

PARADIGM®

DIAMOND WHEELS FOR NEWER, HARD-TO-GRIND AEROSPACE MATERIALS

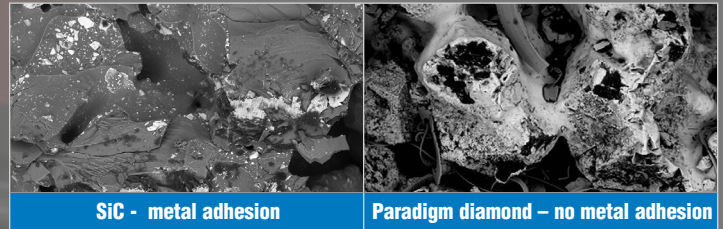


High Tech Solution for Grinding
High Tech Materials

Norton Winter Paradigm offers a superior solution for grinding new aerospace materials, titanium alloys, advanced ceramics and composites. These wheels offer an excellent choice when looking to achieve and maintain a precise profile. The advanced porous metal bond technology combines the toughness and thermal conductivity of a metal bond wheel with the dressability typically seen in a vitrified bond wheel. The most dressable metal-bonded wheel on the market, Paradigm wheels can be trued and dressed online in plunge or traverse modes for maximum productivity.

ONLINE TRUING & DRESSING CAPABILITY
ENABLES DAMAGE FREE GRINDING | LOWER GRINDING POWER

www.nortonabrasives.com



SiC - metal adhesion

Paradigm diamond – no metal adhesion

THE PARADIGM SHIFT

Reduced metal adhesion on cutting edges when grinding TiAl:

- Cooler grinding with reduced friction
- Lower specific energy
- Less opportunity for part damage
- Increased parts per dress

FEATURES & BENEFITS

- Diamond abrasive reduces metal adhesion when grinding TiAl resulting in lower grinding power and specific energy
- Up to 46% natural porosity, enables free-cutting
- High thermal conductivity allows for burn free grinding
- Can be trued and dressed on-machine in plunge or traverse modes
- Significantly higher stock removal rates, increased productivity and lower cost per part compared to SiC products

MADE-TO-ORDER AVAILABILITY

All Norton Winter Paradigm diamond wheels are made to your precise requirements.

Paradigm wheels for grinding aerospace materials are available in a variety of wheel shapes and sizes, and in continuous rim or segmented designs to meet your specific needs.

GENERAL APPLICATION PARAMETERS

Wheel Speed:	6000 SFPM
Traverse Rate:	30 IPM
Depth of Cut:	0.05"
Coolant:	Water Based

DIAMOND STARTING SPECIFICATIONS FOR TIAL AND CMC

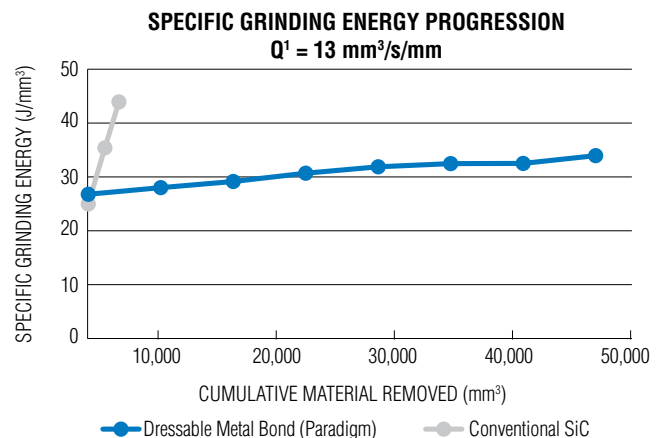
SD220-C168-P100X

NORTON WINTER SOLUTIONS FOR TRUING AND DRESSING PARADIGM WHEELS

Move from dress per part, to parts per dress. Paradigm wheels can be trued and dressed online using one of these 3 technologies :

- Reverse-plated diamond form rolls with CVD reinforcement
- Infiltrated diamond form rolls with high diamond concentration (CVD reinforcement optional)
- BPR dressing disc with CVD reinforcement for traverse dressing

Contact us to determine the correct specification.



Grind TiAl with low specific energy and much higher stock removal per dress compared to SiC.



www.facebook.com/NortonAbrasivesNA | www.youtube.com/NortonAbrasives | www.nortonabrasives.com

USA CUSTOMER SERVICE:

Toll Free Phone: 1 (800) 551-4413
Toll Free Fax: 1 (800) 551-4416

CANADA CUSTOMER SERVICE:

Toll Free Phone: 1 (800) 263-6565
Toll Free Fax: 1 (800) 561-9490

FORM #8746 REV. 08/18

© Saint-Gobain August 2018.

Norton, Norton Winter, and Paradigm are registered trademarks; A Paradigm Shift in Cutting Tool Manufacturing is a trademark of Saint-Gobain Abrasives.

