

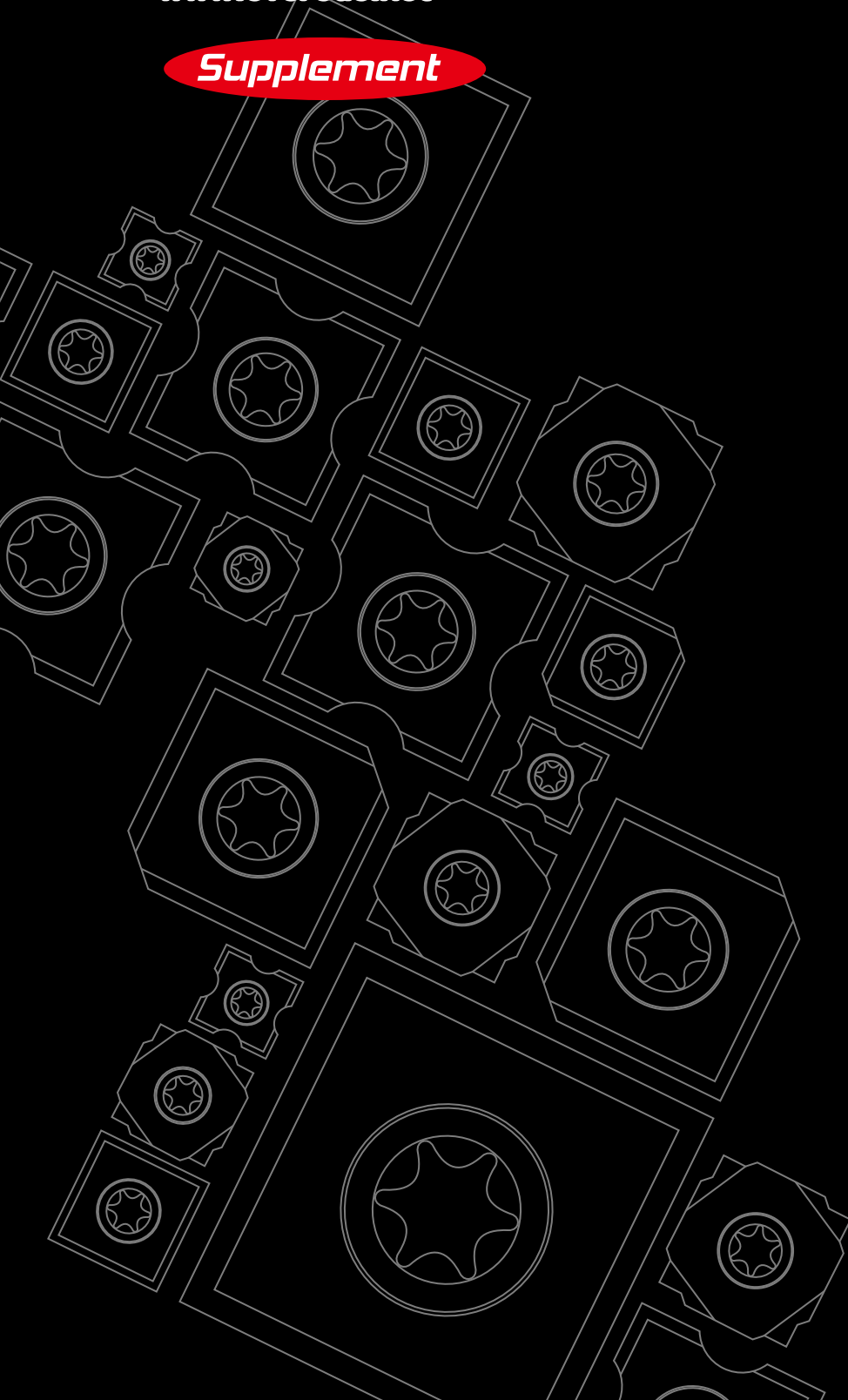


CUTTING TOOLS & TOOL HOLDERS

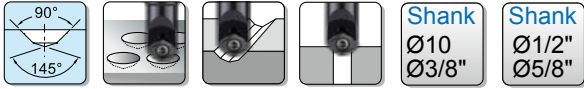
www.everede.net

Supplement

2012



“W” Spotting for Taps



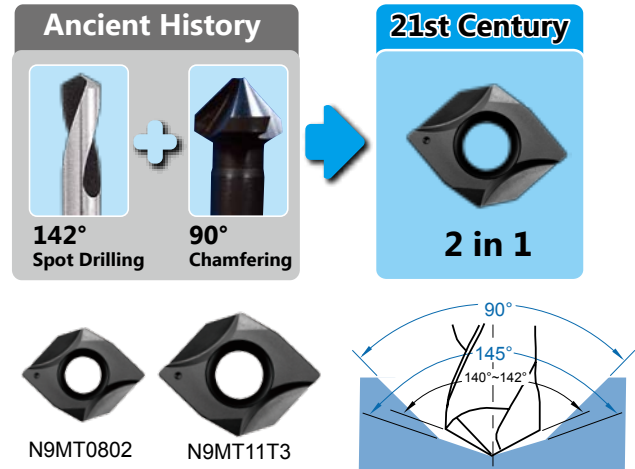
1 process provides 2 applications

Inserts >>

Features:

- Reduces process to one operation. Shortens cycle time.
- Use to spot prior to drilling with high performance drills for higher accuracy of hole position.
- Utilizes standard NC Spot Drill holders -- 99616-10 & 99616-14.

- NC2033 :**
- K20F grade, TiAlN coated, fully ground cutting edge and relief angle.
 - Universal grade for steel and cast iron.
 - Each insert has 2 cutting edges.



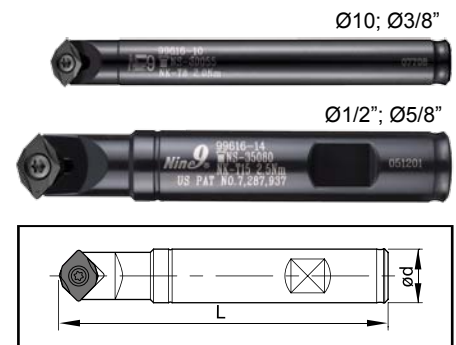
Parts No.	Grade	Coating		Thread Size	D1 ⁺⁰ / _{-0.1}	D2	L2	Max. Chamfering
N9MT0802M04C-NC2033	K20F	TiAlN		M4x0.7	3.30 (0.130")	8 (0.315")	2.8 (0.110")	2C
N9MT0802M05C-NC2033				M5x0.8	4.20 (0.165")		2.5 (0.098")	1.5C
N9MT0802M06C-NC2033				M6x1.0	5.00 (0.197")		2.2 (0.087")	1C
N9MT11T3M08C-NC2033	K20F	TiAlN		M8x1.25	6.80 (0.266")	13 (0.512")	4.1 (0.161")	2.5C
N9MT11T3M10C-NC2033				M10x1.5	8.50 (0.335")		3.5 (0.138")	1.5C
