

C/C composite

Typical properties

Shape	Material	Bulk Density (Mg/m ³)	Electrical Resistivity ($\mu\Omega \cdot m$)	Flexural Strength (MPa)	Flexural modulus (GPa)	Tensile strength (MPa)	Coefficient of Thermal Expansion RT~1273K (10 ⁻⁶ /K)		Thermal Conductivity (W/ (m·K))		C/C type	Description
							(Δ)	(//)	(Δ)	(//)		
Flat plate	CX-741	1.51	23	140	46	185	8.1	<1	6	35	2DC/C	Medium strength (Molding method A)
	CX-761	1.58	20	185	55	250	8.4	<1	9	44		High strength (Molding method A)
	CX-742	1.48	24	130	42	170	7.8	<1	5	34		Medium strength (Molding method B)
	CX-762	1.58	21	170	50	185	8.2	<1	8	42		High strength (Molding method B)
	CX-231	1.63	19	186	52	220	9.3	<1	8	50		Large diameter bolts, nut components, spring components
	CX-31	1.61	22	90	23	98	4.1	<1	12	52		Nut and bolt components
	C/C-201 1)	1.50	30	147	47	127	8.2	<1	5	20		Medium strength, nut and bolt components
Profiles	CX-743	1.48	24	130	-	-	7.8	<1	5	34	FWC/C	Profiles
	CX-763	1.58	21	170	-	-	8.2	<1	8	42		Profiles with high strength
Cylinders	CX-45	1.44	24	105	34	114	8	<1	4	34	FWC/C	Medium strength cylinder
	CX-47	1.52	23	140	45	154	8	<1	6	35		High strength cylinder
Crucibles	CX-510V	1.57	13	195	-	290	7	<1	7	-	FWC/C	FW crucibles
Cylinders	C/C-FW 1)	1.50	12	245	-	245	-	<1	5	30		FW hot press molds
	CX-55	1.60	11	195	-	290	7.4	<1	7	-		FW cylinders
Tiles	CX-2002U 2)	1.65	2,7,3,4,5,1 (X,Y,Z)	47,43,17 (X,Y,Z)	-	35,30,11 (X,Y,Z)	5.3 (Z)	1,7,2,3 (X,Y)	190 (Z)	390,320 (X,Y)	felt C/C	Use in nuclear energy plants
	Isotropic graphite (IG-56)	1.77	12	43	10	27	4.7		104			
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* The figures above are typical values, and are not guaranteed.

1) Manufactured by Ohwada Carbon Industrial Co., Ltd.;

2) The direction of lamination of the felt is designated as the Z-axis and the directions within the plane as X- and Y-axes.

Available sizes

Grade	Dimensions (mm)
CX-741,CX-761,CX-231	2000*1500*0.8 -30, 2000*500*100
CX-742,CX-762	3000*1500*0.8 -30, 2000*500*100
CX-31	Max.850*400 3.2-90t
C/C-201 1)	1020*970*1-12, 970*720*1-12
CX-45,CX-47	Inner diameter ϕ 300-1400, 1400L
CX-743,CX-763	U-profile 80*20-145*1.2*1000 h-profile 107*44*1.5*1000
CX-510V	Max.inner diameter ϕ 1168(46" crucibles available)
C/C-FW	Max. ϕ 950*800h, 20-150t
CX-55	Inner diameter ϕ 10-1400, 2000L
CX-2002U	40*150*150 (X*Y*Z)



※Please contact us for other sizes.