BUREAU OF INDIAN STANDARDS

Program of Work

PCD 7: Solid Mineral Fuels and Solid Biofuels

Scope: To formulate Indian Standards for a) Terminology, methods of sampling and test, codes of

practice, classification by size and type, petrographic analysis and specification for solid mineral fuel b) Terminology, methods of sampling and test, codes of practice, classification and specification for raw and processed materials originating from arboriculture, agriculture,

aquaculture, horticulture and forestry to be used as a source for solid bio-fuels.

Liaison: ISO TC-238 (P): Solid biofuels ISO TC-27 (P): Coal and coke ISO TC- SC-1 (P): Coal

preparation: Terminology and performance ISO TC- SC-3 (P): Coke ISO TC-

SC-4 (P): Sampling ISO TC- SC-5 (P): Methods of analysis

Published Standards

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS 12770 : 1989	Coal for cement manufacture -	May, 2020	-	Indigenous
	Reviewed In: 2020	Specification			
2	IS 12891 : 2021	Determination of fusibility of ash		-	Not Equivalent
	ISO 540: 2008	from coal, coke and lignite (First			
		Revision)			
3	IS 1350 (Part 1):	Methods of test for coal and coke:	September, 2023	1	Indigenous
	1984	Part 1 proximate analysis (Second			
	Reviewed In: 2023	Revision)			
4	IS 1350 (Part 2):	Method of test for coal and coke :		-	Identical under dual
	2022	Part 2 determination of gross			numbering
	ISO 1928 : 2020	calorific value (Third Revision)			
	ISO 1928 : 2020				
5	IS 1350 (Part 3):	Methods of test for coal and coke:		-	Identical under dual
	2022	Part 3 determination of total			numbering
	ISO 334 : 2020	sulphur - Eschka method (Second			
	ISO 334 : 2020	Revision)			
6	IS 1350 (Part 4/Sec	Coal and coke - Methods of test :		-	Indigenous
	1): 2024	Part 4 ultimate analysis, Section 1			
		determination of carbon and			
		hydrogen (Second Revision)			
7	,	Methods of test for coal and coke:	May, 2020	2	Not Equivalent
	2): 1975	Part 4 ultimate analysis, Section 2			
	Reviewed In: 2020	determination of nitrogen (First			
	ISO/R 332, ISO/R	Revision)			
	333				
8	` /	Methods of test for coal and coke:	May, 2021	-	Indigenous
	2017	Part 5 determination of special			
	D 1 11 0001	impurities (carbon present as			
	Reviewed In: 2021	carbonate, chlorine and			
	IG 1050 (D + 1)	phosphorus) (Second Revision)	0 1 2000		*1 . 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
9	IS 1353 (Part 1):	Method of test for coal	September, 2023	-	Identical under dual
	2018	carbonization: Part 1			numbering