N9MT11T3UNC25-NC2033	K20F	TiAlN		1/4-20 UNC	5.08 (0.200")	13 (0.512")	4.7 (0.185")	3C
N9MT11T3UNC31-NC2033				5/16-18 UNC	6.53 (0.257")		4.2 (0.165")	2.5C
N9MT11T3UNC38-NC2033				3/8-16 UNC	7.94 (0.312")		3.7 (0.146")	1.7C

Holders >>

- Features:**
- Indexable insert spotting drill holder.
 - Holders and inserts are interchangeable.
 - For full line of holders see the main catalog.

Applications: • Spotting, grooving and chamfering.

Parts No.	ød	Insert Type	Thread Size	L	Screw	Key
99616-10	10	N9MT0802	M4~M6	88.9 ±0.3 (3.5" ± 0.012")	NS-30055 2.0Nm	NK-T8
99616-10-3/8	3/8"					
99616-14-1/2	1/2"	N9MT11T3	M8~M10 1/4~3/8 UNC	97.5 ±0.6 (3.839" ± 0.024")	NS-35080 2.5Nm	NK-T15
99616-14-5/8	5/8"					



TECH. >>

Work Material	SFM	IPR (inch/rev.)
Carbon Steel	500~820	0.0020~0.0040
Alloy Steel	330~660	0.0016~0.0024
Stainless Steel	210~410	0.0010~0.0024
Cast Iron	260~500	0.0020~0.0040



Indexable Engraving Tool

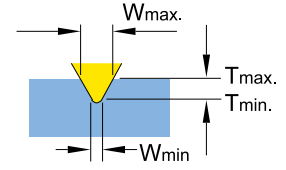


Shank
Ø6
(0.236")

Shank
Ø4
(0.158")



Excellent Performance Super Fine



Inserts >>

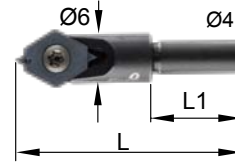
NC2032 :

- TiAlN coated. Good for steel < 30° HRC and cast iron.

