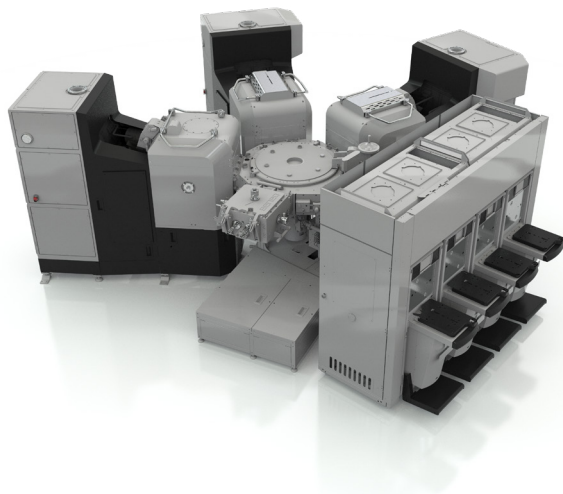




BENEQ Transform® 300

Beneq Transform® 300 is the only 300 mm ALD cluster tool combining thermal ALD (batch) and plasma ALD (single wafer) technologies to provide a highly versatile solution to IDMs and foundries. Transform® 300 is dedicated to a broad range of advanced thin-film applications from gate dielectric to anti-reflection coating, final passivation or encapsulation and beyond.



Application areas for high-volume 300 mm manufacturing:

- CIS
- Power
- Micro-OLED/LED
- Advanced Packaging
- Other MtM devices

VERSATILITY: The only 300mm ALD cluster tool offering both Thermal ALD (batch) and Plasma ALD (single wafer) technologies for maximum flexibility and capability

CONFIGURABILITY: Platform designed to meet a wide range of capacity and applications requirements including gate dielectric in high aspect ratio trenches, surface passivation, and encapsulation, as well as Chip-Scale-Packaging of singulated dies with wafer-on-tape applications.

PRODUCTIVITY: Best in class serviceability, shortest MTTCR
Highest throughput for thermal batch, unique pre-heating module

FAB-READY: Equipment is cleanroom compatible, has SECS/GEM communication capabilities and is compliant with highest SEMI S2 and S8 standards.



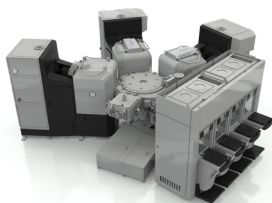


Transform® 300 Specifications

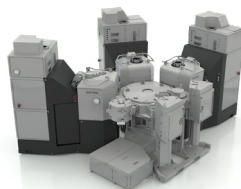
MAXIMUM CONFIGURATION	3 processing modules & 1 preheater
DIMENSIONS	4400 x 4800 x 2250 mm
HOST INTEGRATION	SECS/GEM
BATCH SIZE	Up to 25 x 300 mm wafers
SINGLE WAFER SUBSTRATES	300 mm with 200 mm bridge capability
SAFETY STANDARDS	SEMI S2 and S8
ALD PROCESSES	Al ₂ O ₃ , SiO ₂ , HfO ₂ , Ta ₂ O ₅ , TiO ₂ , AlN, TiN, ZnO, Si ₃ N ₄
PROCESSING TEMPERATURE	420 °C (batch) 350 C (plasma)
THROUGHPUT: AL₂O₃-300°C-50NM	12 wafers/hour – 1 batch PM

BENEQ Semiconductor Equipment

Beneq is dedicated to providing the most flexible and high-end ALD cluster tools to address the high manufacturing demand of the semiconductor industry across all wafer sizes.



Transform® 300
The only 300 mm cluster ALD tool to combine thermal batch and plasma processing.



Transform®
The most versatile cluster ALD tool for MtM device fabrication for 200 mm wafers and below.



Prodigy™
The simple and elegant ALD solution for compound semiconductor and MEMS processing.

