

# SIM-Gd Cathode Blocks

Graphitized, carbon cathode blocks



simonsen®

		Typical Value	Standard Deviation
<b>Apparent Density:</b> <i>ISO 12985.1</i>	..... kg/m <sup>3</sup> ..... lbs/cu.ft.	1650 103	30
<b>Real Density:</b> <i>ISO 21687</i>	..... kg/m <sup>3</sup> ..... lbs/cu.ft.	2200 137	20
<b>Total Porosity:</b>	..... %	26	2
<b>Open Porosity:</b> <i>ISO 12985.2</i>	..... %	19	2
<b>Specific Electrical Resistivity:</b> <i>ISO 11713</i> 20°C (68°F)	..... μΩm	10	2
<b>Compressive Strength:</b> <i>ISO 18515</i>	..... MPa ..... lbs/sq.in.	24 3480	4
<b>Flexural Strength:</b> <i>ISO 12986.1</i>	..... MPa ..... lbs/sq.in.	11 1595	3
<b>Ash Contents:</b> <i>ISO 8005</i>	..... %	0.2	0.15
<b>Thermal Conductivity:</b> <i>ISO 12987</i>	(W/m K) @ Room Temperature (25°C / 77°F)	115	5
<b>Coefficient of Thermal Expansion:</b> <i>ISO 14420</i> 20°C to 900°C (68°F to 1652°F)	..... 10 <sup>-6</sup> K <sup>-1</sup>	3.0	0.5
<b>Young's Modulus:</b> <i>YS/T 63.13</i>	..... GPa	2.1	0.2
<b>Sodium Expansion:</b> <i>ISO 15379.2</i>	..... %	0.2	0.1
<b>Raw Materials:</b>	Petroleum Coke..... %	100	

## SIM-Gd Cathode Blocks

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<b>Dimensional Tolerances:</b>	Length .....	± 5 mm
	Width .....	± 3 mm
	Height.....	± 3 mm
Slots for collector bars:	(All directions).....	± 3 mm

<b>Max. Sizes Cathode Blocks::</b>	Length .....	4000 mm
	Width .....	800 mm
	Height.....	540 mm

**HS Tariff Number:** ..... 85451900  
(Harmonized Commodity Description and Coding System)

**Packing:** All **cathode blocks** are packed on pallets, wrapped in plastic foil and then packed into crates according to international standards.



All blocks are produced by the vibration with vacuum production method.

Measurements are made parallel to pressing direction.

Blocks can be supplied in strict accordance with customer's drawings and specifications.

The values as per this data sheet are based upon typical, average test results.

No warranty or guarantee is implied on the data which are given in good faith.

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**An ISO-9001, ISO-14001 and  
OHSAS-18001 certified company**

