### **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		Indigenous
	Reviewed In: 2020	Specification	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)			
<u></u>	333				
8	` /	Methods of test for coal and coke:	May, 2021	-	Indigenous
	2017	Part 5 determination of special			
	D 1 17 6061	impurities (carbon present as			
	Reviewed In: 2021	carbonate, chlorine and			
	IC 1050 (D + 1)	phosphorus) (Second Revision)	G . 1 2022	-	x1 . 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	1			I	1
	Paviawad In : 2022	determination of the crucible swelling number (Second Revision)			
	ISO 501: 2012	swennig number (Second Revision)			
10	IS 1353 (Part 2):	Method of test for coal	September, 2023	_	Identical under dual
10	2018	carbonization : Part 2	September, 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			nums vi mg
	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	January, 2019	1	Not Equivalent
	Reviewed In: 2019	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		1	
15	IS 13758 (Part 2):	Coal tar pitch - Methods of test :	January, 2020	-	Indigenous
	1993	Part 2 determination of coking			
	Reviewed In: 2020	value			
16	IS 13810 : 2023	Code of practice for float and sink		-	Indigenous
<u> </u>	YG 4 7 420 2004	analysis of coal (First Revision)	2020		
17	IS 15438 : 2004	Coal - Determination of forms of	May, 2020	-	Identical under dual
	ISO 157	sulphur			numbering
	Reviewed In : 2020				
18	ISO 157:1996	Solid mineral finals Determination	Mar. 2020		Identical under dual
18	IS 15441 : 2004 ISO 625	Solid mineral fuels - Determination	May, 2020	-	
	Reviewed In: 2020	of carbon and hydrogen - Liebig 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	surrairy, 2020		margenous
	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			
	ISO 13909-2:2016	Revision)		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	from stationary lots (First			
<u></u>	ISO 13909-3:2016	Revision)		1	T1 (* 1 1 1 1
23	IS 16143 (Part 4):	Hard coal and coke - Mechanical		-	Identical under dual
	2021	sampling: Part 4 coal - preparation			numbering
	ISO 13909-4 : 2016	of test samples (First Revision)			
24	ISO 13909-4 : 2016 IS 16143 (Part 5) :	Hard coal and coke - Mechanical		_	Identical under dual
24	2021	sampling : Part 5 coke - Sampling		· -	numbering
	ISO 13909-5 : 2016				numbering
	ISO 13909-5 : 2016	S \			
25	IS 16143 (Part 6):	Hard coal and coke - Mechanical		-	Identical under dual
	2021	sampling : Part 6 coke -			numbering
I		1 8		1	

	ISO 13909-6 : 2016	* *		1	
	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	C I			
	ISO 13909-7 : 2016	sampling, sample preparation and			
<u> </u>	70 1 (1 10 (7 0)	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	testing for bias (First Revision)			
120	ISO 13909-8 : 2016		M 2020		I do ad a do a do a do a d
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			
29	ISO 609 : 1996 IS 16609 : 2018	Solid mineral fuels - Determination			Identical under dual
29	ISO 19579 : 2012			-	numbering
	ISO 19579:2012	of sulphur by IR spectrometry			numbering
30	IS 16610 : 2022	Coal - Determination of plastic			Identical under dual
	ISO 10329 : 2017	properties - Constant-torque		_	numbering
	ISO 10329 : 2017	gieseler plastometer method (First			numbering
	150 1032) . 2017	Revision)			
31	IS 16611 : 2022	Hard coal - Sampling of slurries		_	Identical under dual
	ISO 20904 : 2020	(First Revision)			numbering
	ISO 20904 : 2020	(1 iist revision)			namoering
32		Solid mineral fuels - Determination	September, 2023	-	Identical under dual
	ISO 29541 : 2010	of total carbon, hydrogen and			numbering
	Reviewed In: 2023	nitrogen content - Instrumental			
	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			
	D 1 11 2022	content by atomic absorption			
	Reviewed In: 2023	spectrometry			
	ISO 15237:				
	2003,ISO 23380 :				
37	2008 IS 16721 (Part 2):	Method of test for coal : Part 2	September, 2023	+	Not Equivalent
31	2018	determination of arsenic and	September, 2023	_	riot Equivalent
	2016	selenium - Eschka's mixture and			
	Reviewed In: 2023	hydride generation/atomic			
	ISO 11723: 2004	absorption spectrometry			
	,ISO 23380 : 2008	absorption spectrometry			
38	IS 17073 : 2019	Determination of major elements		_	Not Equivalent
	15 1,075 . 2017	in coal and coke ash by x-ray			1 tot Equivalent
	ASTM D4326-13	fluorescence spectroscopic method			
39	IS 17378 : 2021	Test method for determination of		-	Indigenous
		major elements in ash from coal			
		and coke by flame atomic			
I	l	,		I	I

