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Rev	Review Document					
Basic	Basic Details					
1.	Sectional Committee No. & Title:	MED 7 - Earth Moving Equipment and Material Handling				
2.	IS No:	IS 13082 : Part 1 : 1991				
3.	Title :	Bulk handling equipment - Ship unloader - Gantry mounted grab type - Code of practice for design, manufacture and erection:: Part 1 mechanical and structural requirements				
4.	Date of Previous Review:	March, 2022				

Review Analysis							
5.1 Stat	5.1 Status of standard(s), if any from which assistance had been drawn in the formulation of this IS.						
S.No.	Standard (No.)	tandard (No.) Standard (Title) When		Major changes	Action proposed		
1	ISO 5049-1 : 1980	Mobile Equipment For Continuous Handling of Bulk Materials - Part 1: Rules For The Design of Steel Structures. Published by International Organization for Standardization.	Revised in 1994 and Re-affirmed in 2013	This second edition cancels and replaces the first edition (ISO 5049-1:1980), of which it constitutes a technical revision.	Update with revised standard.		

	is of standard referred in the	IS.				
				Changes in the		
S.No.	Referred standards (No.)	Referred standards (Title)	Since revised IS no. of the corresponding IS	referred Standards since last review of IS	Changes in the referred standard which are affecting the standard under review	Action proposed
1	IS 210 : 1978	Grey iron castings (third revision)	Revision in 2009 (fifth revision)	-	Assistance has been derived from ISO 185 : 2005 'Grey cast irons - Classification'	Update with revised standar
2	919 (Part 1): 1963	Recommendations for limits and fits for engineering : Part 1 General engineering	Revision in 2017 (third revision)	This revision harmonized with ISO 286-1: 2010		Update with revised standard
3	1136:1958	Preferred sizes for wrought metal products	Revision in 2008 (third revision)	Requirements of IS 1137 : 1990 Thicknesses of sheet and diameters of wire (first revisio have been incorporated		Update with revised standar
4	1364 (Part 1) : 1983	Hexagon head bolts, screws and nuts of products grades C : Part 1 Hexagon head bolts (size range M5 to M36) (second revision)	Revision in 2018 (fifth revision)q	-	Align with the latest version of ISO 4014 published in 2011.	Update with revised standar
5	1364 (Part 2) : 1984	Hexagon head bolts, screws and nuts of products grades C : Part 2 Hexagon head screws (size range M5 to M36) (second revision)	Revision in 2018 (fifth revision)	-	Align with the latest version of ISO 4017 published in 2014.	Update with revised standar
6	1364 (Part 3) : 1984	Hexagon head bolts, screws and nuts of products grades C : Part 3 Hexagon nuts (size range M5 to M36 (second revision)	Revision in 2018 (fifth revision)	-	Align with the latest version of ISO 4032 published in 2012.	Update with revised standar
7	1364 (Part 4) : 1985	Hexagon head bolts, screws and nuts of products grades C: Part 4 Hexagon thin nuts (chamfered) (size range M1.6 to M36) (second revision)	Revision in 2003 (fourth revision)	-	Align with the latest version of ISO 4035 published in 1999.	Update with revised standar
8	1364 (Part 5) : 1985	Hexagon head bolts, screws and nuts of products grades C: Part 5 Hexagon thin nuts (unchamfered) (size range M1.6 to M10) (second revision)	Revision in 2002 (fourth revision)		Align with the latest version of ISO 4036 published in 1999.	Update with revised standar
9	1367 (Part 1) : 1980	Technical supply conditions for threaded steel fasteners : Part 1 Introduction and general information (second revision)	Revision in 2014 (fourth revision)	-	Align with the latest version of ISO 8992 : 2005.	Update with revised standa
10	1367 (Part 2) : 1979	Technical supply conditions for threaded steel fasteners : Part 2 Product grades and tolerances (second revision)	Revision in 2002 (third revision)		Align with the latest version of ISO 4759-1 : 2000	Update with revised standa
11	1367 (Part 3) : 1979	Technical supply conditions for threaded steel fasteners : Part 3 Mechanical properties and test methods for bolts, screws and studs with full loadability (second revision)	Revision in 2017 (fifth revision)	-	Align with the latest version of ISO 898-1 published in 2013.	Update with revised standar
12	1367 (Part 5) : 1980	Technical supply conditions for threaded steel fasteners : Part 5 Mechanical properties and test	Revision in 2018 (fourth revision)	_	Align with the latest version of ISO 898-5 published in 2012.	Update with revised standar
