



BONDED ABRASIVES



Norton Quantum Prime is a prime example of optimized performance from the worldwide leader in bonded abrasive grinding wheels. The new, proprietary, nano-crystalline ceramic grain offers unparallel grinding productivity across multiple applications.

- Reduced cycle time
- Unparallel sharpness and cutting efficacy
- Improved part quality, burn free grinding and surface finish
- Improved wheel life and more parts per dress







Norton IDeal-Prime comes with new nanocrystalline ceramic grains from Saint-Gobain embedded in an optimized bond matrix. Thanks to this unique combination of a new ceramic grain with engineered micro-fracture properties & superior retention capability of the bond, Norton IDeal-Prime delivers excellent grinding efficiency at significantly low power, while controlling workpiece geometry and ensuring outstanding part quality through the wheel life.

Features & Benefits

- · Reduced cycle time
- · Improved wheel life
- Improved geometric consistency
- Improved surface finish
- Reduced environmental impact

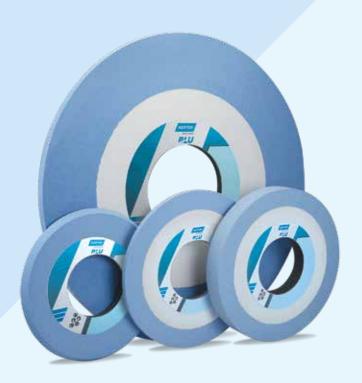


Norton Xtrimium is a perfect technical solution for gear grinding. High-performance grinding wheels engineered to deliver a complete technical solution for worm and dual worm grinding, profile grinding, and bevel grinding.

- An engineered microstructure ceramic grain provide excellent free-cutting action and durability to maximize performance and quality.
- Friction free
- Perfect homogeneity throughout wheel thickness
- · Burn-free cutting and extremely fast grinding
- Reduce part rejection, overall lowering the cost per unit







NORTON BLU is a unique grinding tool engineered with advanced Blue aluminum oxide. Take a leap and upgrade your set-up with BLU, which will deliver significantly longer wheel life and ensuring outstanding part quality.

Features & Benefits

- Norton BLU is an ideal blend of toughness and friability which reduces the grain wear while maintaining cutting efficiency for a longer time which increases the parts per dress.
- Norton BLU offers the best in class value for money, with reduced wheel changeover and reduce dressing costs along with increased wheel life.
- It is combined with the latest bond technologies lead to very uniform wear that helps to maintain consistent part geometry and quality while maintaining surface finish even at high material removal rates.



Norton Quantum X is a revolutionary wheel, beyond the recognized limits of performance grinding. By combining three of the best Norton technologies, we have created Norton Quantum X to bring you unrivalled value and performance, creating the ultimate grinding experience.

- Highly permeable ceramic spacing offers cutting efficiency and cycle time reduction
- Low threshold power of Norton Quantum in a homogeneous Vortex structure reduces the cutting forces – resulting in lower stress and friction for better part quality, consistent cut, and less dresser wear.
- It is positioned at a competitive price compared to other products in the market, providing valuable cost savings.





The advanced high-performance bond in Vortex[™] 2 technology, developed by Saint-Gobain Abrasives, maximizes profile holding, significantly increasing metal removal rates and wheel life, raising productivity to a new level.

Features & Benefits

- High profile holding for extended wheel life and improved productivity
- Improved total cost versus performance ratio
- · Maintains cool cutting
- Very high metal removal rates for significant cycle time reduction
- Very long wheel life though dramatically reduced wheel dressing
- Gentle on the dressing tool, very easy to profile
- Ultimate degree of burn reduction through extreme permeability
- Reduced residual stress after grinding
- Easy conversion from Vortex to Vortex2 specification
- It considerably reduces unit process cost





Norton Vitrium 3 has a revolutionary bond that lowers your process cost in 3 ways, cool cutting, precise profile, and high speed. It offers the ultimate wheel strength and allows lighter construction and high-speed operation while considerably reducing unit process costs.

- Vitrium3 provides superior grain holding properties than any other bond
- It reduces dressing time, dresser wear and dresser replacement requirements
- It considerably reduces unit process cost



SUPER ABRASIVES



V-P WER

V-POWER wheels are mainly used for outer diameter OD grinding, helping you achieve all the quality and productivity objectives. V-POWER is suitable for crankshaft grinding, camshaft grinding, and other automotive component grinding.

Features & Benefits

- Outstanding performance in meeting technical outputs
- Excellent overall cost performance
- · Shorter lead time
- · Better local technical service
- · Lower total grinding cost
- Faster response speed & local technical support



Vitrified cBN ID Grinding Wheels

Designed for superior performance in internal grinding - bore & form. Best suited for bearing, gear transmission, fuel injection, CV components, hob & broach grinding, auto & auto ancillary industries, and other ferrous applications.

- Maximized strength, stiffness, and wear resistance
- Wide range of material removal with versatile bond systems
- Reduction in rework/rejections and Cost Per Component (CPC)





WINTER Roller Dressers - Profile

Rotating profile roller dressers, also known as rotary truers, are particularly suitable for complex profiles in mass production and have the same profile as the workpiece.

Features & Benefits

- Reduction of dressing costs per workpiece
- Optimized utilization of machine capacity
- Automation of the dressing process
- Repeatable high precision with low workpiece rejects
- Rapid incorporation of complex profiles in the grinding wheel





WINTER Dressing Discs

Contour-controlled dressing tools enable complex grinding wheel profiles to be dressed as well as simple cylindrical grinding wheels of differing widths. In addition, by specifying the dressing tool and selecting the individual dressing parameters, it is possible to influence the dressing result and thereby, the quality of the workpiece.

- A versatile dressing tool
- Design is not specific to individual workpieces
- Constant effective dressing width
- Automation of the dressing process
- Reproducible high precision with low workpiece rejects





WINTER

WINTER Stationary Dressing Tools

Ti-Tan and Furioso are the high performance dressing tools developed for next generation aluminas like Altos, Quantum, SG, TG, XG, ES etc.

MCD Needle Blade Dresser - Preferably for profiling, but also for the straight dressing of hard grinding wheels, sintered alumina, and silicon carbide grinding wheels.

CVD Needle Blade - This blade is the first choice for high-precision straight dressing and angular dressing for alumina, specially fused alumina and sintered alumina grinding wheels.

Standard Blade with Diamond Grit - An universal dressing tool for straight and profiled dressing of alumina and sintered alumina grinding wheels with a consistent surface finish.

Needle Blade with Natural Diamond - Versatile dressing tool suitable for the angular plunge, straight, and profile dressing of all types of alumina, ding wheels in grit size 40 - 80. Exceptional natural diamond needles, set by hand in special design, guarantee the long service life of those tools.



GRINDWELL NORTON LTD.

5th Level, Leela Business Park, Andheri-Kurla Road, Marol, Andheri (East), Mumbai 400 059, Maharashtra.