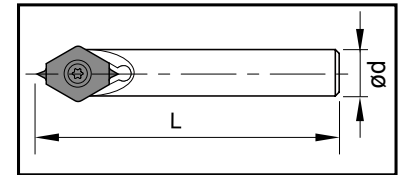
Parts No.	Grade	Coating	Re	Dimensions			Wmin.	Wmax.	Tmin.	Tmax.
				L	S	Re				
V06006T1W03-NC2032	K20F	TiAlN		6.35 (0.250")	2.0 (0.079")	0.1 (0.004")	0.25 (0.010")	1.1 (0.043")	0.05 (0.002")	0.8 (0.030")

Holder >>

- Tool steel shank holders.
Ø4mm holder is designed and used on Engraving Machine.



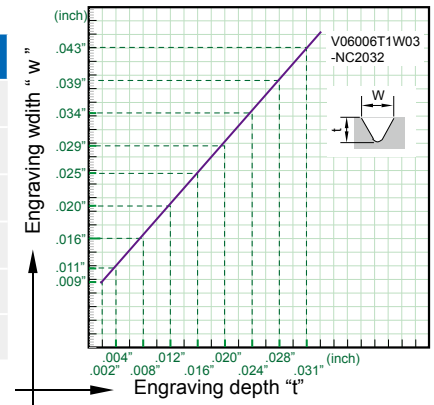
Parts No.	ød	L	L1	Screw	Key
99619-V060-04	4 (0.158")	30 (1.181")	12 (0.472")	NS-22044 1.0Nm	NK-T7
99619-V060-06	6 (0.236")	40 (1.575")	-		



TECH. >>

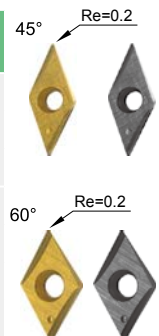
Work Material	S RPM	f (inch/rev.)	Material	Ap	1st	2nd	3rd	4th	5th	~	finishing
Carbon steel C<0.3%	5000~ 20000	0.0002~ 0.0004	Carbon steel C<0.3%		.012"	.008"	.004"	.004"	.002"	.002"	.001"
Carbon steel C>0.3%		0.0002~ 0.0006	Carbon steel C>0.3%		.012"	.008"	.004"	.004"	.002"	.002"	.001"
Low alloy steel C<0.3%		0.0002~ 0.0004	Low alloy steel C<0.3%		.012"	.004"	.004"	.002"	.002"	.002"	.001"
High alloy steel C>0.3%		0.0002~ 0.0004	High alloy steel C>0.3%		.008"	.004"	.004"	.002"	.002"	.002"	.001"
Steel <HRc30°		0.0002~ 0.0004	Steel <HRc30°		.008"	.004"	.004"	.002"	.002"	.002"	.001"
Cast Iron		0.0002~ 0.0006	Cast Iron		.012"	.008"	.004"	.004"	.002"	.002"	.001"

Reference chart of engraving depth and width



More options >>

Parts No.	Angle	Grade	Coating	Re	Dimensions			Wmin.	Wmax.	Tmax.
					L	S	Re			
V04506T1W06-NC2071	45°	K20F	TiN		6.35 (0.250")	2.0 (0.079")	0.2 (0.008")	0.65 (0.026")	2.1 (0.083")	2.0 (0.079")
V04506T1W06-NC2032			TiAlN		0.65 (0.026")	2.7 (0.106")	2.0 (0.079")			
V04506T1W06-NC9031			TiN		0.45 (0.018")					
V06006T1W06-NC2071	60°	K20F	TiN		6.35 (0.250")	2.0 (0.079")	0.2 (0.008")	0.65 (0.026")	2.7 (0.106")	2.0 (0.079")
V06006T1W06-NC2032			TiAlN		0.65 (0.026")					
V06006T1W06-NC2035			TiAlN		0.65 (0.026")					
V06006T1W06-NC9031			TiN	0.45 (0.018")						



* See main catalog for full line of products and technical data.



