

## Type 1 High Performance Cut-Off Wheels

- Ceramic and ceramic blend abrasives

For ferrous metals, stainless steel, aluminum, aerospace alloys, and fiberglass.


| Series | Dia. | Thickness | Arbor Hole Size | Max. RPM | Item No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Norton |  |  |  |  |  |
| For Ferrous Metal, Gray Iron, Stainless |  |  |  |  |  |
| NorZon Plus | 3 in | 0.035 in | 1/4 in | 25,465 | 25TZ08 |
|  | 3 in | 0.035 in | $3 / 8$ in | 25,465 | 25TZ09 |
|  | 3 in | 0.125 in | $3 / 8$ in | 25,465 | 3WL22 |
|  | 3 in | 0.0625 in | $1 / 4$ in | 25,465 | 25TZ10 |
|  | 3 in | 0.0625 in | $3 / 8$ in | 25,465 | 1PYA8 |
|  | 4 in | 0.0625 in | $3 / 8$ in | 19,100 | 3UP27 |
|  | 4 in | 0.035 in | $3 / 8$ in | 19,100 | 3WL24 |
| 3M |  |  |  |  |  |


| Series <br> Sia | Dia. <br> Thickness | Arbor <br> Hole Size | Max. <br> RPM | Item <br> No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| For Ferrous Metal, Stainless |  |  |  |  |



For All Metals, Aluminum, Carbon Steel, Cast Iron, Soft Metals, Stainless Steel

| Silver | 3 in | 0.035 in | $3 / 8$ in | 25,465 | 450 Y 17 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3 in | 0.06 in | $3 / 8$ in | 25,465 | 450Y18 |
|  | 4 in | 0.035 in | $1 / 4$ in | 19,100 | 450Y19 |
|  | 4 in | 0.035 in | $3 / 8$ in | 19,100 | 450Y20 |
|  | 4 in | 0.06 in | $3 / 8$ in | 19,100 | 450Y21 |
|  | $41 / 2$ in | 0.4 in | 7/8 in | 13,300 | 450Y22 |
|  | $41 / 2 \mathrm{in}$ | 0.045 in | $7 / 8$ in | 13,300 | 450Y23 |
|  | 5 in | 0.045 in | $7 / 8$ in | 12,250 | 450Y25 |
|  | 6 in | 0.045 in | 7/8 in | 10,200 | 450Y34 |
|  | 7 in | 0.45 in | $7 / 8$ in | 8,500 | 450Y36 |
| For Cutting, Grinding, Metalworking |  |  |  |  |  |
| Silver | 4 in | 0.125 in | 3/8 in | 19,100 | 480P44 |
|  | $41 / 2$ in | 0.094 in | 7/8 in | 13,300 | 480P45 |

## Cut-Off Wheel Adapters

Use with cut-off wheels listed on this page and page 723, 2384 and wire brushes on pages 2394 and 2395.
Note: Operate according to ANSI and OSHA guidelines and do not exceed maximum rpm noted on wheel being used.

Screw-Type Wheel Mandrel Adapters-Machined from stressproof steel. Screw head is slotted for fast, easy change. Plated finish. 1F540 comes with screws to mount either $1 / 4$ " or $3 / 8$ " holes.

Nut-Type Wheel Arbor Adapters-Use to mount all types of wheels (cut-offs, cloth buffs, wire wheels, etc.). Include arbor, hex nut, and a pair of machined steel washers. Plated finish.


| Fits | Max. Wheel | Shank | Washer | L | Item |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Hole (in.) | Width (in.) | Dia. (in.) | O.D. (in.) | (in.) | No. |
| Screw-Type Wheel Mandrel Adapters |  |  |  |  |  |
| 1/4 | 1/4 in | $1 / 4$ in | $3 / 4$ in | $21 / 8$ in | 1F544 |
| 3/8 | 1/4 in | 1/4 in | $3 / 4$ in | $21 / 8$ in | 1 F542 |
| $1 / 4$ or 3/8 | 1/4 in | 1/4 in | $3 / 4$ in | $21 / 8$ in | 1 F540 |
| Nut-Type Wheel Arbor Adapters |  |  |  |  |  |
| 1/4 | $5 / 8$ in | 1/4 in | 1 in | $29 / 16$ in | 1 F452 |
| $3 / 8$ | $5 / 8$ in | 1/4 in | 1 in | $29 / 16$ in | 1 F450 |
| 1/2 | $5 / 8$ in | 1/4 in | $11 / 2$ in | $29 / 16$ in | 1F448 |



* Washer O.D. indicates diameter of screw and mandrel head (no washer).


## Type 27 General Purpose Depressed Center Grinding and Cutting Wheels

NARTEN


For cutting ferrous metals, stainless steel, and aluminum.

