

# BELTS FOR HIGH METAL REMOVAL & FASTER CUTTING ACTION



R996 BELTS





## PERFORMS IN THE TOUGHEST ENVIRONMENTS



Viking R996 belts are a unique concept from Norton specifically designed to perform in the toughest environments. Offering high metal removal with a faster cutting action, Viking can provide an 80% increase in parts finished and 22% reduction in grinding temperature.

### FEATURES

- New generation SG® ceramic grain
- New formulation of Supersize layer
- High performance resin system
- YY polyester backing for coarse grits (36-50).
- Available in grits 36, 40, 50, 60, 80
- Usable width 1500mm
- Available in narrow and wide belts and rolls

### BENEFITS

- Longer belt life
- Advanced cooling system
- Fast and consistent cut rate
- High stock removal
- Maximum performance
- Cost reduction per part
- Reduced heat generation
- Process improvement
- Less off hand pressure required to cut

### MARKETS & APPLICATIONS

- Investment casting foundries (stainless steel, cobalt chromium)
- Aerospace foundries
- Medical prosthesis (casting)
- Forged parts (tools, turbine blades)
- Steel mills (plate grinding)
- General engineering (heavy stock removal operations)

## INNOVATION

Viking R996 belts are made from a new generation of ceramic grain with innovative bonds specially developed to enhance grain performance offering high stock removal and longevity at high pressure.

A **new generation** Seeded Gel (SG®) ceramic grain, needle like and very sharp, encourages a fast cutting action with low heat generation.

The formula of the Supersize layer offers the **most advanced cooling system available**, aiding cutting and reducing friction, protecting the material integrity.

**High performance resin** system works together with the SG® ceramic grain improving cutting action and grain retention under severe work conditions.

YY polyester backing on coarse grits supports the high performance grain avoiding slipping and allowing a **consistent aggressive cutting action**.

A generation of technology that **maximises efficiency** helping achieve the best from both the workforce and automated machinery.

For grinding materials ranging from **stainless steel to cobalt chromium** used in a range of markets from plate grinding to turbine blades.

## MAXIMUM POTENTIAL

### PROBLEM

- At full capacity and not keeping up with demand.
- Considering adding new machines and increasing manpower.
- High material scrap rate due to heat deformation and burn issues.
- Increase down time / process time due to work piece overheating.
- Looking to increase belt life.
- Looking for overall cost reduction.

### VIKING SOLUTION

- Higher stock removal reduces cycle times and improves processes.
- Less friction enables free cutting and long lasting SG grains.
- Specifically designed bonds makes belt life longer.
- Excellent cost / performance ratio reduces cost per part.



# SUCCESS STORIES

## GATE GRINDING

### MACHINE/APPLICATION INFORMATION

**Application:** Gate Grinding  
**Machine:** Off-hand grinding  
**Contact wheel:** 90 shore  
**Belt speed (MPs):** 32 MPS

### BELT INFORMATION

**Belt size & grit size:** Narrow belts 50 x 4000mm in P40  
**Monthly consumption:** 300 pieces / month

### COMPETITIVE INFORMATION

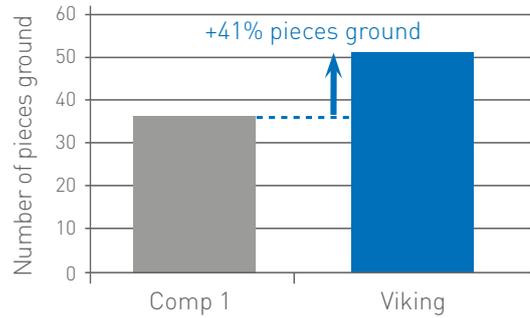
**Competitor:** Comp 1  
**Competitor's Spec:** A

### PART INFORMATION

**Material:** High nickel based alloy

### RESULT W/ SGA SPECIFICATIONS

- 51 pieces versus 36 for comp 1: 41% more parts finished
- Faster cut, less burns and better finish for the customer
- Total savings for the customer: 8 k€



## SINK SEAM GRINDING

### MACHINE/APPLICATION INFORMATION

**Application:** Sink seam Grinding  
**Machine:** Semi automatic - POLAS  
**Contact wheel:** 65 shore - 2:1 LR (soft for ceramic but customer driven)  
**Belt speed (MPs):** 29 MPS

### BELT INFORMATION

**Belt size & grit size:** Narrow belts 50 x 5500mm in P50 to P80  
**Monthly consumption:** 1500 belts per month

### COMPETITIVE INFORMATION

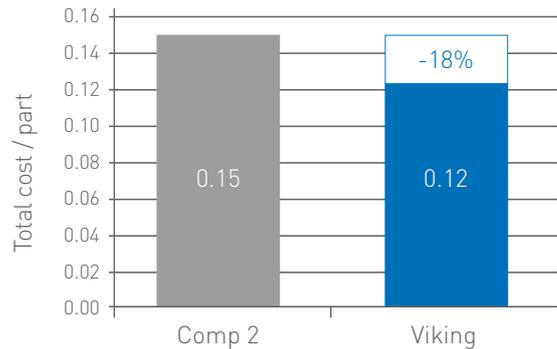
**Competitor:** Comp 2  
**Competitor's Spec:** B

### PART INFORMATION

**Material:** 304 Inox

### RESULT W/ SGA SPECIFICATIONS

- -18% in cost per part for Viking given from increase in parts finished
- 18% reduction in cycle time using Viking
- 18% reduction in total abrasive cost using Viking



[www.norton.eu](http://www.norton.eu)

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