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भारतीय मानक मसौदा

मिल्क कैन ट्रॉली — विशिष्टि

(आईएस 6684 का पहला पुनरीक्षण)

*Draft Indian Standard*

**MILK CAN TROLLEY — SPECIFICATION**

*(First Revision of IS 6684)*

**ICS 65.040.10**

Dairy Equipment Sectional Committee, FAD 33	Last Date of Comments : <b>16 March 2025</b>
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**FOREWORD**

*(Formal clauses will be added later)*

Efficient milk handling is crucial in milk processing, with cans being the primary storage method. Transporting these heavy cans within a plant or premises is labor-intensive, demanding an effective tool to ease the process. The milk can trolley is an indispensable tool for facilitating this transportation, making the task easier, smoother, and safer.

Manual handling of cans often requires significant effort, risks damage due to improper handling and can even lead to injuries. The use of a milk can trolley eliminates these risks. However, since these trolleys are often locally manufactured, variations in dimensions and materials can lead to issues with improper fit or durability, potentially affecting their compatibility with milk cans. To address this, this standard was developed to assist manufacturers in selecting appropriate dimensions and durable materials suited for milk can handling.

This standard was originally published in 1972, and in this revision, the following major changes have been made considering the latest technological advancements and industry practices:

- a) material for the trolley's support and wheels has been updated;
- b) dimensions of the stem, handle, and base have been illustrated in the figure and removed from Table 1;
- c) tolerances have been given on the dimensions as specified for the trolley; and
- d) requirements for the trolley's finish have been revised.

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.

## 1 SCOPE

This standard stipulates the material and dimensional requirements for milk can trolleys used for transport of cans of 40-litre and 50-litre capacities as per IS 1825.

## 2 REFERENCES

The standards given below contain 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 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 1239 (Part 2) : 2011	Steel tubes, tubulars and other steel fittings – Specification: Part 2 Steel pipe fittings ( <i>fifth revision</i> )
IS 1825 : 202X	Aluminium alloy milk cans – Specification ( <i>third revision</i> ) [ <i>Under Preparation Doc: FAD 20(27196)WC</i> ]
IS 2062 : 2011	Hot rolled medium and high tensile structural steel – Specification ( <i>seventh revision</i> )
IS 2629 : 1985	Recommended practice for hot-dip galvanizing of iron and steel ( <i>first revision</i> )
IS 3601 : 2006	Steel tubes for mechanical and general engineering purposes – Specification ( <i>second revision</i> )

