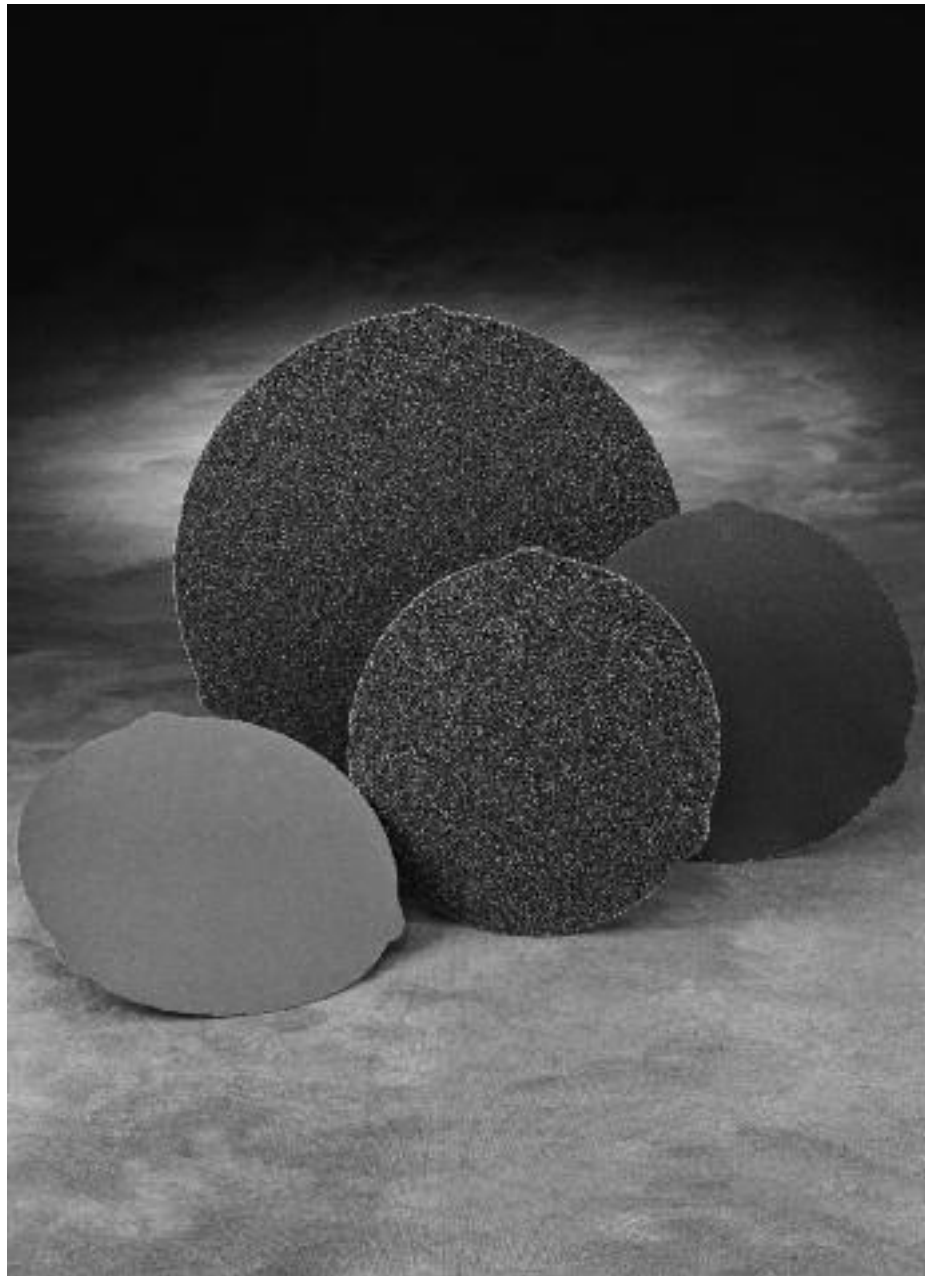


BUEHLER®

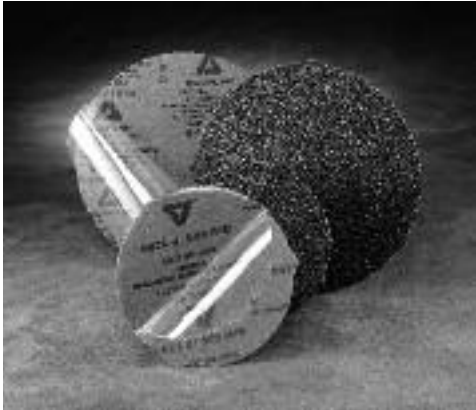
CarbiMet® 2

ABRASIVE PAPER

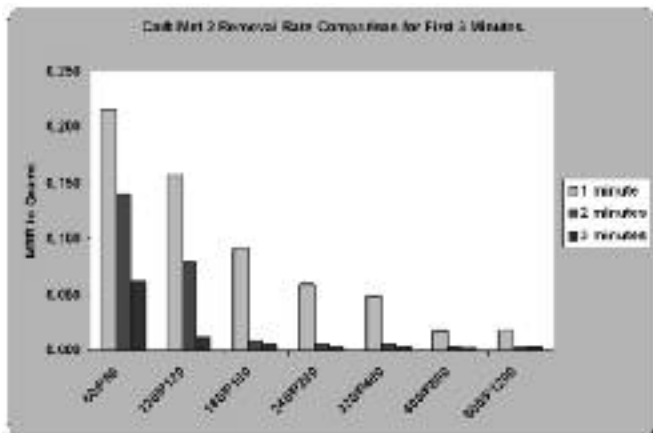
- **Rapid Material Removal**
- **Uniform Surface Finish**
- **Water Resistant Premium "C" Weight Paper**
- **Induces Minimal Specimen Deformation**
- **Exceptional Life to Material Removal Ratio**
- **Manufactured in an ISO14001/2004 Certified Facility Showing Compliance with Environmental Legislation and Regulations and a Commitment to Continual Improvements in Controlling and Identifying Their Environmental Impact.**
 - **Certified by an Independent Third Party**
 - **Facility now Produces Less Pollution Due in Part to Efficient Water and Air Recycling**



Providing Exceptional Final Results



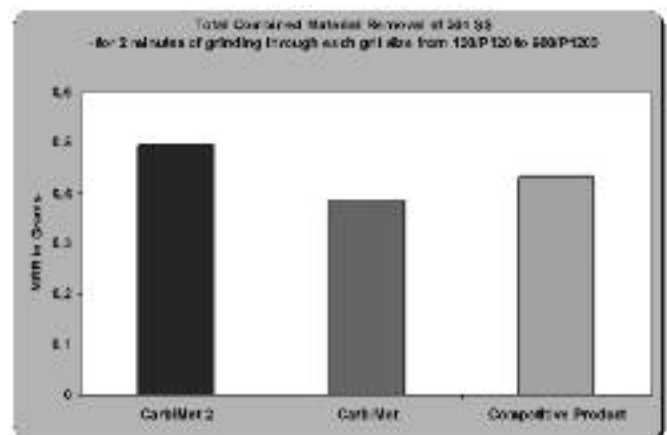
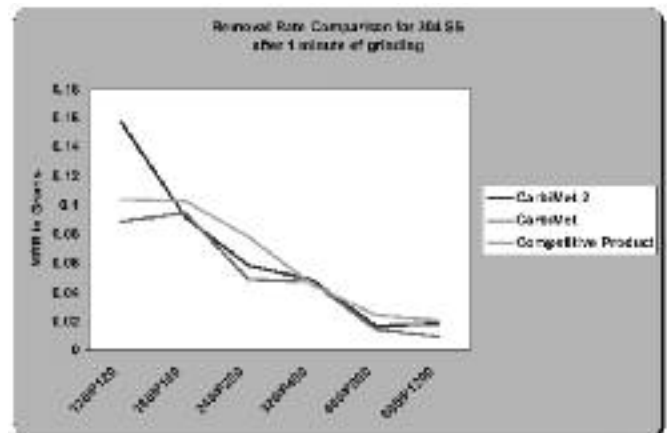
CarbiMet® 2 Abrasive Discs, are the new premium line of grinding papers designed for superior grinding performance on all types of specimens with minimal deformation. These discs are designed for wet or dry grinding; however, wet grinding induces less deformation in specimens. The tightly held abrasive grain sizing and the environmentally friendly resin bond system gives CarbiMet 2 Abrasive Discs the rapid material removal and uniform finish needed to reduce rough and final polishing times. Manufactured in an ISO 14001/2004 certified facility, CarbiMet 2 Abrasive Discs are produced with less pollution, in part due to an efficient water and air recycling system. The uniformity and consistency of these discs make them an excellent choice for use with automatic grinding and polishing systems. CarbiMet 2 Discs utilize premium "C" weight paper and are available with or without a Pressure Sensitive Adhesive (PSA) backing. When using a PSA backed disc, the disc is held firmly in place during use, and is easily removed when the disc life is expired. Plain-backed discs can be held in place with either a MetGrip® Liner or a paper holding band.