		methods for set screws and similar threaded fasteners not under tensile stresses (second revision) Technical supply conditions for threaded steel fasteners: Part 6 Mechanical properties and test				
13	1367 (Part 6) : 1980	methods for nuts with specified proof loads (second revision)	Revision in 2018 (fourth revision)	-	Align with the latest version of ISO 898-2:2012	Update with revised standar
14	1367 (Part 7): 1980	Technical supply conditions for threaded steel fasteners: Part 7 Mechanical properties and test methods for nuts without specified proof loads (second revision)	No revision		No changes	No action required
15	1367 (Part 9) : 1979	Technical supply conditions for threaded steel fasteners: Part 9 Surface discontinuities on bolts, scresss and study (second revision)	Revision in 1993		This annalural is lafuecated into two parts mentioned below: 1.1 S 1367 (Part OSec 1): 1993 150 6157-1 :1988 - Technical supply conditions for threaded sized fasteners: Part 9 surface discontinuities section 1 bolts, screes and stude for general applications (Third Revision) 2. B 1367 (Part OSec 2): 1993 150 6167-3: 1988 - Technical supply conditions for threaded seed fasteners: Part 9 surface discontinuities section 2 bolts, screes and stude for special applications (Third Revision)	Update with revised standar
16	1367 (Part 10): 1979	Technical supply conditions for threaded steel fasteners: Part 10 Surface discontinuities on nuts (second revision)	Revision in 2002 (third revision)	-	Aligning with ISO 6157-2 : 1995 by adoption under dual numbering system	Update with revised standa
17	1367 (Part 12) : 1979	Technical supply conditions for threaded steel fasteners: Part 12 Phosphate coatings on threaded fasteners (second revision)	Revision in 1981 (second revision)	-	No changes	Update revision year
18	1367 (Part 13) : 1979	Technical supply conditions for threaded steel fasteners: Part 13 Hot-dip galvanized coatings on threaded fasteners (second revision)	Revision in 2020 (third revision)	-	Align with the latest version of ISO 10684 : 2004.	Update with revised standa
19	1367 (Part 14) : 1984	Technical supply conditions for threaded steel fasteners: Part 14 Stainless steel threaded fasteners (second revision)	Revision in 2018 (fourth revision)	-	This standard is bifurcated into three parts mentioned below: 1. IS 1367 (Part 14/Sec 1): 2010/IS DO 306-1: 2009: Technical supply conditions for threaded steel fasteners: Part 14 mechanical peoperities of corrosion. Resistant statilenes: Seef fasteners section 1 bolts, screws and state (Fourth Revision): 2. IS 1367 (Part 14/Sec 2): 2010/IS DO 306-2: 2009-7 (Technical Supply): Conditions for Threaded Steel Fasteners Part 14 Mechanical Properties of Corrosion-resistant Stainless steel Fasteners Section 2 Nuts (Fourth Revision): 3. IS 1367 (Part 14/Sec 2): 2010/IS DO 306-2: 2009-7 Technical Supply conditions for threaded steel fasteners. Part 14 mechanical properties of corrosion-resistant stainless steel fasteners section 3 sets torses and similar features not under treadle steer (Fourth Revision)	Update with revised stands
20	1367 (Part 16) : 1979	Technical supply conditions for threaded steel fasteners: Part 16 Designation system and symbols (second revision)	Revision in 2002 (third revision)		Align with the latest version of ISO 8991 : 1986.	Update with revised standa
21	1367 (Part 18) : 1979	Technical supply conditions for threaded steel fasteners: Part 18 Marking and mode of delivery (second revision)	Revision in 1996 (third revision)		Requirements for mode of delivery that is Packaging have been modified as per IS 9141 : 1979 @ZZCode of practice for the packaging of fasteners (first revision)	Update with revised standa
22	2016 : 1967	Plain washers (first revision)	No revision	-	No changes	No action required
23	2048 : 1983	Parallel keys and keyways (second revision)	No revision	-	No changes	No action required
24	2266 : 1977	Steel wire ropes for general engineering purposes (second revision)	Revision in 2019 (fifth revision)		In this revision, small wire ropes covered under IS: 3459 are incorporated in the corresponding construction in this standard.	Update with revised stand
25	2291 : 1981	Tangential keys and keyways (second revision)	Revision in 1990 (third revision)	-	Align with ISO 3117 : 1977.	Update with revised stand
26	2292 : 1974	Taper keys and keyways (first revision)	No revision	-	No changes	No action required
