

**NORTON**

SAINT-GOBAIN

**WINTER**

## DIAMOND WHEELS FOR ROUND TOOL GRINDING

G-Force Plus wheels feature our new premium grain technology with a complementary modification in hybrid bond technology to enable improved performance in demanding round tool grinding applications. G-Force Plus wheels offer a competitive advantage of improved life, higher feed rates and cooler cutting when grinding a range of heat-resistant and wear-resistant work materials.

**GFORCE**  
PLUS

**KEY MARKETS:**  
ROUND TOOL GRINDING

**KEY APPLICATIONS:**  
FLUTING, GASHING

### FEATURES & BENEFITS:

- Premium grain technology – Low normal force for easier chip making and low wear for higher life
- The free grinding bond system significantly reduces grinding forces when compared to competitor products and provides superior part quality
- Lower Specific Cutting Energy and 25% to 50% higher MRR than previous generation products
- Improved edge stability and superior surface quality

G-Force Plus Round Tool Grinding  
**SHAPES & DIMENSIONS:**

<i>Shapes:</i>	1A1, 3V1, 14A1, 1F1, 2A2T, etc
<i>Diameter (D):</i>	3" - 8"
<i>Layer width (T or U):</i>	1/8" - 1" as one section (shape dependent)
<i>Layer depth (X):</i>	Shape/layer width dependent
<i>Grit size:</i>	100 grit through 600 grit
<i>Core Material:</i>	Copper if unitized, aluminium if cemented

Made-To-Order  
**AVAILABILITY:**

Norton Winter G-Force Plus wheels are made to meet your precise requirements. They are available in a variety of profile shapes and wheel sizes to meet your specific needs for round tool or insert grinding. Contact your Norton representative for specification recommendations to ensure maximum grinding performance.

Truing and Dressing  
**PRODUCT RECOMMENDATIONS:**

Truing: Conventional Norton Silicon Carbide wheels  
Dressing: Norton Aluminum Oxide dressing sticks

**GFORCE**  
PLUS

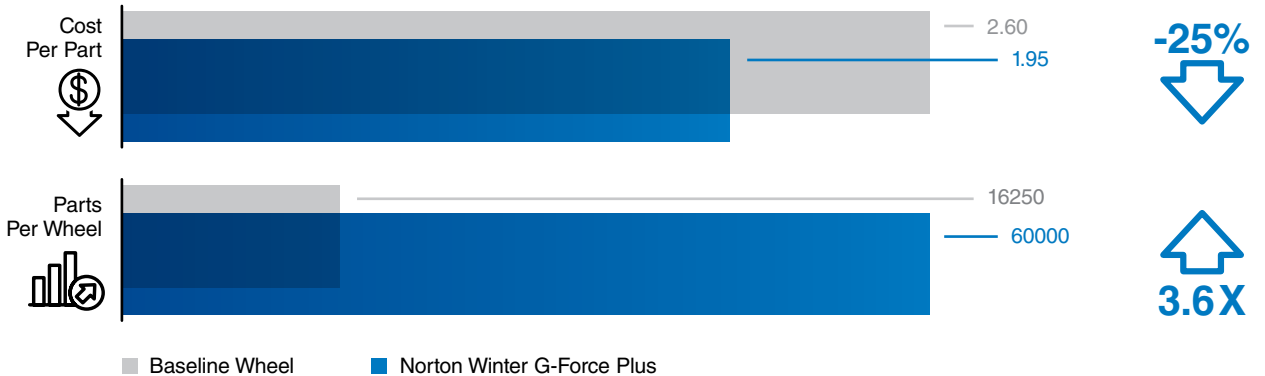
APPLICATION: **FLUTE GRINDING**

**BASELINE PRODUCT:**  
INCUMBENT  
WHEEL



**NORTON PRODUCT:**  
G-FORCE PLUS  
WHEEL

<i>WORKPIECE:</i>	2 Flute 7/32" OD Carbide Endmill
<i>MATERIAL:</i>	Carbide 10%
<i>WHEEL TYPE:</i>	1V1 V=10
<i>MACHINE:</i>	Rollomatic 620 XS
<i>COOLANT:</i>	Oil
<i>G-FORCE PLUS SPEC:</i>	AD320-UP061P
<i>INCUMBENT SPEC:</i>	AD320-UP061
<i>RESULTS:</i>	The G-Force Plus wheel showed increased productivity and wheel life along with a 25% improvement in cost per part.



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