## 3 DIMENSIONS

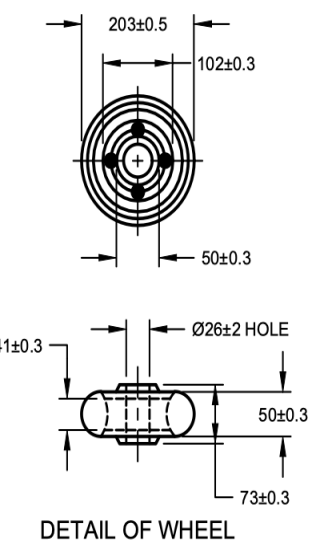
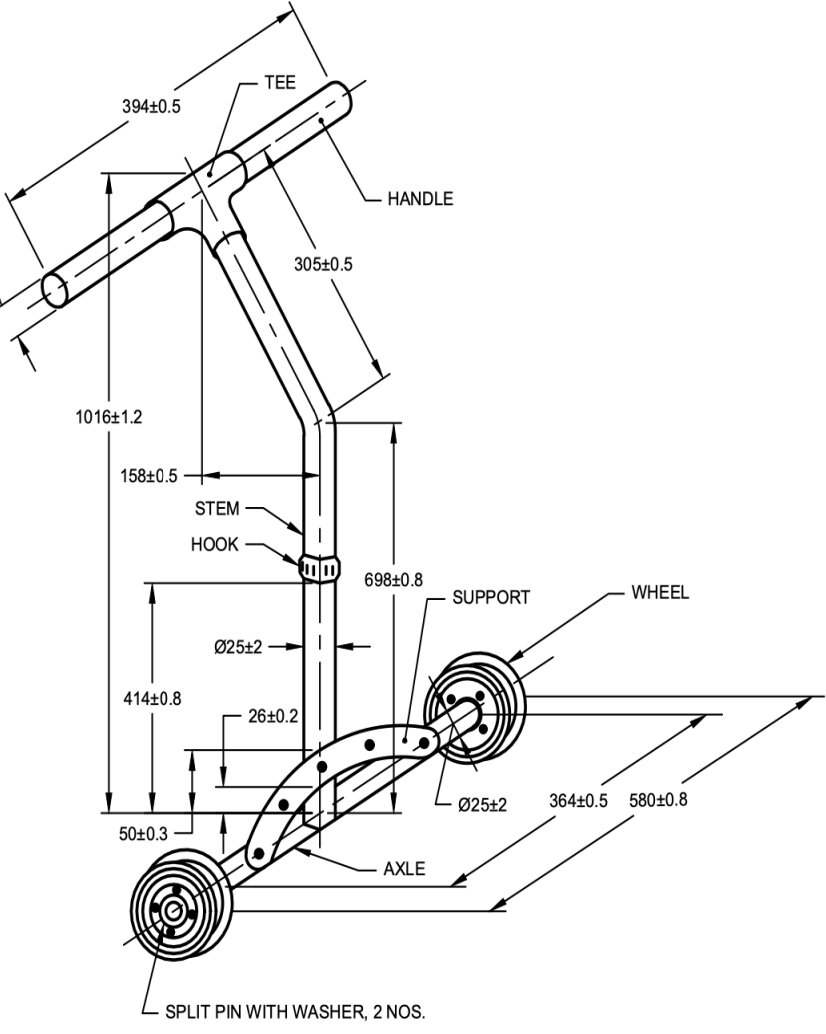
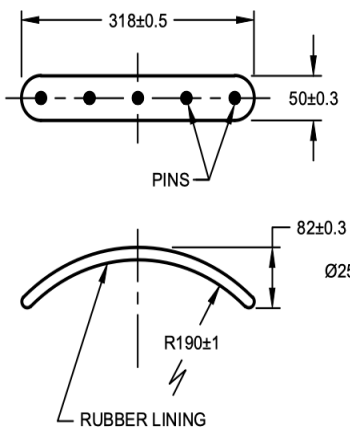
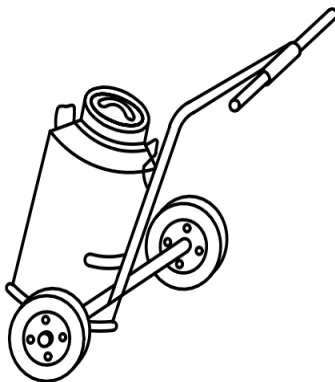
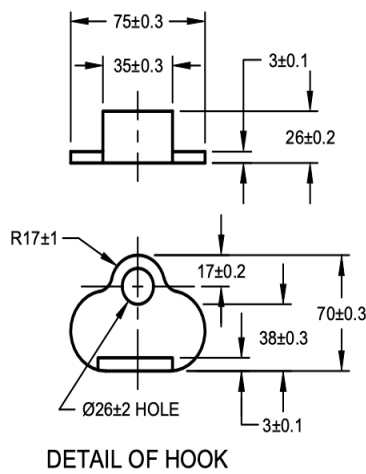
The dimensions of all the components of trolley shall be as given in Fig. 1.

## 4 MATERIALS

**4.1** The materials of the parts used in manufacturing of milk can trolley shall be as given in column 4 of Table 1 and should conform to the relevant Indian Standards.

**Table 1 Material and Dimensional Requirements**  
(*Clause 4.1*)

<b>Sl. No.</b>	<b>Name of Part</b>	<b>Material</b>	<b>Relevant Indian Standards</b>
(1)	(2)	(3)	(4)
i.	Handle	Galvanized iron pipe	IS 3601
ii.	Tee	Galvanized iron pipe	IS 1239 (Part 2)
iii.	Stem	Galvanized iron pipe	IS 3601
iv.	Axle	Mild Steel	IS 2062
v.	Hook	Mild Steel	IS 2062
vi.	Support	Mild steel	IS 2062
		Nylon	-
vii.	Wheels	Mild steel	IS 2062
		Nylon	-
		Polyurethane	-



All dimensions in millimetres.

FIG 1 MILK CAN TROLLEY

## **5 MANUFACTURE**

**5.1** The wheels shall be of material specified in 4 and shall not be slippery. Wheels shall be of heavy-duty type and with suitable bush bearings.

**5.2** The concave side of the support shall be provided with a rubber lining to protect the can from damage.

**5.3** The joints between the stem and axle may be connected by stays or braces.

**5.4** The can trolley frame after fabrication should be hot-dip galvanized (*see* IS 2629) in order to prevent it from corrosion.

**5.5** The can trolley shall be able to withstand the weight of the transport cans filled with milk and there shall not be any deformation or breakage of any part during usage.

## **6 FINISH**

All welding joints shall be smooth, without any porosity or brittleness. All openings, such as the hollow bore of the handlebar, shall be closed, and all edges shall be chamfered and smoothly finished to ensure no injury to the handler.

## **7 MARKING**

**7.1** The milk can trolley shall be marked legibly and permanently with the following particulars in vernacular language:

- a) Manufacturer's name, address and recognized trademark, if any;
- b) Batch or code number;
- d) Model No.; and
- e) Year of manufacturing.

### **7.2 BIS Certification Marking**

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 products may be marked with the Standard Mark.