

Custom Glass Fabrication Capabilities Technical Reference Document 12/11

Cleaning

Abrisa Technologies' Santa Paula manufacturing facility has multiple high volume wash stations to remove dust, fingerprints, and other contamination. Wash stations use high pressure heated water and soft nylon brushes to clean surfaces. Glass exits completely dry and ready for inspection. Cleanliness levels exceed expectations of industrial or commercial customers. Cleanroom, medical, or other high-end applications must be evaluated on a case by case basis.

(Flat Glass Washers, Ultrasonic Tanks, Automated Dryers)

Cosmetic Requirements:

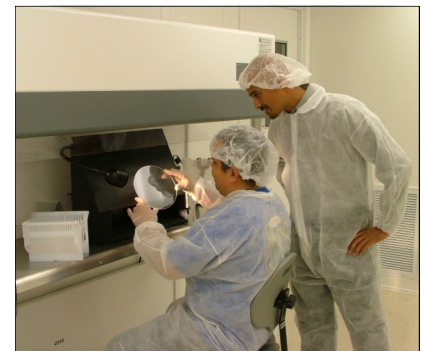
Typical	120/80
Enhanced	60/40

Substrate Thickness:

Typical	Up to 50.8 mm [2"] thick
Enhanced	Outside of range - "hand wash"

Substrate Size:

Typical Minimum	25.4 mm x 25.4 mm [1" x 1"]
Typical Maximum	1,168 mm x 1,168 mm [46" x 46"]
Enhanced	Outside of range - "hand wash"



Clean Rooms

Each Abrisa Technologies division's Quality Management System has based its foundation on the International Quality System Standard ISO 9001:2008. Abrisa Technologies strives for excellence through various SPC (statistical process controls) methods such as control charts, continuous improvement and design of experiments to name a few as well as the use of 5S's methodologies.



Certified to ISO 14644 - 1505 (at 5 microns)

Class 100 — 1,000

Size: (in. sq. ft.)

- Total	700
- Transfer Room	100
- Gown Room	100
- Main Clean Room	500

Class 10,000 — 100,000

Soft wall clean rooms for dust & particle control (screen print)

- 500 sq. ft
- 96 sq. ft.

