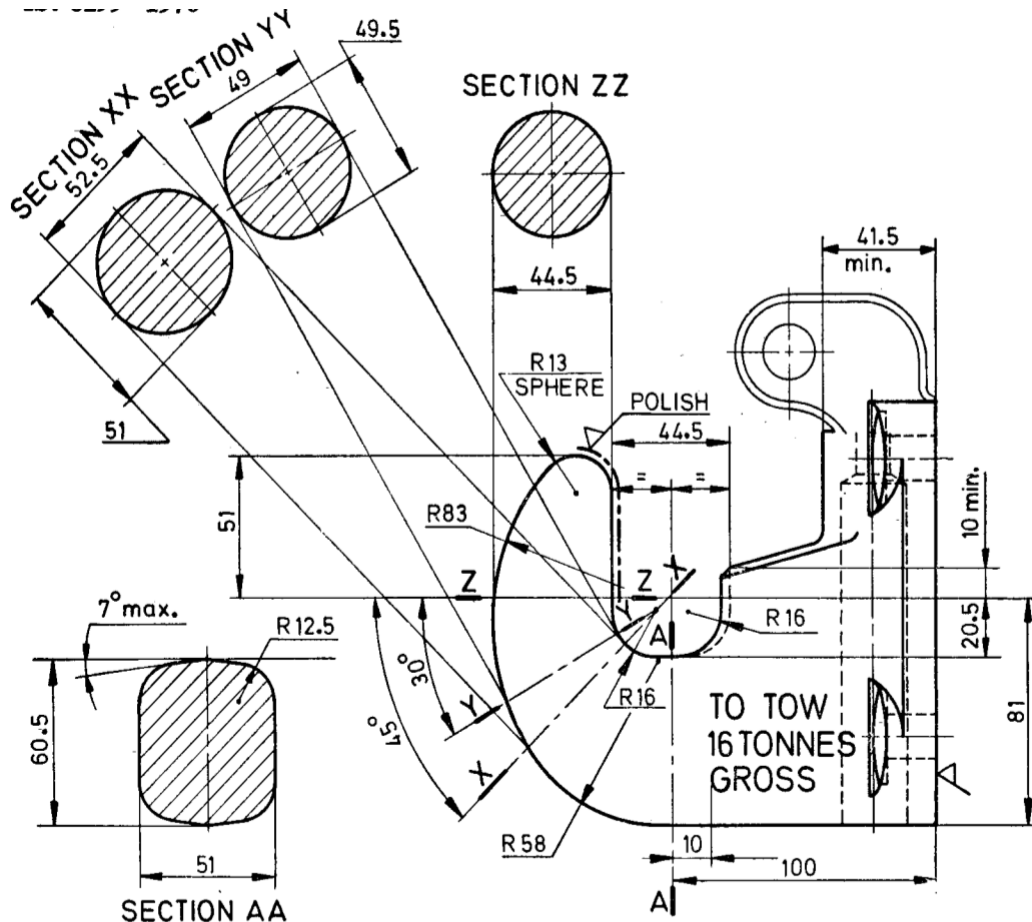
**6.1.1** Bolts and nuts shall comply with precision grade of designation M 16 × 1.5 (P) of IS 1364 (Part 1).

**6.2** The nuts shall be secured either by peening the end of the bolt or by fitting a positive locking device such as a safe locking nut or a slotted nut or split pin.

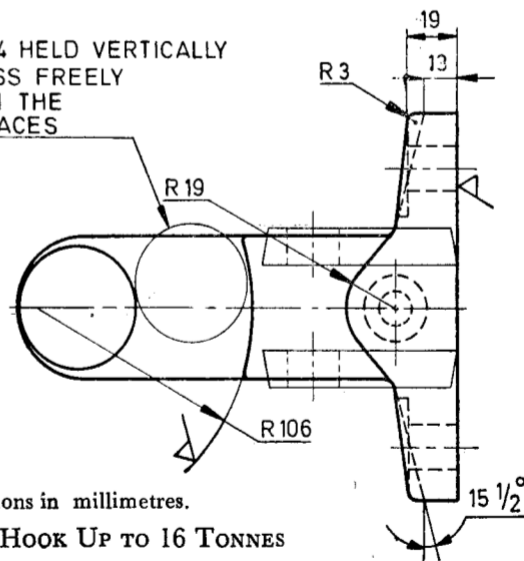


All dimension in millimetres.

FIG. 1 TOWING HOOK, INDICATING SAFETY CATCH UPTO 16 TONNES



A BAR  $\phi 44$  HELD VERTICALLY  
MUST PASS FREELY  
BETWEEN THE  
INSIDE FACES



All dimensions in millimetres.

FIG. 2 TOWING HOOK UP TO 16 TONNES

## **7 MARKING**

**7.1** The following wording, in clear lettering 10 mm high, raised or stamped, shall be marked on each towing hook:

- a) 'TO TOW 16 TONNES GROSS' on one side, and
- b) 'IS 8299: XXXX' on the other side.

\*Year to be added later.

**7.2** In addition, the towing hooks shall also be marked at the appropriate place, the following information:

- a) Name or trade-mark of the manufacturer;
- b) Date or year of manufacture; and
- c) The country of manufacture.

### **7.3 BIS Certification Marking**

**7.3.1** Each towing hook may also be marked with the Standard Mark.

**7.3.2** The use of the Standard Mark is governed by the provisions of the Bureau of Indian Standards Act, 2016 and the Rules and Regulations made thereunder. The details of conditions under which the license for the use of the Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

## **8 SAMPLING**

Unless otherwise agreed upon between a supplier and purchaser, the inspection sampling shall be as per IS 2500 (Part 1).