

BUREAU OF INDIAN STANDARDS

Program of Work

MED 8 : Mining Techniques And Equipment

Scope: Formulation of Indian Standards relating to basic mining techniques and equipment.

Liaison: **ISO TC-82 (P): Mining**

Published Standards

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS 10046 : 1981 Reviewed In : 2018	Specification for dog spikes for mine haulage tracks	November, 2018	-	Indigenous
2	IS 10202 : 1982 Reviewed In : 2018	Specification for scrapers used in mines	November, 2018	-	Indigenous
3	IS 10970 : 1984 Reviewed In : 2020	Specification for keps for mine cages	September, 2020	-	Indigenous
4	IS 11311 : 2011 Reviewed In : 2020	Technical requirements for loaders for use in underground mines (First Revision)	September, 2020	-	Indigenous
5	IS 11862 : 2021	HYDRAULIC LOADCELL - SPECIFICATION First Revision		-	Indigenous
6	IS 12450 (Part 1) : 1988 Reviewed In : 2018	Steel headframes for mines: Part 1 principles of load computation and applicable factors of safety	November, 2018	-	Indigenous
7	IS 12464 : 2024	Roof Bars Used in Mines "Methods of Test (First Revision)		-	Indigenous
8	IS 12464 : 1988 Reviewed In : 2020	Methods of test for roof bars used in mines	September, 2020	-	Indigenous
9	IS 12488 : 2023	HAULAGE ROPE CAPPELS SPECIFICATION (First Revision of IS 12488)		-	Indigenous
10	IS 12489 : 2023	RECOMMENDATIONS FOR FITTING TERMINAL WIRE ROPE SOCKETS BY CONE AND TAIL METHOD		-	Indigenous
11	IS 12526 : 2023	Bucket for Shaft Sinking Operations in Mines 1½ Specification (First Revision)		-	Indigenous
12	IS 12527 : 1988 Reviewed In : 2018	General requirements for riders for buckets used in shaft sinking operations in mines	November, 2018	-	Indigenous
13	IS 13202 : 2012 Reviewed In : 2022	Mine haulage tracks - Code of practice (First Revision)	February, 2022	-	Indigenous
14	IS 13219 : 1992 Reviewed In : 2018	Rock bolts for mines (Cement Grouted) - General requirements	November, 2018	-	Indigenous
15	IS 13230 : 1992 Reviewed In : 2018	Graphical symbols for use on mine plans	November, 2018	-	Indigenous
16	IS 13282 : 2024	MINE HAULAGE TRACKS TRACK SLEEPERS GENERAL		-	Indigenous

		REQUIREMENTS First Revision of IS 13282			
17	IS 13282 : 1991 Reviewed In : 2020	Mine haulage tracks - Track sleepers - General requirements	September, 2020	-	Indigenous
18	IS 13517 : 1992 Reviewed In : 2018	Rock bolts - Resin type - Specification	November, 2018	-	Indigenous
19	IS 13618 : 1993 Reviewed In : 2018	Minehaulages - Directrope (50 To 150 KW) - General requirements	November, 2018	-	Indigenous
20	IS 14352 : 1996 Reviewed In : 2022	Miners Safety Goggles	February, 2022	-	Indigenous
21	IS 14480 : 2006 Reviewed In : 2022	Side - Discharge loaders for underground coal mines - Safety requirements, operation and maintenance - Code of practice (First Revision)	February, 2022	-	Indigenous
22	IS 14567 : 1998 Reviewed In : 2018	Winding in mines - Design of cages - Guidelines	November, 2018	-	Indigenous
23	IS 14567 : 2024	Winding in Mines " Design of Cages " Guidelines (First Revision)		-	Indigenous
24	IS 14778 : 2000 Reviewed In : 2020	Ortable methanometer (Interferometer Type) - Specification	September, 2020	-	Indigenous
25	IS 15838 (Part 110) : 2008 Reviewed In : 2018	Mining - Glossary of terms (Amalgamating of IS 4791 : 1968, IS 4792 : 1968, IS 4863 :1968, IS 5028 1 1969, IS 5307 : 1968, IS 5767 : 1970, IS 5768 : 1970, IS 5814 : 1970, IS 5940 : 1979 AND IS 7580 : 1975)	November, 2018	-	Indigenous
26	IS 16511 : 2017 Reviewed In : 2022	Management systems for Eco - Friendly Non - Coal mining operations - Requirements	September, 2022	-	Indigenous
27	IS 17241 : 2019	Man Riding Car by Rope Haulage System for Transportation of Persons in Mines		-	Indigenous
28	IS 17242 : 2019	Man Riding Chair Lift System for Transportation of Persons in Mines		-	Indigenous
29	IS 17678 : 2021	SHORT ENCAPSULATION PULL TEST SEPT PROCEDURE		-	Indigenous
30	IS 4001 : 2017 Reviewed In : 2022	Mine tubs - specification (Third Revision)	September, 2022	-	Indigenous
31	IS 4005 : 1967 Reviewed In : 2020	Specification for tungsten carbide for mining tools	September, 2020	-	Indigenous
32	IS 5114 : 1969 Reviewed In : 2020	Specification for reflectorized signs for mines	September, 2020	-	Indigenous
33	IS 7577 : 2020 Reviewed In : 2020	Gas Testing Flame Safety Lamps — Specification (Second Revision)	-	-	Indigenous
34	IS 7587 (Part 1) : 2020	Cage Suspension Gear for Winding in Mines Part 1 General Requirements (Second Revision)		-	Indigenous
35	IS 7587 (Part 2) : 2006 Reviewed In : 2022	Cage suspension gear for winding in mines - Specification: Part 2 cappels (First Revision)	February, 2022	1	Indigenous
36	IS 7587 (Part 3) :	Cage suspension gear for winding	February, 2022	1	Indigenous