1	I			1	1
	Paviawad In : 2022	determination of the crucible swelling number (Second Revision)			
	ISO 501: 2012	swelling number (Second Revision)			
10	IS 1353 (Part 2):	Method of test for coal	September, 2023	_	Identical under dual
10	2018	carbonization : Part 2	Septemoer, 2023	_	numbering
	2010	determination of caking power -			namoernig
	Reviewed In: 2023	Gray - King coke test (Second			
	ISO 502: 2015	Revision)			
11	IS 1353 (Part 3):	Method of test for coal		_	Identical under dual
	2022	carbonization : Part 3			numbering
	ISO 15585 : 2019	determination of caking index			
	ISO 15585 : 2019	(Second Revision)			
12	IS 1354 : 2024	Coke - Methods of test - Special		-	Indigenous
		tests (Third Revision)			
13	IS 1355 : 1984	Methods of determination of the	September, 2023	1	Not Equivalent
	Reviewed In: 2023	chemical composition of ash of			
	ISO 1171 : 1981	coal and coke (First Revision)			
14	IS 13758 (Part 1):	Coal tar pitch - Methods of test :	January, 2020	-	Indigenous
	1993	Part 1 determination of matter			
	Reviewed In: 2020	insoluble in quinoline			
15	IS 13758 (Part 2):	Coal tar pitch - Methods of test :	January, 2020	-	Indigenous
	1993	Part 2 determination of coking			
1.5	Reviewed In: 2020	value			×
16	IS 13810 : 2023	Code of practice for float and sink		-	Indigenous
17	IC 17420 2004	analysis of coal (First Revision)	M 2020		T1 (' 1 1 1 1 1
17	IS 15438 : 2004	Coal - Determination of forms of	May, 2020	-	Identical under dual
	ISO 157 Reviewed In: 2020	sulphur			numbering
	ISO 157:1996				
18	IS 15441 : 2004	Solid mineral fuels - Determination	May, 2020		Identical under dual
10	ISO 625	of carbon and hydrogen - Liebig	May, 2020	_	numbering
	Reviewed In: 2020	method			numbering
	ISO 625:1996	method			
19	IS 15807 (Part 1):	Methods of petrographic analysis	January, 2020	-	Indigenous
	2008	of lignite : Part 1 definition of	•		
	Reviewed In: 2020	terms relating to petrographic			
		analysis of lignite			
20	IS 16143 (Part 1):	Hard coal and coke - Mechanical		-	Identical under dual
	2021	sampling : Part 1 general			numbering
	ISO 13909 -1:2016	introduction (First Revision)			
	ISO 13909 -1:2016				
21	IS 16143 (Part 2):	Hard coal and coke - Mechanical		-	Identical under dual
	2021	sampling : Part 2 coal - Sampling			numbering
	ISO 13909-2:2016	from moving streams (First			
<u></u>	ISO 13909-2:2016	Revision)			T.1
22	IS 16143 (Part 3):	Hard coal and coke - Mechanical		-	Identical under dual
	2021	sampling: Part 3 coal - Sampling			numbering
	ISO 13909-3:2016 ISO 13909-3:2016	from stationary lots (First Revision)			
23	IS 16143 (Part 4):	Hard coal and coke - Mechanical			Identical under dual
23	2021	sampling: Part 4 coal - preparation		_	numbering
	ISO 13909-4 : 2016	of test samples (First Revision)			numbering
	ISO 13909-4 : 2016	•			
24	IS 16143 (Part 5):	Hard coal and coke - Mechanical		_	Identical under dual
~ '	2021	sampling : Part 5 coke - Sampling			numbering
	ISO 13909-5 : 2016				
	ISO 13909-5 : 2016	Č ,			
25	IS 16143 (Part 6):	Hard coal and coke - Mechanical		-	Identical under dual
	2021	sampling: Part 6 coke -			numbering
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		preparation of test samples (First			
	ISO 13909-6 : 2016				
26	IS 16143 (Part 7):	Hard coal and coke - Mechanical		-	Identical under dual
	2021	sampling: Part 7 methods for			numbering
	ISO 13909-7 : 2016				
	ISO 13909-7 : 2016	sampling, sample preparation and			
		testing (First Revision)			
27	IS 16143 (Part 8):	Hard coal and coke - Mechanical		-	Identical under dual
	2021	sampling: Part 8 methods of			numbering
	ISO 13909-8 : 2016	·			
•	ISO 13909-8 : 2016				<u> </u>
28		Solid mineral fuels - Determination	May, 2020	-	Identical under dual
	ISO 609 : 1996	of carbon and hydrogen - High			numbering
	Reviewed In: 2020	temperature combustion method			
20	ISO 609 : 1996		2022		
29	IS 16609 : 2018	Solid mineral fuels - Determination	September, 2023	-	Identical under dual
	ISO 19579 : 2012	of sulphur by IR spectrometry			numbering
	Reviewed In: 2023				
20	ISO 19579:2012	Cool Determination C. 1.			Td-m4'1 3 1 1
30	IS 16610 : 2022 ISO 10329 : 2017	Coal - Determination of plastic		-	Identical under dual
	ISO 10329 : 2017 ISO 10329 : 2017	properties - Constant-torque			numbering
	180 10329 : 2017	gieseler plastometer method (First Revision)			
31	IS 16611 : 2022	Hard coal - Sampling of slurries			Identical under dual
31	ISO 20904 : 2020	(First Revision)		-	numbering
	ISO 20904 : 2020	(First Revision)			numbering
32	IS 16612 : 2018	Solid mineral fuels - Determination	September, 2023	_	Identical under dual
32	ISO 29541 : 2010	of total carbon, hydrogen and	September, 2023		numbering
	Reviewed In: 2023	nitrogen content - Instrumental			l maintoering
	ISO 29541 : 2010	method			
33	IS 16616 : 2022	Hard coal - Audibert-arnu		_	Identical under dual
	ISO 349 : 2020	dilatometer test (First Revision)			numbering
	ISO 349 : 2020	,			
34	IS 16617 : 2018	Coal - Sampling of pulverized coal	September, 2023	-	Identical under dual
	ISO 9931 : 1991	conveyed by gases in direct fired			numbering
	Reviewed In: 2023	coal systems			
	ISO 9931:1991				
35	IS 16618 : 2017	Determination of ten race elements	May, 2021	-	Not Equivalent
		in coal, coke, lignite and fly ash by			
	Reviewed In: 2021	flame atomic absorption			
	ISO 23380 : 2013	spectroscopic method			
36	IS 16721 (Part 1):	Method of test for coal : Part 1	September, 2023	-	Not Equivalent
	2018	determination of total mercury			
		content by atomic absorption			
	Reviewed In: 2023	spectrometry			
	ISO 15237:				
	2003,ISO 23380 :				
	2008			ļ	1
37	IS 16721 (Part 2):	Method of test for coal : Part 2	September, 2023	-	Not Equivalent
	2018	determination of arsenic and			
	D 1 11 2022	selenium - Eschka's mixture and			
	Reviewed In : 2023	hydride generation/atomic			
	ISO 11723: 2004	absorption spectrometry			
20	,ISO 23380 : 2008	Determination of mark	C		Not First 1
38	IS 17073 : 2019	Determination of major elements	September, 2023	-	Not Equivalent
	Davious d In 1 2002	in coal and coke ash by x-ray			
	ASTM D4326-13	fluorescence spectroscopic method			
39	IS 17378 : 2021	Test method for determination of			Indigenous
5)	15 1/5/0.2021	103t method for determination of		Ī	marganous

