Cleaning, Coating, and Analytical Services

For Parts that Require Ultra-High-Purity and Extended Longevity

UCT SERVICES DIVISION

The UCT Services Division is a global leader in ultra-high-purity (UHP) parts cleaning, performance coatings, and analytical verification, delivering innovative solutions that enhance process performance and reduce total cost of ownership. With one of the largest global footprints for companies supporting industries that require ultra-high-purity cleaning and coating, UCT offers:

12
Advanced Technology Cleaning Centers located in Asia, North America, Europe, and the Middle East (cleaning/coating/analytical verification)

6
Analytical testing laboratories, part of UCT's ChemTrace suite of solutions

30+
Years of experience developing customized cleaning, coating, and analytical verification solutions for some of the largest semiconductor and other manufacturers in the world

CORE CLEANING AND ANALYTICAL CAPABILITIES

UCT offers the following core cleaning and analytical capabilities that are optimized to remove deposition and contaminants with little to no impact to the part surface, including verification of adherence to customer ultra-high-purity specifications.

UCT offers the following services and capabilities:

- Class 100 clean rooms for final stage cleaning and packaging
- Chemical strip/clean and passivation of parts/components (can customize formulations for customers)
- Ultra-high-pressure DI water jet cleaning (ECP) to remove contaminants (environmentally friendly cleaning method)
- CO_2 snow cleaning process (non-destructive, non-abrasive, residue-free)
- Automated bead blast (utilizing various sizes of media to achieve desired finish)
- High-temperature and vacuum ovens in clean room (to remove any residual liquid from parts)
- Cleaning process development and optimization based upon substrate type (aluminum, steel, quartz, etc.), as well as deposition and coating type
- Cleaning, coating, and appropriate segregation of parts with copper deposition
- Robust metrology capability (CMM, SEM/EDS, Profilometry, ICPMS, TOC, Ion Chromatography, RGA, LPC, DPC, CPC, Optical)

Global Footprint. Local Technology Solutions.
Copy-Exact Protocol. Business Continuity Planning.

CORE COATING CAPABILITIES

UCT designs and applies coatings tailored to customer requirements, balancing performance and cost through a broad portfolio of advanced materials, deposition methods, and process expertise.

UCT offers Suspension Plasma Spray (SPS) coatings, Atmospheric Plasma Spray (APS) coatings, Twin Wire Arc Spray (TWAS) coatings, and Atomic Layer Deposition (ALD) coatings. These coatings are applied using computer-controlled robotic systems and monitored via SPC (statistical process control) to ensure repeatability and consistent specification performance.

COATING SOLUTIONS

C-Coat™ double-layer twin wire arc spray (TWAS) coating, which creates a robust barrier on parts, specifically engineered to extend part life

Atmospheric Plasma Spray (APS) YAG, Yttrium Oxyfluoride (YOF), Yttrium Oxide (Y_2O_3) and Suspension Plasma Spray (SPS) Y_2O_3 coatings (each is designed to withstand aggressive environments and maintain part performance)

Parts coated by UCT for global customers are proven in high-volume manufacturing. The durability of UCT coatings results in fewer part replacements and lower overall costs for our customers.

WHY PARTNER WITH UCT?

The UCT Services Division offers cleaning, coating, and analytical services often at a single location, leading to lower cost, faster lead time, and better operational control. UCT's technology leadership and robust R&D and engineering capabilities deliver innovative, optimized solutions to **achieve high-purity cleaning and coating specifications** at a **lower cost through increased part longevity and performance.**

For more information about UCT's latest technologies and customer success stories, please contact the UCT Services team at servicesinforequest@uct.com or visit our website at www.uct.com.

UCT SERVICES LOCATIONS

United States

- Hillsboro, OR
- Phoenix, AZ
- Carrollton, TX
- Fremont, CA
- Scarborough, ME
- Colorado Springs, CO

International

- Tainan, Taiwan
- Singapore
- Pyeongtek, Republic of Korea
- Cavan, Ireland
- Glenrothes, Scotland
- Qiryat Gat, Israel