	2006 Reviewed In : 2022	in mines - Specification: Part 3 shackles and pins (First Revision)			
37	IS 7587 (Part 4) : 2006 Reviewed In : 2022	Cage suspension gear for winding in mines - Specification: Part 4 bridle chains (First Revision)	February, 2022	-	Indigenous
38	IS 7587 (Part 5) : 2006 Reviewed In : 2022	Cage suspension gear for winding in mines - Specification: Part 5 distribution plates (First Revision)	February, 2022	2	Indigenous
39	IS 7587 (Part 6) : 2006 Reviewed In : 2022	Cage suspension gear for winding in mines - Specification: Part 6 safety detaching hooks (4 Plates Type) 80 and 100 kN capacity (First Revision)	February, 2022	-	Indigenous
40	IS 7587 (Part 7) : 2017 Reviewed In : 2022	Cage suspension gear for winding in mines - Specification: Part 7 safety detaching hook (4 Plate Type) 120, 150 and 200 kN capacity (First Revision)	September, 2022	-	Indigenous
41	IS 7587 (Part 8) : 1993 Reviewed In : 2018	Winding in mines - Suspension gear: Part 8 clivey hook suspension arrangements	November, 2018	-	Indigenous
42	IS 7974 (Part 1) : 1976 ISO 710-1 Reviewed In : 2023 ISO 710-1:1974	Graphical symbols for use on detailed maps, plans and geological cross sections: Part 1 general rules of representation	May, 2023	-	Identical under dual numbering
43	IS 7974 (Part 2) : 1977 ISO 710-2 Reviewed In : 2023 ISO 710-2:1974	Graphical symbols for use on detailed maps, plans and geological cross sections: Part 2 representation of sedimentary rocks	May, 2023	-	Identical under dual numbering
44	IS 7974 (Part 3) : 1976 ISO 710-3 Reviewed In : 2023 ISO 710-3:1974	Graphical symbols for use on detailed maps, plans and geological cross sections: Part 3 Representation of magnetic rocks	May, 2023	-	Identical under dual numbering
45	IS 8003 : 2008 Reviewed In : 2018	Wheel axle assemblies for mine cars - Specification (First Revision)	November, 2018	-	Indigenous
46	IS 8066 : 1976 Reviewed In : 2020	Specification for mine cars	September, 2020	1	Indigenous
47	IS 8166 : 1988 ISO 1717 Reviewed In : 2018 ISO 1717:1974	Specification for rotary drill bits for drilling principally in coal (First Revision)	November, 2018	-	Not Equivalent
48	IS 8421 : 1977 Reviewed In : 2020	Specification for hydraulic props	September, 2020	-	Indigenous
49	IS 8473 : 1988 Reviewed In : 2018	Specification for roof bars used in mines	November, 2018	-	Indigenous
50	IS 8534 (Part 1) : 2017 Reviewed In : 2021	Mine tub couplings and drawbars for use in mines: Part 1 specification	September, 2021	-	Indigenous
51	IS 8534 (Part 2) : 1995 Reviewed In : 2020	Mine tub couplings and drawbars: Part 2 C - Link and D - Shackle type (First Revision)	September, 2020	1	Indigenous
52	IS 8534 (Part 3) : 1995 Reviewed In : 2020	Mine tub couplings and drawbars: Part 3 R - Shackle and link type (First Revision)	September, 2020	-	Indigenous