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		major elements in ash from coal		
		and coke by flame atomic		
		absorption spectroscopic method		
40	IS 17642 : 2021	Solid biofuels - Determination of	-	Identical under dual
	ISO 17828 : 2015	bulk density		numbering
	ISO 17828 : 2015			
41	IS 17643 : 2021			Identical under dual
	ISO 17829 : 2015	length and diameter of pellets		numbering
	ISO 17829 : 2015			
42	IS 17653 : 2021	Solid biofuels - Determination of	-	Identical under dual
	ISO 18122 : 2015	ash content		numbering
	ISO 18122 : 2015			
43	IS 17654 : 2021	Solid biofuels - Determination of	-	Identical under dual
	ISO 18125 : 2017	calorific value		numbering
	ISO 18125 : 2017			
44	IS 17655 (Part 1):	Solid biofuels - Determination of	-	Identical under dual
	2021	moisture content - Oven dry		numbering
	ISO 18134 -1 : 2015	method: Part 1 total moisture -		
	ISO 18134 -1 : 2015			
45	IS 17655 (Part 2):	Solid biofuels - Determination of	-	Identical under dual
	2021	moisture content - Oven dry		numbering
	ISO 18134-2 : 2017	method : Part 2 total moisture -		i i i i i i i i i i i i i i i i i i i
	ISO 18134-2 : 2017	Simplified method		
46	IS 17655 (Part 3):	Solid biofuels - Determination of		Identical under dual
70	2021	moisture content - Oven dry	_	numbering
		method : Part 3 moisture in general		numbering
	ISO 18134-3 : 2015	analysis sample		
47	IS 17656 : 2021	Solid biofuels - Determination of		Identical under dual
47	ISO 18846 : 2016		-	
	ISO 18846 : 2016	fines content in samples of pellets		numbering
48	IS 17820 : 2022	Solid mineral fuels -		Identical under dual
48				
	ISO 622 : 2016	Determination of phosphorus		numbering
	ISO 622 : 2016	content - Reduced		
		molybdophosphate photometric		
10	YG 45000 2000	method		
49	IS 17832 : 2022	Solid biofuels - Determination of	-	Identical under dual
	ISO 16948 : 2015	total content of carbon, hydrogen		numbering
	ISO 16948 : 2015	and nitrogen		
50	IS 17833 : 2022	Solid biofuels - Determination of	-	Identical under dual
	ISO 16994 : 2016	total content of sulfur and chlorine		numbering
	ISO 16994 : 2016			
51	IS 17834 : 2022	Solid biofuels - Determination of	-	Identical under dual
	ISO 16995 : 2015	the water soluble chloride, sodium		numbering
	ISO 16995 : 2015	and potassium content		
52	IS 17844 : 2022	Solid biofuels - Determination of	-	Identical under dual
	ISO 18123 : 2015	the content of volatile matter		numbering
	ISO 18123 : 2015			
53	IS 18557 (Part 1):	Solid biofuels - Determination of	-	Identical under dual
	2024	mechanical durability of pellets		numbering
	ISO 17831-1	and briquettes: Part 1 pellets		
	ISO 17831-1:2015			
54	IS 18557 (Part 2):	Solid biofuels - Determination of	-	Identical under dual
	2024	mechanical durability of pellets		numbering
	ISO 17831-2	and briquettes: Part 2 briquettes		
	ISO 17831-2 : 2015	1 1		
55	IS 18640 : 2024	Solid Biofuels - Sample	-	Not Equivalent
-	ISO 14780	Preparation		
56	IS 18721 : 2024	Solid Biofuels i; ½ Vocabulary	-	Not Equivalent
	ISO 16559 : 2014			
			+	

