

# MPCT™ 2000

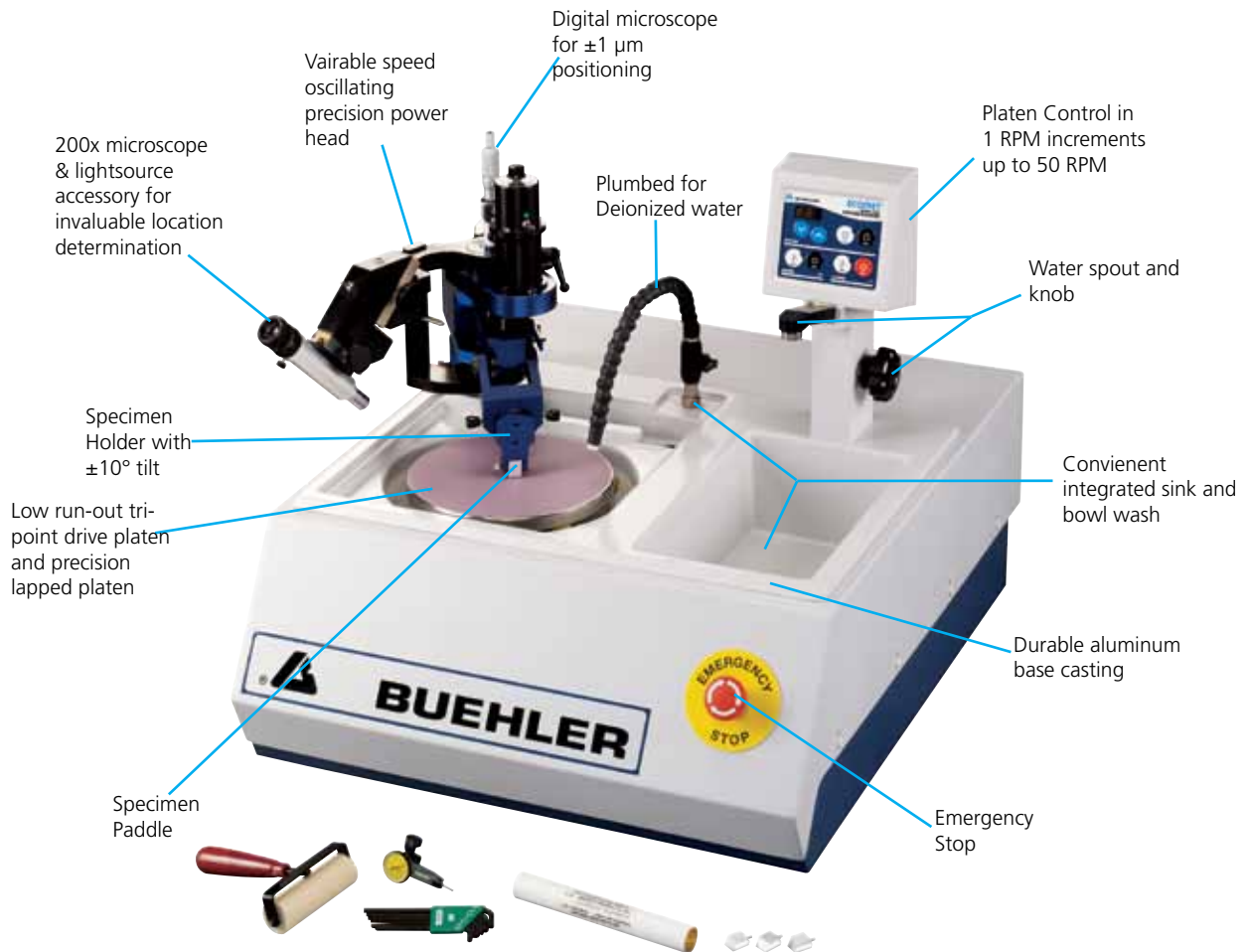
Micro-precise Integrated Circuit  
Cross-Sectioning System



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Excellent Results. Easily Repeatable.™

# When Microns Matter



## MPC™ 2000

The MPC™ 2000 Integrated Circuit Cross-Sectioning System is a bench top grinder-polisher designed to accurately remove material from microelectronic devices and micro-components in the Z direction.

### Features and Benefits

Grind within microns of the target feature then polish to remove the remaining scratches.

This integrated unit enables fewer grinding steps, resulting in greater throughput and operator efficiency.

Oscillating the head over the platen allows for 100% consumable usage. Additionally, the operator can position the head for optimal results. For example, grinding on the left of the platen achieves higher removal rates while keeping the sample in compression. Polishing is performed by moving the head to the right side of the platen. This will reduce over-polishing.

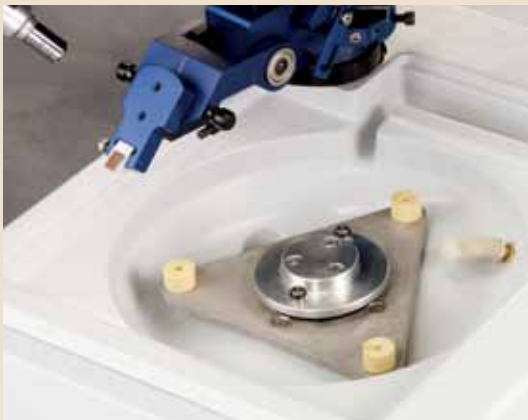
The Tri-point support system allows the platen to run on a water layer reducing vibration.



