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औद्योगिक ट्रकों के संचालन क्षेत्रों के सुरक्षा पहलू — पारिभाषिक शब्दावली

(पहला पुनरीक्षण)

Safety Aspects Concerning Operating Areas of Industrial Trucks — Glossary of Terms

(First Revision)

ICS 53.060

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Price Group 4

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

FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Transport Tractors, Trailers and Industrial Trucks Sectional Committee and had been approved by the Transport Engineering Division Council.

This standard was first published in 1975. In this first revision following changes have been incorporated:

- a) ICS No. have been updated; and
- b) Other editorial changes have been done to bring the standard in the latest style and format of Indian Standards.

The industrial trucks are being exclusively used in the field of materials handling. This standard has been prepared to define various terms concerning operating areas keeping in view the safety aspects.

To achieve international coordination on the subject this standard has been based on Doc: ISO/TC 110 (SC1-2) 333 Safety aspects concerning operating areas, issued by the International Organization for Standardization.

The composition of the Committee responsible for formulation of this standard is given in Annex A.

Indian Standard

SAFETY ASPECTS CONCERNING OPERATING AREAS OF INDUSTRIAL TRUCKS — GLOSSARY OF TERMS

(First Revision)

1 SCOPE

This standard defines the terms relating to safety aspects concerning operating areas of industrial trucks.

2 REFERENCES

This standard contains no cross reference.

3 TERMINOLOGY

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

3.1 Working Areas — Areas where the truck performs loading, unloading, stacking, unstacking, tiering (in racks), untiring and associated operations.

3.1.1 *Handling at Ground Level* — All loading and unloading operations which do not need a lift height higher than the lift just necessary to allow travelling.

3.1.2 *Handling above Ground Level* — All loading, unloading, stacking, unstacking, tiering and untiering operations involving a vertical displacement higher than the lift just sufficient for travelling.

3.2 Travel Paths — Areas reserved specifically for travelling between working areas defined by visual or physical limits.

3.2.1 *Tracks* — Travel paths situated outside buildings.

3.2.2 *Aisles* — Travel paths situated inside buildings.

3.2.3 Ramps

3.2.3.1 *Non-powered* — Inclined travel paths giving access to a higher or lower level which do not incorporate any mechanical means for assisting the ascent or descent of a truck.

3.2.3.2 *Powered* — Inclined travel paths giving access to a higher or lower level which incorporate any mechanical means for assisting the ascent or descent of a truck.

3.2.4 Dimensions

3.2.4.1 *Free width* — The width measured at the narrowest place of the path.

3.2.4.2 *Free height* — The clear height measured at the lowest obstacle above the path.

3.2.5 *Limits of Travel Path* — Visual and physical indications of the confines of the travel path.

3.2.5.1 Marking and signals

3.2.5.1.1 *Marking* — Visual indications of the lateral limits of travel paths or vertical limit of obstacles, by distinctive colours or materials.

3.2.5.1.2 *Signals* — Visual or audible warning of the existence of an obstacle or hazard on the travel path.

3.2.5.2 *Barriers* — Physical impediments to the passage of trucks or personnel.

3.2.5.2.1 *Permanent barriers* — Barriers which are structurally secured in position:

- a) Fixed Permanent barriers which do not incorporate any means of passage; and
- b) Opening Permanent barriers which incorporate any means of passage such as a gate or elevating section.

3.2.5.2.2 *Portable barriers* — Temporary free-standing barriers.

3.2.6 Doors

3.2.6.1 *Power operated* — Doors operated by means of electrical, hydraulic or pneumatic power.

3.2.6.1.1 *Manual control* — Power operated doors responding to manual operation of a control.

3.2.6.1.2 Automatic control — Power operated doors responding to the proximity of a truck.

3.2.6.2 *Flexible* — Doors constructed of a material allowing of opening or deformation by a traversing truck.

3.2.6.2.1 *Hinged* — Flexible doors suspended on hinges.

3.2.6.2.2 *Suspended strip* — Flexible doors constructed of strips of material suspended from the upper beam.

3.2.7 *Bridge Plates and Dockboards* — Rigid moveable bearing plates ensuring continuity of a travel path between two operating areas (for example, between a platform and vehicle) or allowing passage over an obstacle.