53	IS 8534 (Part 4) : 1995 Reviewed In : 2020	Mine tub couplings and drawbars: Part 4 F - Shackle and link type (First Revision)	September, 2020	-	Indigenous
54	IS 8534 (Part 5) : 2005 Reviewed In : 2020	Mine tub couplings and drawbars: Part 5 drawbars (First Revision)	September, 2020	-	Indigenous
55	IS 8534 (Part 6) : 1995 Reviewed In : 2020	Mine tub couplings and drawbars: Part 6 hook and D - Shackle type	September, 2020	1	Indigenous
56	IS 9011 : 1978 Reviewed In : 2020	Specification for skip suspension gear for winding in mines	September, 2020	1	Indigenous
57	IS 9123 : 1979 Reviewed In : 2020	Specification for battery locom - Otives for use in mines	September, 2020	-	Indigenous
58	IS 9170 (Part 1) : 2005 Reviewed In : 2020	Endless haulage rope clips - Specification: Part 1 general requirements (First Revision)	September, 2020	-	Indigenous
59	IS 9170 (Part 2) : 2005 Reviewed In : 2020	Endless haulage rope clips - Specification: Part 2 screw clip, cam clip, smallman clip and wedge clip	September, 2020	-	Indigenous
60	IS 9170 (Part 3) : 2005 Reviewed In : 2020	Endless haulage rope clips - Specification: Part 3 lashing chain	September, 2020	-	Indigenous
61	IS 9171 : 1979 Reviewed In : 2020	Code of practice for maintenance and use of friction and hydraulic props and link bars	September, 2020	-	Indigenous
62	IS 9192 : 2024	FLAMEPROOF HAND-HELD ROTARY ELECTRIC DRILLING MACHINE FOR USE IN MINES SPECIFICATION		-	Indigenous
63	IS 9192 : 1979 Reviewed In : 2020	Specification for flameproof hand - Held rotary electric drilling machine for use in mines	September, 2020	-	Indigenous
64	IS 9203 (Part 1) : 2023	FRICTION ROLLERS FOR MINE HAULAGE TRACKS SPECIFICATION PART 1 TECHNICAL SUPPLY CONDITIONS First Revision of IS 9203 Part 1		-	Indigenous
65	IS 9203 (Part 2) : 2023	FRICTION ROLLERS FOR MINE HAULAGE TRACKS SPECIFICATION PART 2 PARALLEL ROLLERS First Revision of IS 9203 Part 2		-	Indigenous
66	IS 9203 (Part 3) : 2023	FRICTION ROLLERS FOR MINE HAULAGE TRACKS SPECIFICATION PART 3 TAPERED AND VERTICAL ROLLERS AND HORIZONTAL AND VERTICAL PULLEYS [First Revision of IS 9203 (Part 3)]		-	Indigenous
67	IS 9203 (Part 4) : 2023	FRICTION ROLLERS FOR MINE HAULAGE TRACKS SPECIFICATION PART 4 ROLLERS WITH NON- METALLIC ROPE BEARING SURFACES First Revision of IS 9203 Part 4		-	Indigenous
68	IS 9227 : 2023	FRICTION ROLLER		-	Indigenous

		MOUNTINGS FOR MINE HAULAGE TRACKS SPECIFICATION First Revision of IS 9227			
69	IS 9239 : 1999 Reviewed In : 2020	Winding in mines - Sheaves - Cast - Specification (First Revision)	September, 2020	1	Indigenous
70	IS 9494 : 2023	Man $\frac{1}{2}$ Riding Cars used in Mines $\frac{1}{2}$ Specification (First Revision)		-	Indigenous
71	IS 9910 : 1981 Reviewed In : 2020	Method for braze strength testing of coal and rock cutting tools with laid - On tungsten - Carbide tips	September, 2020	-	Indigenous
72	IS 9999 : 1981 Reviewed In : 2018	Specification for diesel locomotives for use in mines	November, 2018	1	Indigenous