NC SPOT DRILL 99616-09V

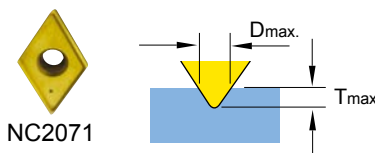


▣ Inserts >>

Features:

- 60 degree indexable spotting insert.
- Special geometry with supporting edges for use in high speed machining.

- NC2071 :**
- K20F grade, TiN coated, high positive ground cutting edge and relief angle.
 - Universal grade for carbon steel, alloy steel and cast iron.
 - Each insert has 2 cutting edges.



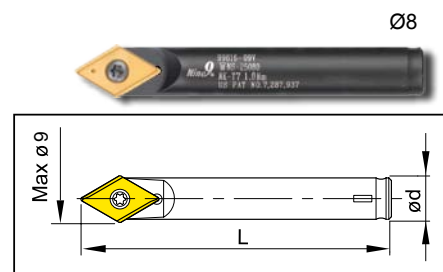
Parts No.	Grade	Coating	Re	Dimensions			Dmax.	Tmax.
				L	S	Re		
V9MT0802CT-NC2071	K20F	TiN		8 (0.315")	2.38 (0.094")	0.4 (0.016")	9 (0.354")	7.3 (0.287")

▣ Holders >>

- Features:**
- 60 degree spotting drill with indexable insert.
 - A single cutting edge creates higher precision and position when spotting.

- Applications:**
- Spotting, engraving, grooving and chamfering.

Parts No.	ød	L	Screw	Key
99616-09V	8 (0.315")	60 (2.362")	NS-25045 1.2Nm	NK-T7



▣ TECH. >>

Work Material	SFM	IPR (inch/rev.)
Carbon Steel	500~820	0.0020~0.0040
Alloy Steel	330~660	0.0016~0.0024
Stainless Steel	210~410	0.0010~0.0024
Cast Iron	260~500	0.0020~0.0040

* See main catalog for full line of products and technical data.

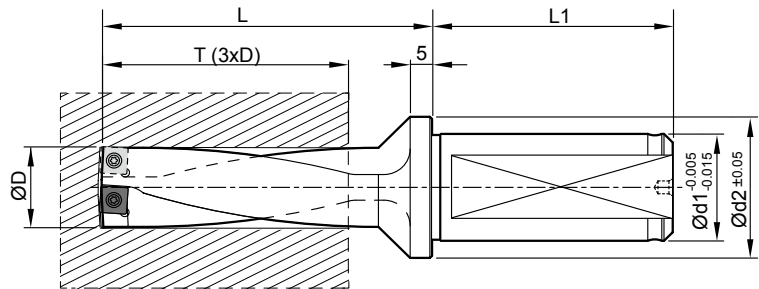


Super Drills (3xD)



Features:

- Smallest indexable drill starting at 10mm.
- 4 cutting edges per insert.
- Same insert for outer and inner pockets.



Kit Package >>

- Introductory kits for easy ordering.
- Two extra spare screws included.



◀ NC2032

AlTiN coated
Universal grade for almost all materials.



◀ Contents

- One super drill
- 10 inserts
- Two spare insert screws
- One screw key
- One plastic case
(packaging subject to change)

Ordering Code	Drills Diameter	T	L	d1	d2	L1	Radial Adjustment	D max.	Kit Contents	
									Holder	Insert / Screw / Key
99313-10.0-KIT	10.0	30.0	49	20	27	49	0.25	10.5	99313-10.0	N9GX04T002-NC2032 NS-18037 NK-T6 Torque: 0.6Nm
99313-10.3-KIT	10.3	30.9	52	20	27	49	0.25	10.8	99313-10.3	
99313-10.5-KIT	10.5	31.5	52	20	27	49	0.25	11.0	99313-10.5	
99313-11.0-KIT	11.0	33.0	52	20	27	49	0.20	11.4	99313-11.0	
99313-11.5-KIT	11.5	34.5	55	20	27	49	0.20	11.9	99313-11.5	
99313-12.0-KIT	12.0	36.0	55	20	27	49	0.15	12.3	99313-12.0	
99313-12.5-KIT	12.5	37.5	58	20	27	49	0.15	12.8	99313-12.5	

* 3/4" shank available upon request.

