



SAINT-GOBAIN

# WINTER

Transforming  
surfaces  
...and beyond

# DICING BLADES

- EXCELLENT DICING PERFORMANCE
- GOOD QUALITY CONTROL
- FULL SERIES PRODUCTS
- DESIGN AND OPTIMIZING CAPABILITY
- SHORT LEAD TIME
- LOCAL TECHNICAL SUPPORT

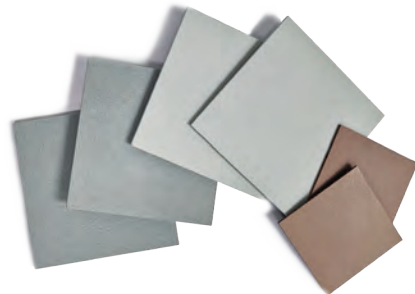


## PREMIUM DICING BLADES FOR CUTTING AND SLOTTING

Norton Winter dicing blades allow for excellent cutting quality, and long product life. The blades are designed with premium quality abrasive grains and advanced bond systems for superior and consistent performance on different applications.



	Metal bond No steel core	Metal bond Steel core	Resin bond No steel core	Resin bond Steel core	Nickel bond Hubless blades	Nickel bond Hub blades
<b>Product appearance</b>						
<b>Application</b>	<ul style="list-style-type: none"> <li>Semiconductor materials</li> <li>Optical glass</li> <li>Ceramic materials</li> <li>Metal materials</li> <li>Magnetic and other materials</li> </ul>		<ul style="list-style-type: none"> <li>Semiconductor materials</li> <li>Optical glass</li> <li>Ceramic materials</li> <li>Metal materials</li> <li>Other materials</li> </ul>		<ul style="list-style-type: none"> <li>Semiconductor wafers</li> <li>Semiconductor packages</li> <li>Ceramics materials</li> <li>Other materials</li> </ul>	
<b>Features</b>	<ul style="list-style-type: none"> <li>High strength and stiffness</li> <li>Long life and consistency</li> <li>Recommended for applications needed straight cuts and large blade exposure</li> </ul>		<ul style="list-style-type: none"> <li>Free cutting and self sharpening</li> <li>Suitable for hard and brittle materials</li> <li>Recommended for applications requiring good cutting quality</li> </ul>		<ul style="list-style-type: none"> <li>Best stiffness and blade life</li> <li>Ultra-thin thickness</li> <li>Recommended for semiconductor wafers and semiconductor packages</li> </ul>	
<b>General shape</b>	1A8, 1A8S	1A1, 1A1R, 1A1S, 1A1RS	1A8, 1A8S	1A1, 1A1R, 1A1S, 1A1RS	1A8, 1A8S	3A1, 3A1S
<b>Diameter (mm)</b>	10 ~ 200	30 ~ 400	50 ~ 153	50 ~ 400	50 ~ 120	50 ~ 58
<b>Thickness (mm)</b>	0.05 ~ 4.00	0.25 ~ 6.00	0.06 ~ 4.00	0.20 ~ 6.00	0.02 ~ 0.50	0.01 ~ 0.12
<b>Thickness tolerance (mm)</b>	±0.002 / ±0.005	±0.010 / ±0.020	±0.005 / ±0.008	±0.010 / ±0.020	±0.005 / ±0.010	±0.005 / ±0.010
<b>Other dimension</b>		Abrasive layer height 3~10mm		Abrasive layer height 2~15mm		Exposure 0.25 ~ 2.50 mm
<b>Grain grit size</b>	100# ~ 3000#	100# ~ 3000#	100#~2000#	100# ~ 2000#	200# ~ 4000#	320# ~ 5000#
<b>Grain type</b>	Diamond / CBN					
<b>Concentration</b>	25 ~ 150					
<b>Slot number</b>	0, 4, 8, 16, 32, 64					
<b>Bond hardness</b>	Low / Medium / Hard					
<b>Remark</b>	Accept customization for special requests					



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[www.saint-gobain-abrasives.com](http://www.saint-gobain-abrasives.com)  
[www.youtube.com/NortonAbrasivesEMEA](http://www.youtube.com/NortonAbrasivesEMEA)

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