

Deburring Mill >>>

60° & 90°

For both front and back deburring and threading applications.

P M K N H

► 2 Angles : 60° / 90°

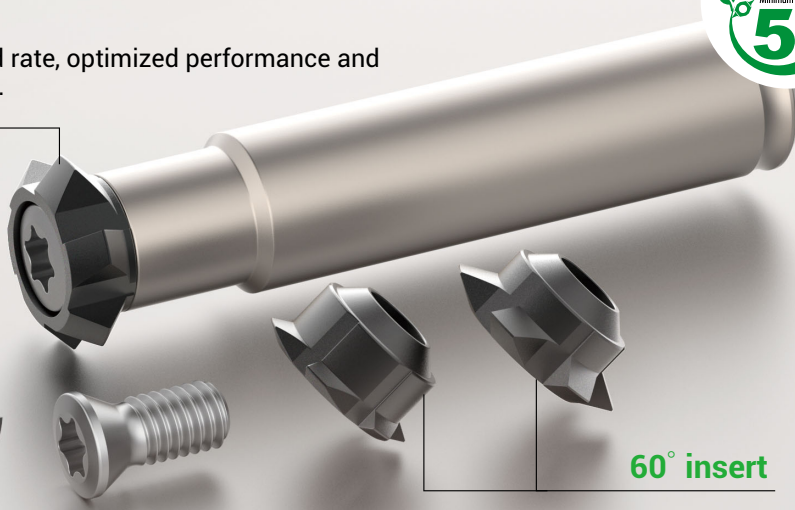
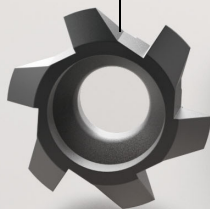
- One holder can fit on both the 60° and 90° deburring inserts.

► 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 programing.
For example: Ø10.0mm insert can do external, threading pitch from P1.25 to P2.0mm, save your tool inventory.

► Deburring Mill 90°

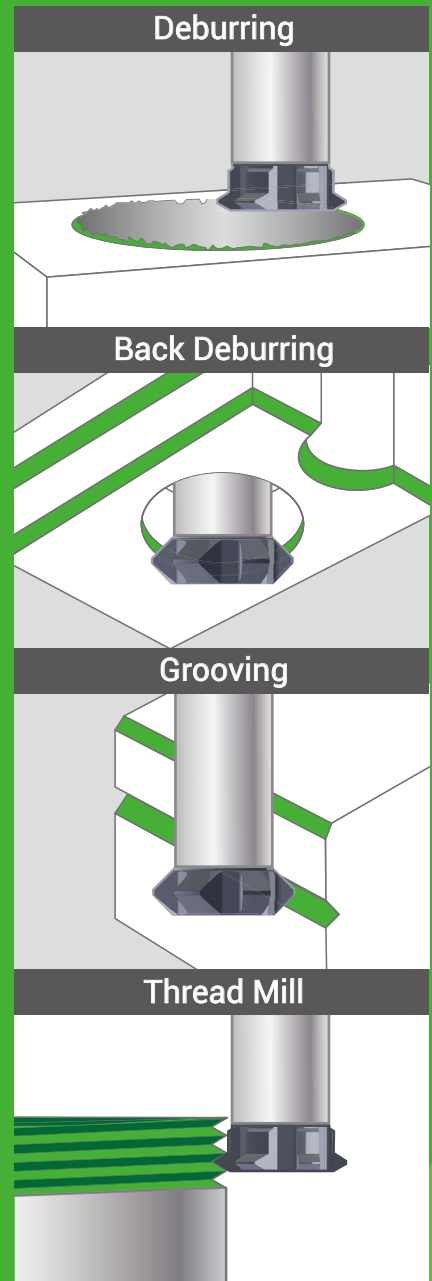
- For front & back deburring, grooving is also possible.
- Mini. deburring bore from Ø3.9 ~ Ø10mm.
- Each insert has 6 flutes.



Applications



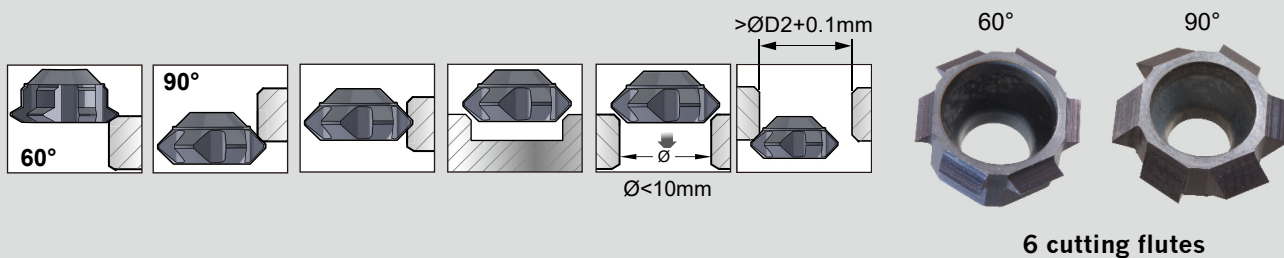
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- Specialized on narrow space below 10mm by indexable inserts.
 - 6 cutting flutes, higher feed rate, good for hardened steel up to HRC60.
- ”



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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.