		absorption spectroscopic method		1	
40	IS 17642 : 2021	Solid biofuels - Determination of		-	Identical under dual
	ISO 17828 : 2015	bulk density			numbering
	ISO 17828 : 2015				
41	IS 17643 : 2021	Solid biofuels - Determination of		-	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	Reference method			
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 -			
	ISO 18134-2 : 2017	Simplified method			
46	IS 17655 (Part 3):	Solid biofuels - Determination of		-	Identical under dual
	2021	moisture content - Oven dry			numbering
	ISO 18134-3 : 2015	method: Part 3 moisture in general			
	ISO 18134-3 : 2015				
47	IS 17656 : 2021	Solid biofuels - Determination of		-	Identical under dual
	ISO 18846 : 2016	fines content in samples of pellets			numbering
	ISO 18846 : 2016				
48	IS 17820 : 2022	Solid mineral fuels -		-	Identical under dual
	ISO 622 : 2016	Determination of phosphorus			numbering
	ISO 622 : 2016	content - Reduced			
		molybdophosphate photometric			
		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	· · · · · · · · · · · · · · · · · · ·			
55	212 : 2021	Crude coal tar for general use		-	Indigenous
		(Third Revision)			
		·			
	YC 21 6 200 6	Coal tar pitch - Specification	April, 2021	_	Indigenous
56	IS 216: 2006	Coartar pitch - Specification	Aprii, 2021	-	margenous
56	IS 216 : 2006 Reviewed In : 2021	(Second Revision)	Aprii, 2021	-	margenous

	Reviewed In: 2019	use as wood preservatives (Second Revision)				
58	IS 3746 : 2018  Reviewed In : 2023 ISO 561:1986	Graphical symbols for coal preparation plant (Second Revision)	September, 2023	-	Not Equivalent	
59	IS 3810 (Part 1): 2002 Reviewed In: 2020 ISO 1213-1:1993	Solid mineral fuels - Vocabulary : Part 1 terms relating to coal preparation (Second Revision)	May, 2020	-	Not Equivalent	
60	IS 3810 (Part 2): 2003 ISO 1213-2 Reviewed In: 2020 ISO 1213-2:1992	Solid mineral fuels - Vocabulary: Part 2 terms relating to sampling, testing and analysis (First Revision)	May, 2020	-	Not Equivalent	
61	IS 3810 (Part 3): 2023	Glossary of terms relating to solid mineral fuels : Part 3 - Coke		-	Indigenous	
62	IS 4023 : 2022 ISO 18894 : 2018 ISO 18894 : 2018	Methods for the determination of coke reactivity index (CRI) and coke strength after reaction (CSR) (Second Revision)		-	Identical under dual numbering	
63	IS 4286 : 2024	Domestic Coke - Specification (Second Revision)	M 2020	-	Indigenous	
64	IS 4286 : 1976 Reviewed In : 2020	Specification for domestic coke (First Revision)	May, 2020	-	Indigenous	
65	IS 4311 : 2024 ISO 602 : 2015 ISO 602 : 2015	Coal - Determination of mineral matter (First Revision)		-	Identical under dual numbering	
66	IS 436 (Part 1/Sec 1) : 1964 Reviewed In : 2023	Methods for sampling of coal and coke: Part 1 sampling of coal, Section 1 manual sampling (First Revision)	September, 2023	-	Indigenous	
67	IS 437 : 2020	Size analysis of coal and coke for marketing (Fourth Revision)	-	-	Indigenous	
68	IS 439 : 2020	Industrial Coke - Specification (Fourth Revision)	-	-	Indigenous	
69	IS 4433 : 1979 Reviewed In : 2020	Method for determination of hardgrove grindability index of coal (First Revision)	May, 2020	-	Indigenous	
70	IS 5062 (Part 1): 1969 Reviewed In: 2020	Methods of test for brown coals and lignites: Part 1 determination of moisture content by the direct volumetric method	May, 2020	-	Indigenous	
71	IS 5062 (Part 2): 1969 Reviewed In: 2020	Methods of test for brown coals and lignites : Part 2 determination of ash	May, 2020	-	Indigenous	
72	IS 5062 (Part 3): 2022 ISO 647: 2017 ISO 647: 2017	Methods of test for brown coals and lignite: Part 3 determination of the yields of tar water gas and coke residue by low temperature distillation (Second Revision)		-	Identical under dual numbering	
73	IS 5062 (Part 4): 2018 ISO 975: 2013	Method of test for brown coals and lignites: Part 4 determination of yield of benzene-soluble extract - Semi-automatic method (Second Revision)	-	-	Identical under dual numbering	

