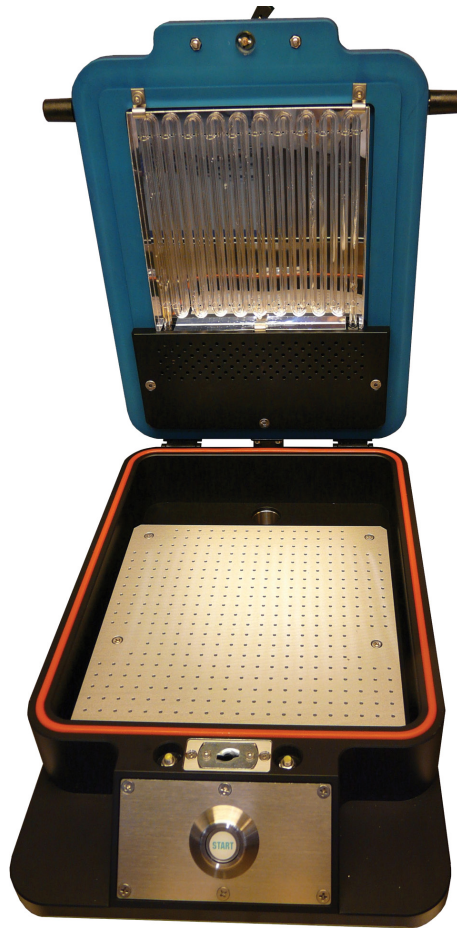


MB-UV-O₃-Cleaner

MANUAL SURFACE CLEANING AND ACTIVATION



- Main control with human machine interface (HMI)
- Programmable process parameters
- Hermetically sealed process chamber
- High intensity UV grid lamp with integrated reflector
- Safety interlock
- Available as fully glovebox integrated and standalone unit

MB-UV-O₃-Cleaner

MANUAL SURFACE CLEANING AND ACTIVATION

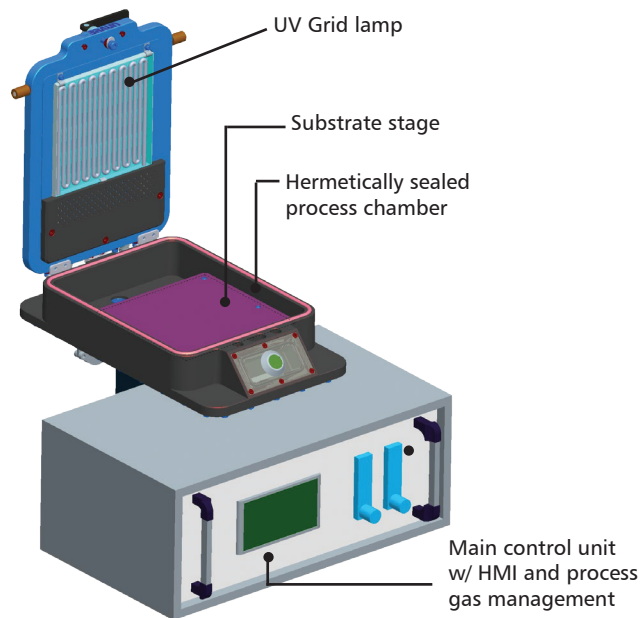
DESCRIPTION

The MBRAUN MB-UV-O₃Cleaner is an integrated system for UV ozone cleaning of semiconductor and optical surfaces. This process provides a clean, hydrocarbon-free optical surface with significantly improved thin film and UV resin adhesion characteristics.

Applying ozone and UV light simultaneously, results in a highly effective removal of residual organic and carbon contamination down to contact angles of 5° (depending on initial cleaning and substrate material).

Using ozone and UV light resistant sealing materials and components as well as isolation valves on the process chamber gas inlet and the exhaust, the hermetically sealed chamber is completely isolated either from the inert glovebox atmosphere (integrated version) or the operator itself (standalone version).

The control unit allows setting the process (irradiation) time from 1-999.9 minutes whilst an integrated flow meter is used to adjust the process gas flow during the cleaning process. Once the pre-set irradiation time has ended, the oxygen flow is automatically shut off and the process chamber is purged with nitrogen until all process gases have been removed. Integrated safety interlocks are provided to shut off the UV radiation if the door is opened during the process or the exhaust is interrupted. The system itself is available as a bench top (stand alone) version as well as a fully glovebox integrated tool addressing the needs of various industrial applications for optical clean surfaces.



TECHNICAL DATA

Dimensions	250 x 300 x 150 mm (outside dimensions)
Substrate size	Up to 6" x 6"
Lamp type	Low pressure mercury arc lamp
Wavelength	Main peaks at 184.9 nm and 253.7 nm
Timer function	1-999.9 minutes
Utilities	CDA at 0.5 – 2.0 bar N2 at 0.5 – 2.0 bar 115 V, 60 Hz, 3 A (6 A fused inside) 230 V, 50 Hz, 3 A (6 A fused inside)
Control	Siemens PLC Controller

Technical note: Dependent upon operating conditions.