

NORTON

SAINT-GOBAIN®

WINTER



AEON

HIGH PRECISION ELECTROPLATED GRINDING WHEELS

Norton Winter AEON wheels are the latest innovation in electroplated grinding wheels for high precision applications in the automotive, medical and aerospace markets.

AEON electroplated wheels have been designed with a single usable abrasive layer, with diamond or cBN particles mechanically fixed onto the core surface by an electrochemical process of nickel deposition which provides high grit retention levels for long wheel life.

Once the abrasive grains are worn, the core of the wheel can be re-plated with new diamond or cBN grain in a continuous re-plating cycle, enabling the wheel core to be re-used several times - a cost saving benefit in the production cycle.

High precision AEON wheels benefit from an innovative manufacturing process which provides extremely tight tolerances and superior profile accuracy allowing them to provide the highest level of performance.

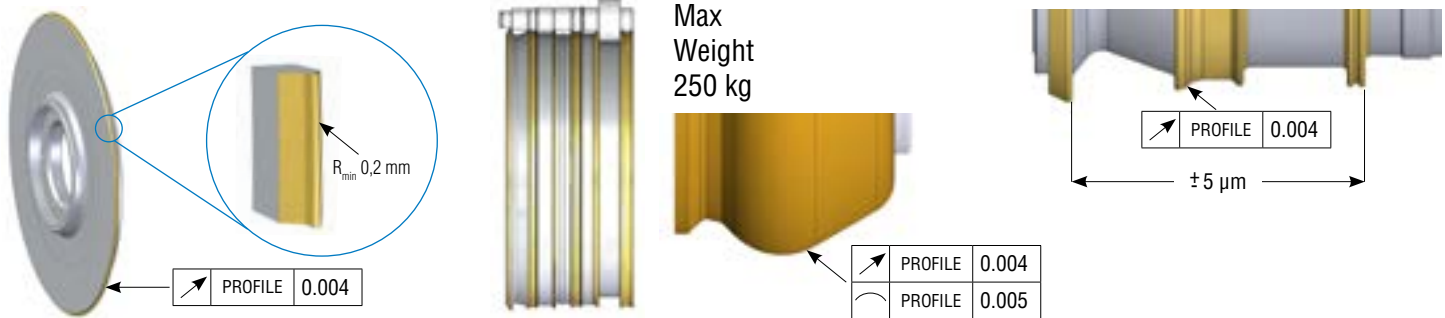
KEY MARKETS

AUTOMOTIVE | MEDICAL | AEROSPACE

www.nortonabrasives.com

- AEON wheels have been designed to deliver the best possible option in every step of design and manufacturing.
- Every AEON grinding wheel is highly customized through close communication with the customer providing best-in-class performance, with a 50% increase in efficiency, lifetime, and number of re-platings.
- Through its unique layer design, AEON technology provides superior wear resistance.
- AEON wheels achieve outstanding tool life, highest accuracy and perfect profile stability throughout the life of the wheel. The precision level meets +/- 5 µm profile tolerance at maximum wheel size and maximum weight of 250 kg.

Design Range & Features



Case Study: Electroplated cBN Wheel

APPLICATION:

- Gear shaft groove grinding in pre-machined grooves
- Shaft material: Steel

NORTON WINTER TOOL / AEON electroplated cBN wheel
SPECIFICATION:

Example SH700-400-41

COOLANT:

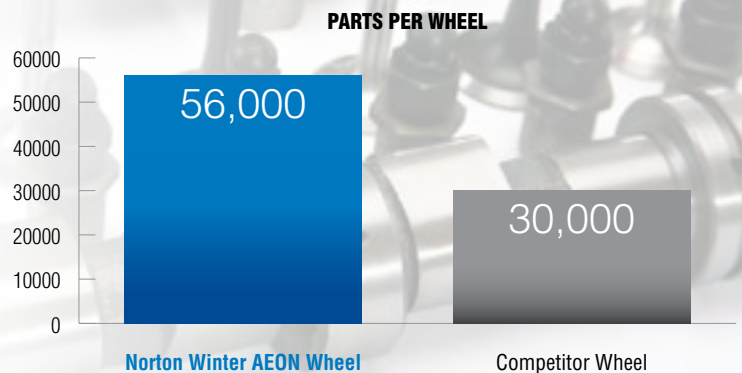
Oil

PROCESS CONDITIONS:

- Workpiece revolution: 850 U/min
- $ae = 0,1\text{ mm}$ stock in the groove (equidistant)
- Wheel speed - vc : 120 m/s
- Infeed rate: 20 mm/min

BENEFIT:

NEW AEON wheel spec. 56,000 parts



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