57	IS 18724 : 2024	Solid biofuels - Fuel specifications		l -	Not Equivalent
		and classes - Pellets from agro and		_	1 tot Equivalent
		herbaceous residues			
58	IS 18725 : 2024	Solid biofuels - Fuel specifications		-	Not Equivalent
	ISO 17225-7	and classes - Briquettes from agro			
	212 2021	and herbaceous residues			
59	212 : 2021	Crude coal tar for general use		-	Indigenous
		(Third Revision)			
60	IS 216 : 2006	Coal tar pitch - Specification	April, 2021	_	Indigenous
	Reviewed In: 2021	(Second Revision)	,		
61	IS 218 : 1983	Specification for creosote oil for	September, 2023	1	Indigenous
	Reviewed In: 2023	use as wood preservatives (Second			
		Revision)			
62	IS 3746 : 2018	Graphical symbols for coal	September, 2023	-	Not Equivalent
	D ' 4 I 2022	preparation plant (Second			
	Reviewed In: 2023 ISO 561:1986	Revision)			
63	IS 3810 (Part 1):	Solid mineral fuels - Vocabulary :	May, 2020	_	Not Equivalent
0.5	2002	Part 1 terms relating to coal	1/14/		Tiot Equitations
	Reviewed In: 2020	preparation (Second Revision)			
	ISO 1213-1:1993				
64	IS 3810 (Part 2):	Solid mineral fuels - Vocabulary :	May, 2020	-	Not Equivalent
	2003	Part 2 terms relating to sampling,			
	ISO 1213-2	testing and analysis (First Revision)			
	Reviewed In: 2020 ISO 1213-2:1992				
65	IS 3810 (Part 3):	Glossary of terms relating to solid		_	Indigenous
	2023	mineral fuels : Part 3 - Coke			indigenous
66	IS 4023 : 2022	Methods for the determination of		-	Identical under dual
	ISO 18894 : 2018	coke reactivity index (CRI) and			numbering
	ISO 18894 : 2018	coke strength after reaction (CSR)			
I		(7 15			
		(Second Revision)			Indiannas
67	IS 4286 : 2024	Domestic Coke - Specification		-	Indigenous
	IS 4286 : 2024	Domestic Coke - Specification (Second Revision)		-	
67		Domestic Coke - Specification		-	Indigenous Identical under dual numbering
	IS 4286 : 2024 IS 4311 : 2024	Domestic Coke - Specification (Second Revision) Coal - Determination of mineral		-	Identical under dual
68	IS 4286 : 2024 IS 4311 : 2024 ISO 602 : 2015 ISO 602 : 2015 IS 436 (Part 1/Sec 1)	Domestic Coke - Specification (Second Revision) Coal - Determination of mineral matter (First Revision) Methods for Sampling of Coal and		-	Identical under dual
68	IS 4286 : 2024 IS 4311 : 2024 ISO 602 : 2015 ISO 602 : 2015	Domestic Coke - Specification (Second Revision) Coal - Determination of mineral matter (First Revision) Methods for Sampling of Coal and Coke Part 1 Sampling of Coal		-	Identical under dual numbering
68	IS 4286 : 2024 IS 4311 : 2024 ISO 602 : 2015 ISO 602 : 2015 IS 436 (Part 1/Sec 1)	Domestic Coke - Specification (Second Revision) Coal - Determination of mineral matter (First Revision) Methods for Sampling of Coal and Coke Part 1 Sampling of Coal Section 1 Manual Sampling		-	Identical under dual numbering
68	IS 4286 : 2024 IS 4311 : 2024 ISO 602 : 2015 ISO 602 : 2015 IS 436 (Part 1/Sec 1) : 2024	Domestic Coke - Specification (Second Revision) Coal - Determination of mineral matter (First Revision) Methods for Sampling of Coal and Coke Part 1 Sampling of Coal Section 1 Manual Sampling (Second Revision)	Sentember 2023	-	Identical under dual numbering Indigenous
68	IS 4286 : 2024 IS 4311 : 2024 ISO 602 : 2015 ISO 602 : 2015 IS 436 (Part 1/Sec 1) : 2024 IS 436 (Part 1/Sec 1)	Domestic Coke - Specification (Second Revision) Coal - Determination of mineral matter (First Revision) Methods for Sampling of Coal and Coke Part 1 Sampling of Coal Section 1 Manual Sampling (Second Revision) Methods for sampling of coal and	September, 2023	-	Identical under dual numbering
68	IS 4286 : 2024 IS 4311 : 2024 ISO 602 : 2015 ISO 602 : 2015 IS 436 (Part 1/Sec 1) : 2024	Domestic Coke - Specification (Second Revision) Coal - Determination of mineral matter (First Revision) Methods for Sampling of Coal and Coke Part 1 Sampling of Coal Section 1 Manual Sampling (Second Revision) Methods for sampling of coal and coke: Part 1 sampling of coal,	September, 2023	-	Identical under dual numbering Indigenous
68	IS 4286 : 2024 IS 4311 : 2024 ISO 602 : 2015 ISO 602 : 2015 IS 436 (Part 1/Sec 1) : 2024 IS 436 (Part 1/Sec 1) : 1964 Reviewed In : 2023	Domestic Coke - Specification (Second Revision) Coal - Determination of mineral matter (First Revision) Methods for Sampling of Coal and Coke Part 1 Sampling of Coal Section 1 Manual Sampling (Second Revision) Methods for sampling of coal and coke : Part 1 sampling of coal, Section 1 manual sampling (First Revision)	September, 2023	- - -	Identical under dual numbering Indigenous
68	IS 4286 : 2024 IS 4311 : 2024 ISO 602 : 2015 ISO 602 : 2015 IS 436 (Part 1/Sec 1) : 2024 IS 436 (Part 1/Sec 1) : 1964	Domestic Coke - Specification (Second Revision) Coal - Determination of mineral matter (First Revision) Methods for Sampling of Coal and Coke Part 1 Sampling of Coal Section 1 Manual Sampling (Second Revision) Methods for sampling of coal and coke : Part 1 sampling of coal and coke : Part 1 sampling of First Revision) Size analysis of coal and coke for	September, 2023	-	Identical under dual numbering Indigenous
68 69 70	IS 4286 : 2024 IS 4311 : 2024 ISO 602 : 2015 ISO 602 : 2015 IS 436 (Part 1/Sec 1) : 2024 IS 436 (Part 1/Sec 1) : 1964 Reviewed In : 2023	Domestic Coke - Specification (Second Revision) Coal - Determination of mineral matter (First Revision) Methods for Sampling of Coal and Coke Part 1 Sampling of Coal Section 1 Manual Sampling (Second Revision) Methods for sampling of coal and coke : Part 1 sampling of coal, Section 1 manual sampling (First Revision)	-	-	Identical under dual numbering Indigenous Indigenous
68 69 70	IS 4286 : 2024 IS 4311 : 2024 ISO 602 : 2015 ISO 602 : 2015 IS 436 (Part 1/Sec 1) : 2024 IS 436 (Part 1/Sec 1) : 1964 Reviewed In : 2023 IS 437 : 2020	Domestic Coke - Specification (Second Revision) Coal - Determination of mineral matter (First Revision) Methods for Sampling of Coal and Coke Part 1 Sampling of Coal Section 1 Manual Sampling (Second Revision) Methods for sampling of coal and coke : Part 1 sampling of coal, Section 1 manual sampling (First Revision) Size analysis of coal and coke for marketing (Fourth Revision)	-	- - - -	Identical under dual numbering Indigenous Indigenous Indigenous