27	2293 : 1974	Gib-head keys and keyways (first revision)	No revision	-	No changes	No action required
28	2294 : 1986	Woodruff keys and keyways (second revision)	No revision	-	No changes	No action required
29	2327 : 1963	Dimensions for straight sided splines for general engineering use	Revision in 1993 (first revision)		Align with ISO 14: 1982	
30						Update with revised stand
_	3177 : 1977	Code of practice for overhead travelling cranes and gantry cranes other than steel works cranes (first revision)	Revision in 2020 (third revision)	-	Selection of wheel and giving due consideration of duty class, travel speed and wheel material.	
31	3177 : 1977 3665 : 1966	Code of practice for overhead travelling cranes and gantry cranes other than steel works cranes (first revision) Dimensions for involute sided splines	Revision in 2020 (third revision) Revision in 1985 (first revision)			Update with revised stand
		revision)			material. Recommendations for adhesion tests for variety of coatings system have been incorporated in Table 1 and a typical process chart has also been included for the guidance of the	Update with revised stand
32	3665 : 1966	Dimensions for involute sided splines	Revision in 1985 (first revision)	-	material. Recommendations for adhesion tests for variety of coatings system have been incorporated in Table 1 and a ppical process chart has also been included for the guidance of the electroplates, in this revision.	Update with revised stand Update with revised stand
32	3665 : 1966 4009 (Part 1) : 1981	Dimensions for involute sided splines Grease nipples: Part 1 Button head grease nipples (first revision)	Revision in 1985 (first revision) No revision	-	material. Recommendations for adhesion tests for variety of coatings system have been incorporated in Table I and a pylical process chart has also been included for the guidance of the electroplates, in this revision. No changes	Update with revised stand Update with revised stand No action required
32 33 34	3665 : 1966 4009 (Part 1) : 1981 4009 (Part 2) : 1981	Dimensions for involute sided splines Grease nipples : Part 1 Button head grease nipples (first revision) Grease nipples : Part 2 Conical head grease nipples (first revision)	Revision in 1985 (first revision) No revision No revision		material. Recommendations for adhesion tests for variety of coatings system have been incorporated in Table 1 and a typical process chart has also been included for the guidance of the electroplates, in this revision. No changes No changes	Update with revised stand Update with revised stand No action required No action required
332 333 34 35	3665 : 1966 4009 (Part 1) : 1981 4009 (Part 2) : 1981 4672 : 1982	Dimensions for involute sided splines Grease nipples : Part 1 Button head grease nipples (first revision) Grease nipples : Part 2 Conical head grease nipples (first revision) Grease cups (first revision)	Revision in 1985 (first revision) No revision No revision		material. Recommendations for adhesion tests for variety of coatings system have been incorporated in Table 1 and a pylical process chart has also been included for the guidance of the electroplaters, in this revision. No changes No changes	Update with revised stand Update with revised stand No action required No action required No action required
332 333 34 35 36	3665 : 1966 4009 (Part 1) : 1981 4009 (Part 2) : 1981 4672 : 1982 4673 : 1968	Dimensions for involute sided splines Grease nipples: Part 1 Button head grease nipples (first revision) Grease nipples: Part 2 Conical head grease nipples (first revision) Grease cups (first revision) Wick feed lubricators	Revision in 1985 (first revision) No revision No revision No revision No revision		material. Recommendations for adhesion tests for variety of coatings system have been incorporated in Table 1 and a typical process chart has also been included for the guidance of the electroplaters, in this revision. No changes No changes No changes	Update with revised stand Update with revised stand No action required No action required No action required No action required