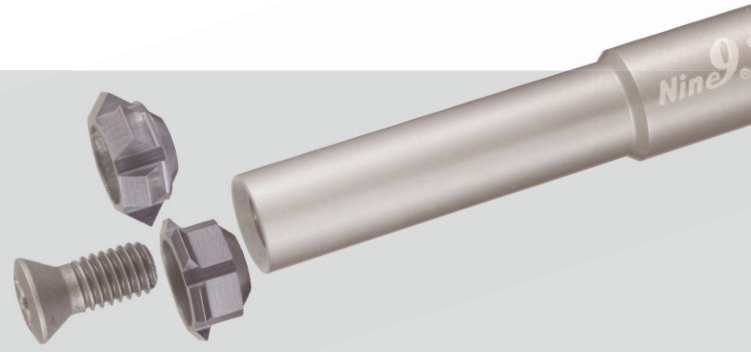
Code	Parts No.	Coating	Grade		ØD1	ØD2	L	LC1	LC2	LC3	LC4	S	Pitch Range		Plunge 0.1C	
													mm	TPI	min. hole	max. hole
01R2101	R06005-05006-32	TiAlN	K20F		3.9	5.0	0.06	0.03	0.35	0.41	2.45	2.45	0.7 - 0.75	28 - 24	4.1	4.8
01R2102	R06005-05006-00	Uncoated			3.9	5.0	0.1	0.03	0.32	0.42	2.45	2.45	0.8 - 1.0	28 - 24	4.1	4.8
01R2103	R06005-05010-32	TiAlN			3.9	5.0	0.1	0.03	0.32	0.42	2.45	2.45	0.8 - 1.0	28 - 24	4.1	4.8
01R2104	R06005-05010-00	Uncoated			3.9	5.0	0.1	0.03	0.32	0.42	2.45	2.45	0.8 - 1.0	28 - 24	4.1	4.8
01R2301	R06007-06810-32	TiAlN			5.5	6.8	0.1	0.03	0.40	0.50	3.25	3.25	0.8 - 1.25	20	5.7	6.6
01R2302	R06007-06810-00	Uncoated			5.5	6.8	0.1	0.03	0.40	0.50	3.25	3.25	0.8 - 1.25	20	5.7	6.6
01R2601	R06010-08510-32	TiAlN			6.9	8.5	0.1	0.03	0.49	0.59	4.60	4.60	1.0 - 1.5	18 - 16	7.1	8.3
01R2602	R06010-08510-00	Uncoated			6.9	8.5	0.1	0.03	0.49	0.59	4.60	4.60	1.0 - 1.5	18 - 16	7.1	8.3
01R2603	R06010-10010-32	TiAlN			6.9	10.0	0.1	0.03	0.92	1.02	4.60	4.60	1.0 - 2.0	14 - 9	7.1	9.8
01R2604	R06010-10010-00	Uncoated			6.9	10.0	0.1	0.03	0.92	1.02	4.60	4.60	1.0 - 2.0	14 - 9	7.1	9.8

► 90° deburring mill

- Front & back deburring in one operation.

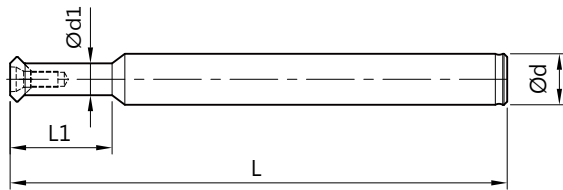
Code	Parts No.	Coating	Grade		ØD1	ØD2	L	LC1	LC2	LC3	LC4	S	Plunge 0.1C	
													min. hole	max. hole
01R4101	R09005-05060-32	TiAlN	K20F		3.9	5.0	0.6	0.05	0.6	1.2	1.77	2.45	4.1	4.8
01R4102	R09005-05060-00	Uncoated			3.9	5.0	0.6	0.05	0.6	1.2	1.77	2.45	4.1	4.8
01R4301	R09007-07020-32	TiAlN			5.1	7.0	0.2	0.05	1.0	1.2	2.17	3.25	5.3	6.8
01R4302	R09007-07020-00	Uncoated			5.1	7.0	0.2	0.05	1.0	1.2	2.17	3.25	5.3	6.8
01R4601	R09010-10010-32	TiAlN			7.2	10.0	0.1	0.05	1.45	1.55	2.97	4.60	7.4	9.8
01R4602	R09010-10010-00	Uncoated			7.2	10.0	0.1	0.05	1.45	1.55	2.97	4.60	7.4	9.8

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	Rxxx05	*NS-20045 0.6Nm	NK-T6
70R103	00-99626-CR05-08-076	BC08-CR05-076	8	3.5	12	76			
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	Rxxx07	NS-25060 0.9Nm	NK-T7
70R303	00-99626-CR07-08-078	BC08-CR07-078	8	5	16	78			
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	Rxxx10	NS-35080 2.5Nm	NK-T15
70R603	00-99626-CR10-08-082	BC08-CR10-082	8	6.8	20	82			
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
P	Carbon steel	120 ~ 250	0.005 ~ 0.12	NC2032
	Alloy steel	100 ~ 200	0.005 ~ 0.10	NC2032
M	Stainless steel	60 ~ 150	0.005 ~ 0.10	NC2032
K	Casting iron	80 ~ 180	0.005 ~ 0.10	NC2032
N	Al, and non-ferrous metal	150 ~ 500	0.005 ~ 0.15	XP9000
H	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
P	Carbon steel	80 ~150	0.002 ~ 0.013	NC2032
	Alloy steel	60 ~ 120	0.002 ~ 0.01	NC2032
M	Stainless steel	50 ~ 100	0.002 ~ 0.01	NC2032
K	Casting iron	50 ~ 100	0.002 ~ 0.01	NC2032
N	Al, and non-ferrous metal	100 ~ 300	0.002 ~ 0.013	XP9000
H	Hardened steel < 60 HRC	30 ~ 60	0.002 ~ 0.008	NC2032