



**CATEGORY DEFINITION**

Depressed center wheels may also be referred to as raised hub wheels or by their shape designation of "Type", with Type 27 being the most popular. The depressed center design allows the flange/lock nut to recess within the wheel so that it can be used for various grinding and cutting applications. Depressed center wheels are designed to handle the most severe right angle grinding applications from heavy stock removal to rough blending. More recently, depressed center wheels have been designed to increase the utility of the tool for cut-off applications. While large right angle grinders (7" & 9") have been around for many years, small or mini grinders that handle 4", 4-1/2" and 5" wheels have made this machine, and wheel category, the most popular in power tools.

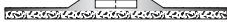
- APPLICATIONS: Grinding, stock removal, edge chamfering, beveling, weld blending, and cutting-off
- SIZE RANGE: 2" – 9"
- THICKNESS RANGE: .040 (1/32) – .250 (1/4")
- GRIT RANGE: 24 – 46 grits for stock removal; 60, 80, 120 grits for blending and finishing
- ABRASIVE GRAIN: Ceramic Alumina, Zirconia Alumina, Aluminum Oxide, Silicon Carbide
- MOUNTING OPTIONS: Plain hole (5/8" and 7/8") and discard mount (3/8-24" and 5/8-11")
- SHAPE: Type 27, Type 28, Type 29

**TYPE-TO-APPLICATION RECOMMENDATION GUIDE**

**WHEEL TYPE/THICKNESS**

**APPLICATIONS**

**TYPE 27**



**Type 27 wheels are essentially straight wheels that have a "depressed center/raised hub". Different types of fiberglass reinforcement mesh give the product stability for use on the periphery, on the face, or a combination of the two.**

			
	90° ANGLE	30° ANGLE	
.040", .045", .060", and .090" Type 27 RightCut	■		
.090" Type 27 RightCut	■		
.125" Type 27 RightCut	■		
1/8" Type 27	■	■	
5/32" Type 27	■	■	
1/8" Type 27 Flexible	■		
1/8" Type 27 Foundry Notchers	■	■	
1/4" Type 27	■		
1/4" Type 27 Foundry Snaggers	■	■	
1/4" Type 27 Heavy-Duty Foundry	■	■	

**TYPE 28**




**Type 28 wheels are constructed with a downward angle built into the grinding section to facilitate a flatter grinding angle. These wheels can only be used on the face and never on the periphery for cutting-off.**

			
			15° ANGLE
1/4" Type 28 Saucers			■

**TYPE 29**



**Type 29 wheels are constructed with an upward angle built into the grinding section to provide full face contact for light stock removal and blending operations. These wheels can only be used on the face and never on the periphery for cutting-off.**

			
			15° ANGLE
1/8" Type 29 Flexible, AVOS			■



FEATURED PRODUCTS



**NORZON PLUS**

BEST/HIGHEST PRODUCTIVITY FOR STEEL, STAINLESS STEEL AND ALL OTHER FERROUS METALS

**FEATURES**

- Combination of patented Norton SG (ceramic alumina) and NorZon (zirconia alumina) with an advanced bond system

**BENEFITS**

- 50 to 200% better overall performance vs. competitive zirconia and ceramic wheels
- Lowest total grinding cost; highest productivity
- Up to 10X the performance of aluminum oxide wheels
- 50% or better cut rate than competitive zirconia wheels
- Easy on the operator and equipment
- Foundry Snagger
- Designed to withstand the most aggressive foundry application



**CHARGER PLUS**

BETTER CHOICE FOR STEEL, STAINLESS STEEL AND ALL OTHER FERROUS METALS

**FEATURES**

- High-ratio zirconia alumina blend with aluminum oxide
- Charger Contaminate Free **INOX**
- Charger Foundry
- AVOS Charger Flexible (with aluminum oxide grain)

**BENEFITS**

- 3 times the life of aluminum oxide wheels
- Ideal for stainless steel and carbon steel applications, efficiently grinds a variety of materials from alloys to gray iron
- Excellent performance to price ratio lowers total grinding costs
- Contain <0.1% iron, sulfur or chlorine for rust-free and corrosion-free result; will not contaminate stainless steel
- Zirconia alumina/silicon carbide abrasive and reinforcement structure designed for aggressive foundry applications
- Patented shape design provides complete vision of the grinding zone, for more efficient grinding, less gouging, and heat-reducing interrupted cuts
- Uniquely-patterned face creates cooler grinding and minimal gouging



**GEMINI**

GOOD CHOICE FOR STEEL AND FERROUS METALS AS WELL AS SPECIALTY APPLICATIONS IN ALUMINUM AND FOUNDRIES

**FEATURES**

- Quality aluminum oxide
- Gemini Contaminate Free **INOX**
- Gemini Aluminum

**BENEFITS**

- Consistent performance at a competitive price
- Contain <0.1% iron, sulfur or chlorine for rust-free and corrosion-free results; will not contaminate stainless steel
- Grind aluminum and soft metals without loading
- Contain no wax or rubber fillers



**NORTON METAL/MASONRY**

GOOD CHOICE FOR STEEL/FERROUS METAL AND MASONRY APPLICATIONS WITH LOW INITIAL PRICE

**FEATURES**

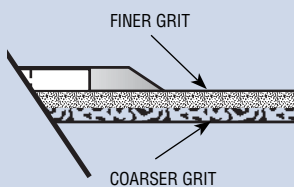
- Competitive initial price point
- Metal – aluminum oxide
- Masonry – sharp silicon carbide

**BENEFITS**

- Best starting specification for end user unable to measure performance
- Engineered for all steel/ferrous materials
- Engineered for all masonry materials such as concrete, brick and asphalt

**Norton Fine, Hard Back Depressed Center Wheels Boost Productivity and Wheel Life**

*Versus Competitors' Monolithic Design (2 coarse layers)*



Our fine, hard back (a finer-grit mixture in the top half of the grinding wheel) limits premature shedding or “spalling” and allows for a smoother grinding action from the periphery to the hub.