- Aluminum oxide abrasive

| Series | Dia. | Thicknes | Arbor Hole Size | Max. RPM | Item |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Norton |  |  |  |  |  |
| For Aluminum |  |  |  |  |  |
|  | $41 / 2$ in | 0.25 in | 5/8-11 in | 13,580 | 4B1 |
| For Aluminum, Ferrous Metal |  |  |  |  |  |
| Gemini | $41 / 2$ in | 0.125 in | 1/8 in | 13,580 | 25TZ63 |
| Aluminum | 7 in | 0.25 in | $5 / 8-11$ in | 8,600 | 25TZ98 |
| For Aluminum, Ferrous Metal, Gray Iron, Pipeline, Stainless |  |  |  |  |  |
| Gemini <br> RightCut Aluminum | $41 / 2 \mathrm{in}$ | 0.045 in | 7/8 in | 13,580 | 33N343 |
| For Aluminum, Ferrous Metal, Gray Iron, Stainless |  |  |  |  |  |
| $\underset{\text { Gemini }}{\text { Aluminum }}$ | 4 in | 0.25 in | $5 / 8$ in | 15,280 | 4B173 |
|  | 5 in | 0.25 in | $7 / 8$ in | 12,225 | 25 TZ68 |
|  | 7 in | 0.25 in | $5 / 8-11$ in | 8,600 | 6A432 |
|  | 9 in | 0.25 in | $5 / 8-11$ in | 6,600 | 6A433 |
| Gemini Flexible | 2 in | 0.125 in | $3 / 8$ in | 30,560 | 4DDY1 |
| GeminiRightCut Aluminum | 5 in | 0.045 in | 1/8 in | 12,225 | 33N344 |
|  | 6 in | 0.045 in | $7 / 8$ in | 10,185 | 33N345 |
| For Contaminate Free |  | , Ferrous M | Metal, Gray | Iron, St | inless |
| $\begin{aligned} & \text { Gemini } \\ & \text { Right Cut } \end{aligned}$ | 4 | 0.045 in | $5 / 8-11$ in | 13,580 | 33N347 |
|  | $41 / 2 \mathrm{in}$ | 0.045 in | 7/8 in | 13,580 | 33N346 |
|  | 5 in | 0.045 in | $7 / 8$ in | 12,225 | 33N348 |
|  | 7 in | 0.045 in | 5/8-11 in | 8,600 | 33N353 |
|  | 7 in | 0.045 in | 7/8 in | 8,600 | 33N352 |
| Gemini Stainless Steel |  | 0.0938 in | 5/8-11 in | 13,580 | 25TZ60 |
|  | $41 / 2$ in | 0.0938 in | 7/8 in | 13,580 | 25TZ61 |
|  |  | 0.25 in | 7/8 in | 13,580 | 25TZ65 |
|  | 5 in | 0.0938 in | 7/8 in | 12,225 | 25 TZ66 |
|  | 5 in | 0.25 in | 7/8 in | 12,225 | 25TZ69 |


| Series | Dia | Thicknes | Arbor Hole Size | Max. <br> RPM | Item No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| For Ferrous Metal, Gray Iron, Pipeline, Stainless |  |  |  |  |  |
| Gemini | 6 in | 0.125 in | $5 / 8-11$ in | 10,185 | 25 TZ52 |
|  | $41 / 2$ in | 0.0938 in | $5 / 8-11$ in | 13,580 | 33N337 |
| Gemini Right Cut | 5 in | 0.0938 in | $5 / 8-11$ in | 12,225 | 33N338 |
|  | 6 in | 0.0938 in | $5 / 8-11$ in | 10,185 | 33N339 |
|  | 6 in | 0.0938 in | $7 / 8$ in | 10,185 | 33N340 |
|  | 7 in | 0.0938 in | $5 / 8-11$ in | 8,600 | 33N341 |
|  | 7 in | 0.0938 in | $7 / 8$ in | 8,600 | 33N342 |
| For Ferrous Metal, Gray Iron, Stainless |  |  |  |  |  |
| Gemini | 3 in | 0.25 in | $3 / 8$ in | 18,000 | 4B168 |
|  |  | 0.125 in | $3 / 8$ in | 15,280 | 4B169 |
|  | 4 in | 0.25 in | $3 / 8$ in | 15,280 | $4 \mathrm{B170}$ |
|  | $41 / 2$ in | 0.25 in | 5/8-11 in | 13,580 | 48171 |
|  |  | 0.125 in | 5/8 in | 15,280 | 5A863 |
|  | 4 in | 0.25 in | 5/8 in | 15,280 | 6A624 |
|  |  | 0.25 in | 7/8 in | 13,580 | 6A076 |
|  | $41 / 2$ in | 0.125 in | 7/8 in | 13,580 | 25 TZ84 |
|  |  | 0.25 in | $5 / 8-11$ in | 12,225 | 25TZ86 |
|  | 5 in | 0.125 in | 7/8 in | 12,225 | 5A865 |
|  |  | 0.25 in | 7/8 in | 12,225 | 5A866 |
|  |  | 0.25 in | $5 / 8-11$ in | 10,185 | 1PYC5 |
|  |  | 0.125 in | $5 / 8-11$ in | 10,185 | 25TZ44 |
|  | 6 in | 0.125 in | 7/8 in | 10,185 | 1PYD4 |
|  |  | 0.25 in | 7/8 in | 10,185 | 1PYC8 |
|  |  | 0.125 in | 5/8-11 in | 8,600 | 5 A872 |
|  | 7 in | 0.06 in | $7 / 8$ in | 8,600 | 6PJ31 |
|  |  | 0.125 in | 7/8 in | 8,600 | 5A871 |
|  |  | 0.125 in | 5/8-11 in | 6,600 | 5A874 |
|  | 9 in | 0.06 in | 5/8-11 in | 6,600 | 4RA81 |
|  |  | 0.125 in | 7/8 in | 6,600 | 5A873 |



| Series | Dia. | Thickness | Arbor Hole Size | Max. RPM | Item No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Gemini } \\ & \hline 1-2-3 \end{aligned}$ | $41 / 2$ in | 0.0938 in | $7 / 8$ in | 13,500 | 25 TZ77 |
| Gemini <br> Fast Cut |  | 0.25 in | $5 / 8-11$ in | 13,580 | 25TZ80 |
|  |  | 0.25 in | 7/8 in | 13,580 | 25TZ79 |
|  | 7 in | 0.25 in | $5 / 8$-11 in | 8,600 | 25 TZ97 |
|  |  | 0.25 in | $5 / 8-11$ in | 6,600 | 25UA07 |
|  |  | 0.25 in | 7/8 in | 6,600 | 25UA06 |