The above graph illustrates the material removal rate of each grit size over a 3 minute time frame. By tracking the amount of material removed as a function of time, you can see that the amount of work performed in the first minute of use ranges from 52% to 87%, the average being 75%. Very little material is removed in subsequent minutes grinding. It is evident that as the particle size decreases, the amount of material that is removed from the specimen is greatly reduced, leaving your specimen with less deformation and a finer surface finish at each progressive step. To maintain satisfactory removal rates, Buehler suggests using Silicon Carbide papers for no more than 1-2 minutes.

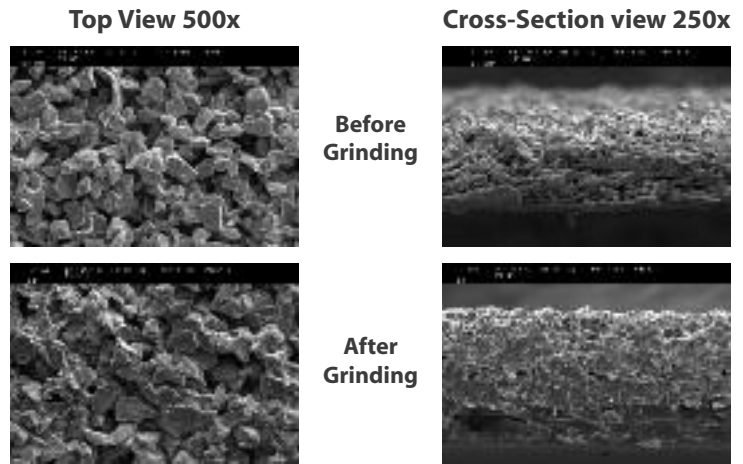
Buehler offers many other long wear surfaces such as the Apex® DGD Color for high removal rates over significantly longer periods of time as compared to CarbiMet 2 Abrasive Discs.

When compared with its predecessor and with other metallographic papers on the market, CarbiMet 2 will provide higher removal at 120/P120 grit, and comparable removal rates at all other grit sizes.



As you can see, combined removal rates when run through the entire series of papers is much greater on CarbiMet 2; this is what allows for fast preparation while achieving excellent final results.

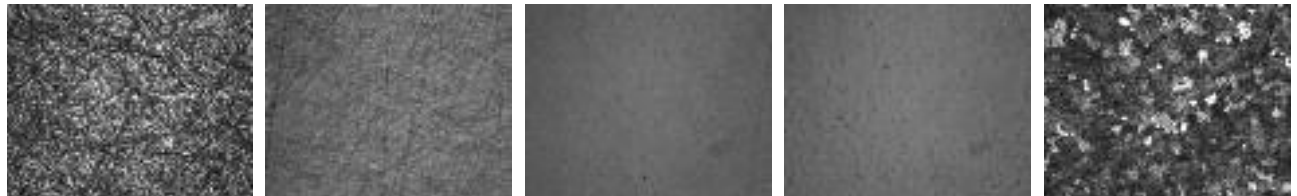
These SEM images show that in the unused condition you can observe the sharp edges of the abrasive on the top surface while the cross-section shows the variations of the surface that are present as a result of the way each abrasive grain is held into place in the resin binder. After grinding, the top view shows that silicon carbide abrasive grain is abundantly present, but has rounded or broken edges no longer suitable for grinding. The cross-section view after grinding shows that the abrasive grain is still held firmly to the paper.



MICROSTRUCTURES PROVE RESULTS

All specimens were prepared using proven Buehler SumMet Methods, previously developed. Results below were achieved substituting the CarbiMet® 2 directly into the method requiring no changes to any method parameters.

2011 Al



CarbiMet® 2 240 Grit

9µm MetaDi® Supreme on TexMet®

1µm MetaDi® Supreme on TexMet®

Final Polish 10X. MasterMet® on ChemoMet®.