Standards under Development

Projects Approved

SI. No.	Doc No.	Title
<i>No Records Found</i>		

Preliminary Draft Standards

SI. No.	Doc No.	Title
<i>No Records Found</i>		

Drafts Standards in WC Stage

SI. No.	Doc No.	Title
<i>No Records Found</i>		

Draft Standards Completed WC Stage

SI. No.	Doc No.	Title
1	MED 8 (19661)	WINDING IN MINES SHEAVES CAST SPECIFICATION Second Revision of IS 9239
2	MED 8 (20453)	MINE CARS SPECIFICATION
3	MED 8 (20456)	CODE OF PRACTICE FOR MAINTENANCE AND USE OF FRICTION AND HYDRAULIC PROPS AND LINK BARS
4	MED 8 (20457)	METHOD FOR BRAZE STRENGTH TESTING OF COAL AND ROCK CUTTING TOOLS WITH LAID-ON TUNGSTEN-CARBIDE TIPS
5	MED 8 (20458)	DOG SPIKES FOR MINE HAULAGE TRACKS SPECIFICATION
6	MED 8 (20461)	STEEL HEADFRAMES FOR MINES PART 1 PRINCIPLES OF LOAD COMPUTATION AND APPLICABLE FACTORS OF SAFETY
7	MED 8 (20462)	GENERAL REQUIREMENTS FOR RIDERS FOR BUCKETS USED IN SHAFT SINKING OPERATIONS IN MINES
8	MED 8 (20463)	MINERS SAFETY GOGGLES SPECIFICATION
9	MED 8 (20643)	KEPS FOR MINE CAGES SPECIFICATION
10	MED 8 (20644)	ROOF BARS USED IN MINES SPECIFICATION
11	MED 8 (21522)	SCRAPERS USED IN MINES SPECIFICATION
12	MED 8 (22862)	TUNGSTEN CARBIDE FOR MINING TOOLS - SPECIFICATION
13	MED 8 (22869)	SAFETY REQUIREMENTS FOR DIESEL LOCOMOTIVES USED IN MINES - SPECIFICATION

Finalized Draft Indian Standard

SI. No.	Doc No.	Title
		ROTARY DRILL BITS FOR DRILLING PRINCIPALLY IN COAL SPECIFICATION

1	MED 8 (21735) Revision of: IS 8166:1988	
2	MED 8 (21737) Revision of: IS 8421:1977	HYDRAULIC PROPS SPECIFICATION First Revision of IS 8421

Finalized Draft Indian Standards under Print

Sl. No.	Doc No.	Title
1	MED 8 (18003) Revision of: IS 8534:2017	MINE TUB COUPLINGS AND DRAWBARS FOR USE IN MINES
2	MED 8 (20507) Revision of: IS 13618:1993	MINE HAULAGES DIRECT ROPE 50 TO 150 kW GENERAL REQUIREMENTS First Revision of IS 13618

Total Published Standards:68 Total Standards Under development:17

Aspect Wise Report

Product : 52
Code of Practices : 4
Methods of Test : 4
Terminology : 5
Dimensions : 0
System Standard : 2
Safety Standard : 0
Others : 0
Service Specification : 0
Process Specification : 1
Unclassified : 0

Annexure-I :List of Indian Standards Withdrawn/Superseded

Sl. No.	IS No. & Year	Title
1	IS 11922 : 1986	Portable Mine Hoist
2	IS 13163 : 1991 Reviewed In : 2010	Mine haulage tracks - Laying - Code of practice
3	IS 13201 : 1991 Reviewed In : 2010	Mine Haulage Tracks - Rails and Fish Plates - General Requirements
4	IS 13210 : 1991 Reviewed In : 2010	Mine haulage tracks - Switches and crossings - General requirements
5	IS 13220 : 1991	Friction Props - Hydraulic Setting Device - General Requirements
6	IS 3819 : 1967 Reviewed In : 1995	Solid Forged Coal Cutting Picks
7	IS 3820 : 1982	Carbide Tipped Coal Cutting Tools
8	IS 3869 (Part 1) : 1966 Reviewed In : 1995	Shortwall coal cutting machine Part 1 General requirement for skid mounted shortwall coal cutting machines
9	IS 3869 (Part 2) : 1966 Reviewed In : 1995	Shortwall coal cutting machine Part 2 Recommendations on selection of the basic parameters of the cutting system and the calculation of power consumption
10	IS 3970 : 1967	Safety Detaching Hooks Used In Mines
11	IS 4791 : 1968	Specification for metal paper trays First Revision
12	IS 4792 : 1968	Guide for heat insulation of non - Industrial buildings
13	IS 4863 : 1968	Glossary of mining terms drilling and blasting
		Glossary Of Mining Terms planning And Surveying