Application & TECH. >>

Application	Regular Surface 100%	Cross Holes 80%	Stack Drilling 80%~70%	Round Work Piece Offset Drilling 80%~60%	Plunge Drilling 80%	Concave Surfaces 80%	Angled Surfaces 80%~70%	Cone Work Piece Offset Drilling 80%~70%
Work Piece Shape								
Work Material	SFM			IPR (inch / rev.)				
Carbon Steel	200~985			0.0010 ~ 0.0030				
Stainless Steel	200~500			0.0010 ~ 0.0020				
Cast Iron	265~400			0.0020 ~ 0.0030				
Hardened Steel	200~330			0.0010 ~ 0.0020				

* Adjust speed and feed percentage by applications.



Quick Change High Speed Boring Tools

Ø5mm~Ø50mm boring bars are Interchangeable.
Change the boring bar in just one minute.
G6.3 10000 r.p.m. pre-balanced. All sizes are guaranteed.

High Speed

- Surface speeds of carbide inserts up to 2300 SFM.
- Combination bore / chamfer / facing tools can be ordered on request.

Low Cost for Machining Small Holes

- The cost of this product is low compared to other micro adjustable boring heads.

Simplistic Yet Accurate

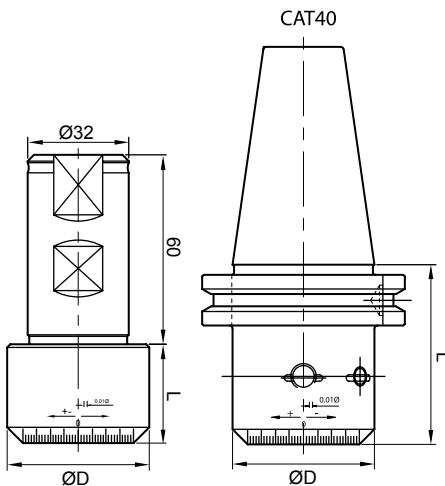
- Dimensions are easy to read. They are indicated on the tools and are easily adjustable on a tool presetter or in machining center.
- No backlash.
- Change the boring bar and set the boring dimension on the tool presetter in just one minute.
- This simple boring tool has minimal components.

Boring Head Shank

- Adjustable range: +0.12 /-0.13 mm. (.010")
- Each division is 0.01 mm. (.0004")

Part No.	ØD	L
BT30-146-51	45	51.3
BT40-146-56	45	56.3
BT50-146-77	45	77.3
CAT40-146-56 ⁺	45	56.3
HSK63A-146-72	45	72
SB32-146-31 ⁺	45	31.3

⁺ Stock in U.S.A.
The SB32 is a 32mm straight shank holder.



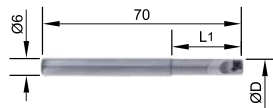
Adapter

- Economical solution of small dia. boring bar.



Part No.	ØD	L
C20-ID06	6	52
C20-ID08	8	49
C20-ID10	10	21.5
C20-ID11	11	21.5
C20-ID15.5	15.5	21.5

Ø4.87~Ø6.87mm



- Solid Carbide Shank
- Boring Depth : L1, 4~6xD

Part No.	ØD	L1	Insert
C06-0500-20L	4.87~5.12	20.00	CCGT030102-NC30 Screw: NS-16030 Key: NK-T6
C06-0525-20L	5.12~5.37	20.00	
C06-0550-22L	5.37~5.62	22.00	
C06-0575-22L	5.62~5.87	22.00	
C06-0600-24L	5.87~6.12	24.00	
C06-0625-24L	6.12~6.37	24.00	
C06-0650-26L	6.37~6.62	26.00	
C06-0675-26L	6.62~6.87	26.00	

Precisely ground Inserts

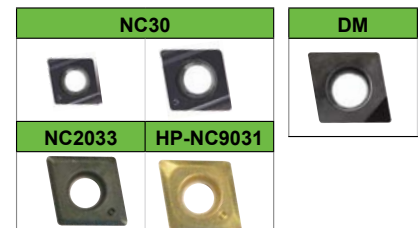
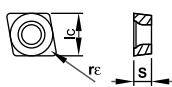
-CC030102, CC040102

- **NC30** : K20F carbide insert, TiAlN coated, universal grade for cast iron, carbon steel, alloy steel, stainless steel.

-CC040102, CC060204

- **NC2033** : K20F carbide insert, TiAlN coated, good for carbon steel, alloy steel, stainless steel.
- **HP-NC9031**: K20F carbide insert, TiN coated, good for Al, Al-alloy, copper and non ferrous metal.
- **DM** : PCD brazed tipped insert with a polished and honed cutting edge for fine surface finished and longer tool life.