- At the proper grinding angle, a sharp bevel is produced at the wheel periphery
- As the wheel wears, this thin edge become susceptible to stress
- A coarse grit back is much more likely to break away prematurely resulting in unnecessary wheel loss and quite possibly an injury to operator and others



AVAILABILITY



TIER:	<b>BEST</b>	<b>BETTER</b>	<b>GOOD</b>	<b>GOOD</b>
TRADENAME:	<b>NORZON PLUS</b>	<b>CHARGER PLUS</b>	<b>GEMINI</b>	<b>NORTON METAL</b>
SHAPE:	Type 27 and Type 28	Type 27 and Type 28	Type 27 and Type 28	Type 27
ABRASIVE:	Ceramic Alumina/ Zirconia Alumina	Zirconia Alumina/ Aluminum Oxide	Aluminum Oxide	Aluminum Oxide
MATERIAL:	<b>STAINLESS STEEL / METAL</b>	<b>STAINLESS STEEL / METAL</b>	<b>STAINLESS STEEL / METAL</b>	<b>STAINLESS STEEL / METAL</b>

SIZE (D X T X H)	MAX. RPM	STD. PKG.	PART NO.	PART NO.	PART NO.	PART NO.
<b>1/8", 5/32" – CUTTING / NOTCHING / LIGHT GRINDING – TYPE 27</b>						
7 x 1/8 x 5/8-11	8,600	10	66252938855	66252929862	66252939259	07660702678
		10		66243578241 <b>INOX</b>		
7 x 1/8 x 7/8	8,600	20	66252938854	66252929863	66252939207	
		20		66243578240 <b>INOX</b>		07660775956
		5				
7 x 5/32 x 7/8	8,600	20			66252835581	
9 x 1/8 x 5/8-11	6,600	10	66253048897	66253029866		
		10		66243578245 <b>INOX</b>		
		5				07660775939
9 x 1/8 x 7/8	6,600	20	66253048896	66253029867	66253048994	
		20		66243578244 <b>INOX</b>		
<b>1/4" – GRINDING – TYPE 27</b>						
3 x 1/4 x 3/8	18,000	20	66243528809		66243528855	
4 x 1/4 x 3/8	15,280	20	66243529886	66243529899	66243529748	
4 x 1/4 x 5/8	15,280	20	66243529887	66243529852	66243519884 <b>FC</b>	66252836797
		20			66243530620	
4-1/2 x 3/16 x 7/8	13,580	20	66252830446		66252830575	
4-1/2 x 1/4 x 5/8-11	13,580	20	66252828804	66252829855	66252817084 <b>FC</b>	66252819559
		20	66252835576 <b>LL</b>	66243578251 <b>INOX</b>	66252830432	
		20			66252819568 <b>INOX</b>	
4-1/2 x 1/4 x 7/8	13,580	20	66252828803	66252829856	66252830612 <b>FC</b>	66252836796
		20		66243578250 <b>INOX</b>	66252830611	
		20			66252819567	
5 x 1/4 x 5/8-11	12,225	20	66252828806	66252829859	66252837010	
		20	66252835577 <b>LL</b>	66243578255 <b>INOX</b>		
		5				07660775913
5 x 1/4 x 7/8	12,225	20	66252828805	66252829861	66252830617 <b>FC</b>	
		20		66243578254 <b>INOX</b>	66252830615	
		20			66252819570 <b>INOX</b>	
		5				07660775918
6 x 1/4 x 5/8-11	10,185	10		66252832391	66252832390	
		10		66243578259 <b>INOX</b>		
6 x 1/4 x 7/8	10,185	20	66252809376	66252809372	66252801865	
		20		66243578258 <b>INOX</b>		
7 x 1/4 x 5/8-11	8,600	10	66252917881	66252929864	66252940147 <b>FC</b>	66252912633
		10	66252835578 <b>LL</b>	66243578243 <b>INOX</b>	66252940148	
7 x 1/4 x 7/8	8,600	20	66252917880	66252929865	66252940099 <b>FC</b>	
		20		66243578242 <b>INOX</b>	66252940098	
		5				07660775936
9 x 1/4 x 5/8-11	6,600	10	66253021634	66253029868	66253049105 <b>FC</b>	
		10	66252830728 <b>LL</b>	66243578247 <b>INOX</b>	66253049104	
		5				07660775938
9 x 1/4 x 7/8	6,600	20	66253021633	66253029869	66253049077 <b>FC</b>	
		20		66243578246 <b>INOX</b>		
		5				07660775935
<b>1/4" – GRINDING – TYPE 28 SAUCER</b>						
7 x 1/4 x 5/8-11	8,600	10	66252905369	66252905367	66252940149	
7 x 1/4 x 7/8	8,600	20	66252905368		66252940095	
9 x 1/4 x 5/8-11	6,600	10	66253006335	66253006334	66253049106	
9 x 1/4 x 7/8	6,600	20			66253049081	

DEPRESSED CENTER DESCRIPTION CODES

<b>INOX</b> = CONTAMINANT FREE	<b>FC</b> = FAST CUT	<b>LL</b> = LONG LIFE	<b>HD</b> = HEAVY DUTY	<b>BLANK</b> = ALL PURPOSE
<b>■</b> = STAINLESS	<b>■</b> = STEEL / METAL	<b>■</b> = FOUNDRY	<b>■</b> = MASONRY	<b>■</b> = ALUMINUM