

NORTON

SAINT-GOBAIN®

WINTER

FIXED DIAMOND WIRE

**PREMIUM DIAMOND WIRE FOR SLICING,
WAFERING, CUTTING, CROPPING AND BRICKING**

Norton Winter patented plated diamond wire allows for superior part quality, high material yield, fast cut rate and long product life. The diamond wire is designed with premium quality diamond, a unique plating structure, and exposed diamond edges for superior performance on hard to cut materials.



KEY APPLICATIONS AND MATERIALS

SLICING | WAFERING | CUTTING | CROPPING AND DEBURRING OF
DIFFICULT TO CUT MATERIALS SUCH AS SIC, ALN, SI, SAPPHIRE,
CERAMICS, PRECIOUS METAL, GLASS, QUARTZ, MAGNETIC MATERIAL

KEY MARKET SEGMENTS

MEDICAL EQUIPMENT | POWER ELECTRONICS | SEMICONDUCTORS | SOLAR

www.nortonabrasives.com

NORTON

SAINT-GOBAIN

WINTERFIXED
DIAMOND WIRE

FEATURES & BENEFITS

- Tightly controlled diamond size and concentration for consistent slicing performance
- Uniform wire diameter and even diamond distribution with no diamond clustering
- Features engineered diamond with high diamond exposure ratio
- Allows for accurate part dimensions, including kerf, part shape and TTV (total thickness variation)
- Delivers a superior surface finish with minimal edge chipping
- Onsite application support and process fine tuning available



Norton Diamond Wire Availability and Common Applications

CORE WIRE DIAMETER (MM)	DIAMOND SIZE (UM)	FINISHED WIRE DIAMETER (MM)	APPLICATION
0.1	8 - 16	0.12	Wafering (Si, Ceramics, Optical glass)
0.12	10 - 20	0.14	Wafering (Si, Ceramics, optical glass)
0.13	25 - 35	0.19	Wafering (Crystals, Ceramics)
0.15	30 - 40	0.23	Wafering/Cropping (SiC, AlN, Sapphire, Hard Ceramics)
0.175	30 - 40	0.25	Wafering/Cropping (SiC, AlN, Sapphire, Hard Ceramics)
0.35	45 - 55	0.45	Bricking/Cropping (Si, Sapphire, Hard Ceramics)

Custom Availability: Specifications can be engineered upon request for optimized processes

OEMs: PSS, Takatori, NTC, IWT, Logomatic, Toyo, etc

— GRAIN DISTRIBUTION —

Case Study # 1

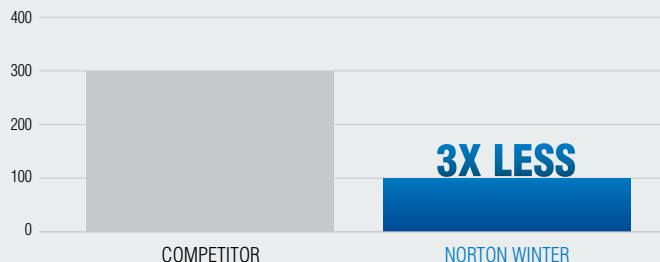
APPLICATION: Slicing of 150 mm SiC crystals

WHEEL SPEC: Norton Winter 0.25mm

MACHINE: Wiresaw for hard material wafering

RESULTS: Able to make 150mm SiC wafer in <12hrs with superior quality. Results in 3X less material to be removed in the finishing step.

MATERIAL REMOVAL REQUIRED AFTER SLICING WITH FIXED DIAMOND WIRE



Case Study # 2

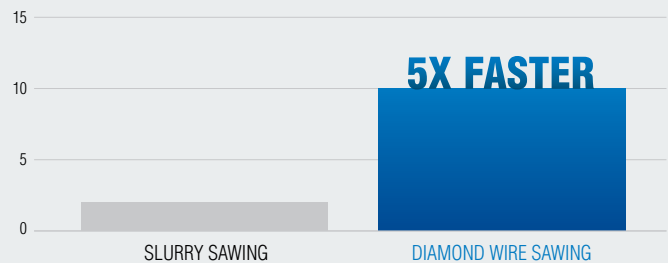
APPLICATION: Slicing of hard ceramics

WHEEL SPEC: Norton Winter 0.12mm

MACHINE: Wiresaw for hard material wafering

RESULTS: Able to cut ceramics 5X faster. 5X more throughput compared to other processing technology with exceptional part quality with less chipping.

CUT RATE RATING



www.facebook.com/NortonAbrasivesNA | www.youtube.com/NortonAbrasives | www.nortonabrasives.com

USA CUSTOMER SERVICE:

Toll Free Phone: 1 (800) 551-4413
Toll Free Fax: 1 (800) 551-4416

CANADA CUSTOMER SERVICE:

Toll Free Phone: 1 (800) 263-6565
Toll Free Fax: 1 (800) 561-9490

FORM #8892 REV. 11/20

© Saint-Gobain November 2020.

Norton, Norton Winter and "Reshaping Your World" are trademarks of Saint-Gobain Abrasives. All other trademarks are the property of their respective owners.

NO-RISK TEST