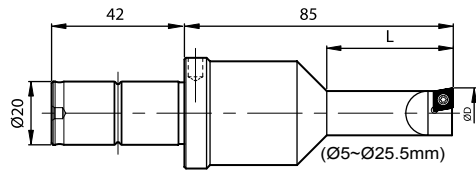
Inserts	NC30	DM	NC2033	NC9031	Dimensions		
					lc	S	rε
CCGT030102	•				3.5	1.4	0.2
CCGT040102	•				4.3	1.8	0.2
CCFT060204			•		6.35	2.38	0.4
CCFT060204HP				•	6.35	2.38	0.4
CCMW060204		•			6.35	2.38	0.4



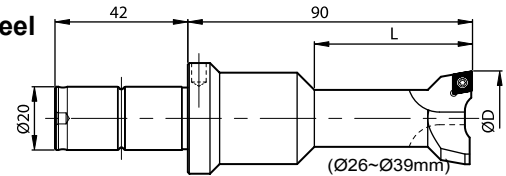
Quick Change High Speed Boring Tools



• Alloy Steel



• Alloy Steel

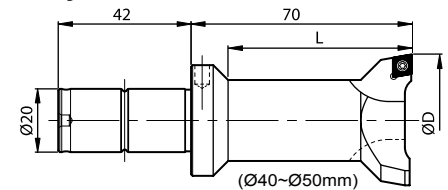


Part No.	ØD	L1	Insert
C20-0500-10L	4.87~5.12	10.00	CCGT030102-NC30
C20-0600-12L	5.87~6.12	12.00	NS-16030, NK-T6
C20-0700-14L	6.87~7.12	14.00	CCGT040102-NC30
C20-0800-16L	7.87~8.12	16.00	NS-20045, NK-T6
C20-0900-18L	8.87~9.12	18.00	Select grade from cutting data chart
C20-1000-25L	9.87~10.12	25.00	
C20-1025-25L	10.12~10.37	25.00	
C20-1050-26L	10.37~10.62	26.25	
C20-1075-26L	10.62~10.87	26.25	
C20-1100-27L	10.87~11.12	27.50	
C20-1125-27L	11.12~11.37	27.50	
C20-1150-28L	11.37~11.62	28.75	
C20-1175-28L	11.62~11.87	28.75	
C20-1200-30L	11.87~12.12	30.00	
C20-1225-30L	12.12~12.37	30.00	CCGT060204
C20-1250-31L	12.37~12.62	31.25	CCFT060204
C20-1275-31L	12.62~12.87	31.25	Select grade from cutting data chart
C20-1300-32L	12.87~13.12	32.50	Screw: NS-20045 Key: NK-T7
C20-1325-32L	13.12~13.37	32.50	
C20-1350-33L	13.37~13.62	33.75	
C20-1375-33L	13.62~13.87	33.75	
C20-1400-35L	13.87~14.12	35.00	
C20-1425-35L	14.12~14.37	35.00	
C20-1450-36L	14.37~14.62	36.25	
C20-1475-36L	14.62~14.87	36.25	
C20-1500-37L	14.87~15.12	37.50	
C20-1525-37L	15.12~15.37	37.50	
C20-1550-38L	15.37~15.62	38.75	CCGT060204 CCFT060204 Screw: NS-20060 Key: NK-T7
C20-1575-38L	15.62~15.87	38.75	
C20-1600-40L	15.87~16.12	40.00	
C20-1625-40L	16.12~16.37	40.00	
C20-1650-41L	16.37~16.62	41.25	
C20-1675-41L	16.62~16.87	41.25	
C20-1700-42L	16.87~17.12	42.50	