Reviewed In : 2023   (Resinous Substance) in the benzene-soluble extract (Second Revision)	74	IS 5062 (Part 5): 2018	Methods of test for brown coals and lignites: Part 5 determination	September, 2023	-	Identical under dual numbering
75			benzene-soluble extract (Second			
2017	<u> </u>	YO 5060 (D. 16)	, , , , , , , , , , , , , , , , , , ,	2021	_	** * * * * * * * * * * * * * * * * * * *
ISO 5072; 2013   Reviewed In : 2021   ISO 5072; 2013   ISO 5072; 2013   ISO 5073; 2021   ISO 5084; 2020   ISO 5088-1; 2007   ISO 5088-1; 2007   ISO 5088-1; 2007   ISO 5088-1; 2007   ISO 5088-2; 2	75			May, 2021	-	
Reviewed In : 2021   15 S062 (Part 7) : 2013   2024   2024   2025   2027   2028   2029   20			_			numbering
ISO 5072 : 2013   Brown coals and lignites - Methods of test : Part 7 determination of lumine acids (First Revision)   Soptimizer content, Section 1   Indirect gravimetric method for total moisture content, Section 1   Indirect gravimetric method for total moisture content, Section 1   Indirect gravimetric method for total moisture content, Section 2   IsO 5068-1: 2007   IsO 5068-2: 2001						
Total moisture content, Section 1   Reviewed In : 2003   So 508-3: 2007   Reviewed In : 2018   So 5073 : 2021   So 508-3: 2007   Reviewed In : 2023   So 508-3: 2007   Reviewed In : 2024   So 508-3: 2007   Reviewed In : 2018   So 508-3: 2007   So 50			apparent relative density			
So 5073 : 2021   So 508-1 : 2007   So 508-1 : 2007   So 508-1 : 2007   So 508-2 : 2001   So 5		ISO 5072 : 2013				
ISO 5073 : 2021	76	IS 5062 (Part 7):	Brown coals and lignites - Methods		-	Identical under dual
ISO 5073 : 2021		2024	of test: Part 7 determination of			numbering
ISO 5073 : 2021		ISO 5073 : 2021	humic acids (First Revision)			
To   So   So   C   Part   Soe   Methods of test for brown coals and lignites: Part 8 determination of moisture content, Section 1   Indirect gravimetric method for total moisture		ISO 5073 : 2021	, , , , , , , , , , , , , , , , , , ,			
1): 2018   and lignites: Part 8 determination of moisture content, Section 1   Reviewed In: 2023   ISO 5068-1: 2007   total moisture   September, 2023   Identical under dinumbering   September, 2023   Identical under din	77		Methods of test for brown coals	September, 2023	-	Identical under dual
Reviewed In : 2023   180 5068 - 1: 2007   180 5067 - 2021   180 5067 -	1			~~F		
Reviewed In : 2023   indirect gravimetric method for total moisture   So 5068-1: 2007		1).2010	_			numo emig
ISO 5068-1: 2007		Reviewed In : 2023	*			
Reviewed In : 2019   IS 0.7936   September, 2023   September, 2023   September, 2023   Identical under de numbering			•			
Description   Color	70			Sentember 2022	+	Identical under dual
ISO 5068-2: 2007   Reviewed In: 2023 indirect gravimetric method for moisture content, Section 2 indirect gravimetric method for moisture in the analysis smaple	/ 0			5cpiciii061, 2025	1	
Reviewed In : 2023   indirect gravimetric method for moisture in the analysis smaple   1SO 5068-2: 2007   1SO 290-2 (2002   1SO 924: 1989   1SO 924: 1989   1SO 924: 1989   1SO 924: 1989   1SO 594: 1989   1SO 1543   Revision)   1SO 1543   Revision   1SO 1543   Revision   1SO 1543   Revision   1SO 7936   Reviewed In : 2016   1SO 7936   Revision   1SO 567: 2021   1SO 567: 2021   1SO 567: 2021   1SO 567: 2021   1SO 579: 2021   1SO 1543   Revision   1SO 1013: 2020   1SO 7936   Reviewed In: 2019   1SO 7936   Revision   1SO 1013: 2020   1SO 7936   Revision   1SO 7936		/	· ·			numbering
ISO 5068-2: 2007			· ·			
Total Properties   Total Prope			_			
Reviewed In : 2020   ISO 924: 1989   Solution   Solut	<u> </u>					
Reviewed In : 2020   (First Revision)   SO 924:1989   80   IS 5451 : 2001   Reviewed In : 2018   carbonization products (First Revision)   Reviewed In : 2018   1S 6345 : 1996   Methods of sampling of coal for Reviewed In : 2019   ISO 7936   Revision   So 7936   Revision   So 567 : 2021   ISO 567 : 2021   ISO 567 : 2021   ISO 567 : 2021   ISO 1013 : 2020   ISO 1013 : 2020   ISO 1013 : 2020   ISO 1013 : 2020   Reviewed In : 2019   Reviewed In : 2019   Reviewed In : 2019   Methods of test : Part 2   determination of bulk density in a large container (Second Revision)   Indian coals, lignites and semi-anthracites (Third Revision)   Reviewed In : 2020   So 7404-1 : 2016   ISO 7404-1 : 2016   ISO 7404-2 : 2009   Revision   Revision   Revision   ISO 7404-2 : 2009   Revision   Revision   Revision   ISO 7404-2 : 2009   Revision   Revision   Revision   Revision   Revision   ISO 7404-2 : 2009   Revision   Revision   Revision   Revision   Revision   ISO 7404-2 : 2009   Revision   Revis	79			May, 2020	-	
