by CeramTec

CBN Insert BHT 430

			GJL					GJS				K ADI			S	SI GJS			GJV			H S P			P	
Insert	ISO	Grade	EN-GJL 150				EN-GJL 350	EN-GJS 400-15			EN-GJS 800-2		EN-GJS 1000-5						EN-GJV 400		EN-GJV 500	HARD SIEEL	DIE CASTING	HRSA	STEEL	SPK- Ref. No.
CCGW 09 T3	CCGW 09 T3 04	BHT 430	¢				70	\$			\$\diameter				¢	¢						+			+	48.57.401.37.1
9.7	CCGW 09 T3 08	BHT 430	\$	\$	*		• •	<	> >	\$	\$				\$	\$	\$,	+	+		+	48.57.402.37.1
DCGW 11 T3	DCGW 11 T3	BHT 430					\$ -		+		\$			+						Н	4	+	+		+	48.57.408.37.1
\$ 11.6 \$ 3.97	DCGW 11 T3 08	BHT 430	\$	\$	*	*	\$	<	> >	\$					\$		\$,	+	+		+	48.57.409.37.1
VCGW 16 04	VCGW 16 04 04	BHT 430		\$	\$		\$ -	<	*		\$				\$	¢	\$				1	+	+		+	48.57.462.37.1
166 K	VCGW 16 04 08	BHT 430	\$	\$	*	*	*	<	> >	\$	\$				\$	\$	\$				-	• •	+		+	48.57.463.37.1
TPGW 16 04	TPGW 16 04 04	BHT 430	÷	\$	*		\$ -	\$ <	> \$		÷		+	+			\$	+		H	-	+	+		+	48.37.416.37.1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TPGW 16 04 08	BHT 430						<			*				\$	*						+				48.37.417.37.1
16.5																										
CNGA 12 04	CNGA 12 04 04	BHT 430	÷	÷	÷	< <	\$	<	*	÷	¢				÷	÷	÷				4	+	+		+	48.56.406.37.1
12.9	CNGA 12 04 08	BHT 430		\$	\$	*	*	<	> >								\$				4	•	+		+	48.56.407.37.1
DNGA 15 04	DNGA 15 04 04	BHT 430		\$	\$	< <	<	<	*	\$				İ	\$	\$					1	+	+		+	48.56.401.37.1
15.5	DNGA 15 04 08	BHT 430		\$	*		*	<	*	\$					\$	\$	\$					+	+		+	48.56.402.37.1
TNGA 16 04	TNGA 16 04 04	BHT 430			\$		\$ -		> >					+	\$	\$		+		H	1	+	+		+	48.36.401.37.1
16.5	TNGA 16 04 08	BHT 430	\$	\$	*	*	\$	<	> >		÷				\$	\$	\$,	+	+		+	48.36.402.37.1
VNGA 16 04	VNGA 16 04 04	BHT 430		\$	\$		\$ -		\					+						H	1	+	+		+	48.56.409.37.1
16.6	VNGA 16 04 08	BHT 430	\$	\$	*	*	\$	<	> >	\$					\$	\$	\$				•	+	+			48.56.410.37.1
K Cast Iron	Hard materials	S ■ H	SRA	Д			P Steel						Main application 🔸							Secondary applitcation						



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5PK

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Really the hardness, really great!

Cubic boron nitride is considered the second hardest material in the world - after the diamond. For our new CBN cutting material BHT 430, we have taken this property to the extreme: With a particularly fine CBN grain and a binder phase optimized for it, we achieve outstanding wear resistance with very good toughness. This makes BHT 430 suitable for turning hardened steels and sintered metals.

Sintered metals in particular are considered to be materials with a great future: They enable new, high-strength material combinations that can be used in press or additive manufacturing processes to form weight-optimized components. Resource-saving thanks to near-net-shape geometries. However, the machining of sintered metals is more difficult due to the reduced thermal conductivity of such materials.

The cutting material BHT 430 solves this challenge and cushions the heat generated emperature peaks at the cutting edge, which is typical in the precision machining of sintered metals.



"Turned, not ground!"



"Anyone involved in the machining of sintered metals has often had to reckon with high tool wear and relatively short tool life. Many of these materials were therefore often only ground in precision machining, which had a negative impact on cost efficiency. With our new cutting material BHT430, we now enable reliable turning of hardened sintered metals."

Dipl.-Ing. Johannes Schneider,
Senior Product Manager Cutting Tools at SPK by CeramTe

Three questions & answers about the CBN cutting material BHT430:



What cutting data can I run?

- $v_c = 100 \text{ to } 300 \text{ m/min}$
- $a_p = 0.1 \text{ to } 0.3 \text{ mm}$
- f = 0.05 to 0.25 mm



What can I machine and how?

- High speed turning of sinterd metals in non interrupted and slightly interrupted cutting.
- Finishing and semi-finishing, also roughing with doc up to a_n = 1,5 mm
- Main applications in precision machining of components in gear, motor and drive technologies.



What does it stand for?

- High wear resistance together with good toughness
- Reduced machining times for higher economical efficiency
- Process reliable tool life
- Best cost per part results

Application recommendation

