



# Deburring Mill >>>

## 60° & 90°

For both front and back deburring and threading applications.



### ▶ 2 Angles : 60° / 90°

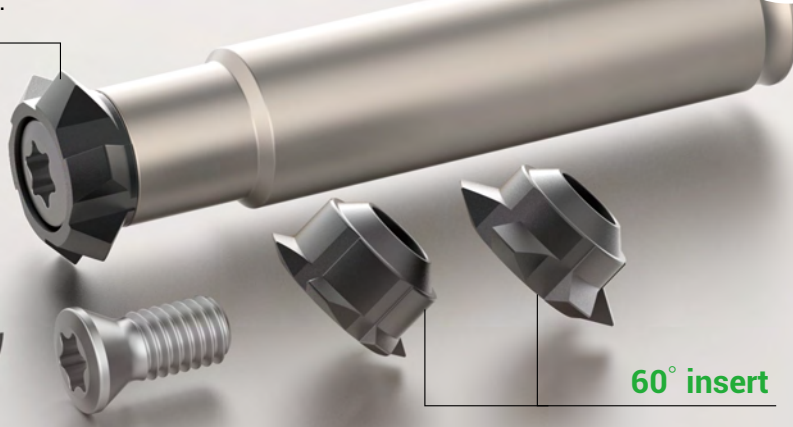
- One holder can fit on both the 60° and 90° deburring inserts.

### ▶ 6 Cutting Flutes

- provide higher feed rate, optimized performance and reduced cycle time.

### ▶ Ø5(mm)

90° insert



60° insert



## Features >>>

### ▶ Deburring Mill 60°

- Front & back deburring in one operation.
- Mini. deburring bore from Ø3.9 ~ Ø10mm.
- Also for thread milling application.
- Each insert has 6 flutes.
- Thanks for special insert geometry and Nine9 clamping system to provide high precision and accurate position.
- The smallest insert Ø5.0 can do M6xP0.75 internal threading and deburring.
- For external different threading pitch can be done by NC programming.  
For example: Ø10.0mm insert can do external, threading pitch from P1.25 to P2.0mm, save your tool inventory.

### ▶ Deburring Mill 90°

- For front & back deburring, grooving is also possible.
- Mini. deburring bore from Ø3.9 ~ Ø10mm.
- Each insert has 6 flutes.



# Applications



## 60°

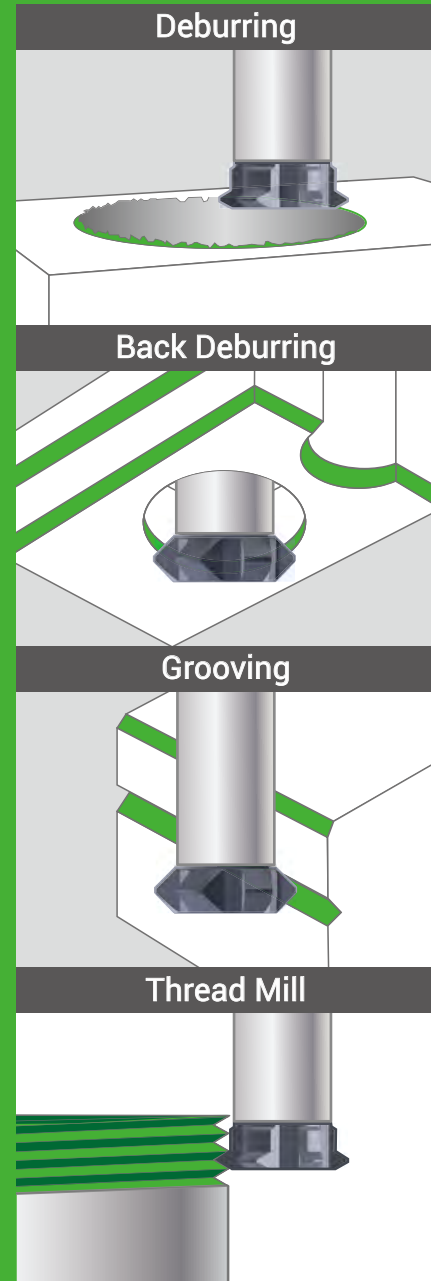
- Front and back deburring and thread milling in one operation.



