

BUREAU OF INDIAN STANDARDS

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Draft Indian Standard

**DATA SHEET FOR INDUSTRIAL TOWING TRUCKS: PART 1 — I.C. ENGINE POWERED**  
(*Second Revision*)

(ICS 53.060)

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Transport Tractors, Trailers and Industrial Trucks Section Committee, TED 22	Last Date for Comments: 14.09.2024
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Transport Tractors, Trailers and Industrial Trucks Sectional Committee, TED 22

## FOREWORD

*(Formal clause to be added later on)*

This standard was first revised in 1987. First revision included some additional information which may be used by the manufacturer and purchaser alike for giving details of the equipment to be manufactured by the manufacturer or required by the purchaser.

This revision has been taken to incorporate the latest development in the field.

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

In reporting the result of a test or analysis made in accordance with this standard, if the final value, observed or calculated, is to be rounded off it shall be done in accordance with IS 2: 2022 'Rules for rounding off numerical values (Second Revision)'.  
(Will be added later)

*Draft Indian Standard*

**DATA SHEET FOR INDUSTRIAL TOWING TRUCKS: PART 1 — I.C. ENGINE  
POWERED  
(Second Revision)**

**1 SCOPE**

This standard lays down the data required for the selection of I.C. engine powered industrial towing trucks.

**2 REFERENCE**

This standard does not contain any cross reference.

**3 TERMINOLOGY**

For the purpose of this standard, the following definitions shall apply.

**3.1 Industrial Towing Trucks** — A self-propelled industrial truck with solid or pneumatic tyres, with three or more wheels, with front or rear drive wheels, intended for towing or shunting one or several non-powered trucks or trailers inside or outside buildings and occasionally on public roads.

**3.2 Drawbar Pull** — The drawbar pull measured on a smooth, dry and horizontal concrete surface, with a horizontal towbar in the longitudinal axis of the vehicle, after progressive acceleration, and with a driver weighing 70 kg in the case of sit-on or stand-on tractor.

3.2.1 The drawbar pull shall be given for a tractor equipped with solid tyres or with pneumatic tyres inflated to the pressure specified by the tractor manufacturer.

**4 DATA SHEET**

**4.1 Application and Site Data** — *(To be furnished by the users)*

- a) Hours per shift.....h
- b) Shifts per day.....
- c) Days per week.....
- d) Temperature : Max ..... °C; Min..... °C
- e) Altitude .....m, above mean sea level
- f) Relative humidity, Max at..... °C .....%

**4.2 Engine**

- a) Make, model .....
- b) Type.....
- c) Cooling system.....Air Cooled/Water Cooled
- d) Gross power ..... kW .....at rpm
- e) Fly wheel power..... kW ..... at rpm
- f) Maximum torque..... Nm..... at rpm
- g) No. of cylinders.....
- h) Bore..... mm
- j) Displacement.....

- k) Type of fuel used.....
- m) Type of fuel pump.....
- n) Oil specification.....

**4.3 Transmission**

- a) Model.....
- b) Type.....
- c) Converter/clutch.....
- d) Speed in kmph (Unladen)
  - 1) Forward speed.....
  - 2) Reverse speed.....
- e) Neutral start provision..... Yes/No
- f) Controls..... Single/Multi-lever

**4.4 Maximum Drawbar Pull .....N**

- 4.4.1 Sustained drawbar pull ..... N
- 4.4.2 Height of coupling..... mm

**4.5 Braking**

- a) Type (drum/disc, wet/dry, hydraulic).....
- b) Actuating system (hydraulic/mechanical).....
- c) Operation of brake (hand operated/foot operated).....
- d) No. of levers/pedals.....

**4.6 Steering**

- a) Type (mechanical/power assisted).....
- b) Power pump.....
- c) Actuator details.....

**4.7 Electrical System**

- a) Starting/Type..... Voltage..... V
- b) Battery, Type..... Capacity..... Ah
- c) Lighting.....
- d) Charging: Type (Alternate/Dynamo).....

**4.8 Tyre**

NUMBER/SIZE	TYPE OF TYRE			
	Solid Rubber	Pneumatic Shaped Resilient	Pneumatic	Any Other Type
No. of wheels (driving)				
No. of wheels (steering)				
Tyre size				
Rim size				

**4.9 Oil**

	Oil Capacity	Type of Oil
a) Fuel tank		
b) Engine crank case		
c) Final drive		
d) Torque converter		
e) Transmission		
f) Steering		
g) Differential		

**4.10 Dimensions**

- a) Overall length ..... mm
- b) Overall width ..... mm
- c) Height ..... mm
- d) Minimum ground clearance ..... mm
- e) Wheel base .....
- f) Wheel track
  - 1) Front .....
  - 2) Rear .....
- g) Turning radius .....
- h) Angle of approach and departure... ..

**4.11 Mass of Base Machine (Without any Attachment) kgs**

**4.12 Standard equipment** .....

**4.13 Optional Attachments** .....

**4.14 Other Attachments** .....

**4.15 Gauges and Indicators** .....

**4.16 Truck Provided with Overhead Canopy** ..... Yes/No

**ANNEX A**  
*(Foreword)*

**COMMITTEE COMPOSITION**

TRANSPORT TRACTORS, TRAILERS AND INDUSTRIAL TRUCKS SECTIONAL COMMITTEE, TED 22  
**(Will be Added Later)**