







## **CleanStep** Parts

The CleanStep Parts is designed for etching and cleaning of PECVD and diffusion boats such as graphite boats, quartz part, and silicon carbide boats etc.



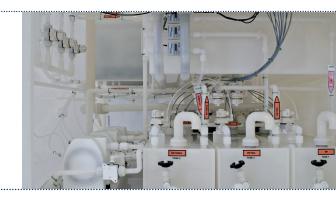
## **BENEFITS**

- Safe operation by closed process chamber, load and unload only after complete rinse of process chamber
- > Fail-safe door locking system
- > Process chamber protected against overfilling
- > Exhaust monitoring
- Conductivity probe for door interlock (Quartz boat cleaner only)
- > Easy and safe operation by high quality user interface (Touch screen)
- Minimized cleaning costs per boat by low consumption of media, 2–3 times shorter compared to immersion process
- > Reduced operation times
- > Consumption of chemicals approx. 10 times lower compared to immersion process
- > Very uniform cleaning, DI water consumption is approx. 2 times lower compared to immersion process
- High availability and low maintenance requirements by modular design and long life components
- > Very small footprint

## **APPLICATIONS**

The CleanStep Parts is designed for etching and cleaning of PECVD and diffusion boats such as graphite boats, quartz part, and silicon carbide boats etc.

Example for a standard design is cleaning of 2 graphite boats or 4 quartz boats. A strong argument for this spraying process instead of an immersion process is the extremely fast process times also the chemical consumption is a valuable reason to take the decisions for the spray process.



TECHNICAL DATA	CleanStep Parts
Electic supply	230 / 400 VAC 3Ph / N / PE 50 Hz / 60 Hz
Power	1,5 kVA
Control voltage	24 VDC
Control unit	B&R PLC
Camber size (LxDxH)	1450 x 420 x 650 mm
Compressed air (CDA)	6 bar
Working height	830 mm
Weight of tool	720 kg
Weight of tool with wooden create	820 kg
Appr. dimensions (LxDxH)	1700 x 1400 x 2100 mm



## **Options**

- > Waste tank lifting device
- > Housing structure of the system »FM approved material«
- > HF gas detection toxic detector
- > Centrotherm graphite boat basket set for 19 to 21 slot »disassembled boat«
- > Centrotherm graphite boat carrier set for 23 slot »disassembled boat«
- > Quartz boat holder for quartz part cleaning
- > Drip pan drain connection valve
- > Resistivity measurement
- > Oven for drying carriers manuel load
- > Preparation tank for 30 liter HNO3 / HF/ DI-H2O
- > Separate tool media supply for pre used HF
- > NOx gas detection toxic detector
- > ACI carrier holder for wafer back etching
- > N2 purge