ANNEX A

(<u>Foreword</u>)

COMMITTEE COMPOSITION

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

Organization	Representative(s)
Automotive Research Association of India, Pune	SHRI A. AKBAR BADUSHA (Chairperson)
Action Construction Equipment Limited, Palwal	SHRI CHETAN GOLE SHRI INDERPAL SINGH BENIWAL (Alternate)
All India Motor Transport Congress, New Delhi	SHRI NAVEEN GUPTA SHRI S. K. MITTAL (<i>Alternate</i>)
Ashok Leyland Limited, Chennai	SHRI PRASANNA VENKATESH SHRI FAUSTINO V. (Alternate)
Automotive Component Manufactures Association of India, New Delhi	SHRI SANJAY TANK Ms. Seema Babal (<i>Alternate</i>)
Automotive Research Association of India, Pune	SHRI P. D. BETGERI Shri Tusharkumar R. Kamble (<i>Alternate</i>) Shri V. P. Rawal
BEML Limited, Banglore	SHRI RAMESH RAJU SHRI SETHU MADHAVAN (<i>Alternate</i>)
Brakes India Limited, Chennai	SHRI B. RUBAN DEVA PRASATH SHRI G. DEVENDRAN (Alternate)
Central Institute of Road Transport, Pune	SHRI S. N. DHOLE SHRI S. N. GUTTE (<i>Alternate</i>) SHRI S. R. SONAWANE
Directorate General Factory Advice Service and Labour Institutes, Mumbai	SHRI H. CHATTOPADHAYAYA
Godrej & Boyce Manufacturing Company Limited, Mumbai	SHRI VINAY G. KULKARNI SHRI ANAND SHANKAR TAWDE (<i>Alternate</i>)
JCB India Limited, New Delhi	SHRI SAURABH DALELA SHRI ALOK GANDHI (<i>Alternate</i>)
Josts Engineering Company Limited, Thane	SHRI PRAMOD M. POPHALE SHRI SANTOSH SARAF (<i>Alternate</i>)
KION India Private Limited, Pune	SHRI SUNIL K GUPTA SHRI RIZWAN KHAN (<i>Alternate</i>)
Knorr-Bremse Systems for Commercial Vehicles India Private Limited, Pune	Shri Arun Bisht Shri Abhishek Jadhav (<i>Alternate</i>) Shri Ajinkya Bangar

Representative(s) Organization Machine and Mill Stores Corporation Private SHRI DIPAK GHOSH Limited, Howrah SHRI SUBHAMGHOSH (Alternate) Mahindra Trucks and Bus Division, Pune SHRI V G KULKARNI SHRI AMIT PATIL (*Alternate*) Ministry of Heavy Industries and Public Enterprises, SHRI B K MISHRA Department of Heavy Industry, New Delhi SHRI R. K. JAISWAL (Alternate) Ministry Of Labour and Employment Directorate, DR R.N.MEENA Mumbai SHRI K. DURAI (Alternate) Ministry of Road Transport and Highways, SHRI A. KANNAN New Delhi MS. DHARKAT R. LUIKANG SHRI SAM SHAIKH (Alternate) SDR Auto Private Limited, Chennai SHRI B. RAMESH SHRI PRAVEEN KUMAR (Alternate) SHRI PARIKSHIT ABHIMANYU BHASKAR Tata International Vehicle Applications Private SHRI KRISHNA PRASAD (Alternate) Limited, Pune Tata Motors Limited, Pune SHRI RAHUL MOHANRAO PATHAK SHRI SUNIL AGARWAL (Alternate I) SHRI M. HARRISH (Alternate II) TRATEC Engineering Pvt Ltd, New Delhi SHRI KAMAL KHOSLA SHRI C. RAJASEKHAR (Alternate) Volvo Construction Equipment, Bangalore SHRI V. R. SAI PRASAD POLIPALLI ZF Commercial Vehicle Control Systems India SHRI PRABHAKARAN DURAIRAJ Limited, Pune SHRI SACHIN DESHMUKH (Alternate) SHRI R. R. SINGH, SCIENTIST 'F'/SENIOR DIRECTOR **BIS** Directorate General (TRANSPORT ENGINEERING) AND HEAD [REPRESENTING DIRECTOR GENERAL (*Ex-officio*)]

Member Secretary Shri August Dubey Scientist 'B'/Assistant Director (Transport Engineering), BIS this Page has been intertionally left blank

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