SO 924:1989   So 15 5451 : 2001   Reviewed In : 2018   carbonization products (First ISO 1543   Revision)   So 1543   Revision   Revision   So 1543   Revision   So 1543   Revision   Revision   So 1543   Revision   Revision   So 1543   Revision   So 1543   Revision   Revision   Revision   So 1543   Revision						numbering
Reviewed In : 2018   IS 5451 : 2001   Reviewed In : 2018   IS 0 1543   Revision)   Reviewed In : 2019   IS 0 7936   Revision)   IS 0 1570 (Part 1) : 2024   IS 0 150 15013 : 2020   IS 0 1013 : 2020   IS			(First Revision)			
Reviewed In : 2018 ISO 1543 Revision)  81 IS 6345 : 1996 Reviewed In : 2019 ISO 7936 Reviewed In : 2019 ISO 7936 Revision)  82 IS 7190 (Part 1): 2024 ISO 567 : 2021 RSO 1013 : 2020 ISO 1013 : 2020 ISO 1013 : 2020 Reviewed In : 2019 ISO 7936 Reviewed In : 2019 ISO 567 : 2021 RSO 1013 : 2020 Reviewed In : 2019 ISO 7936 Reviewed In : 2019 ISO 7936 Revision)  83 IS 7190 (Part 2): 2022 ISO 1013 : 2020 Reviewed In : 2019 Reviewed In : 2019 Reviewed In : 2019 Reviewed In : 2020 RSO 1013 : 2020 RSO 1013 : 2020 RSO 1013 : 2020 RSO 1014 : 2016 Reviewed In : 2020 RSO 1015 : 2021 RSO 1017 : 2018 Reviewed In : 2020 RSO 1018 : 2						
Solution	80		•	October, 2018	-	Not Equivalent
Social Service		Reviewed In: 2018	carbonization products (First			
Reviewed In: 2019 ISO 7936 Revision)  82 IS 7190 (Part 1): 2024 ISO 567: 2021 ISO 567: 2021 ISO 567: 2021 Revision)  83 IS 7190 (Part 2): 2022 ISO 1013: 2020 Reviewed In: 2019  84 IS 770: 2013 Reviewed In: 2019 Reviewed In: 2019  85 IS 7929: 1975 Reviewed In: 2020 Reviewed In: 2020  86 IS 9127 (Part 1): 2022 ISO 7404-1: 2016 Reviewed In: 2010 Reviewed In: 2010  87 IS 9127 (Part 2): 2021 Reviewed In: 2010 Reviewed In: 2020 Reviewed In: 2010 Reviewed In: 2000			,			
ISO 7936   Revision   Coke - Methods of test : Part 1   determination of bulk density in a small container (Second Revision)	81	IS 6345 : 1996		January, 2019	-	Not Equivalent
S		Reviewed In: 2019	float and sink analysis (First			
So 567 : 2021   So 7100 (Part 2) : 2022   So 1013 : 2020   So 1		ISO 7936	Revision)			
ISO 567 : 2021 ISO 567 : 2021  83 IS 7190 (Part 2) :	82	IS 7190 (Part 1):	Coke - Methods of test : Part 1		-	Identical under dual
ISO 567 : 2021		2024	determination of bulk density in a			numbering
S		ISO 567: 2021	small container (Second Revision)			
Solution		ISO 567: 2021				
ISO 1013 : 2020 ISO 1013 : 2020  84	83	IS 7190 (Part 2):	Coke - Methods of test : Part 2		-	Identical under dual
ISO 1013 : 2020 ISO 1013 : 2020  84		2022	determination of bulk density in a			numbering
ISO 1013 : 2020   S44   IS 770 : 2013   Classification and codification of indian coals, lignites and semianthracites (Third Revision)   S5   IS 7929 : 1975   Methods for determination of electrical resistivity of chemical coke   S6   IS 9127 (Part 1) : Methods of petrographic analysis of coal : Part 1 definition of terms relating to petrographic analysis of ISO 7404-1 : 2016   ISO 7404-1 : 2016   S7 404-2 : 2009   Reviewed In : 2020   Revision)   Iso 7404-2 : 2009   Revision		ISO 1013 : 2020				
Reviewed In : 2019   Classification and codification of indian coals, lignites and semianthracites (Third Revision)   May, 2020   Indigenous		ISO 1013 : 2020	, , , , , , , , , , , , , , , , , , ,			
Reviewed In: 2019 indian coals, lignites and semi-anthracites (Third Revision)  85 IS 7929: 1975 Methods for determination of electrical resistivity of chemical coke  86 IS 9127 (Part 1): Methods of petrographic analysis of coal: Part 1 definition of terms relating to petrographic analysis of ISO 7404-1: 2016 (Second Revision)  87 IS 9127 (Part 2): Of coal: Part 2 methods of preparing coal samples (Second Reviewed In: 2020 Reviewed In: 2020 ISO 7404-2: 2009 Reviewed In: 2020 ISO 7404-2: 2009 ISO 7404-2: 2009	84		Classification and codification of	January, 2019	-	Indigenous
anthracites (Third Revision)  85				··· J,		G <del></del>