## 90°

For front and back  
Deburring  
Smallest size  
from 5mm

C0.2



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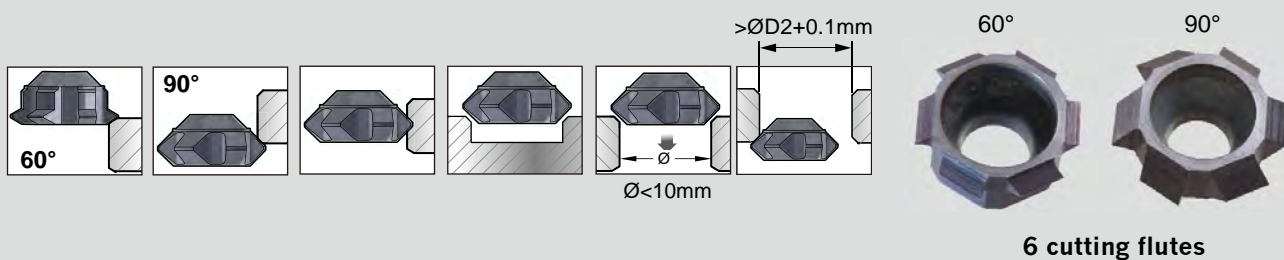
- Specialized on narrow space below 10mm by indexable inserts.
- 6 cutting flutes, higher feed rate, good for hardened steel up to HRC60.

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Deburring Mill

# Deburring Mill 60° & 90°



## ► Inserts >>

**NC2032:** • TiAlN coating provides longer tool life.

- For all kinds of steel < 60 HRC, carbon steel, alloy steel and cast iron.

**XP9000:** • High positive geometry and sharp edge produces excellent surface finish.

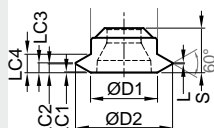
- For non-ferrous material such as aluminum, titanium, brass, copper and long cutting chip metal.

## ► 60° deburring mill

- For front and back deburring.
- Also for threading application.



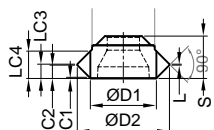
Code	Parts No.	Coating	Grade	ØD1	ØD2	L	LC1	LC2	LC3	LC4	S	Pitch Range		Plunge 0.1C		
												mm	TPI	min. hole	max. hole	
01R2101	R06005-05006-32	TiAlN	K20F	3.9	5.0	0.06	0.03	0.35	0.41	2.45	2.45	0.7 - 0.75	28 - 24	4.1	4.8	
01R2102	R06005-05006-00	Uncoated														
01R2103	R06005-05010-32	TiAlN														
01R2104	R06005-05010-00	Uncoated														
01R2301	R06007-06810-32	TiAlN														
01R2302	R06007-06810-00	Uncoated														
01R2601	R06010-08510-32	TiAlN														
01R2602	R06010-08510-00	Uncoated														
01R2603	R06010-10010-32	TiAlN														
01R2604	R06010-10010-00	Uncoated														



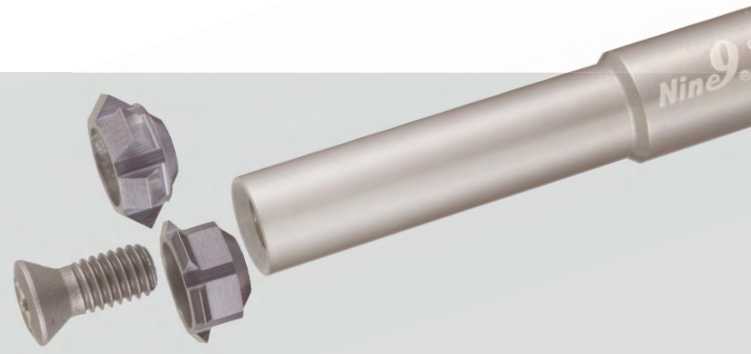
## ► 90° deburring mill

- Front & back deburring in one operation.