Part No.	ØD	L1	Insert
C20-1725-42L	17.12~17.37	42.50	Select grade from cutting data chart
C20-1750-43L	17.37~17.62	43.75	
C20-1775-43L	17.62~17.87	43.75	
C20-1800-45L	17.87~18.12	45.00	
C20-1825-45L	18.12~18.37	45.00	
C20-1850-46L	18.37~18.62	46.25	
C20-1875-46L	18.62~18.87	46.25	
C20-1900-47L	18.87~19.12	47.50	
C20-1925-47L	19.12~19.37	47.50	
C20-1950-48L	19.37~19.62	48.75	
C20-1975-48L	19.62~19.87	48.75	
C20-2000-50L	19.87~20.12	50.00	CCGT060204 CCFT060204 Screw: NS-20045 Key: NK-T7
C20-2025-50L	20.12~20.37	50.00	
C20-2050-50L	20.37~20.62	50.00	
C20-2075-50L	20.62~20.87	50.00	
C20-2100-50L	20.87~21.12	50.00	
C20-2125-50L	21.12~21.37	50.00	
C20-2150-50L	21.37~21.62	50.00	
C20-2175-50L	21.62~21.87	50.00	
C20-2200-50L	21.87~22.12	50.00	
C20-2225-50L	22.12~22.37	50.00	
C20-2250-50L	22.37~22.62	50.00	
C20-2275-50L	22.62~22.87	50.00	
C20-2300-50L	22.87~23.12	50.00	
C20-2325-50L	23.12~23.37	50.00	
C20-2350-50L	23.37~23.62	50.00	
C20-2375-50L	23.62~23.87	50.00	
C20-2400-50L	23.87~24.12	50.00	
C20-2425-50L	24.12~24.37	50.00	
C20-2450-50L	24.37~24.62	50.00	
C20-2475-50L	24.62~24.87	50.00	
C20-2500-50L	24.87~25.12	50.00	
C20-2525-50L	25.12~25.37	50.00	
C20-2550-50L	25.37~25.62	50.00	

Part No.	ØD	L1	Insert
C20-2600-50L	25.87~26.12	50.00	CCGT060204 CCFT060204 Select grade from cutting data chart Screw: NS-25060 Key: NK-T7
C20-2700-50L	26.87~27.12	50.00	
C20-2800-50L	27.87~28.12	50.00	
C20-2900-50L	28.87~29.12	50.00	
C20-3000-50L	29.87~30.12	50.00	
C20-3100-70L	30.87~31.12	70.00	
C20-3200-70L	31.87~32.12	70.00	
C20-3300-70L	32.87~33.12	70.00	
C20-3400-70L	33.87~34.12	70.00	
C20-3500-70L	34.87~35.12	70.00	
C20-3600-70L	35.87~36.12	70.00	
C20-3700-70L	36.87~37.12	70.00	
C20-3800-70L	37.87~38.12	70.00	
C20-3900-70L	38.87~39.12	70.00	

• Alloy Steel

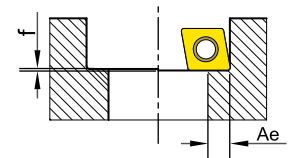


Part No.	ØD	L1	Insert
C20-4000-70L	39.87~40.12	70.00	CCGT060204 CCFT060204 Select grade from cutting data chart Screw: NS-25060 Key: NK-T7
C20-4100-70L	40.87~41.12	70.00	
C20-4200-70L	41.87~42.12	70.00	
C20-4300-70L	42.87~43.12	70.00	
C20-4400-70L	43.87~44.12	70.00	
C20-4500-70L	44.87~45.12	70.00	
C20-4600-70L	45.87~46.12	70.00	
C20-4700-70L	46.87~47.12	70.00	
C20-4800-70L	47.87~48.12	70.00	
C20-4900-70L	48.87~49.12	70.00	
C20-5000-70L	49.87~50.12	70.00	

* H type with internal coolant can be ordered on request.

TECH.

Material	Cutting conditions or surface finishes	Grade of insert	Ae Max. inch	SFM	IPR (inch/rev.)
Carbon Steel	Regular cutting	NC2033	0.020	394 ~ 656	0.002 ~ 0.004
	Interrupted cutting	NC30	0.012	328 ~ 459	0.002 ~ 0.003
Alloy Steel	Regular cutting	NC2033	0.020	328 ~ 459	0.002 ~ 0.004
	Interrupted cutting	NC30	0.012	262 ~ 394	0.002 ~ 0.003
Stainless Steel	Regular cutting	NC2033	0.020	262 ~ 394	0.002 ~ 0.004
	Interrupted cutting	NC30	0.012	230 ~ 328	0.002 ~ 0.004
Cast Iron	Regular cutting	NC30	0.020	262 ~ 394	0.002 ~ 0.004
Brass, Bronze and Al-alloy Si >6%	Regular cutting	NC9031	0.020	492 ~ 984	0.002 ~ 0.004
Al, Al-alloy, Non-ferrous Metal	Regular cutting	NC9031	0.020	492 ~ 984	0.002 ~ 0.004
	Super finished	DM	0.012	1640 ~ 6560	0.002 ~ 0.004
Hardened Steel <HRC 50	Regular cutting	NC30	0.012	262 ~ 394	0.002 ~ 0.004





Indexable Chamfer Tool



Features:

- Elliptical necked bar to optimize the tool strength.
- Tool body is made of hot working steel and hardened.
- Front or back hole chamfering in one pass.
- Designed to chamfer for taps M8, M10, M12 & 1/2-13UNC.