13 13 14 15 16	3665 : 1966 4009 (Part 1) : 1981 4009 (Part 2) : 1981 4672 : 1982 4673 : 1968 5019 : 1968	Dimensions for involute sided splines Grease nipples: Part 1 Button head grease nipples (first revision) Grease nipples: Part 2 Conical head grease nipples (first revision) Grease cups (first revision) Wick feed lubricators Lubricating plugs	Revision in 1985 (first revision) No revision No revision No revision No revision No revision	-	material. Recommendations for adhesion tests for variety of coatings system have been incorporated in Table 1 and a ppical process chart has also been included for the guidance of the electroplates, in this revision. No changes No changes No changes Withdrawn	Update with revised stand Update with revised stand No action required No action required No action required Update reference
333 334 34 35 36 37	3665 : 1966 4009 (Part 1) : 1981 4009 (Part 2) : 1981 4672 : 1982 4673 : 1968 5010 : 1968 5372 : 1975	Dimensions for involute sided splines Grease nipples: Part 1 Button head grease nipples (first revision) Grease nipples: Part 2 Conical head grease nipples (first revision) Grease cups (first revision) Wick feed lubricators Lubricating plugs Taper weshers for channels (ISMC) (first revision)	Revision in 1985 (first revision) No revision	-	material. Recommendations for adhesion tests for variety of coatings system have been incorporated in Table 1 and a pytical process chart has also been included for the guidance of the electroplaters, in this revision. No changes No changes No changes Withdrawn No changes	Update with revised stand Update with revised stand No action required No action required No action required No action required Update reference No action required
332 333 334 335 336 337 338 339	3665 : 1966 4009 (Part 1) : 1981 4009 (Part 2) : 1981 4672 : 1982 4673 : 1968 5019 : 1968 5372 : 1975 5374 : 1975	Dimensions for involute sided splines Gresse nipples: Part 1 Button head grease nipples (first revision) Grease nipples: Part 2 Conical head grease nipples (first revision) Grease cups (first revision) Wick feed lubricators Lubricating plugs Taper washers for channels (ISMC) (first revision)	Revision in 1985 (first revision) No revision	-	material. Recommendations for adhesion tests for variety of coatings system have been incorporated in Table 1 and a pytical process chart has also been included for the guidance of the electroplaters, in this revision. No changes No changes No changes Withdrawn No changes	Update with revised stand Update with revised stand Update with revised stand No action required No action required No action required Update reference No action required No action required No action required No action required
32 33 34 35 36 37 38 39 40	3665 : 1966 4009 (Part 1) : 1981 4009 (Part 2) : 1981 4672 : 1982 4673 : 1968 5019 : 1968 5372 : 1975 5374 : 1975	Dimensions for involute sided splines Grease nipples: Part 1 Button head grease nipples (first revision) Grease nipples: Part 2 Conical head grease nipples (first revision) Grease cupe (first revision) Wick feed lubricators Lubricating plugs Taper washers for channels (ISMC) (first revision) Labricating nipple adaptors	Revision in 1985 (first revision) No revision	-	material. Recommendations for adhesion tests for variety of coatings system have been incorporated in Table 1 and a pytical process chart has also been included for the guidance of the electroplates, in this revision. No changes No changes No changes Withdrawn No changes No changes	Update with revised stand Update with revised stand Update with revised stand No action required No action required No action required Update reference No action required No action required No action required No action required
332 333 333 334 335 336 336 339 339 440 441	3665 : 1966 4009 (Part 1) : 1981 4009 (Part 2) : 1981 4672 : 1982 4673 : 1968 5019 : 1968 5374 : 1975 5374 : 1975 5548 : 1970	Dimensions for involute sided splines Grease nipples: Part I Button head grease nipples (first revision) Grease nipples: Part 2 Conical head grease nipples (first revision) Grease cups (first revision) Wick feed lubricators Lubricating plugs Taper washers for channels (ISMC) (first revision) Lubricating nipple adaptors Lubricating nipple adaptors Lubricating nipple adaptors	Revision in 1985 (first revision) No revision Revision in 2019	-	material. Recommendations for adhesion tests for variety of coatings system have been incorporated in Table 1 and a typical process chart has also been included for the guidance of the electroplaters, in this revision. No changes No changes No changes Withdrawn No changes No changes The experience gained in implementation of the standard has necessitated this revision	Update with revised stand Update with revised stand Update with revised stand No action required No action required No action required Update reference No action required No action required Update reference No action required Update reference Update reference Update with revised stand
