

SOWA C.B.N products are made from Cubic Boron Nitride powder and special ceramic binder. SOWA C.B.N can provide excellent cutting performance for hardened steel and cast iron having high hardness. Using a C.B.N can replace of additional grinding process, thus cost savings can be acquired.

- Suitable for sintered alloy, hard material, heat treated alloy
- Excellent surface finish at the cutting of hardened steel.
- Excellent for cast iron cutting

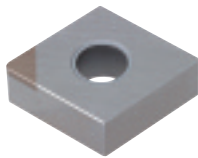
■ Recommended Cutting Condition

Work piece	Speed (sfm)	Feed Turning(ipr) Milling(ipt)	Depth (inch)	1 st Recommended Grade
Gray Cast Iron (180-230HB)	1325 ~ 3275	0.004 ~ 0.02	0.005 ~ 0.04	KB350
	1325 ~ 3275	0.004 ~ 0.02	0.005 ~ 0.04	KB360
Heat Treated Steel (over HRC45)	325 ~ 450	0.001 ~ 0.012	0.005 ~ 0.04	KB320 KB330
High Temp Alloy (over HRC45)	175 ~ 600	0.002 ~ 0.008	0.005 ~ 0.04	KB360
Sintered Alloy	175 ~ 825	0.001 ~ 0.008	0.005 ~ 0.04	KB360
Carbide Roll, High speed steel Roll	150 ~ 200	0.024 ~ 0.031	0.08 ~ 0.16	KB360

C.B.N Inserts

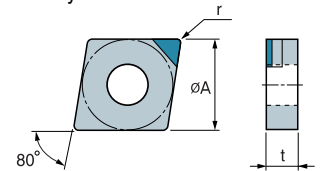
CNMA

Negative Type With Hole



■ Geometry

■ Recommendation
See above



Applicable holder	Designation	ISO	C.B.N.							(inch)			
			KB320	KB330	KB350	KB360	KB420			A	t	r	Hole Size
MCKNR/L	CNMA 431	120404											1/64
MCLNR/L	432	120408	146-131 \$80.50		147-886 \$80.50	147-965 \$80.50				0.508	1/2	3/16	1/32
MCRNR/L	433	120412											3/64
Boring MCLNR/L PCLNR/L													

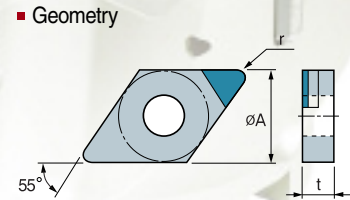
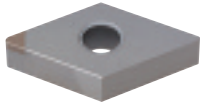
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Note: Small tip and 2 sided small tip C.B.N. inserts available upon request



DNMA

Negative Type With Hole



■ Recommendation
See page 384

Applicable holder	Designation	ISO	C.B.N.							(inch)			
			KB320	KB330	KB350	KB360	KB420			A	t	r	Hole Size
MDJNR/L Boring PDSNR/L PDUNR/L	DNMA 431	120404											1/64
	432	120408	146-132 \$80.50						0.508	1/2	3/16		1/32
	433	120412											3/64

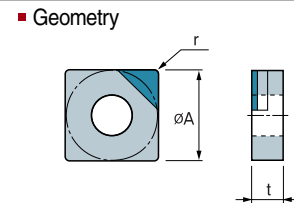
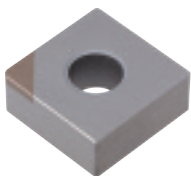
C.B.N Inserts

P. 406,425

Note: Small tip and 2 sided small tip C.B.N. inserts available upon request

SNMA

Negative Type With Hole



■ Recommendation
See page 384

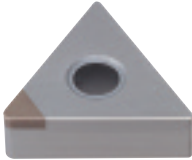
Applicable holder	Designation	ISO	C.B.N.							(inch)			
			KB320	KB330	KB350	KB360	KB420			A	t	r	
MSDNN	SNMA 431	120404											1/64
MSKNR/L	432	120408	146-133 \$80.50						1/2	3/16	1/32		
MSRNR/L	433	120412	146-134 \$80.50										3/64
Boring PSKNR													

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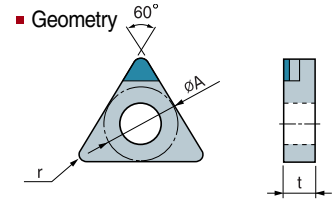
Note: Small tip and 2 sided small tip C.B.N. inserts available upon request

TNMA

Negative Type With Hole



■ Recommendation
See page 384



C.B.N Inserts

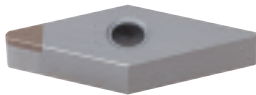
Applicable holder	Designation	ISO	C.B.N.							(inch)			
			KB320	KB330	KB350	KB360	KB420			A	t	r	
MTCNN	TNMA 330.5	160402										0.008	
MTENN	331	160404								3/8	3/16	1/64	
MTFNR/L	332	160408	146-139 \$77.90									1/32	
MTGNR/L	333	160412										3/64	
MTJNR/L	432	220408	146-141 \$80.50							1/2	3/16	1/32	
Boring MTFNR/L MTUNR/L PTFNR/L	433	220412										3/64	

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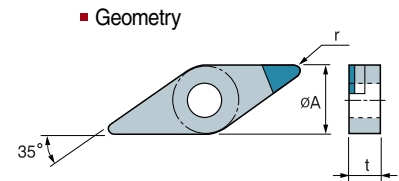
Note: Small tip and 2 sided small tip C.B.N. inserts available upon request

VNMA

Negative Type With Hole



■ Recommendation
See page 384



Applicable holder	Designation	ISO	C.B.N.							(inch)				
			KB320	KB330	KB350	KB360	KB420			A	t	r		
MVJNR/L	VNMA 331	160402				147-968 \$85.80						3/8	3/16	1/64
	332	160404										1/32		
	432	160408								1/2	3/16	1/32		

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Note: Small tip and 2 sided small tip C.B.N. inserts available upon request