NC2032



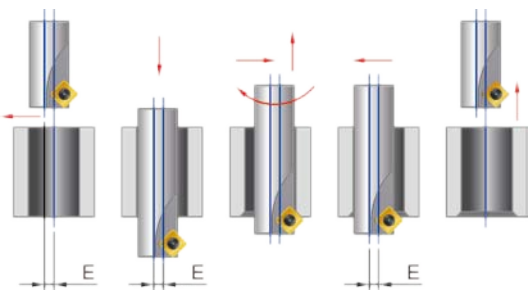
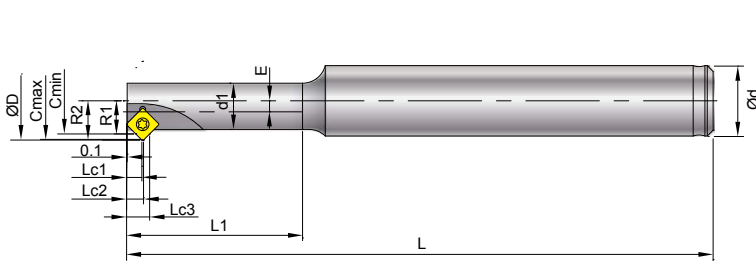
NC9071

Inserts >>

NC2032: • K20F grade, AlTiN coated. The 1st choice for high carbon, high alloy and hardened steels as well as cast iron.

NC9071: • K20F grade, TiN coated, high positive rake angle and honed sharp edge. The best choice for low carbon steel, low carbon alloy steel, stainless steel, Al, Al-alloy, brass, bronze and most of the non-ferrous metals.

Parts No.	Grade	Coating	Diagram	Dimensions			Screw	Key
				L	S	re		
N9GX04T002-NC2032	K20F	AlTiN		4.0	1.8	0.2	NS-18037	NK-T6
N9GX04T002-NC9071		TiN		(0.157")	(0.071")	(0.008")		



Holdings >>

Parts No.	Thread Size	Cmin.	Cmax.	Ød	d1	ØD	R1	R2	L	L1	Lc1	Lc2	Lc3	E	Insert Screw/ Key
99616-C02	M8X1.25	6.8 (.268")	8.8 (.346")	10 (.394")	5.25 (.207")	9 (.354")	3.4 (.134")	4.4 (.173")	80 (3.150")	20 (.787")	2.56 (.101")	2.93 (.115")	3.93 (.155")	1.25 (.050")	N9GX04T002 NS-18037 NK-T6
99616-C04	M10X1.5	8.5 (.335")	10.8 (.425")	12 (.472")	6.45 (.254")	11.1 (.437")	4.25 (.167")	5.4 (.213")	100 (3.940")	25 (.984")	2.51 (.099")	2.98 (.117")	4.13 (.163")	1.55 (.061")	
99616-C06	M12X1.75 1/2-13UNC	10.26 (.404")	13.2 (.520")	12 (.472")	7.88 (.310")	13.5 (.531")	5.13 (.201")	6.4 (.252")	100 (3.940")	30 (1.181")	2.51 (.099")	2.98 (.117")	4.45 (.180")	1.88 (.074")	

TECH. >>

Work Piece Material		Grade of insert	Cutting Speed SFM feet / min.	Feed Rate inch / tooth
Material Group	Sample Code (AISI)			
Carbon steel C<0.3%	1050	NC9071	200-260-390	0.0007" ~ 0.0030"
Carbon steel C>0.3%	1050	NC2032	200-260-390	0.0007" ~ 0.0030"
Low alloy steel C<0.3%	4130	NC9071	200-260-390	0.0004" ~ 0.0020"
High alloy steel C<0.3%	D2	NC2032	200-260-390	0.0007" ~ 0.0030"
Stainless steel	304	NC9071	100-200-330	0.0004" ~ 0.0020"
Cast iron	A48 35B / No 35B	NC2032	200-260-390	0.0007" ~ 0.0023"
Al, and non-ferrous metal	6061	NC9071	260-330-500	0.0011" ~ 0.0040"



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