

NORTON

SAINT-GOBAIN

Reshaping
your
world.

ABRASIVE SOLUTIONS FOR

ROBOTIC APPLICATIONS




SAINT-GOBAIN



READY TO AUTOMATE YOUR GRINDING OPERATIONS

As the pace of the Industry 4.0 transformation picks up, robots are becoming increasingly affordable and easy to program, making the technology accessible. Manufacturers worldwide have implemented robotic grinding and robotic material removal solutions due to the productivity benefits they provide.

Today, choosing the right abrasive tool is a key consideration in maximizing automated grinding efficiency and quality parameters.

Norton has provided the most powerful, precise and user-friendly abrasives together with our expert knowledge for more than 135 years. In the age of industrial automation, we are ahead of market expectations, delivering a complete range of abrasive solutions ideally suited for robotic applications in many industries.



Norton has the widest selections of abrasive products to meet every customer requirement. The range is classified into three quality-tiers to help you choose the right product for your specific application.

+++

GOOD

++++

BETTER

+++++

BEST

FOUNDRY

Years of experience and a thorough analysis of the abrasive processes in the foundry industry enable us to offer the whole spectrum of abrasive solutions ideally suited for robotic applications. From fast stock removal to fine finishing and polishing, Norton abrasives cover the most demanding grinding operations.



SUPER ABRASIVE WHEELS



+++++

NORTON FOUNDRY X

Made-to-order Foundry X wheels are designed to overcome grinding heat and loading issues when used for deburring, cutting, fettling and snagging. Improved productivity enables up to 40% more parts per wheel and 30% longer life compared to competition.

MOUNTED POINTS



++++

NORTON NZ ORGANIC

With stock removal that's twice as fast and product life that's up to four times longer than their conventional aluminium oxide counterparts, organic mounted points increase productivity and clean more parts in less time, reducing your overall process cost.

GRINDING WHEELS



+++++

LARGE SNAGGING WHEELS ZF7A

Norton offers a range of products for snagging operations in the foundry industry. Type 01 straight wheels are used on portable machines and type 06 and 11 cup wheels on vertical grinders.

FIBRE DISCS

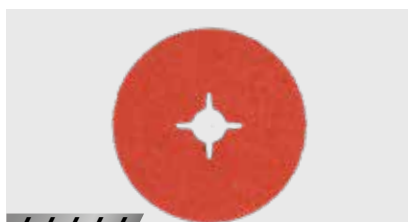


+++++

NORTON BLAZEX F970X

Fibre disc specially designed for use on carbon steel. Its ceramic micro-fracturing grain constantly self-sharpenes, exposing new sharp edges for a better cut rate and longer disc life.

FIBRE DISCS



+++++

NORTON QUANTUM F996

High performance fibre disc made up of extremely high density SG ceramic grain provides exceptionally high material removal rate and excellent surface finish.

CUT-OFF WHEELS



++++

NORTON FOUNDRY X

Reinforced cut-off wheels contain fiberglass to increase mechanical resistance when in use. The reinforcements increase the lateral stress capacity, resulting in higher resistance to breakage. The wheels are suitable for use in dry or wet conditions, depending on bond type.

BELTS



+++++

NORTON VIKING R996

The best ceramic choice for stainless steel, inconel, cobalt chrome, titanium and all hard metals. Extremely durable even under demanding conditions. Perfect for heat sensitive metals and heavy material removal.



+++++

NORTON SG R929

Made with premium SG abrasive grain, perfect for heat sensitive metals. The heavy polyester backing provides high material removal in demanding applications without snagging or tearing.



++++

NORTON BLUEFIRE R895

The new microfracturing zirconia grain provides a better cut rate and longer life in demanding applications, with optimised grain coverage for consistently good results every time.



++++

NORTON RAPIDPREP

Ideal for removing surface defects, edge burrs, parting lines or flashing, rust, oxides, corrosion, paints and scale, cleaning molds, blending mill marks, tool marks, uneven edges and refining coated abrasive finish.

AUTOMOTIVE

From the initial metal working through to the final detailing and polishing, Norton provides the most powerful, precise, and user-friendly solutions to grind, shape and finish all types of materials in the production of engine and body components for motorcycles, cars and trucks.



UNITISED WHEELS

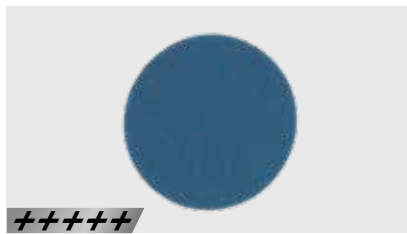


++++

NORTON VORTEX RAPID BLEND

Unitised wheels are made from compressed and bonded layers of non-woven abrasive for maintenance operations where an efficient, cost effective solution is needed for deburring, polishing, cleaning and finishing composites. The uniform construction maintains part tolerance and prevents cutting and gauging.

DISCS



+++++

NORTON ICE Q255

Abrasive discs designed to remove defects faster and more effectively, thereby reducing polishing time. The foam layer absorbs unevenness in the surface and helps maintain an excellent cutting action that provides a very homogeneous, high quality finish.

