

PHYSICAL PROPERTIES

CALL: 1.800.426.4291 FAX: 1.800.838.4178

General Offices and Nickel Plant

900 Main Street, P.O. Box 228, Lowber, PA 15660

Cobalt Plant

900 Blythedale Road, P.O. Box 525, Buena Vista, PA 15018

Mechanical Press Division

403 First Avenue, Sutersville, PA 15018



BASIC CARBIDE'S BC-12C: PERFORMANCE
GUARANTEED



*WHEN ORDERING MATERIAL FOR WIRE-EDM, SPECIFY ON ORDER. WE HAVE DEVELOPED A SPECIAL PROCESS THAT WHEN USED IN CONJUNCTION WITH OUR BC-12C GRADE, IS GUARANTEED AGAINST CRACKING. (WE WILL PROCESS ANY OF OUR GRADES FOR WIRE-EDM. ASK ONE OF OUR ENGINEERS TO EXPLAIN THE PROCESS.)

Industry Code	BASIC CARBIDE	Approximate Binder %	Hardness Rockwell "A" "C"		Transverse Rupture Strength PSI	Compressive Strength PSI	Grain Size	Basic Applications
Special	BC-00	0	92.5-94.5	81-83	-	-	Fine/Coarse	Excellent Wear, No Shock for Binderless Application
C-3 C-4	BC-3	3	92.0-93.0	80-82	225,000	660,000	Fine	Excellent Wear; No Shock; Developed for Compacting Ceramics Grinding Compounds
C-1 C-2 C-9	BC-6	6	91.0-92.0	79-81	275,000	700,000	Fine	Excellent Wear; Slight Shock Developed for Cutting and Abrasion Resistance
C-10	BC-9	9	90.0-91.0	77-79	350,000	600,000	Fine	Excellent Wear; Slight to Medium Shock Developed for Light Drawing and Light Blanking
Special	BC-11	11	89.0-90.5	74-77	350,000	625,000	Fine	Good Wear; Medium Shock High Edge Strength Developed for Stamping and Lamination Dies and Punches
Special	BC-12C	12	88.0-89.0	72-74	500,000	540,000	Fine and Coarse	Good Wear; Heavy Shock Developed for Heavy Work Conditions. Use for WEDM*
C-11	BC-13	13	88.5-89.5	73-75	370,000	600,000	Fine	Good Wear; Medium Shock Developed for Medium Work Conditions
C-12	BC-14	14	88.0-89.0	72-74	385,000	575,000	Fine	Good Wear; Medium to Heavy Shock General Purpose Grade, Developed for Medium to Heavy Work Conditions
C-13	BC-15	15	87.5-88.5	71-73	400,000	560,000	Fine	Good Wear; High Strength Developed for Heavy Work Conditions
Special Special	BC-15C BC-17C	15 17	87.0-88.0 85.5-86.5	70-71 67-69	425,000 435,000	520,000 525,000	Fine and Coarse Fine and Coarse	Medium Wear; Heavy Shock And Coarse Used in Place of C-14 Grades; Outperformed 20-25%; Grades in Many Applications; Medium Wear, Heavy Shock Glass Cutting Grade for BC-17C Application
C-14	BC-20C	20	84.0-85.0	65-67	450,000	530,000	Coarse	High Impact; Heavy Shock Resistance Developed for Cold Heading and Swaging Dies
C-17	BC-22C	22	81.5-83.0	60-62	350,000	480,000	Extra Coarse	Highest Impact Developed for Heavy Workload
SUPER SUBMICRON GRADES								
Special	BC-8SS	8	92.5-93.5	81-83	500,000	N/A	Super Submicron	Developed for Extreme Abrasive application; Excellent Wear; Slight to Medium Shock
Special	BC-12SS	12	91.0-92.0	79-81	400,000	N/A	Super Submicron	Developed for Extreme Abrasive Applications; Excellent Wear; Medium to Heavy Shock
SUBMICRON GRADES								
Special	BC-6S	6	92.3-93.3	81-82	400,000	665,000	Submicron	Excellent Wear; Light Shock Developed for Cutting Better Wear than C-2 Grades
Special	BC-8S	8	91.5-92.5	79-82	500,000	600,000	Submicron	Excellent Wear; Medium Shock Developed for Slitting and Cutting; Increases Tool Life
Special	BC-10S	10	91.0-92.5	79-82	520,000	605,000	Submicron	Excellent Wear; Medium Shock Developed for Slitting and Cutting Where Some Shock is Involved
Special	BC-14S	14	89.5-91.0	73-79	550,000	645,000	Submicron	Excellent Wear; Slight to Medium to Heavy Shock Developed Specially
Special	BC-17S	17	88.5-89.5	73-75	525,000	620,000	Submicron	Good Wear; High Edge Strength
NICKEL GRADES NONMAGNETIC AVAILABLE ON REQUEST								
C-18	BC-6N	6	91.0-92.5	79-81	315,000	635,000	Submicron	Excellent Wear Use in Corrosive Environments - Seals
Special	BC-10N	10	89.5-91.5	75-79	365,000	495,000	Submicron	Excellent Wear Special Seals Corrosive Environments
Special	BC-12N	12	88.0-89.5	71-75	475,000	390,000	Submicron	Excellent Wear; Good Shock High Strength Corrosive Environments