

## THE COMPLETE TECHNICAL SOLUTION FOR TODAY'S GEAR GRINDING CHALLENGES

The right choice of abrasive wheels is key to the production of high quality gears. Increasingly stringent industry requirements and extreme environments call for tighter tolerances, higher profile accuracy, and improved surface finish where only the highest-performing grinding wheels excel.

With their superior form holding and burn-free grinding, our Norton Xtrimium wheels master all of these challenges for worm grinding, profile grinding, and bevel grinding.

Our new dual-worm grinding wheels further enhance our capabilities in gear manufacturing. These wheels combine a vitrified bond section to grind, and a fine-grit resin bond section to polish the teeth of the gear, delivering an improved surface finish quality while reducing gear noise in the final assembly.

### KEY APPLICATIONS

WORM AND DUAL WORM GRINDING | PROFILE GRINDING | BEVEL GRINDING

### KEY INDUSTRIES

AUTOMOTIVE | AEROSPACE | WIND TURBINES | CONSTRUCTION EQUIPMENT | ELEVATOR AND ESCALATORS

[www.nortonabrasives.com](http://www.nortonabrasives.com)

**NORTON**

SAINT-GOBAIN

**Xtrimum****GEAR GRINDING  
WHEELS**

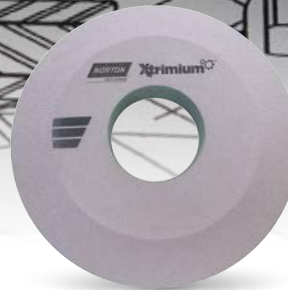
### Worm Grinding (Continuous Generating)

- Our unique wheel homogeneity allows a constant performance throughout the wheel thickness and life
- New Norton abrasive and bond technologies deliver superior grinding rates and form holding with zero burn



### Dual Worm Grinding (Continuous Generating)

- Achieve cost and time savings by grinding and polishing with one wheel
  - » A high-performance vitrified bond grinding section and a fine-grit resin bond polishing section deliver improved surface finish quality and reduced gear harmonics
- Wheels can be adapted to existing machines



### Profile Grinding

- Norton Xtrimum profiling wheels are THE tool for deep profile grinding
- High porosity and permeability create much higher removal rates and burn-free grinding



### Bevel Grinding

- Extremely fast, burn-free cutting

## NORTON GEAR-GRINDING TECHNOLOGY HIGHLIGHTS

The following abrasive technologies are used to customize a wheel to your exact requirements. The recommended wheel specification will be a function of your application.

**TQX and TQ:** these ceramic abrasive grains are the newest and longest-shaped ceramic grains in the industry, optimized to achieve highest MRR and coolest cut.

**TG2 and TG:** the first shaped grains in the grinding wheel industry, these durable metal-removal ceramic workhorses get the job done quickly, with excellent surface finish.

**NQ:** a new micro-structured ceramic grain designed to provide extended wheel life.

**SG:** the first micro-structured ceramic grain in the grinding wheel industry.

**86A:** a versatile, premium aluminum oxide grain. The performance to initial price ratio produces a great value grinding wheel. Whether your machine is new or old, 86A wheels will work for your operation.

**Norton Vortex:** the abrasive grains listed above can be blended with our agglomerated grain to make a high-porosity, high-performance grinding wheel.

**Norton Vitrium3 Bond:** the strongest bond in the Norton portfolio. All Norton Xtrimum gear wheels are made using our Norton Vitrium3 bond that delivers 1. Cool-cutting, 2. Precise profiles and 3. High speeds.



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NO-RISK TEST