*Bare die grinding on 1µm Diamond Lapping Film.*



*Bare die sample is easily aligned with the Tilt Cross-hair Alignment Microscope Accessory.*



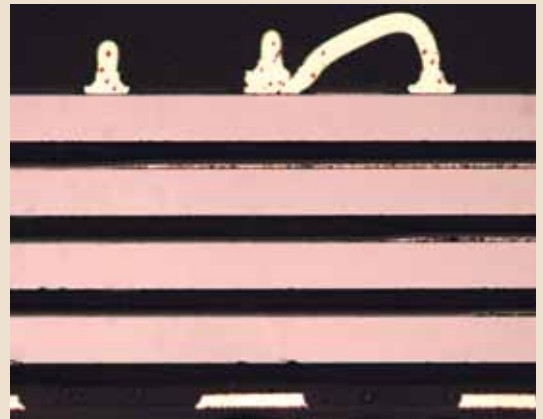
*The precision lapped stainless steel platen (not shown) rests on a tri-point support for increased accuracy. This platen is water lubricated.*



*MPCT™ 2000 control panel features illuminated touchpad switches for power on/off, 1-50 rpm platen speed, water on/off and platen on/off.*



*Remote optional micrometer digital display accessory.*



*Cross-section of a 4GB SD Drive ~ 100x.*

## Specifications:

**Voltage, Frequency & phase:**  
84-264V, 50/60Hz, 1 phase

**Motor Power:**  
1 Hp (746 Watts)

**Platen Speed:**  
1-50 rpm in 1 rpm increments

**Head Oscillation:**  
22 cycles/minute

**Machine Dimensions:**  
22.5 W x 28.2 D x 22.5 H [in.]  
57.2 W x 71.5 D x 57.2 H [cm]

**Machine Weight:**  
200 lbs [91kg]

## Ordering Information

49-3100 MPC™ 2000 Integrated Circuit Cross-Sectioning System includes the MPC™ 2000 Power Head, digital micrometer, oscillating motor mounting post with adjustable floating mount slow speed EcoMet® Grinder-Polisher plumbed for deionized water, dial indicator and mounting jig, 8in [203mm] precision lapped stainless steel platen, 4 SEM cross-sectioning paddles and a variety of convenient tools and consumables. CE marked.

### Accessories:

- 60-5152 Tilt Alignment Microscope Assembly (optional)
- 60-5153 Remote Digital Micrometer Display (optional)
- 40-4064 Precision lapped stainless steel platen (1 is included with machine)

### Consumables:

#### UltraPrep™ Diamond Lapping Film, 8in [203mm], Type A, Plain Backed

Micron Size	Color	Catalog Number
30µm	Green	15-6831
15µm	Orange/Brown	15-6816
9µm	Blue	15-6810
6µm	Brown	15-6807
3µm	Pink	15-6804
1µm	Lavendar	15-6802
0.5µm	White	15-6796
0.1µm	Light Gray	15-6792

#### 8in [203mm] Premium Polishing Cloths

Cloth	Catalog Number
TriDent™	40-7518
TexMet® C	40-1108
ChemoMet®	40-7918

#### MetaDi® II Diamond Paste

Micron Size	Size	Catalog Number
1µm	5 grams	40-6244
1µm	20 grams	40-6243
3µm	5 grams	40-6247
3µm	20 grams	40-6246

#### Final Polish

Suspension	Size	Catalog Number
MasterPrep® Alumina Polishing Suspension, for Gold, Silver, Solder, Copper	32 oz. [0.95ℓ]	40-6377-032
MasterMet® Colloidal Silica Suspension	64 oz. [1.9ℓ]	40-6370-064

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.



**BUEHLER®**, a division of Illinois Tool Works Inc.  
– Worldwide Headquarters  
41 Waukegan Road  
Lake Bluff, Illinois 60044-1699 USA  
Tel: (847) 295-6500 • Fax: (847) 295-7979  
Sales: 1-800-BUEHLER (1-800-283-4537)  
www.buehler.com  
Email: info@buehler.com

#### BUEHLER GmbH - European and MESA Headquarters

In der Steele 2 • 40599 Düsseldorf  
Telefon: (49) 211 974100 • Telefax: (49) 211 9741079  
www.buehler-met.de  
Email: info@buehler-met.de

#### BUEHLER FRANCE

Téléphone: 0800 89 73 71  
Télécopie: 0800 88 05 27  
www.buehler.fr  
Email: info@buehler.fr

#### BUEHLER UNITED KINGDOM

Telephone: 0800 707 6273  
Fax: 0800 707 6274  
www.buehler.co.uk  
Email: sales@buehler.co.uk

#### BUEHLER CANADA

10 Carlow Court, Unit #2  
Whitby, Ontario L1N 9T7  
Telephone: (905) 430-4684  
Fax: (905) 430-4647  
Sales Telephone: 1-800-268-3593  
Email: info@buehler.ca

#### BUEHLER, ASIA-PACIFIC

5/F Vogue Centre  
696 Castle Peak Road  
Lai Chi Kok, Kowloon  
Hong Kong, SAR, China  
Telephone: (852) 2307 0909  
Fax: (852) 2307 0233