Code	Parts No.	Coating	Grade	ØD1	ØD2	L	LC1	LC2	LC3	LC4	S	Plunge 0.1C		
												min. hole	max. hole	
01R4101	R09005-05060-32	TiAlN	K20F	3.9	5.0	0.6	0.05	0.6	1.2	1.77	2.45	4.1	4.8	
01R4102	R09005-05060-00	Uncoated												
01R4301	R09007-07020-32	TiAlN												
01R4302	R09007-07020-00	Uncoated												
01R4601	R09010-10010-32	TiAlN												
01R4602	R09010-10010-00	Uncoated												

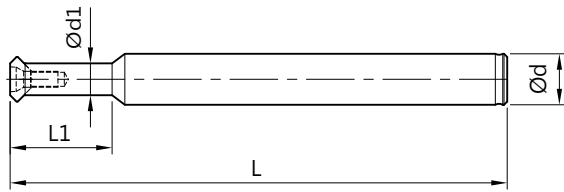


# Deburring Mill 60° & 90°



## ► Holder >>

- Made of hardened high alloy steel.
- For both 60° and 90° deburring inserts.



Code	Parts No.	Type	Ød	Ød1	L1	L	Insert Type	Screw	Key
70R102	00-99626-CR05-05-031	BC05-CR05-031	5	3.5	6	31			
70R103	00-99626-CR05-08-076	BC08-CR05-076	8	3.5	12	76	Rxxx05	*NS-20045 0.6Nm	NK-T6
70R101	00-99626-CR05-05-043	BC05-CR05-043	5	3.5	18	43			
70R302	00-99626-CR07-06-036	BC06-CR07-036	6	5	8	36			
70R303	00-99626-CR07-08-078	BC08-CR07-078	8	5	16	78	Rxxx07	NS-25060 0.9Nm	NK-T7
70R301	00-99626-CR07-06-052	BC06-CR07-052	6	5	24	52			
70R602	00-99626-CR10-08-040	BC08-CR10-040	8	6.8	10	40			
70R603	00-99626-CR10-08-082	BC08-CR10-082	8	6.8	20	82	Rxxx10	NS-35080 2.5Nm	NK-T15
70R601	00-99626-CR10-08-070	BC08-CR10-070	8	6.8	30	70			

\*Torque screwdriver is recommended.

## ► Cutting Data >>

### 60° & 90° deburring mill for deburring

	Workpiece material	Vc ( m/min. )	Feed rate ( mm / tooth )	Grade of insert
<b>P</b>	Carbon steel	120 ~ 250	0.005 ~ 0.12	NC2032
	Alloy steel	100 ~ 200	0.005 ~ 0.10	NC2032
<b>M</b>	Stainless steel	60 ~ 150	0.005 ~ 0.10	NC2032
<b>K</b>	Casting iron	80 ~ 180	0.005 ~ 0.10	NC2032
<b>N</b>	Al, and non-ferrous metal	150 ~ 500	0.005 ~ 0.15	XP9000
<b>H</b>	Hardened steel < 60 HRC	40 ~ 100	0.005 ~ 0.05	NC2032

### 60° deburring mill for thread milling

	Workpiece material	Vc ( m/min. )	Feed rate ( mm / tooth )	Grade of insert
<b>P</b>	Carbon steel	80 ~ 150	0.002 ~ 0.013	NC2032
	Alloy steel	60 ~ 120	0.002 ~ 0.01	NC2032
<b>M</b>	Stainless steel	50 ~ 100	0.002 ~ 0.01	NC2032
<b>K</b>	Casting iron	50 ~ 100	0.002 ~ 0.01	NC2032
<b>N</b>	Al, and non-ferrous metal	100 ~ 300	0.002 ~ 0.013	XP9000
<b>H</b>	Hardened steel < 60 HRC	30 ~ 60	0.002 ~ 0.008	NC2032

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