High-Density Carbon Products (Isostatic Graphite / Molded Products) Characteristics Table

Attention: Artificial graphite is subject to export control. Therefore, you would need to obtain export license from Ministry of Economy, Trade and Industry (METI) of Japan, if you want to export them to countries outside of Japan by yourselves.

Grade		Bulk Density (g/cm^3)	Tensile Strength (MPa)	Shore Hardness (HSD)	Thermal Conductivity (W/m·K)	Maximum Grain Diameter (mm)	Bending Strength (MPa)	Specific Resistance (μ Ω·m)	Coefficient of Thermal Expansion (CTE) ($x10^{-6}$/K)	Ash (%)	Maximum Block Size (mm)	Characteristics
Cold Isostatic Pressed Products (Isostatic Graphite)	IGS-603	1.80	29	57	116	0.02	44	12.5	4.6	0.05	ø510×800/ 350×630×1020	This is isostatic graphite with good balance of density and strength
	IGS-644	1.83	35	66	105	0.02	54	15.0	5.0	0.05	ø510×800/ 350×630×1020	This is isostatic graphite which is more dense and is stronger than IGS-603.
	IGS-743	1.80	35	60	128	0.05	54	12.5	4.8	0.05	ø1160×700/ 250×1380×1610	This is isostatic graphite with high strength and can be produced with very large size
	IGS-744	1.86	38	64	140	0.05	59	11.0	4.8	0.05	ø285×800/ 160×400×1020	This is isostatic graphite with high density and low specific resistance. The particles are finer than those of IGS-743.
	IGS-844	1.85	40	75	80	0.02	60	17.0	5.4	0.05	350×650×1500	This is isostatic graphite with the characteristics of high density, high strength, and high specific resistance
	IGS-895	1.93	48	87	90	0.02	74	15.0	6.2	0.10	70×305×620	This is isostatic graphite with high density, high strength, and high CTE that is made from special raw materials.
	IGS-652	1.72	22	60	70	0.05	34	17.5	4.5	0.05	160×400×1020	This is isostatic graphite with carburization resistance
	EGS-743	1.80	33	64	128	0.05	50	12.5	4.8	0.05	ø1100×950	This is isostatic graphite with high density, high strength, that is used in wide range of areas.
	EGS-763	1.81	36	53	130	0.05	55	12.0	4.5	0.05	ø880×500	This is isostatic graphite with homogeneous structure and corrosion-resistance.
Molded Products	EG-20	1.70	8	25	139	3.40	12	7.0	1.5	0.50	ø1400×550	This is isostatic graphite in large block.
	GS-203	1.81	26	60	116	0.02	50	10.5	4.9	0.05	150×320×640	This is molded graphite with good balance of density and strength
	GS-203R	1.78	30	90	23	0.02	59	30.0	6.0	0.20	105×320×640	This is molded graphite with high specific resistance and low thermal conductivity

1. The above numerical values are representative characteristic values, and are not guaranteed values.
2. Measurement Range for Coefficient of Thermal Expansion(CTE): RT~500˚C.
3. Unit Conversion: MPa × 10.2→kg/cm^2 W/m·K × 0.86→kcal/ m·h·˚C
4. For electrical discharge machining (EDM) electrodes, we have “SED Series” which is specifically designed for such purpose.
   For crucibles to melt aluminum, we have the “SJ Series” which is specifically designed for such purpose.
5. For inquiries on our products that you want to use for specific use, please consult with our sales personnel.
6. If you have any demands in the size other than those described above, please consult with us.