68 69 70	IS 4286 : 2024 IS 4311 : 2024 ISO 602 : 2015 ISO 602 : 2015 IS 436 (Part 1/Sec 1) : 2024 IS 436 (Part 1/Sec 1) : 1964 Reviewed In : 2023	Domestic Coke - Specification (Second Revision) Coal - Determination of mineral matter (First Revision) Methods for Sampling of Coal and Coke Part 1 Sampling of Coal Section 1 Manual Sampling (Second Revision) Methods for sampling of coal and coke : Part 1 sampling of coal, Section 1 manual sampling (First Revision) Size analysis of coal and coke for marketing (Fourth Revision) Industrial Coke - Specification	-	- - -	Identical under dual numbering Indigenous Indigenous
68 69 70	IS 4286 : 2024 IS 4311 : 2024 ISO 602 : 2015 ISO 602 : 2015 IS 436 (Part 1/Sec 1) : 2024 IS 436 (Part 1/Sec 1) : 1964 Reviewed In : 2023 IS 437 : 2020	Domestic Coke - Specification (Second Revision) Coal - Determination of mineral matter (First Revision) Methods for Sampling of Coal and Coke Part 1 Sampling of Coal Section 1 Manual Sampling (Second Revision) Methods for sampling of coal and coke : Part 1 sampling of coal, Section 1 manual sampling (First Revision) Size analysis of coal and coke for marketing (Fourth Revision)	-	- - - -	Identical under dual numbering Indigenous Indigenous Indigenous
68 69 70	IS 4286 : 2024 IS 4311 : 2024 ISO 602 : 2015 ISO 602 : 2015 IS 436 (Part 1/Sec 1) : 2024 IS 436 (Part 1/Sec 1) : 1964 Reviewed In : 2023 IS 437 : 2020	Domestic Coke - Specification (Second Revision) Coal - Determination of mineral matter (First Revision) Methods for Sampling of Coal and Coke Part 1 Sampling of Coal Section 1 Manual Sampling (Second Revision) Methods for sampling of coal and coke : Part 1 sampling of coal, Section 1 manual sampling (First Revision) Size analysis of coal and coke for marketing (Fourth Revision) Industrial Coke - Specification	-	- - - - -	Identical under dual numbering Indigenous Indigenous Indigenous
68 69 70 71	IS 4286 : 2024 IS 4311 : 2024 ISO 602 : 2015 ISO 602 : 2015 IS 436 (Part 1/Sec 1) : 2024 IS 436 (Part 1/Sec 1) : 1964 Reviewed In : 2023 IS 437 : 2020 IS 439 : 2020	Domestic Coke - Specification (Second Revision) Coal - Determination of mineral matter (First Revision) Methods for Sampling of Coal and Coke Part 1 Sampling of Coal Section 1 Manual Sampling (Second Revision) Methods for sampling of coal and coke : Part 1 sampling of coal, Section 1 manual sampling (First Revision) Size analysis of coal and coke for marketing (Fourth Revision) Industrial Coke - Specification (Fourth Revision)	- -	- - - -	Identical under dual numbering Indigenous Indigenous Indigenous Indigenous
68 69 70 71 72	IS 4286 : 2024 IS 4311 : 2024 ISO 602 : 2015 ISO 602 : 2015 IS 436 (Part 1/Sec 1) : 2024 IS 436 (Part 1/Sec 1) : 1964 Reviewed In : 2023 IS 437 : 2020 IS 439 : 2020 IS 4433 : 1979 Reviewed In : 2020	Domestic Coke - Specification (Second Revision) Coal - Determination of mineral matter (First Revision) Methods for Sampling of Coal and Coke Part 1 Sampling of Coal Section 1 Manual Sampling (Second Revision) Methods for sampling of coal and coke : Part 1 sampling of coal, Section 1 manual sampling (First Revision) Size analysis of coal and coke for marketing (Fourth Revision) Industrial Coke - Specification (Fourth Revision) Method for determination of hardgrove grindability index of coal (First Revision)	- May, 2020	- - - - -	Identical under dual numbering Indigenous Indigenous Indigenous Indigenous Indigenous
68 69 70 71	IS 4286: 2024 IS 4311: 2024 ISO 602: 2015 ISO 602: 2015 IS 436 (Part 1/Sec 1): 2024 IS 436 (Part 1/Sec 1): 1964 Reviewed In: 2023 IS 437: 2020 IS 439: 2020 IS 4433: 1979 Reviewed In: 2020 IS 5062 (Part 1):	Domestic Coke - Specification (Second Revision) Coal - Determination of mineral matter (First Revision) Methods for Sampling of Coal and Coke Part 1 Sampling of Coal Section 1 Manual Sampling (Second Revision) Methods for sampling of coal and coke : Part 1 sampling of coal, Section 1 manual sampling (First Revision) Size analysis of coal and coke for marketing (Fourth Revision) Industrial Coke - Specification (Fourth Revision) Method for determination of hardgrove grindability index of coal (First Revision) Methods of test for brown coals	- -	- - - - - -	Identical under dual numbering Indigenous Indigenous Indigenous Indigenous
68 69 70 71 72	IS 4286 : 2024 IS 4311 : 2024 ISO 602 : 2015 ISO 602 : 2015 IS 436 (Part 1/Sec 1) : 2024 IS 436 (Part 1/Sec 1) : 1964 Reviewed In : 2023 IS 437 : 2020 IS 439 : 2020 IS 4433 : 1979 Reviewed In : 2020 IS 5062 (Part 1) : 1969	Domestic Coke - Specification (Second Revision) Coal - Determination of mineral matter (First Revision) Methods for Sampling of Coal and Coke Part 1 Sampling of Coal Section 1 Manual Sampling (Second Revision) Methods for sampling of coal and coke : Part 1 sampling of coal, Section 1 manual sampling (First Revision) Size analysis of coal and coke for marketing (Fourth Revision) Industrial Coke - Specification (Fourth Revision) Method for determination of hardgrove grindability index of coal (First Revision) Methods of test for brown coals and lignites : Part 1 determination	- May, 2020	- - - - -	Identical under dual numbering Indigenous Indigenous Indigenous Indigenous Indigenous
68 69 70 71 72	IS 4286: 2024 IS 4311: 2024 ISO 602: 2015 ISO 602: 2015 IS 436 (Part 1/Sec 1): 2024 IS 436 (Part 1/Sec 1): 1964 Reviewed In: 2023 IS 437: 2020 IS 439: 2020 IS 4433: 1979 Reviewed In: 2020 IS 5062 (Part 1):	Domestic Coke - Specification (Second Revision) Coal - Determination of mineral matter (First Revision) Methods for Sampling of Coal and Coke Part 1 Sampling of Coal Section 1 Manual Sampling (Second Revision) Methods for sampling of coal and coke : Part 1 sampling of coal, Section 1 manual sampling (First Revision) Size analysis of coal and coke for marketing (Fourth Revision) Industrial Coke - Specification (Fourth Revision) Method for determination of hardgrove grindability index of coal (First Revision) Methods of test for brown coals	- May, 2020	- - - - -	Identical under dual numbering Indigenous Indigenous Indigenous Indigenous Indigenous

