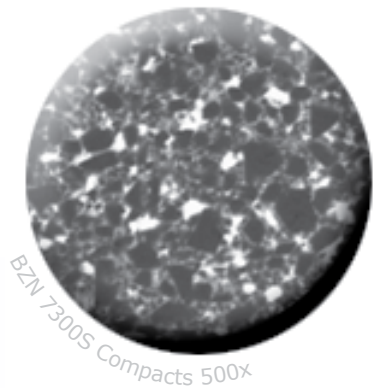


Diamond Innovations® is the leading global supplier of manufactured superabrasives products for optimal removal in the machining industry. Our manufactured product offering includes BZN® compacts. A vast selection of products are offered to answer today's diverse machining demands. We have the capability to cut almost any shape specific to your machining inserts and will work with you to determine what material and shape are most appropriate for your application.

BZN® 7300S Compacts for Heavy Machining

BZN 7300S solid PCBN is designed for heavy machining of chilled cast iron and turning of heavily interrupted ferrous parts. A unique combination of CBN crystals and ceramic materials gives BZN 7300S compacts a good balance of toughness, abrasion resistance and thermo-chemical resistance.

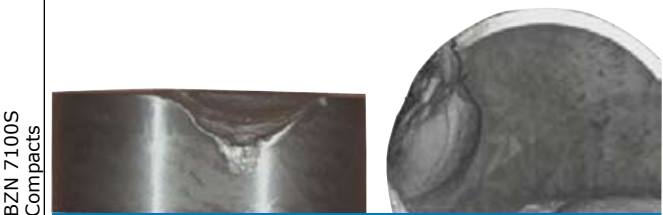
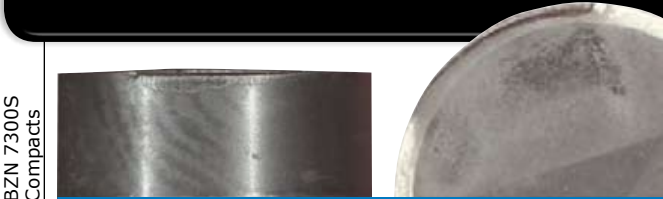


Features and Benefits

Alloy	high-chromium white iron
Hardness	56 - 62 HR _c
Microstructure	chrome carbides in a martensitic matrix and a small amount of retained austenite

Heavy Machining Application 1

Application	Facing Impeller (φ70")
Settings	170m/min, 0.2mm/rev, 3.5mm DOC
Facing cuts on top inner face	φ1m OD, φ0.7m ID, 135mm LOC
Results	cutting edges showed no chipping, only flank and crater

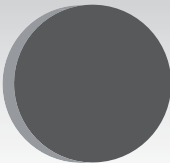


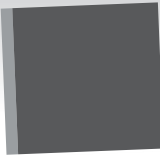
Heavy Machining Application 2


Application	Milling Pump Shells
Settings	150-170m/min, 0.25-0.3mm/rev, 2-2.5mm DOC
Results	<ul style="list-style-type: none"> • BZN 7300S compacts completed 5 passes of flange and machining steel lugs respectively • cutting tool edges only had slight flank and crater wear




BZN® 7300S Compacts Product Availability

	ANSI	ISO	IC	Thickness	S/O	Item Number	Item Description
Round 	RNU-32	RNUN-0903	9.8	3.2	O	60023401	BRNU-32X 73S
	RNU-33	RNUN-0904	9.8	4.8	S	52767301	BRNU-33X 73S
	RNU-42	RNUN-1203	13.1	3.2	O	60023501	BRNU-42X 73S
	RNU-43	RNUN-1204	13.1	4.8	S	52577501	BRNU-43X 73S
	RNU-63	RNUN-1904	19.3	4.8	S	52577601	BRNU-63X 73S
	RNU-83	RNUN-2504	25.7	4.8	O	60023601	BRNU-83X 73S

Square 	SNU-32	SNUN-0903	9.8	3.2	O	52767601	BSNU-32X 73S
	SNU-33	SNUN-0904	9.8	4.8	O	52768001	BSNU-33X 73S
	SNU-42	SNUN-1203	13.0	3.2	S	52767401	BSNU-42X 73S
	SNU-43	SNUN-1204	13.0	4.8	S	60046401	BSNU-43X 73S

Rhombus 	CNU-32	CNUN-0903	9.8	3.2	O	60023701	BCNU-32X 73S
	CNU-33	CNUN-0904	9.8	4.8	O	60023801	BCNU-33X 73S
	CNU-42	CNUN-1203	13.0	3.2	O	52767501	BCNU-42X 73S
	CNU-43	CNUN-1204	13.0	4.8	S	52774701	BCNU-43X 73S

Triangle 	TNU-22	TNUN-1103	6.6	3.2	O	66024001	BTNU-22X 73S
	TNU-32	TNUN-1603	9.8	3.2	O	66024101	BTNU-32X 73S
	TNU-33	TNUN-1604	9.8	4.8	O	52767901	BTNU-33X 73S

Convenient online ordering available