

NORTON

SAINT-GOBAIN

DOUBLE THE CUT; DOUBLE YOUR OUTPUT

Norton double-cut style carbide burrs have stronger tooth formulation and numerous cutting edges to outperform other double-cut carbide burrs with better stock removal, granular chip break, and longer life. Single spiral carbide burrs make deburring aluminum and non-ferrous materials an ease. Extra sharp edges and fast debris removal keeps you on task for better production.

Pair up these long-lasting burrs with the Norton pneumatic die grinder to quickly and comfortably accomplish many portable applications on one machine – including jobs using specialties, small diameter flap wheels, and mounted points.



KEY APPLICATIONS

DEBURRING | MEDIUM TO LIGHT SURFACE CLEANING & STOCK REMOVAL |
WELD REMOVAL & PREP | CHAMFERING

KEY INDUSTRIES

METAL FABRICATION | FOUNDRY | SHIPBUILDING | AVIATION |
AUTOMOTIVE | MRO

KEY MATERIALS

STAINLESS AND OTHER STEELS | NICKEL | COPPER | TITANIUM |
CAST IRON | ALUMINUM | OTHER NON-FERROUS METALS

www.nortonabrasives.com

NORTON

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WHY USE NORTON CARBIDE BURRS:

FEATURES & BENEFITS

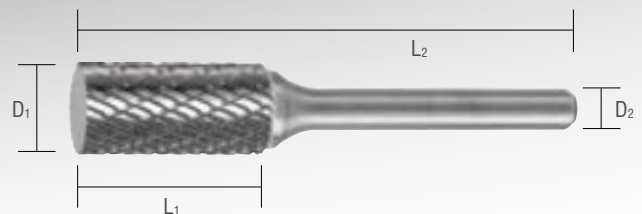
- The primary advantage of using these burrs is their extended life due to the hardness of their tungsten carbide substrate, plus their stronger tooth formulation (decreased tooth wedge angle), and numerous cutting edges. Carbide burrs can be used longer, and on more demanding production runs with less changeover downtime vs. other cutting tools.
- Achieve higher stock removal, and smaller, granular chip-break on hard-to-grind workpieces vs. other carbide burrs.
- Carbide burrs perform well at higher temperatures and can be used longer than high-speed steel tools – even if the operation generates some heat.
- Double-cut burrs are the most popular and functional because of their universal cutting style. These versatile burrs can be used on die grinders and automated CNC machines.



UNDERSTANDING THE PRODUCT

Burr Dimensions

D ₁	L ₁	D ₂	L ₂
HEAD DIAMETER	HEAD LENGTH	SHANK DIAMETER	OVERALL BURR LENGTH (OL)



STOCK AVAILABILITY

- Sub-shape names and dimensions are standard in the industry, which facilitates an easy cross over to our Norton, high-quality carbide burrs.
- Each Norton carbide burr is packed individually in a clear, protective plastic case with Norton-blue end-caps. Each burr is marked with the burr head diameter and length for easy identification.
- All shank diameters (D2) are 1/4 inch.

RECOMMENDATIONS FOR USE

- It might be necessary to adjust the rates shown to achieve optimum performance
- Running below the optimum speed will encourage chipping
- Harder materials or sticky metals, such as titanium, require slower speeds
- Running above optimum speed will cause tooth wear
- Smaller burrs require faster speeds
- Allowing the tool to become too hot might cause the braze to melt and detach the head of the shank
- Apply constant movement and light pressure when in use
- Do not sink the burr for more than one third of its periphery

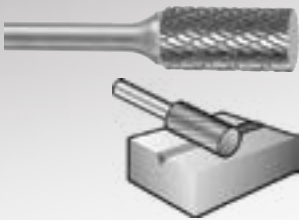
Recommended Operating Speeds (RPM)

MATERIAL	Product Diameter				
	1/8" (3MM)	1/4" (6MM)	3/8" (10MM)	1/2" (12MM)	5/8" (16MM)
Steel	60,000-90,000	45,000-60,000	30,000-40,000	22,500-30,000	18,000-24,000
Tempered steel	60,000-90,000	30,000-45,000	19,000-30,000	15,000-22,500	12,000-18,000
Stainless steel	60,000-90,000	30,000-45,000	19,000-30,000	15,000-22,500	12,000-18,000
Casting	45,000-90,000	22,500-60,000	15,000-40,000	11,000-30,000	9,000-24,000
Titanium	60,000-90,000	30,000-45,000	19,000-30,000	15,000-22,500	12,000-18,000
Nickel	60,000-90,000	30,000-45,000	19,000-30,000	15,000-22,500	12,000-18,000
Copper and copper alloys	45,000-90,000	22,500-60,000	15,000-40,000	11,000-30,000	9,000-24,000

Recommended speeds are for standard shank length of 1-3/4" (45mm), maximum overhang 3/8" (10mm).