I		volumetric method		I	1
75	IS 5062 (Part 2):	Methods of test for brown coals	May, 2020	_	Indigenous
'	1969	and lignites : Part 2 determination	<i>j</i> ,		
	Reviewed In: 2020	of ash			
76	IS 5062 (Part 3):	Methods of test for brown coals		-	Identical under dual
	2022	and lignite: Part 3 determination			numbering
	ISO 647: 2017	of the yields of tar water gas and			
	ISO 647: 2017	coke residue by low temperature			
		distillation (Second Revision)			
77	IS 5062 (Part 4):	Method of test for brown coals and	September, 2023	-	Identical under dual
	2018	lignites : Part 4 determination of			numbering
		yield of benzene-soluble extract -			
	Reviewed In: 2023	Semi-automatic method (Second			
	ISO 975: 2013	Revision)			
78	IS 5062 (Part 5):	Methods of test for brown coals	September, 2023	-	Identical under dual
	2018	and lignites : Part 5 determination			numbering
	ISO 1017 : 2006	of acetone-soluble material			
	Reviewed In: 2023	(Resinous Substance) in the			
	ISO 1017 : 2006	benzene-soluble extract (Second			
		Revision)			
79	IS 5062 (Part 6):	Methods of test for brown coals	May, 2021	-	Identical under dual
	2017	and lignites : Part 6 determination			numbering
	ISO 5072 : 2013	of true relative density and			
	Reviewed In : 2021	apparent relative density			
90	ISO 5072 : 2013	Duaren anala and Lanitas Mathada			Identical and dead
80	IS 5062 (Part 7): 2024	Brown coals and lignites - Methods of test : Part 7 determination of		-	Identical under dual
	ISO 5073 : 2021				numbering
	ISO 5073 : 2021	humic acids (First Revision)			
81	IS 5062 (Part 8/Sec	Methods of test for brown coals	September, 2023	_	Identical under dual
61	1): 2018	and lignites: Part 8 determination	September, 2023		numbering
	1).2010	of moisture content, Section 1			numbering
	Reviewed In: 2023	indirect gravimetric method for			
	ISO 5068-1: 2007	total moisture			
82	IS 5062 (Part 8/Sec	Methods of test for brown coals	September, 2023	-	Identical under dual
	2): 2018	and lignites: Part 8 determination			numbering
	ISO 5068-2 : 2007	of moisture content, Section 2			
	Reviewed In: 2023	indirect gravimetric method for			
L_	ISO 5068-2: 2007	moisture in the analysis smaple		<u> </u>	
83	IS 5209 : 2002	Coal preparation plant - Principles	May, 2020	-	Identical under dual
	ISO 924	and conventions for flowsheets			numbering
	Reviewed In: 2020	(First Revision)			
	ISO 924:1989				
84	IS 5451 : 2001	Glossary of terms relating to coal	September, 2023	-	Not Equivalent
	Reviewed In: 2023	carbonization products (First			
	ISO 1543	Revision)			
85	IS 6345 : 1996	Methods of sampling of coal for	September, 2023	-	Not Equivalent
	Reviewed In: 2023	float and sink analysis (First			
06	ISO 7936	Revision)		1	Idontical J 11
86	IS 7190 (Part 1): 2024	Coke - Methods of test : Part 1		_	Identical under dual
	ISO 567 : 2021	determination of bulk density in a small container (Second Revision)			numbering
	ISO 567 : 2021	Sman container (Second Revision)			
87	IS 7190 (Part 2):	Coke - Methods of test : Part 2		 -	Identical under dual
"	2022	determination of bulk density in a			numbering
	ISO 1013 : 2020	large container (Second Revision)			
	ISO 1013 : 2020	(222314 101010)			
88	IS 770 : 2013	Classification and codification of	September, 2023	-	Indigenous
	Reviewed In: 2023	indian coals, lignites and semi-	* ′		
I		1		1	I