Etched 10X

110 Cu



CarbiMet® 2 240 Grit

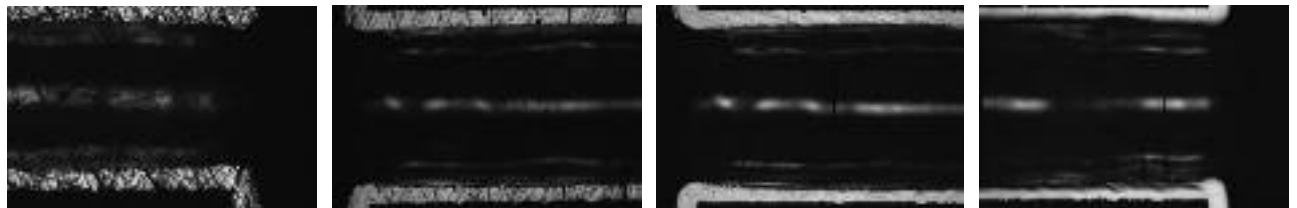
9µm MetaDi® Supreme on TexMet®

3µm MetaDi® Supreme on TexMet®

Final Polish 10X. MasterPrep® on MicroCloth®.

Etched 10X

PWB



CarbiMet® 2 240 Grit

CarbiMet® 2 600 Grit

3µm MetaDi® Supreme on TexMet®

Final Polish 10X. MasterPrep® on MicroCloth®.

304 Stainless Steel



CarbiMet® 2 240 Grit

9µm MetaDi® Supreme on TexMet®

1µm MetaDi® Supreme on TexMet®

Final Polish 10X. MasterMet® on ChemoMet®.

Etched 10X

CarbiMet® 2 Plain Backed

Grit	8" (203mm)	10" (254mm)	12" (305mm)
60 (P60)	30-5108-060-102	30-5125-1-060-102	30-5125-060-102
120 (P120)	30-5108-120-102	30-5125-1-120-102	30-5125-120-102
180 (P180)	30-5108-180-102	30-5125-1-180-102	30-5121-180-102
240 (P280)	30-5108-240-102	30-5125-1-320-102	30-5121-240-102
320 (P400)	30-5108-320-102	30-5125-1-320-102	30-5121-320-102
400 (P800)	30-5108-400-102	30-5125-1-400-102	30-5121-400-102
600 (P1200)	30-5108-600-102	30-5125-1-600-102	30-5121-600-102

CarbiMet® 2 PSA Backed

Grit	2 7/8" (73mm)	8" (203mm)	10" (254mm)	12" (305mm)
60 (P60)				30-5112-060-102
120 (P120)	30-5170-120-102	30-5118-120-102	30-5125-3-120-102	30-5112-120-102
180 (P180)	30-5170-180-102	30-5118-180-102	30-5125-3-180-102	30-5112-180-102
240 (P280)	30-5170-240-102	30-5118-240-102	30-5125-3-240-102	30-5112-240-102
320 (P400)	30-5170-320-102	30-5118-320-102	30-5125-3-320-102	30-5112-320-102
400 (P800)	30-5170-400-102	30-5118-400-102	30-5125-3-400-102	30-5112-400-102
600 (P1200)	30-5170-600-102	30-5118-600-102	30-5125-3-600-102	30-5112-600-102
Assorted 10 of each grit	30-5178-182 (180/P180 - 600/P1200 grit)	30-5118-102 (120/P120 - 600/P1200 grit)		

CarbiMet® 2 Rolls & Strips

Grit	Abrasive Rolls for HandiMet® 2	Abrasive Strips for HandiMet® 1
	3 7/8" x 60'	3" x 11"
240 (P280)	30-5143-240-002	30-5160-240-102
320 (P400)	30-5143-320-002	30-5160-320-102
400 (P800)	30-5143-400-002	30-5160-400-102
600 (P1200)	30-5143-600-002	30-5160-600-102
Assorted 10 of each grit 240-600 (P280-P1200)		30-5160-102

MetGrip® Liners

Double sided PSA backed film for holding plain backed papers on platen.

Size

for 8" (203mm) Wheel	30-8508
for 10" (254mm) Wheel	30-8510
for 12" (305mm) Wheel	30-8512

For a complete listing of consumables, please refer to our Consumables Buyer's Guide. Buehler continuously makes product improvements; therefore, technical specifications are subject to change without notice.

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