

Carbonaceous Materials for the Metallurgical Industry

STD Method applied at RDC

**internal method*

#	Property	Unit	Norm(s)
1	Abrasion	%	M191*
2	Air Forced Sieving	%	M101*
3	Air Permeability	nPm	ISO 15906
4	Air Permeability Coke	l/h	M207*
5	Air Reactivity Anode	%	ISO 12989-1
6	Air Reactivity Coke 525°C (0.5°C/min)	%/min	ISO 12982-1
7	Air Reactivity Coke 600°C (10°C/min)	%/min	ISO 12982-1
8	Air Reactivity Thermogravimetric	%/min	M112-1*
9	Apparent Density Baked	kg/dm ³	ISO 12985-1
10	Apparent Density Graphitized	kg/dm ³	ISO 12985-1
11	Apparent Density Green	kg/dm ³	ISO 12985-1
12	Apparent Density Hydrostatic	kg/dm ³	ISO 12985-2
13	Apparent Hg Density	kg/dm ³	DIN 66133
14	Ash Content	%	ISO 8005
15	Ash Content Pitch	%	ISO 8006
16	Baking Loss	%	M131-1*
17	Baking Shrinkage	%	M132-1*
18	Binder Content	%	ISO 14423
19	Blaine Value	Blaine	M155*
20	CO ₂ Reactivity Anode	%	ISO 12988-1
21	CO ₂ Reactivity Coke	%	ISO 12981-1
22	CO ₂ Reactivity Thermogravimetric	%/min	M112-2*
23	Coefficient of Thermal Expansion	10 ⁻⁶ K ⁻¹	ISO 14420
24	Coking Value	%	ISO 6998
25	Compressive Strength	Mpa	ISO 18515
26	Crystallite Size	Å	ISO 20203
27	Dust Forming Factor	%	M177*
28	Dynamic Elasticity Modulus	Gpa	ISO 18142
29	Elementar Analysis C	%/ppm	M108-1*
30	Elementar Analysis H	%/ppm	M108-2*
31	Elementar Analysis N	%/ppm	M108-3*
32	Elementar Analysis O	%/ppm	M108-4*
33	Elements XRF	%/ppm	ISO 12980
34	Elements XRF Pitch	%/ppm	ISO 12980
35	Fixed Carbon	%	M136*
36	Flexural Strength	MPa	ISO 12986-1
37	Flowability	-	M185*
38	Fractionated Distillation	%	ASTM D2569
39	Fracture Energy	J/m ²	M184*
40	Grain Stability	%	ISO 10142
41	Graphitization Loss	%	M131-2*
42	Graphitization Shrinkage	%	M132-2*
43	Hardgrove Grindability Index	-	ISO 5074
44	Hardness	mm	M188*

45	Ignition Temperature 0.5°C/min	°C	ISO 12982-1
46	Ignition Temperature 10°C/min	°C	ISO 12982-2
47	Interlayer Spacing	Å	M106*
48	Laser Granulometry	%	M106*
49	Mesophase Content	%	ASTM D4616
50	Oil Content	%	ISO 8723
51	Oil Content of Coke - Heating Method	%	ISO 6997
52	Open Porosity	%	ISO 12985-2
53	Paste Shrinkage	%	ISO 14428
54	Pitch Requirement (Plastograph)	°C	M102*
55	Pore Axial Ratio	-	M109-1*
56	Pore Distribution Hg 2000 bar	-	DIN 66133
57	Porosity Distribution Microscopy	-	M109-3
58	Pressed Density Blaine	kg/dm ³	M155*
59	Pressed Density SER	kg/dm ³	ISO 10143
60	Pulverizing Factor	-	M168*
61	Quinoline Insoluble	%	ISO 6791
62	Rapoport Expansion	%	ISO 15379-1
63	Real Density Helium	kg/dm ³	ISO 21687
64	Real Density Xylene	kg/dm ³	ISO 8004/ISO 9088
65	Real Density Water	kg/dm ³	ISO 6999
66	Resiliency	%	M147*
67	Resiliency 500 bar	%	M200*
68	Sieving Analysis	%	ISO 12984
69	Sodium Vapour Resistance	%	M192*
70	Softening Point Mettler	°C	ISO 5940-2
71	Specific Electrical Resistance Anode	μΩm	ISO 11713
72	Specific Electrical Resistance Coke	μΩm	ISO 10143
73	Specific Surface BET	m ² /g	ISO 9277
74	Static Elasticity Modulus	GPa	ISO 18515
75	Sticking	%	M133*
76	Tapped Bulk Density	kg/dm ³	ISO 10236
77	Temperature Window	°C	ISO 17544
78	Thermal Conductivity	W/mK	ISO 12987
79	Thermal Expansion Dilatometry	10 ⁻⁶ K ⁻¹	M014*
80	Toluene Insoluble	%	ISO 6376
81	Total Porosity	%	M134*
82	Vibrated Bulk Density	kg/dm ³	ASTM D4292
83	Viscosity	mPa*s	ASTM D5018
84	Volatile Matter	%	ISO 9406
85	Water Content of Coke	%	ISO 11412
86	Water Content Pitch	%	ISO 5939
87	Wettability	-	M163-2*
88	Wetting Power	-	M-163-1*