		anthracites (Third Revision)			
89	IS 7929 : 1975	Methods for determination of	May, 2020	-	Indigenous
	Reviewed In: 2020	electrical resistivity of chemical			
		coke			
90	IS 9127 (Part 1):	Methods of petrographic analysis		-	Identical under dual
	2022	of coal: Part 1 definition of terms			numbering
	ISO 7404-1 : 2016	relating to petrographic analysis of			
	ISO 7404-1 : 2016	coal (Second Revision)			
91	IS 9127 (Part 2):	Methods for petrographic analysis	January, 2020	-	Identical under dual
	2014	of coals: Part 2 methods of			numbering
	ISO 7404-2 : 2009	preparing coal samples (Second			
	Reviewed In: 2020	Revision)			
	ISO 7404-2 : 2009				
92	IS 9127 (Part 3):	Methods for the petrographic	May, 2020	-	Identical under dual
	2002	analysis of bituminous coal and			numbering
	ISO 7404-3	anthracite: Part 3 method of			
	Reviewed In: 2020	determining maceral group			
	ISO 7404-3:1994	composition (First Revision)			
93	IS 9127 (Part 4):	Methods for petrographic analysis		-	Identical under dual
	2022	of coal: Part 4 method of			numbering
	ISO 7404-4 : 2017	determining microlithotype			
	ISO 7404-4 : 2017	carbominerite and minerite			
<u> </u>	70.10- (5	composition (First Revision)			
94	IS 9127 (Part 5):	Methods for the petrographic	May, 2020	-	Identical under dual
	2004	analysis of bituminous coal and			numbering
	ISO 7404-5	anthracite : Part 5 method of			
	Reviewed In: 2020	determining microscopically the			
	ISO 7404-5:1994	reflectance of vitrinite (First			
05	IC 0012 1001	Revision)	J 2020		To dia anno
95	IS 9912 : 1981	Coal tar based coating material and	January, 2020	-	Indigenous
	Reviewed In: 2020				
		pipelines - Specification (First			
96	IS 9949 : 1986	Revision) Methods of test for abrasive	May 2020	+	Indiannous
90	Reviewed In : 2020		May, 2020	_	Indigenous
	Reviewed iii: 2020	properties of coal and associated			
		minerals (First Revision)			