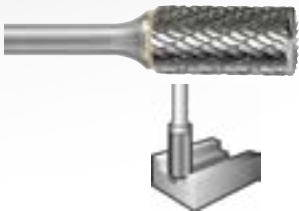
CARBIDE BURRS FOR STANDARD METAL REMOVAL

**SA**

Cylindrical without End Cut

The ends of these burrs are flat, with no cutting edges and are used for contour finishing and to get into right-angled corners.

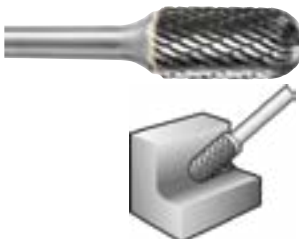
SUB-SHAPE	MAX. RPM	D1	L1	L2	MIN/STD PKG QTY	PART #
SA1	25,000	1/4"	3/4"	2"	1	699573 08002
SA3	25,000	3/8"	3/4"	2-1/2"	1	699573 08004
SA5	25,000	1/2"	1"	2-3/4"	1	699573 08005

**SB**

Cylindrical with End Cut

The cutting edge at the end of the burr makes these burrs a good choice for contour finishing.

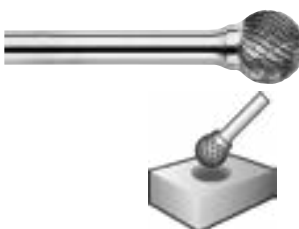
SUB-SHAPE	MAX. RPM	D1	L1	L2	MIN/STD PKG QTY	PART #
SB3	25,000	3/8"	3/4"	2-1/2"	1	699573 08006
SB5	25,000	1/2"	1"	2-3/4"	1	699573 08007
SB6	25,000	5/8"	1"	2-3/4"	1	699573 08008

**SC**

Ball-Nosed Cylindrical

Use these round-nosed burrs for smoother operation and better tool control.

SUB-SHAPE	MAX.-RPM	D1	L1	L2	MIN/STD PKG QTY	PART #
SC1	25,000	1/4"	3/4"	2"	1	699573 08009
SC2	25,000	5/16"	3/4"	2-1/2"	1	699573 08010
SC3	25,000	3/8"	3/4"	2-1/2"	1	699573 08011
SC5	25,000	1/2"	1"	2-3/4"	1	699573 08012
SC5	25,000	1/2"	1"	6"	1	699573 60679
SC6	25,000	5/8"	1"	2-3/4"	1	699573 08013

**SD**

Ball Shape

Use these carbide burrs to create a concave and to hollow out a workpiece.

SUB-SHAPE	MAX.-RPM	D1	L1	L2	MIN/STD PKG QTY	PART #
SD1	25,000	1/4"	1/4"	2"	1	699573 08014
SD3	25,000	3/8"	5/16"	2-1/8"	1	699573 08016
SD5	25,000	1/2"	7/16"	2-3/16"	1	699573 08017

CARBIDE BURRS FOR STANDARD METAL REMOVAL



SF

Ball-Nosed Tree

Designed to round off edges and make concave cuts.

SUB-SHAPE	MAX.-RPM	D1	L1	L2	MIN/STD PKG QTY	PART #
SF1	25,000	1/4"	3/4"	2"	1	699573 08018
SF2	25,000	5/16"	3/4"	2-1/2"	1	699573 08019
SF3	25,000	3/8"	3/4"	2-1/2"	1	699573 08020
SF3	25,000	3/8"	3/4"	6"	1	699573 60689
SF5	25,000	1/2"	1"	2-3/4"	1	699573 08021
SF5	25,000	1/2"	1"	6"	1	699573 60691
SF6	25,000	5/8"	1"	2-3/4"	1	699573 08022



SG

Tree with Taper

The taper allows access to hard-to-reach areas, such as angled contours.

SUB-SHAPE	MAX.-RPM	D1	L1	L2	MIN/STD PKG QTY	PART #
SG1	25,000	1/4"	3/4"	2"	1	699573 08023
SG3	25,000	3/8"	3/4"	2-1/2"	1	699573 08025
SG5	25,000	1/2"	1"	2-3/4"	1	699573 08026
SG5	25,000	1/2"	1"	6"	1	699573 60712
SG6	25,000	5/8"	1"	2-3/4"	1	699573 08027



SH

Flame Shape

Great for channel working and shaping due to its long fluted sides and rounded head.

SUB-SHAPE	MAX.-RPM	D1	L1	L2	MIN/STD PKG QTY	PART #
SH5	25,000	1/2"	1-1/4"	6"	1	699573 66822



SL

Ball-Nosed Cone

This cone shape is excellent for imparting fine finishes.

SUB-SHAPE	MAX.-RPM	D1	L1	L2	MIN/STD PKG QTY	PART #
SL2	25,000	5/16"	7/8"	2-3/4"	1	699573 08028
SL3	25,000	3/8"	1-3/16"	2-15/16"	1	699573 08029
SL4	25,000	1/2"	1-3/16"	3"	1	699573 08030
SL4	25,000	1/2"	1-3/16"	6"	1	699573 60720



SM

Pointed Cone

Ideal for rounded edges or reaching difficult, tight areas.