14	IS 5028 : 1969	
15	IS 5307 : 1969	Glossary of mining terms boring and exploration
16	IS 5767 : 1970	Glossary of mining terms strata control
17	IS 5768 : 1970	Glossary of Mining Terms Winning and Working
18	IS 5771 : 1981	Coal Cutting Tools Point Attack Tungsten Carbide Tipped
19	IS 5814 : 1970	Glossary Of Mining Terms shaft And Associated Equipment
20	IS 5940 : 1970	Glossary Of Mining Terms geology
21	IS 7578 : 1975	Wedge and Slot type Roof Bolt
22	IS 7580 : 1975	Glossary Of Mining Terms transport
23	IS 7586 : 1975 Reviewed In : 2004	Friction Props for Mines
24	IS 8266 : 1976	Expansion Shell Type Roof Bolts

Annexure-II :List of Indian Product Standards

SI. No.	IS No. & Year	Title
1	IS 10046 : 1981 Reviewed In : 2018	Specification for dog spikes for mine haulage tracks
2	IS 10202 : 1982 Reviewed In : 2018	Specification for scrapers used in mines
3	IS 10970 : 1984 Reviewed In : 2020	Specification for keps for mine cages
4	IS 11311 : 2011 Reviewed In : 2020	Technical requirements for loaders for use in underground mines First Revision
5	IS 11862 : 2021 ISO 21387:2020	HYDRAULIC LOADCELL - SPECIFICATION First Revision
6	IS 12450 (Part 1) : 1988 Reviewed In : 2018	Steel headframes for mines Part 1 principles of load computation and applicable factors of safety
7	IS 12488 : 2023	HAULAGE ROPE CAPPELS SPECIFICATION First Revision of IS 12488
8	IS 12526 : 2023	Bucket for Shaft Sinking Operations in Mines Specification First Revision
9	IS 12527 : 1988 Reviewed In : 2018	General requirements for riders for buckets used in shaft sinking opeiRations in mines
10	IS 13219 : 1992 Reviewed In : 2018	Rock bolts for mines Cement Grouted - General requirements
11	IS 13282 : 2024	MINE HAULAGE TRACKS TRACK SLEEPERS GENERAL REQUIREMENTS First Revision of IS 13282
12	IS 13517 : 1992 Reviewed In : 2018	Rock bolts - Resin type - Specification
13	IS 13618 : 1993 Reviewed In : 2018	Minehaulages - Directrope 50 To 150 KW - General requirements
14	IS 14352 : 1996 Reviewed In : 2022	Miners Safety Goggles
15	IS 14778 : 2000 Reviewed In : 2020	Ortable methanometer Interferometer Type - Specification
16	IS 17241 : 2019	Man Riding Car by Rope Haulage System for Transportation of Persons in Mines

