



ABRASIVE SOLUTIONS

INDUSTRIAL APPLICATIONS



PRECISION GRINDING APPLICATIONS

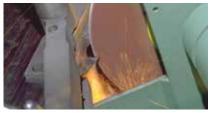
Thanks to Norton's technical expertise, bond and abrasive grain formulations are optimized to best suit the technical request of all precision operations. Our vitrified wheels are available in a variety of shapes, diameters and arbor

sizes available from stock or on request. They are intended to maximize your productivity by improving your grinding efficiency and part quality in surface, tool and cutter, ID and cylindrical grinding as well as sharpening applications.



TOOL GRINDING

Tool grinding refers to the maintenance and repair of the cutting tools used in manufacturing operations. Wheels of all sizes and shapes are used in tool and cutter applications. Most wheels used are vitrified, in grit sizes 36 to 220, and in grades H through to N.



SAW SHARPENING

Saw sharpening refers to the maintenance and repair of saw blades. Vitrified flat wheels and cups are used in grit sizes 54 to 60. Resin treatment reinforces the wheel and helps reduce wheel face deformation.



SURFACE GRINDING

The term surface grinding is used to describe the grinding of flat surfaces in which the wheel moves past the workpiece in a flat plane, or vice versa. Surface grinding applications range can very from heavy rapid stock removal, to precision contour grinding.



EXTERNAL CYLINDRICAL GRINDING

Norton's leading technology, provides you with the best precision, formholding vitrified wheels to maximize productivity, increase grinding efficiency and improve part quality in all your external cylindrical grinding operations.



INTERNAL CYLINDRICAL GRINDING

Internal grinding refers to the grinding of bores or holes and is probably one of the most difficult types of grinding. Internal grinding applications range from very rapid stock removal to more controlled processes capable of generating sizes and concentricity measured in microns.



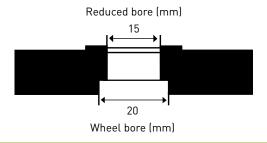
BENCH AND PEDESTRAL GRINDING

Bench and pedestral grinding application refers to offhand deburring and sharpening of parts and tools. The wheels are mounted on bench grinders or pedestal grinders and covers three types of abrasives to answer all deburring, shaping and sharpening needs: aluminum oxide for high speed tool steels and other metals, and silicon carbide for non-ferrous metals.

REDUCTION RINGS

Plastic reduction rings may be used to adapt grinding wheels to fit on various spindle sizes. These rings reduce the bore hole size, allowing the wheel to be safely mounted on a spindle with a smaller diameter.

- Reduction rings should never come in contact with the flange
- Reduction rings should not be used on wheels of thicknesses less than 6mm, nor greater than 50mm
- Always use one reduction ring on each side of the wheel when the wheel is thick enough to allow correct seating
- Never use reduction rings to reduce the hole below the minimum specified in the FEPA safety code



WHEEL BORE (mm)	REDUCED TO (mm)	ART NO.
50,8	35	7660704766
32	25	7660717540
32	20	7660717538
31,75	15,88	7660704757
31,75	12,7	7660704755
20	16	7660717530
20	15	7660717529
20	13	7660717527
20	12	7660717525
20	10	7660717524
16	6	510008919