

advanced
coatingscleaning and
refurbishmentoriginal parts
manufacturingquality
assurance

The NxEdge Advantage

The NxEdge integrated capability advantage means the convenience and assurance of one-point contact. With in-house machining, anodizing, cleaning, and refurbishment, we deliver high product quality and rapid turn-around time at a lower cost.

Problem Statement

- OEM design requires off-line chamber cleaning after only 7,500 wafers, often preceded by severe particulate excursions before such service. This design leads to surface wear that further exacerbates the cleaning frequency and particulate problem.
- The OEM product improvement kit has a high price point. Other non-OEM improvements, such as ceramic replacement parts, also have high price points.

NxEdge Solution

At NxEdge, we have the in-house capability to receive original domes, clean and strip domes, prepare the surface for coating, and to re-coat the surface of the original quartz dome with either yttria (Y_2O_3) or alumina (Al_2O_3) to achieve superior particulate performance at a low price point.

The coated dome has a durable ceramic-textured surface to maximize wafer cleaning by-product adherence and minimize flaking and particle generation. As a result, cleaning frequency is greatly reduced.

We also offer a convenient dome exchange program to maximize re-coating efficiency.

Refurbishment Capabilities

NxEdge offers one-stop cleaning and refurbishment service solutions to extend component life and improve equipment performance.

- Total refurbishment of power source drive blocks for vacuum sputtering chambers
- Coating and parts refurbishment of major brand OEM etch, poly and other chambers
- Total re-coating and re-coiling of Novellus ceramic Speed™ domes
- Internal integrated remote plasma source cleaning without disassembly
- Online parts data tracking system for all orders

Quality Assurance & Engineering

NxEdge is committed to meeting the high quality standards that our customers demand. Our coating and manufacturing operations are ISO-certified. We continuously work to refine processes and invest in our workforce to maintain excellence in quality management and operational efficiency.

At NxEdge, we are equally committed to applying our engineering resources toward our customers' evolving needs. Novel coatings, specialized hardware engineering, process design and optimization, and materials science R&D are all part of our ongoing efforts to provide flexible solutions.

AMAT Endura Pre-Clean II Quartz Dome

