

Solving Advanced Technology Challenges with Innovative Materials

As semiconductor nodes shrink to 10 nm and below, improvements in materials and process integration are required. In order to deliver industry-leading innovation, Entegris uses a holistic approach in the development of slurries, formulated chemistries, CMP pad conditioners, and brushes.

YIELD ENHANCEMENT AND PROCESS STABILITY ENABLING TECHNOLOGIES

WET CHEMISTRIES



#1 PCMP chemistry supplier

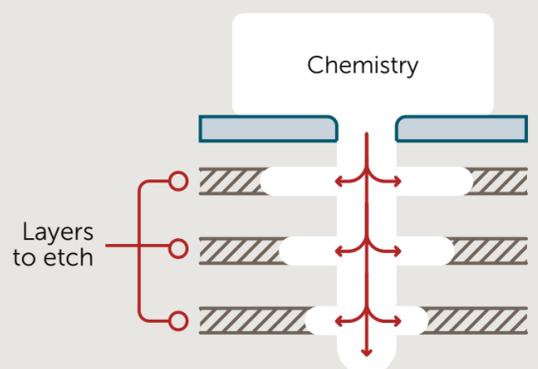
#1 leader of slurries for polishing ultra-hard surface materials

>16M gallons of PCMP chemistries shipped over the last 20 years

>10M gallons of PERR chemistries delivered across the world

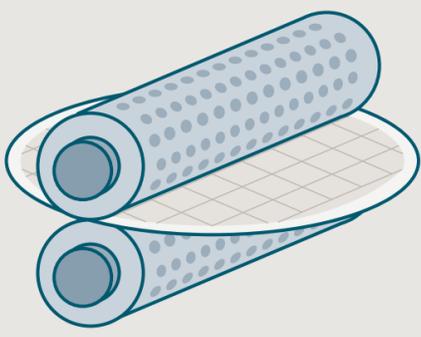
>250M wafer layers processed each year using our cleans

ETCH CHEMISTRIES



Preferred selective etch solutions provider for 3D NAND

CMP BRUSHES

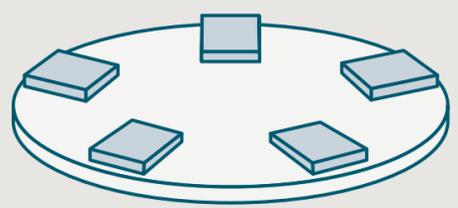


2.5x longer brush life

80% trace metal reduction

Surface Modified for charge repulsion

CMP DISKS

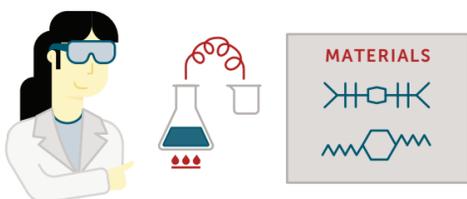


>2.5x pad life increase

>100% scratch reduction

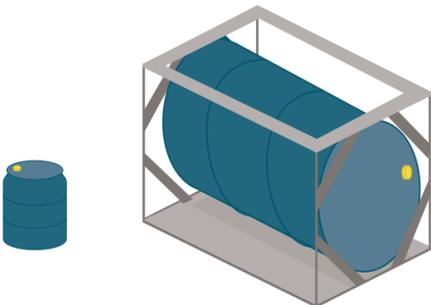
Enhanced process stability

THE PROCESS OF INNOVATION AND LEADING-EDGE SCIENCE



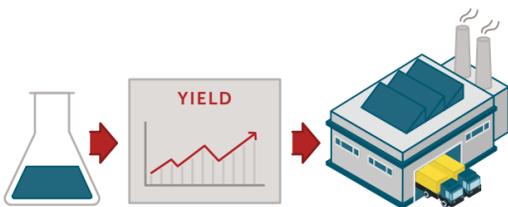
Research and Development

We collaborate closely with IDMs and OEMs to deliver specific, tailored solutions leveraging in-house analytics, component synthesis, purification, and 300 mm wafer processing capabilities.



Delivery

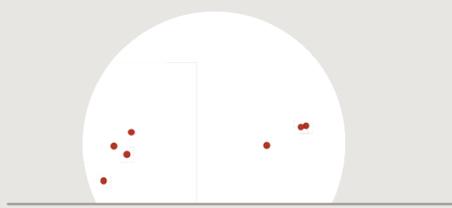
We supply products in our world-class, high-purity packages with customized filtration solutions that provide optimal performance and improve total cost of ownership.



Scale Up

We follow established processes to rapidly scale up from R&D to HVM that use precise DOE methodology and SPC analytics to meet customer specifications.

GLOBAL INFRASTRUCTURE



5 manufacturing facilities
4 technology centers
} strategic locations near customer sites



>20 global technical experts skilled with extensive integration and applications knowledge



>500 years of cumulative global chemistry and materials expertise solving the most challenging integration issues to enable high yield manufacturing

Learn More

www.entegris.com/spi-innovation