332 333 333 334 335 336 337 338 339 440 441 441 442	3665 : 1966 4009 (Part 1) : 1981 4009 (Part 2) : 1981 4672 : 1982 4673 : 1968 5019 : 1968 5372 : 1975 5374 : 1975 5548 : 1970 5664 : 1984 6166 : 1971	Dimensions for involute sided splines Grease nipples: Part 1 Button head grease nipples (first revision) Grease nipples: Part 2 Conical head grease nipples (first revision) Grease cups (first revision) Wick feed lubrications Lubricating plugs Taper washers for channels (ISMC) (first revision) Lubricating nipple adaptors Lubricating nipple adaptors Lubricating connectors (first revision) Thin taper keys and keyways	Revision in 1985 (first revision) No revision No revision	-	material. Recommendations for adhesion tests for variety of coatings system have been incorporated in Table 1 and a typical process chart has also been included for the guidance of the electroplaters, in this revision. No changes No changes No changes Withdrawn No changes No changes The experience gained in implementation of the standard has necessitated this revision No changes	Update with revised stand Update with revised stand No action required No action required No action required Update reference No action required No action required Update reference No action required Update with revised stand No action required
332 333 334 335 336 336 337 338 339 440 441 441 442 442	3665 : 1966 4009 (Part 1) : 1981 4009 (Part 2) : 1981 4672 : 1982 4673 : 1968 5372 : 1975 5374 : 1975 5548 : 1970 5664 : 1984 6166 : 1971	Dimensions for involute sided splines Grease nipples: Part 1 Button head grease nipples (first revision) Grease nipples: Part 2 Conical head grease nipples (first revision) Grease cups (first revision) Wick feed lubricators Lubricating plugs Taper washers for channels (ISMC) (first revision) Taper washers for I-beams (ISMB) (first revision) Lubricating nipple adaptors Lubricating nipple adaptors Lubricating connectors (first revision) Thin taper keys and keyways Thin parallel keys and keyways	Revision in 1985 (first revision) No revision No revision		material. Recommendations for adhesion tests for variety of coatings system have been incorporated in Table 1 and a typical process chart has also been included for the guidance of the electroplates, in this revision. No changes No changes No changes Withdrawn No changes No changes The experience gained in implementation of the standard has necessitated this revision No changes No changes	Update with revised stand Update with revised stand No action required No action required No action required No action required Update reference No action required Update reference No action required No action required No action required Update with revised stand No action required Update with revised stand No action required Update verification
332 333 333 334 334 335 335 336 336 440 441 442 443 443	3665 : 1966 4009 (Part 1) : 1981 4009 (Part 2) : 1981 4672 : 1982 4673 : 1968 5019 : 1968 5372 : 1975 5374 : 1975 5548 : 1970 5664 : 1984 6166 : 1971 6167 : 1971 7745 : 1975	Dimensions for involute sided splines Grease nipples: Part 1 Button head grease nipples (first revision) Grease nipples: Part 2 Conical head grease nipples (first revision) Grease cups (first revision) Wick feed lubricators Lubricating plugs Taper washers for channels (ESMC) (first revision) Taper washers for beams (ESMB) (first revision) Lubricating nipple adaptors Lubricating nipple adaptors Lubricating connectors (first revision) Thin taper keys and keyways Thin parallel keys and keyways Dimensions of lubrication holes, grooves and bore relief	Revision in 1985 (first revision) No revision	· · · · · · · · · · · · · · · · · · ·	material. Recommendations for adhesion tests for variety of coatings system have been incorporated in Table 1 and a typical process chart has also been included for the guidance of the electroplates, in this revision. No changes No changes No changes Withdrawn No changes No changes The experience gained in implementation of the standard has necessitated this revision No changes The experience gained in implementation of the standard has necessitated this revision No changes No changes Withdrawn No changes	Update with revised stand Update with revised stand Update with revised stand No action required No action required No action required Update reference No action required Update with revised stand No action required Update reference Update reference Update reference
