



Cathode Blocks

Technical Data Sheet

Cathode: Grade MBTF Series

Typical Property	Unit	Test Method	Graphitized		100% GP	ECA + GP	
			Grade GRP	Grade GHD	Grade MBTF-100	Grade MBTF-50	Grade MBTF-30
Real Density	g/cm ³	ISO 21687	2.17	2.19	2.10	2.00	1.97
Bulk Density	g/cm ³	ISO 12985.1	1.62	1.69	1.64	1.62	1.60
Electrical Resistivity	μΩm	ISO 11713	11.9	10.5	18.7	28	33
Sodium Expansion	%	ISO 15379.1	0.27	0.25	0.40	0.50	0.50
Compressive Strength	MPa	ISO 18515	21.5	30.5	28.1	27	27
Flexural Strength	MPa	ISO 12986.1	7.4	11.8	8.2	n/d	n/d
Total Porosity	%	Calculated	25.35	22	21.9	n/d	n/d
Open Porosity	%	ISO 12985.2	19.29	14.6	18.8	n/d	n/d
Thermal Conductivity	W (K · M)	ISO 12987	128.5	136	77	22	17
Modulus of Elasticity	GPa	YS/T63.13	1.4	1.4	3.2	n/d	n/d
CTE	-	ISO 14420	3.6	3.8	3.8	< 3.5	< 3.5
Ash Content	%	ISO 8005	0.40	0.38	0.70	< 3.0	< 4.0