

FLOORSTAND AND SWINGFRAME SNAGGING WHEELS



CATEGORY DEFINITION

Norton snagging wheels maximize your productivity in foundries, welding shops, fabrication facilities, steel mills, and ship yards.

APPLICATIONS: Removing unwanted metal on castings, removing flaws and cracks, removing

gates, risers and parting lines

SIZE RANGE: 24" and 30" diameters in stock; other diameters available as made-to-order

ABRASIVE GRAIN: Zirconia Alumina, Zirconia Alumina/Silicon Carbide blend, Aluminum Oxide

SHAPE: Type 01 Straight

REINFORCEMENT: Strong fiberglass webbing and steel rings for maximum strength

FLOORSTAND SNAGGING WHEEL MATERIAL-TO-PRODUCT RECOMMENDATION GUIDE

		BEST	BETTER	GOOD
Casting Type		HIGHEST PRODUCTIVITY LOWEST TOTAL COST	EXCELLENT BLEND OF PERFORMANCE & PRICE	CONSISTENT PERFORMANCE LOW INITIAL PRICE
Iron	Gray	4ZF1434-R5B38S, ZI/25-R, ZI/26-Q	Charger Long Life	Gemini All Purpose
	Ductile / Malleable	4ZF1434-Q5B38S, ZI/25-R, ZI/26-Q	Charger Long Life	Gemini All Purpose
Steel	Carbon and Low Alloy	4NZ1434-R5B38S	Charger Free Cut	Gemini All Purpose
	Stainless and High Alloy	4NZ1634-Q5B38S	Charger Free Cut	Gemini All Purpose

NOTE: GRADE, GRIT AND ABRASIVE TUNING MAY BE NECESSARY TO OBTAIN OPTIMUM PERFORMANCE

SWINGFRAME SNAGGING WHEEL MATERIAL-TO-PRODUCT RECOMMENDATION GUIDE

Casting Type		BEST HIGHEST PRODUCTIVITY LOWEST TOTAL COST	GOOD CONSISTENT PERFORMANCE LOW INITIAL PRICE		
Iron	Gray	4ZF1234-R5B38S, ZI/25-R, ZI/26-Q	Gemini All Purpose		
	Ductile / Malleable	4ZF1234-R5B38S, ZI/25-R, ZI/26-Q	Gemini All Purpose		
Steel	Carbon and Low Alloy	4ZF1434-R5B38S	Gemini All Purpose		
	Stainless and High Alloy		Gemini All Purpose		
Aluminum Alloy		NZC142-R5B38S			
Copper Alloys / Brass / Bronze		NZC142-R5B38S			

NOTE: GRADE, GRIT AND ABRASIVE TUNING MAY BE NECESSARY TO OBTAIN OPTIMUM PERFORMANCE

TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSES	SUGGESTED CORRECTION		
Poor stock removal	Insufficient pressure applied	Increase pressure to use all available power		
	Wheel too coarse or hard	Use finer grit and/or softer grade wheel		
	Inadequate abrasive	Try NorZon, 4ZF, or ZI/25 specification		
Grinding costs too high	Wheel acting too soft	Use harder and/or coarser wheel		
	Low performance specification	Try NorZon or ZI products		
Wheel loading or glazing	Grade too hard	Try softer grade		
	Grit too coarse	Try finer grit		
	Dirty, scale-covered parts	Try NZC wheels		
Wheels "dusty"	Wheel too soft	Try harder grade		
Wheel doesn't hold corner or wheel spalling	Wheel too coarse	Use finer grit and/or 2 grit combination		
	Wheel too soft	Use harder grade		
Burning the workpiece	Wheel too hard	Use softer grade		
	Wheel glazed or loaded	Dress the wheel face		
	Grinding pressure too low	Increase grinding force		
	Grinding pressure too high	Reduce grinding force		
Surface finish too rough	Wheel too coarse	Try finer grit or try ZI/26 specification		
	Wheel speed too slow	Try higher speed machine (Do not exceed maximum operating speed of wheel)		
	Worn machine bearings	Rebuild machine		
Vibration	Wheel worn out of round	Try truing the wheel		
	Faulty flanges	Check flanges for flatness and burrs (see ANSI B7.1)		
	Bent machine spindle	Check spindle run-out		
	Worn machine bearings	Rebuild machine		
Wheel stalls or slows	Grinding force too high	Reduce pressure or contact area		
	Wheel too hard	Use softer grade wheel		
	Machine power too low	Replace machine with higher power grinder		



FLOORSTAND AND SWINGFRAME **SNAGGING WHEELS**

FEATURED PRODUCTS

4ZF, 4NZ, ZI, AND NZC WHEELS

BEST CHOICE FOR DEMANDING APPLICATIONS

FEATURES	BENEFITS
■ 4ZF – for long life	Engineered for high-pressure, heavy-duty, snagging operations, particularly on ironExceptional wheel life
■ 4NZ – for sharpness	 Developed for low- to medium-pressure operations, especially on steel and steel castings Exceptionally high cut rate The most operator-friendly wheels
■ ZI – zirconia grain stays sharper, longer	■ The choice for iron castings: ZI/25 for tough metal removal, ZI/26 for finer surface finish
■ NZC – zirconia alumina and silicon carbide blend	Ideal for dirty, scale-covered castings

