2023 TECHCET
CRITICAL MATERIALS REPORT™

CMP ANCILLARIES: PAD CONDITIONERS, PVA BRUSHES, SLURRY FILTERS & RETAINING RINGS MARKETS

Prepared By:
Karey Holland Ph.D.. Senior Analyst

Reviewed By:

TECHCET CA LLC
11622 El Camino Real #100
San Diego CA 92130
www.TECHCET.com
info@TECHCET.com

RESEARCH METHODOLOGY

TECHCET employs subject matter experts having first-hand experience within the industries which they analyze. Most of TECHCET's analysts have over 25 years of direct and relevant experience in their field. Our analysts survey the commercial and technical staff of IC manufacturers and their suppliers and conduct extensive research of literature and commerce statistics to ascertain the current and future market environment and global supply risks. Combining this data with TECHCET's proprietary quantitative wafer forecast results in a viable long-term market forecast for a variety of process materials.

READER'S NOTE

This report represents the interpretation and analysis of information generally available to the public or released by responsible agencies or individuals. Data was obtained from sources considered reliable. However accuracy or completeness is not guaranteed.

ANALYST BIOGRAPHY

Karey Holland, Ph.D. – Chief Strategist and Co-Founder of TECHCET—has specialized in advanced semiconductor transistor fabrication, including metrology, CMP, ALD & CVD, photolithography, and interconnect technologies for over 30 years. She was CTO of start-up NexPlanar, strategic marketing senior manager at FEI, on the Board of Directors at Nova Measuring Instruments, VP of technology at CMP pad supplier Thomas West, and CTO and VP of process technology at CMP OEM IPEC/SpeedFam-IPEC. Previously, she was manager of manufacturing planning for Motorola's Microprocessor and Memory Technology Group. Her career began in process engineering at IBM where she managed DUV lithography technology development, and worked on interconnect integration for 4 and 16 Mb DRAMs, which were the first chips in the world to use tungsten plugs and CMP for all interconnect dielectrics. She holds a Ph.D. in analytical chemistry from Pennsylvania State University, a M.S. in analytical chemistry from Purdue University, and a B.A. in chemistry from Albion College.

Karey Holland, Ph.D.
Chief Strategist and
Co-Founder of TECHCET

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Scope and Methodology

2.1 SCOPE

- This report looks at the market drivers for pad conditioners, retaining rings, slurry filters, and PVA brushes and forecasts by application market shares suppliers. The report contains data and analysis from TECHCET's data base and Sr. Analyst experience as well as that developed from primary and secondary market research. For more information on TECHCET Critical materials Reports™ please go to https://TECHCET.com
- CMP processes are critical to semiconductor manufacturing as process integration requires the fabrication of thin and uniformly flat layers to build up device structures across the semiconductor wafers. The number of CMP process steps continue to increase with each generation of new device technology.
- New device technology is characterized by more layers new materials tighter process control requirements and new techniques for advanced packaging. These manufacturing challenges require new and continued optimization for CMP processes.