POLISHING



+++++

FARECLA COMPOUNDS

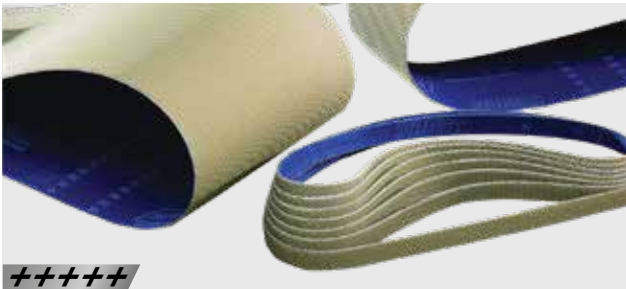
Farecla polishing compounds offer a one-step system solution that provides a fast cutting action and a high gloss finish across all automotive coatings.

MEDICAL

Precision and quality are critical when it comes to the production of surgical instruments and implants. Used by professionals around the world in the medical and optical industries, our high performance abrasives are designed to deliver exceptional results and help you manufacture high quality products to the industry's most stringent requirements.



BELTS



+++++

NORTON NORAX

Norax belts with microstructured 3D pattern layers are engineered to achieve the highest quality, finest finishing and polishing results on orthopaedic implants, surgical instruments and equipment.

SUPER ABRASIVE WHEELS



+++++

DIAMOND ELECTROPLATED WHEELS

Superabrasive wheels offer exceptional productivity and cost efficiency. Wheels are made-to-order to exact requirements and are available in a variety of profile shapes and sizes.

FIXED CUT-OFF WHEELS



+++

NON-REINFORCED CUT-OFF WHEELS

Non-reinforced cut-off wheels are designed for use on fixed base machines, where the work is securely clamped, the wheel is adequately guarded and operating on a controlled cutting plane. They are suitable for use in dry or wet conditions, depending on bond type.

CONVOLUTE WHEELS



+++

NORTON RAPID FINISH

Rapid Finish wheels generate uniform satin and antique finishes. They are ideal for blending & finishing as well as surface preparation before buffing, polishing and applying decorative finishes.



AEROSPACE

Norton holds significant expertise in Aerospace applications offering a range of innovative products and technical abrasive solutions in the coated market, such as specialities and non-woven abrasives for blending, refining, deburring, surface preparation, cleaning and polishing.

MESHPower DISCS



+++++

NORTON MESHPOWER

Multi-functional abrasive discs have an open mesh construction allowing particles to flow freely through thousands of tiny holes. This hole structure allows dust extraction in any application and provides a dust free sanding environment.

DIAMOND FILM



+++++

NORTON FINIUM Q651

Norton Finium diamond film rolls, discs and belts are versatile products that can be used from soft composite coatings to ultra-hard thermal sprays, improving productivity on both material types.

BELTS



+++++

NORTON VIKING R996

The best ceramic choice for stainless steel, inconel, cobalt chrome, titanium and all hard metals. Extremely durable even under demanding conditions. Perfect for heat sensitive metals and heavy material removal.



+++++

NORTON BLUEFIRE R895

The new microfracturing zirconia grain provides a better cut rate and longer life in demanding applications, with optimised grain coverage for consistently good results every time.



+++++

NORTON RAPIDPREP

Ideal for removing surface defects, edge burrs, parting lines or flashing, rust, oxides, corrosion, paints and scale, cleaning molds, blending mill marks, tool marks, uneven edges and refining coated abrasive finish.

SPEEDLOK™ DISCS



+++++

NORTON BLAZE R980P

The best choice for part cut & finish on stainless steel, Inconel, chromium cobalt, titanium and extremely hard materials. The tool-free fastening system enables quick disc changes to maximize productivity and minimise downtime. Ideal for light to medium pressure grinding, blending & finishing on small or difficult to access areas.

MOUNTED POINTS



+++++

NORTON QUANTUM

Precision abrasives, working in intricate or curved shapes that are notoriously difficult to grind and finish, offer high wear in industries where grinding volumes are high. The extensive range of Norton mounted points includes over 200 size and 80 shape configurations.

CARBIDE BURRS



+++++

NORTON DOUBLE CUT EXTRA COATED

Double cut style carbide burrs extra coated with TiLAN (titanium aluminium nitride) for better sliding characteristics. Norton carbide burrs withstand the most demanding production runs due to the hardness of their tungsten carbide substrate, plus their stronger tooth formulation.

UNITISED WHEELS



+++

NORTON RAPID BLEND

Unique compacted structure design offers material removal while imparting a final smear free finish. Ideal for deburring, edge breaking, blending, cleaning and polishing.

CONVOLUTE WHEELS



+++

NORTON RAPID FINISH

Convolute wheels are formed by wrapping non-woven web material around a centre core and bonding the layers together to create an abrasive wheel. Wheels are available in different diameters, grades and densities for burr, flash and rust removal.

PASSING OUR KNOWLEDGE ONTO YOU

NORTON
SAINT-GOBAIN



www.nortonabrasives.com



NORTON TECHNICAL SUPPORT WITH YOU IN MIND

Whether you already have a robotic cell or are just starting to think about automating your grinding processes, contact us and benefit from our advantages:

EXPERTISE KNOWLEDGE

Norton application engineers provide comprehensive service support and are committed to the development of your robotic grinding process.

CONTACT NETWORK

Let us connect you with system integrators and robotics OEMs.

BEST MARKET SOLUTIONS

Discover our complete range of ready for robot abrasives.



Saint-Gobain Abrasifs
European Headquarters
251 Rue de l'Ambassadeur
78700 Conflans
France

Tel: +33 (0)1 34 90 40 00
Fax: +33 (0)1 34 90 43 97

www.nortonabrasives.com
www.youtube.com/NortonAbrasiveEMEA

Norton is a registered trademark of Saint-Gobain Abrasives.
Form # 4022



Sustainable European Abrasive Manufacturers