



भारतीय मानक ब्यूरो

(उपभोक्ता मामले, खाद्य एवं सार्वजनिक वितरण मंत्रालय, भारत सरकार)

BUREAU OF INDIAN STANDARDS

(Ministry of Consumer Affairs, Food & Public Distribution, Govt. of India)

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Review Document

Basic Details

1.	Sectional Committee No. & Title:	MED 7 - Earth Moving Equipment and Material Handling
2.	IS No :	IS/ISO 3457 : 2003
3.	Title :	Earth - Moving machinery - Guards - Definitions and requirements
4.	Date of Previous Review:	March, 2022

Review Analysis

5.1 Status of standard(s), if any from which assistance had been drawn in the formulation of this IS.

S.No.	Standard (No.)	Standard (Title)	Whether the standard has since been revised	Major changes	Action proposed
1	ISO 3457:2003	Earth-moving machinery $\frac{1}{2}$ Guards $\frac{1}{2}$ Definitions and requirements. Issued by International Organization for Standardization	No revision	No change	The adopted ISO remains current. No change required.

5.2 Status of standard referred in the IS.

S.No.	Referred standards (No.)	Referred standards (Title)	Since revised IS no. of the corresponding IS	Changes in the referred Standards since last review of IS	Changes in the referred standard which are affecting the standard under review	Action proposed
1	IS/ISO 2867 : 2006	Earth-moving machinery $\frac{1}{2}$ Access systems	Revised in 2011	The ISO has incorporated the provisions of ISO 14122-1 and ISO 14122-4 in clause 4 and clause 9 with the revision. Provisions of ISO 14567 has also been incorporated in clause 4.	The current version of the referred standard needs to be incorporated in the current IS	Update with revised standard.
2	ISO 9244 : 2008	Earth-moving machinery $\frac{1}{2}$ Machine safety labels $\frac{1}{2}$ General principles	No Revision	No change	The current version of the referred standard is incorporated in the current IS	No action required
3	ISO 12508 : 1994	Earth-moving machinery $\frac{1}{2}$ Operator station and maintenance areas $\frac{1}{2}$ Bluntness of edges	No Revision	No change	The current version of the referred standard is incorporated in the current IS	No action required
4	IS/ISO 3411 : 2007	Earth-moving machinery $\frac{1}{2}$ Human physical dimensions of operators and minimum operator space envelope	No Revision	No change	The current version of the referred standard is incorporated in the current IS	No action required
5	IS/ISO 6165 : 2006	Earth-moving machinery $\frac{1}{2}$ Basic types $\frac{1}{2}$ Identification and terms and definitions	Revised in 2012	Terminologies such as operating mass, base machine, attachment and equipment has been added with the revision of the IS.	The current version of the referred standard needs to be incorporated in the current IS	Update with revised standard.
6	IS 11252 : 1993	Earth-moving machinery $\frac{1}{2}$ Zones of comfort and reach for controls	No Revision	No change	The current version of the referred standard is incorporated in the current IS	No action required

5.3 Any other standards available related to the subject & scope of the standard being reviewed (International/regional/other national/association/consortia, etc or of new or revision of existing Indian Standard).

S.No.	Standard (No.)	Standard (Title)	Provisions that could be relevant while reviewing the IS	Action proposed
1	BS EN ISO 3457 : 2008	Earth-moving machinery $\frac{1}{2}$ Guards $\frac{1}{2}$ Definitions and requirements. Issued by British Standards Institution	The given standard is the adopted version of the ISO as mentioned in clause 5(i) of the review performa	The committee may consider the provisions of ISO while reviewing the IS.
2	ISO 2867 : 2006	Earth-moving machinery $\frac{1}{2}$ Access systems	This standard has been revised by ISO 2867:2011.	The committee may consider the provisions of ISO while reviewing the IS.
3	ISO 3411:2007	Earth-moving machinery $\frac{1}{2}$ Physical dimensions of operators and minimum operator space envelope	Minimum normal operating space envelope within the operator enclosures	No action required
4	ISO 6165:2006	Earth-moving machinery $\frac{1}{2}$ Basic types $\frac{1}{2}$ Identification and terms and definitions	This standard has been revised by ISO 6165 : 2022.	The committee may consider the provisions of ISO while reviewing the IS.
5	ISO 6682:1986	Earth-moving machinery $\frac{1}{2}$ Zones of comfort and reach for controls	design of the operator compartment controls for earth-moving machinery	No action required

5.4 Technical comments on the standard received, if any.

S.No.	Source	Clause of IS	Comment	Action proposed
No entry made in this table				

5.5 Information available on relevant technical developments

S.No.	Source	Development	Relevant clause of the IS under review that is likely to be impacted (Clause & IS No.)	Action proposed
1	Industry Association	https://www.industrysearch.com.au/vandal-covers-and-safety-guards-for-earthmoving-machinery/f/13223	IS 3457	The Committee may review
2	Individual	https://www.linkedin.com/pulse/safe-work-procedure-heavy-earth-moving-machinery-site-mohan	Safe Work Procedure	The Committee may review
3	Manufacturer (Non-licensee)	https://safetyskills.com/machine-guarding/:text=Interlocking20guards2C20also20known20as,such20as20when20clearing20jams.	Types of guards	The Committee may review

5.6 Issues arising out of changes in any related IS or due to formulation of new Indian Standard.

S.No.	Related IS (revised or new)	Related IS Title	Provision in the IS under review that would be impacted & the clause no. or addition of new clause/provision	Changes that may be necessary in the Standards under review	Action proposed
No entry made in this table					

5.7 Any consequential changes to be considered in other IS.

S.No.	Related IS to get impacted	Related IS Title	Requirements to be impacted
1	IS/ISO 14990 : Part 1-2016	Earth-Moving Machinery and Electrical Safety of Machines Utilizing Electric Drives and Related Components and Systems Part 1 General Requirements	Clauses 5.2 Protection by enclosures; and clause 8 Protection against mechanical hazards
2	IS/ISO 21873 : Part 2-2019	Building Construction Machinery and Equipment Mobile Crushers Part 2 Safety Requirements and Verification (First Revision)	Clauses 4.15 Protective measures and devices; Clause 5.2 Protection by enclosure; Clause 8 Protection against mechanical hazards

Other Details

6.	Any other observation:	a) References can be updated with revision of the IS. b) The adopted ISO remains current, hence the given IS/ISO can be re-affirmed.
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7.	Upload Supporting Document(s)	
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7.1 ARP Report	68_21487_221107111302_ARP_Report.docx
7.2 Draft Document	No Document Uploaded

8.	Recommendations - On the basis of the analysis of the info available as mentioned above consideration of sectional committee is solicited on the following aspects of the IS under review:	As the base standard i.e. ISO 3457 : 2003 is in its current form, the IS/ISO 3457 : 2003 may be retained as it is.
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