



Dicing Blades | Range and Technical Data

Nickel Blades

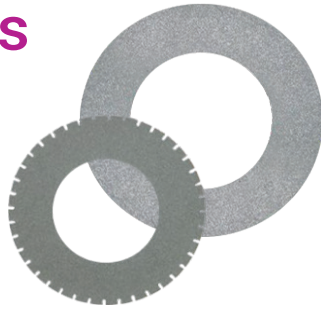
The Nickel binder provides longer blade life and lower wear rate. Nickel-bond Blades are a perfect choice for soft material applications such as: PCB, Silicon and BGA.

Blade thickness: 50 – 300µm

Diamond grit size: 3 – 50µm

Serrations:

Serrations available for Nickel blades as well as various edge shapes



Steel Core Nickel Blades

Best suited for applications such as Green Ceramic, BGA (Tape process).

Only the rim (the cutting edge of the blade) is composed of nickel and diamonds.

Blade thickness: 300 – 750µm

Diamond grit size: 10 – 70µm

Serrations:

Serrations available for Steel Core Nickel blades as well as various edge shapes

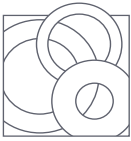


Diamond grit size (µm)	Product	Material	Matrix
30 up to 50	Ceramic / Capacitors	Green Ceramic	BLB/BL0
10 up to 30	PCB / LED Package	FR4 / Epoxy & Cu	BLZ,BLV,BLT
6-8 up to 10	Medical Ultrasound Sensors	PZT	AOT
2-4 up to 4-8	IC's	Silicon	Hub blades

NICKEL - BOND BLADES PART NUMBER DESCRIPTION

I.D.	O.D	GRIT SIZE (µm)	O.D SHAPE	EDGE GEOMETRY**	THICKNESS* (mil)	THICKNESS TOLERANCE*
0 = 88.82mm	0 = 4.34"	(1) = 2-4	0 = Standard	0 = Standard	(008) = 8	A = ± .0001"***
1 = 40mm	1 = 4.256"	(2) = 3-6	1 = Sandard	1 = Pre-dressed		B = ± .0002"***
3 = 2.75"	2 = 2.188"	(3) = 10	Serration:			C = ± .0003"
4 = 3.5" (88.9mm)	3 = 3"	(4) = 17	2" x 16 slots			D = ± .0005"
5 = 3"	4 = 4.6"	(5) = 30	3" x 40 slots			F = ± .0010"
8 = 55mm	5 = 5"	(6) = 50	4" x 60 slots			
9 = 52mm	7 = 4.4"	(9) = 10-15	5" x 60 slots			
	8 = 4.8"	(B) = 6-8				
	9 = 4.5"	(C) = 25				
	C = 95mm					
	D = 93mm					
	E = 78mm					
	G = 4.3"					
	H = 77mm					
	K = 98mm					
	L = 75mm					
	M = 4.7"					
	S = 4.36"					
Example part number	X 4 776 -8 2 0 1 - 070 -C				XX Product family	
3.5" I.D.	4.8" O.D.	3-6 µm Grit	Standard	Pre-dressed	7 mil Thickness	± .0003"





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NICKEL BLADES PART NUMBER DESCRIPTION

I.D.	O.D.	GRIT SIZE (μm)	O.D SHAPE	THICKNESS* (mil)	THICKNESS TOLERANCE*
Special 2" Nickel Blade Designator 40mm I.D. only	0 = 55mm	(1) = 2-4	0 = Standard	(008) = 8	A = $\pm .0001$ ***
	1 = 50.1mm	(2) = 3-6	1 = Pre-dressed		B = $\pm .0002$ ***
	2 = 50.2mm	(3) = 10	2 = Standard serration (x16 slots)		C = $\pm .0003$ "
	3 = 50.4mm	(4) = 17			D = $\pm .0005$ "
	4 = 50.6mm	(5) = 30			F = $\pm .0010$ "
	5 = 50.8mm	(6) = 50			
	6 = 51mm	(9) = 10-15			
	7 = 51.2mm	(B) = 6-8			
	8 = 51.4mm	(C) = 25			
	9 = 52mm				
	A = 58mm				
	B = 56mm				
	C = 54mm				
	D = 60mm				
	E = 50.5mm				
	F = 51.5mm				
	G = 58.2mm				
	L = 54.5mm				
	M = 2.25"				
	P = 61.6mm				
Q = 53mm					
R = 52.8mm					
S = 51.8mm					
T = 51.6mm					
J = 59mm					

Example part number	4B776-3 2 3 1 -045 -B XX	Product family
	40 mm I.D. 50.2 mm O.D. 10 μm Grit Pre-dressed 4.5 mil Thickness $\pm .0002$ "	

* Depends on diamond grit size

** Depends on blade thickness and diamond grit size

*** All special 2" Nickel blades have an I.D. of 40mm

Other thickness options, diameters, edge geometries and diamond grit size are available upon request.