Standards under Development

	Projects Approved				
SI. No.	Doc No.	Title			
	No Records Found				

		Preliminary Draft Standards		
SI. No.	Doc No.	Title		
	No Records Found			

		Drafts Standards in WC Stage	
SI. No.	Doc No.	Title	
	No Records Found		

	Draft Standards Completed WC Stage		
SI. No.	Doc No.	Title	
1	PCD 7 (24223)	Methods of Test for Coal and Coke Part 1 Proximate Analysis Third Revision	

2	PCD 7 (24232)	Coal for Cement Manufacture Specification First Revision
3	PCD 7 (25093)	Method of test for Brown Coals and Lignites Part 4 Determination of Yield of Benzene - Soluble
		Extract Semi - Automatic Method Third Revision
4	PCD 7 (25094)	Methods of Test for Brown Coals and Lignites Part 6 Determination of True Relative Density and
		Apparent Relative Density First Revision
5	PCD 7 (25095)	Solid Biofuels Determination of Ash Content First Revision
6	PCD 7 (25096)	Solid Biofuels Determination of Moisture Content Part 3 Moisture in General Analysis Sample
		First Revision
7	PCD 7 (25097)	Solid Biofuels Determination of Volatile Matter First Revision
8	PCD 7 (25098)	Solid Biofuels Determination of Moisture Content Part 1 Reference Method First Revision
9	PCD 7 (25211)	SOLID BIOFUELS - DETERMINATION OF MAJOR ELEMENTS - Al Ca Fe Mg P K Si Na
		AND Ti
10	PCD 7 (25212)	SOLID BIOFUELS DETERMINATION OF MINOR ELEMENTS
11	PCD 7 (25218)	Methods of test for Abrasive Properties of Coal and Associated Minerals Second Revision
12	PCD 7 (25223)	SOLID BIOFUELS SAMPLING
13	PCD 7 (25597)	Coal and Coke Methods of Test Part 4 Ultimate Analysis Section 2 Determination of Nitrogen
		Second Revision
14	PCD 7 (25615)	Coal and Coke - Methods for determination of the chemical composition of ash Second Revision

Finalized Draft Indian Standard			
SI. No.	Doc No.	Title	
No Records Found			

Finalized Draft Indian Standards under Print			
SI. No.	Doc No.	Title	
No Records Found			

Total Published Standards:89 Total Standards Under development:14

Aspect Wise Report

Product: 9
Code of Practices: 1
Methods of Test: 61
Terminology: 7
Dimensions: 1
System Standard: 0
Safety Standard: 0

Others: 16
Service Specification: 0
Process Specification: 0
Unclassified: 0

Annexure-I :List of Indian Standards Withdrawn/Superseded

SI. No.	IS No. & Year	Title
1	IS 1272 : 1958	Coal Tar Solvent Naphtha Light Grade 2
	Reviewed In: 2005	
2	IS 1351 : 1959	Methods of Test for Coal Coke Ultimates Analysis
3	IS 1352 : 1959	Methods of Test for Coal and Coke Ultimate Analysis
4	IS 1421 : 1964	Cellulose Nitrate Coated Fabrics
5	IS 15439 : 2000 Reviewed In : 2005	Hard Coal - Determination of Oxygen Content
		Coal - Sampling of Pulverized Coal Conveyed by Gases in Direct Fired Coal Systems

6	IS 15440 : 2004	
7	IS 213 : 1968	Coal-based naphtha superseding IS 214 AND IS 1272
8	IS 214 : 1958	Coal Tar Solvent Naphtha Heavy
9	IS 215 : 1995 Reviewed In : 2016	Road Tar
10	IS 358 : 1964	Benzole Industrial revised
11	IS 436 (Part 1/Sec 2) : 1976 Reviewed In : 2010	Methods for sampling of coal and coke Part I Sampling of Coal Section 2 Mechanical sampling
12	IS 436 (Part 2): 1965 Reviewed In: 2010	Methods of sampling of coal and coke Part 2 Sampling of coke
13	IS 4836 : 1968	Foundary Coke
14	IS 5018 : 1968	Classification of hard coals by type
15	IS 535 : 1955	Benzene Pure Nitration Grade
16	IS 5615 : 1970	Gas Coke
17	IS 6372 : 1971	Coke For Ferro-alloys
18	IS 6407 : 1971	Rubber Aprons For Hospital Use
19	IS 7189 : 1974 Reviewed In : 2005	Blast Furnace Coke
20	IS 7190 : 1974 Reviewed In : 2010	Methods of determination of bulk density of coke
21	IS 7221 : 1974	Methods of determining the moisture holding capacity in hard coals

Annexure-II :List of Indian Product Standards

SI. No.	IS No. & Year	Title
1	IS 12770 : 1989	Coal for cement manufacture - Specification
	Reviewed In: 2020	
2	IS 18724 : 2024	Solid biofuels - Fuel specifications and classes - Pellets from agro and herbaceous residues
3	IS 18725 : 2024	Solid biofuels - Fuel specifications and classes - Briquettes from agro and herbaceous residues
4	212 : 2021	Crude coal tar for general use Third Revision
	ISO 5518:2007	
5	IS 216 : 2006	Coal tar pitch - Specification Second Revision
	Reviewed In: 2021	
6	IS 218 : 1983	Specification for creosote oil for use as wood preservatives Second Revision
	Reviewed In: 2023	
7	IS 4286 : 2024	Domestic Coke - Specification Second Revision
8	IS 439 : 2020	Industrial Coke - Specification Fourth Revision
9	IS 9912 : 1981	Coal tar based coating material and primers for protecting iron or steel pipelines - Specification
	Reviewed In: 2020	First Revision