38 39 40 41 42 43	3665 : 1966 4009 (Part 1) : 1981 4009 (Part 2) : 1981 4672 : 1982 4673 : 1968 5019 : 1968 5372 : 1975 5374 : 1975 5548 : 1970 5664 : 1984 6166 : 1971 6167 : 1971 7745 : 1975 8593 (Part 1) : 1977	Dimensions for involute sided splines Gresse nipples: Part 1 Batton head grease nipples (first revision) Gresse nipples: Part 2 Conical head grease nipples (first revision) Gresse nipples: Part 2 Conical head grease nipples (first revision) Wick feed lubricators Lubricating plugs Taper washers for channels (ISMC) (first revision) Taper washers for I-beams (ISMB) (first revision) Lubricating nipple adaptors Lubricating connectors (first revision) Thin taper keys and keyways Thin parallel keys and keyways Dimensions of lubrication holes, grooves and bore relief Recommendations for centralised lubrication as applied to plant and machinery. Part 1 Oil lubrication Recommendations for centralised lubrication as applied to plant and machinery. Part 2 Gresse	Revision in 1985 (first revision) No revision Revision in 2019 No revision	· · · · · · · · · · · · · · · · · · ·	material. Recommendations for adhesion tests for variety of coatings system have been incorporated in Table 1 and a pytical process chart has also been included for the guidance of the electroplaters, in this revision. No changes No changes No changes Withdrawn No changes The experience gained in implementation of the standard has necessitated this revision No changes Withdrawn The experience gained in implementation of the standard has necessitated this revision	No action required No action required No action required No action required Update reference No action required No action required No action required Update with revised standa No action required 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 w	Provisions that could be relevant while reviewing the IS					
1	UNE 58214:2000 Mobile Equipment For Continuous Handling Of Bulk Materials - Rules For The Design Of Steel Structures. The published by Spanish Association of Standardization The Continuous Handling Of Bulk Materials - Rules For The Design Of Steel Structures. The Continuous Handling Of Bulk Materials - Rules For The Design Of Steel Structures.					The standard establishes rules for detection designing steel structures for mobile of	The standard establishes rules for determining the loads, types and combinations of loads (main, additional and special loads) which must be taken into account when designing steel structures for mobile continuous bulk handling equipment.				No change required.
5.4 Tec	hnical comments on th	ne standard received,	f any.								
S.No. Source Clause of IS		Comment			Action proposed						
						No entry made in this table					
5.5 Infe	ormation available on	relevant technical de	elopments								
S.No.	No. Source Development Relevant clause of the IS under review that is likely to be impacted (Clause & IS No.) Action proposed										
						No entry made in this table					
5.6 Issu	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 th				hanges that may be necessary in	the Standards under review	Action proposed					
	No entry made in this table										
5.7 Any	5.7 Any consequential changes to be considered in other IS.										
S.No.			Related IS	to get impacted		Related IS Title	Related IS Title Requirements to be impacted				
	No entry made in this table										

Othe	Other Details						
6.	Any other observation:		a) Clause 8 for brakes shall conform to relevant IS. b) IS 13082 part 2 and IS 13082 part 3 can be amalgamated into IS 13082 part 1 c) Clause 15.2 for shunt and series switches shall conform to relevant IS with the revision. d) Clause 6 for suitable AC and D.C motor shall conform to relevant IS with the revision. e) References can be updated with the revision of the IS.				
7. Upload Supporting Document(s)							
7.1	7.1 ARP Report 68_4574_221201112		44_ARP_Report.docx				
7.2	2 Draft Document	68_4574_221201112456_	221201112456_Draft_Document.docx				
8.	Recommendations - On the basis of the analy mentioned above consideration of sectional c the following aspects of the IS under review:	ommittee is solicited on	The committee may take up the revision of the standard.				