CHARGER WHEELS

BETTER CHOICE FOR STRONG PERFORMANCE TO PRICE RATIO

FEATURES	BENEFITS		
■ Strong zirconia alumina abrasive	■ Very good cut rate and life		

5ZF AND GEMINI WHEELS

GOOD CHOICE FOR NUMEROUS SMALL JOBS

FEATURES	BENEFITS
■ Gemini – versatile aluminum oxide formulation	■ Works well with a variety of machines, horsepowers, and operations
■ Low initial price	■ The choice for initial-price-conscious end-users
■ 5ZF – zirconia alumina	■ Ideal for lower horsepower or low-pressure applications

AVAILABILITY TIER.		TIER:	BEST		BETTER		GOOD	
SIZE (D x T x H)	MAX. RPM	STD. PKG.	SPEC.	PART #	SPEC.	PART #	SPEC.	PART #
Type 01 Straight								
24 x 3 x 12	1,990	1	4ZF1234-R5B38S	69083166310			5ZF14-QS	69083166858
HS Steel Rings with	1,990	1	ZI/25-R	66253119637			Gemini All Purp.	69083167173
Fine Centers, S Webs	1.595	1	4NZ1634-Q5B38S	69210421412	Charger Free Cut	69210421417	57F14-R	69210467105
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HS Steel Rings with	1,595	I	4ZF1434-R5B38S	69210466458	Charger Long Life	69210421418	Gemini All Purp.	69210417463
Fine Centers, S Webs	1,595	1	4ZF1634-Q5B38S	69210466460				
	1,595	1	ZI/25-R	66253119636				
	1,595	1	ZI/26-Q	66253119638				
	1,595	1	NZC142-R5B38S	69210421414				

FOR YOUR SAFETY: ALL FLOORSTAND AND SWINGFRAME WHEELS HAVE STRONG FINE CENTERS, STEEL RINGS AND HIGH-STRENGTH FIBERGLASS REINFORCEMENT CONSTRUCTION.

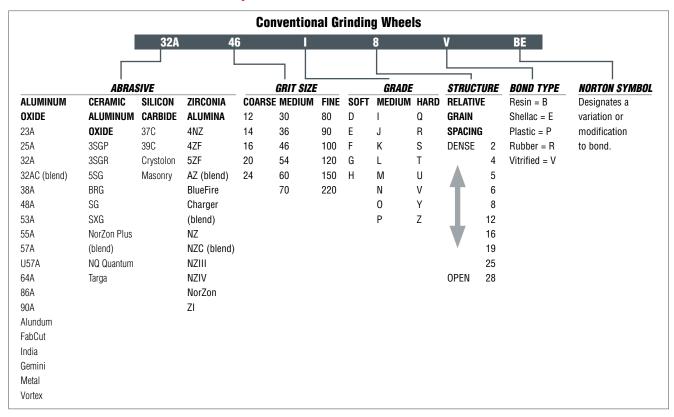
TECHTIP

- Always use safety guard



It is the user's responsibility to refer to and comply with ANSI B7.1

How to Read an Abrasive Product Specification

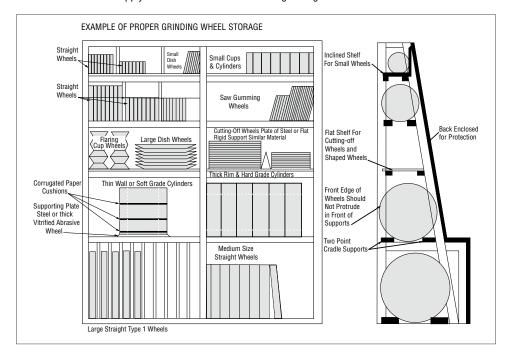


Shelf Life and Proper Storage of Grinding Wheels

It has always been Saint-Gobain Abrasives recommendation that resinoid bonded grinding wheels be used within 2 years from the date of manufacture. This recommendation assumes that resinoid bonded grinding wheels have been stored under ideal storage conditions. It might be true that under ideal storage conditions resinoid bonded grinding wheels can survive without any degradation in strength for well over two years. However, it is always wise to suspect any wheels over two years old and have them reinspected or re-speed tested to determine if there has been any degradation in strength. If the wheels are stored under less than ideal conditions, they might have a much shorter shelf life depending upon the severity of storage conditions. These same comments also apply to rubber and shellac bonded grinding wheels.

As for vitrified grinding wheels, the shelf life is less influenced by humidity and adverse storage conditions as compared to resinoid, rubber or shellac, but even vitrified grinding wheels do not have an infinite shelf life. The best procedure and the best rule of thumb is to have any wheel that is two years old or older re-speed tested and reinspected to ensure it is fit for use. The procedure for having this done and the charges will be explained by our Customer Service Department, but the cost of shipping as well as the cost of re-inspection is the customer's responsibility. Also, any wheels rejected or otherwise lost in the re-inspection process will also be the responsibility of the customer.

Keep in mind, however, that this procedure is good to verify the reliability of a product but must not be performed until you are ready to



consume the wheel. If wheels are sent back after the two year time frame for re-inspection and re-testing and then put back on the shelf, there is no telling how long they will be fit for use after that last inspection. Therefore, these wheels must be consumed as soon as is practical.