SUB-SHAPE	MAX.-RPM	D1	L1	L2	MIN/STD PKG QTY	PART #
SM5	25,000	1/2"	7/8"	6"	1	699573 60767

CARBIDE BURR KIT



SUB-SHAPE	MIN/STD PKG QTY	PART #
Carbide Burr Kit	1	699573 08060
Kit Includes one each of: SA5 (699573 08005), SF3 (699573 08020), SF5 (699573 08021), SG5 (699573 08026), and SL4 (699573 08030)		

CARBIDE BURRS FOR ALUMINUM AND NON-FERROUS MATERIALS



SA

Cylindrical without End Cut

The ends of these burrs are flat, with no cutting edges and are used for contour finishing and to get into right-angled corners.

SUB-SHAPE	MAX. RPM	D1	L1	L2	MIN/STD PKG QTY	PART #
SA3 NF	25,000	3/8"	3/4"	2.-1/2"	1	699573 40148
SA5 NF	25,000	1/2"	1"	2-3/4"	1	699573 40149



SF

Ball-Nosed Tree

Designed to round off edges and make concave cuts.

SUB-SHAPE	MAX.-RPM	D1	L1	L2	MIN/STD PKG QTY	PART #
SF3 NF	25,000	3/8"	3/4"	2-1/2"	1	699573 40154
SF5 NF	25,000	1/2"	1"	2-3/4"	1	699573 60647



SL

Ball-Nosed Cone

This cone shape is excellent for imparting fine finishes.

SUB-SHAPE	MAX.-RPM	D1	L1	L2	MIN/STD PKG QTY	PART #
SL4 NF	25,000	1/2"	1-1/4"	6"	1	699573 60651



NORTON

SAINT-GOBAIN

**PNEUMATIC
DIE GRINDER****FEATURES & BENEFITS**

- A double-bearing spindle generates superb concentricity, reducing vibrations and allowing longer use, while producing finer finishes
- Finesse projects by having the ultimate control in both precision and power with the speed regulator
- Achieve better tool handling, along with reduced fatigue, from the ergonomic and streamlined non-slip grip
- Small size enhances control and finishes while their light weight provides additional control, less vibration for operator comfort, and the ability to get into small parts
- Extremely versatile and productivity-enhancing; includes a 1/8" and 1/4" collet to accommodate numerous abrasive products: specialties (including cartridge and spiral rolls, square and cross pads, overlap slotted discs), small diameter 1/8" and 1/4" shank and 1/4"-20 thread mounted flap wheels, mounted points, and carbide burs
- Excellent value proposition: this is solid tool sold at a GOOD-tier price

**TECHNICAL SPECIFICATIONS**

Specifications for:	Norton Pneumatic Die Grinder
Weight of tool:	1.4 lbs.

Compressed air:	6.2 bar (90psi)
Maximum permissible operating pressure:	6.2 bar (90psi)
Recommended operating pressure:	6.2 bar (90psi)
Horsepower:	0.9HP
Free speed:	25,000 rpm
Air consumption @90psi:	85 l/min (3 CFM)

Noise characteristic value in accordance with EN ISO 15744 (ISO 15744):	
• A-weighted sound pressure level at workstation	87.3 dB
• A-weighted sound power level	98.3 dB
• Peak C-weighted instantaneous sound pressure level at workstation	< 130 dB
• Measurement uncertainty (Standard)	3 dB

Vibration value according to EN ISO 28927-12:	3.00 m/s ²
Measurement uncertainty (Standard):	0.84 m/s ²

Recommended lubrications:	Air drill oil 20#
Sanding tool specifications:	Pad Size 2" Collet Chuck 1/8" (3 mm) and 1/4" (6 mm)

Applications & suitability:	Final surface finishing, chamfering, deburring of architectural millwork, sheet metal and surface prep, zinc casting, aluminum products, injection molds, etc.; general sanding and polishing.
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DESCRIPTION	PART #	QTY.
Single Norton Die Grinder with 1/8" and 1/4" collets	699573 08000	1
Norton Die Grinder Bulk Kit	699573 08001	1
Bulk Kit Includes: 1 - Norton Die Grinder with 1/8" and 1/4" Collets, 100 - 3/8" x 1-1/2" x 1/8" 80 Grit Norton Merit R228 Cartridge Rolls (088341 80232), 1 - M9 Cartridge Roll Mandrel (088341 81209), 10 - 1" x 1" x 1/4" Shank 60 Grit Norton Blaze R920 Flap Wheels (662611 51170), 5 - 1" x 1" W220 1/4" x 1-1/2" Spindle Norton Gemini 38 A60-P Mounted Points (614636 24566), 1 - 1/2" x 1" SF5 Norton Double-Cut Carbide Burr (699573 08021)		

SAINT-GOBAIN

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NO-RISK TEST