Society   1975   Methods for determination of electrical resistivity of chemical coke   Society   1975   Methods of petrographic analysis of coal: Part 1 definition of terms relating to petrographic analysis of coal (Second Revision)   Society   1975   Methods for petrographic analysis of coal (Second Revision)   Methods for petrographic analysis of coal (Second Revision)   Methods for petrographic analysis of coals: Part 2 methods of preparing coal samples (Second Revision)   Methods for petrographic analysis of coals: Part 2 methods of preparing coal samples (Second Revision)   Methods for petrographic analysis of coals: Part 2 methods of preparing coal samples (Second Revision)   Methods for petrographic analysis of coals: Part 2 methods of preparing coal samples (Second Revision)   Methods for petrographic analysis of coals: Part 2 methods of preparing coal samples (Second Revision)   Methods for petrographic analysis of coals: Part 2 methods of preparing coal samples (Second Revision)   Methods for petrographic analysis of coals: Part 2 methods of preparing coal samples (Second Revision)   Methods for petrographic analysis of coals: Part 2 methods of preparing coal samples (Second Revision)   Methods for petrographic analysis of coals: Part 2 methods of petrographic an			_			
Reviewed In : 2020 electrical resistivity of chemical coke  86  IS 9127 (Part 1):	85	IS 7929 : 1975	` ´	May. 2020	-	Indigenous
Coke   S6   IS 9127 (Part 1) :   Methods of petrographic analysis of coal : Part 1 definition of terms relating to petrographic analysis of ISO 7404-1 : 2016   Coal (Second Revision)   S7   IS 9127 (Part 2) :   Methods for petrographic analysis of coals : Part 2 methods of preparing coal samples (Second Revision)   ISO 7404-2 : 2009   Revision)   Revision   Revision   ISO 7404-2 : 2009   To preparing coal samples (Second Revision)   Revision   To preparing coal samples (Second Revision)   To preparing coal samples (Secon				11lay, 2020		margenous
Solution		Reviewed III . 2020	-			
2022 of coal : Part 1 definition of terms relating to petrographic analysis of Coal (Second Revision)  87 IS 9127 (Part 2) : Methods for petrographic analysis of Coals : Part 2 methods of Preparing coal samples (Second Reviewed In : 2020 Revision)  88 Reviewed In : 2020 Revision)  10 Identical under de numbering relating to petrographic analysis of Coals (Second Revision)  11 Identical under de numbering relating to petrographic analysis of Coals (Second Revision)	86	IS 9127 (Part 1) ·			<del> </del>	Identical under dual
ISO 7404-1 : 2016 relating to petrographic analysis of coal (Second Revision)  87 IS 9127 (Part 2) : Methods for petrographic analysis of coals : Part 2 methods of preparing coal samples (Second Reviewed In : 2020 Reviewed In : 2020 ISO 7404-2 : 2009 Revision)  88 IS 9127 (Part 2) : Methods for petrographic analysis of coals : Part 2 methods of preparing coal samples (Second Revision)					1	
ISO 7404-1 : 2016 coal (Second Revision)  87 IS 9127 (Part 2) : Methods for petrographic analysis of coals : Part 2 methods of preparing coal samples (Second Reviewed In : 2020 Revision)  ISO 7404-2 : 2009  Revision)  ISO 7404-2 : 2009						numbering
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ISO 7404-2 : 2009 preparing coal samples (Second Reviewed In : 2020 ISO 7404-2 : 2009 Revision)	0/			January, 2020	_	
Reviewed In : 2020   Revision) ISO 7404-2 : 2009						numbering
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			Kevision)			
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	2002	analysis of bituminous coal and			numbering
	ISO 7404-3	anthracite: Part 3 method of	anthracite: Part 3 method of		
	Reviewed In: 2020	determining maceral group			
	ISO 7404-3:1994	composition (First Revision)			
89	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			
		composition (First Revision)			
90	IS 9127 (Part 5):	Methods for the petrographic May, 2020 -		Identical under dual	
	2004	analysis of bituminous coal and	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			
		Revision)			
91	IS 9912 : 1981	Coal tar based coating material and	January, 2020	-	Indigenous
	Reviewed In: 2020	primers for protecting iron or steel			
		pipelines - Specification (First			
		Revision)			
92	IS 9949 : 1986	Methods of test for abrasive	May, 2020	=	Indigenous
	Reviewed In: 2020	properties of coal and associated			
		minerals (First Revision)			