17	IS 17242 : 2019	Man Riding Chair Lift System for Transportation of Persons in Mines
18	IS 4001 : 2017 Reviewed In : 2022	Mine tubs - specification Third Revision
19	IS 4005 : 1967 Reviewed In : 2020	Specification for tungsten carbide for mining tools
20	IS 7587 (Part 1) : 2020	Cage Suspension Gear for Winding in Mines Part 1 General Requirements Second Revision
21	IS 7587 (Part 2) : 2006 Reviewed In : 2022	Cage suspension gear for winding in mines - Specification Part 2 cappels First Revision
22	IS 7587 (Part 3) : 2006 Reviewed In : 2022	Cage suspension gear for winding in mines - Specification Part 3 shackles and pins First Revision
23	IS 7587 (Part 4) : 2006 Reviewed In : 2022	Cage suspension gear for winding in mines - Specification Part 4 bridle chains First Revision
24	IS 7587 (Part 5) : 2006 Reviewed In : 2022	Cage suspension gear for winding in mines - Specification Part 5 distribution plates First Revision
25	IS 7587 (Part 6) : 2006 Reviewed In : 2022	Cage suspension gear for winding in mines - Specification Part 6 safety detaching hooks 4 Plates Type 80 and 100 kN capacity First Revision
26	IS 7587 (Part 7) : 2017 Reviewed In : 2022	Cage suspension gear for winding in mines - Specification Part 7 safety detaching hook 4 Plate Type 120 150 and 200 kN capacity First Revision
27	IS 7587 (Part 8) : 1993 Reviewed In : 2018	Winding in mines - Suspension gear Part 8 clivey hook suspension arrangements
28	IS 8003 : 2008 Reviewed In : 2018	Wheel axle assemblies for mine cars - Specification First Revision
29	IS 8066 : 1976 Reviewed In : 2020	Specification for mine cars
30	IS 8166 : 1988 ISO 1717 Reviewed In : 2018 ISO 1717:1974	Specification for rotary drill bits for drilling principally in coal First Revision
31	IS 8421 : 1977 Reviewed In : 2020	Specification for hydraulic props
32	IS 8473 : 1988 Reviewed In : 2018	Specification for roof bars used in mines
33	IS 8534 (Part 1) : 2017 Reviewed In : 2021	Mine tub couplings and drawbars for use in mines Part 1 specification
34	IS 8534 (Part 2) : 1995 Reviewed In : 2020	Mine tub couplings and drawbars Part 2 C - Link and D - Shackle type First Revision
35	IS 8534 (Part 3) : 1995 Reviewed In : 2020	Mine tub couplings and drawbars Part 3 R - Shackle and link type First Revision
36	IS 8534 (Part 4) : 1995 Reviewed In : 2020	Mine tub couplings and drawbars Part 4 F - Shackle and link type First Revision
37	IS 8534 (Part 5) : 2005 Reviewed In : 2020	Mine tub couplings and drawbars Part 5 drawbars First Revision
38	IS 8534 (Part 6) : 1995 Reviewed In : 2020	Mine tub couplings and drawbars Part 6 hook and D - Shackle type
39	IS 9011 : 1978 Reviewed In : 2020	Specification for skip suspension gear for winding in mines
40	IS 9123 : 1979 Reviewed In : 2020	Specification for battery locom - Otives for use in mines
41	IS 9170 (Part 1) : 2005 Reviewed In : 2020	Endless haulage rope clips - Specification Part 1 general requirements First Revision
42	IS 9170 (Part 2) : 2005 Reviewed In : 2020	Endless haulage rope clips - Specification Part 2 screw clip cam clip smallman clip and wedge clip

43	IS 9170 (Part 3) : 2005 Reviewed In : 2020	Endless haulage rope clips - Specification Part 3 lashing chain
44	IS 9192 : 2024	FLAMEPROOF HAND-HELD ROTARY ELECTRIC DRILLING MACHINE FOR USE IN MINES SPECIFICATION
45	IS 9203 (Part 1) : 2023	FRICITION ROLLERS FOR MINE HAULAGE TRACKS SPECIFICATION PART 1 TECHNICAL SUPPLY CONDITIONS First Revision of IS 9203 Part 1
46	IS 9203 (Part 2) : 2023	FRICITION ROLLERS FOR MINE HAULAGE TRACKS SPECIFICATION PART 2 PARALLEL ROLLERS First Revision of IS 9203 Part 2
47	IS 9203 (Part 3) : 2023	FRICITION ROLLERS FOR MINE HAULAGE TRACKS SPECIFICATION PART 3 TAPERED AND VERTICAL ROLLERS AND HORIZONTAL AND VERTICAL PULLEYS First Revision of IS 9203 Part 3
48	IS 9203 (Part 4) : 2023	FRICITION ROLLERS FOR MINE HAULAGE TRACKS SPECIFICATION PART 4 ROLLERS WITH NON-METALLIC ROPE BEARING SURFACES First Revision of IS 9203 Part 4
49	IS 9227 : 2023	FRICITION ROLLER MOUNTINGS FOR MINE HAULAGE TRACKS SPECIFICATION First Revision of IS 9227
50	IS 9239 : 1999 Reviewed In : 2020	Winding in mines - Sheaves - Cast - Specification First Revision
51	IS 9494 : 2023	Man Riding Cars used in Mines Specification First Revision
52	IS 9999 : 1981 Reviewed In : 2018	Specification for diesel locomotives for use in mines