# **Standards under Development**

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

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

	Drafts Standards in WC Stage		
SI. No.	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 - AI 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		
1	PCD 7 (19505)	Solid Biofuels Vocabulary		
2	PCD 7 (19732) Revision of:	METHODS FOR SAMPLING OF COAL AND COKE PART 1 SAMPLING OF COAL		
	IS 436:1964	SECTION 1 MANUAL SAMPLING Second Revision		
3	PCD 7 (20027)	SOLID BIOFUELS - FUEL SPECIFICATIONS AND CLASSES - PELLETS FROM AGRO		
		AND HERBACEOUS RESIDUES		
4	PCD 7 (20028)	SOLID BIOFUELS - FUEL SPECIFICATION AND CLASSES - BRIQUETTES FROM AGRO		
		AND HERBACEOUS RESIDUES		
5	PCD 7 (20276)	Solid Biofuels - Sample Preparation		

Total Published Standards:89 Total Standards Under development:19

### **Aspect Wise Report**

Product: 7
Code of Practices: 1
Methods of Test: 61
Terminology: 6
Dimensions: 1
System Standard: 0
Safety Standard: 0
Others: 15

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	Hard Coal - Determination of Oxygen Content
	Reviewed In: 2005	
6	IS 15440 : 2004	Coal - Sampling of Pulverized Coal Conveyed by Gases in Direct Fired Coal Systems
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	Road Tar

	Reviewed In: 2016	
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 sampli
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	212 : 2021	Crude coal tar for general use Third Revision
	ISO 5518:2007	
3	IS 216 : 2006	Coal tar pitch - Specification Second Revision
	Reviewed In: 2021	
4	IS 218 : 1983	Specification for creosote oil for use as wood preservatives Second Revision
	Reviewed In: 2019	
5	IS 4286 : 2024	Domestic Coke - Specification Second Revision
6	IS 439 : 2020	Industrial Coke - Specification Fourth Revision
7	IS 9912 : 1981	Coal tar based coating material and primers for protecting iron or steel pipelines - Specification
	Reviewed In: 2020	First Revision