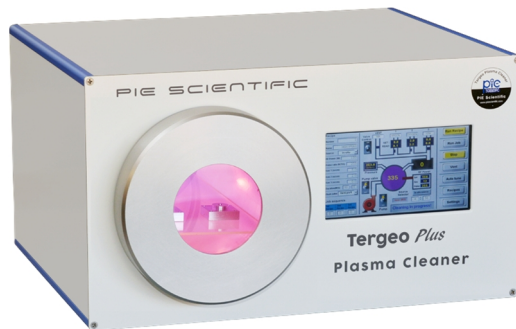


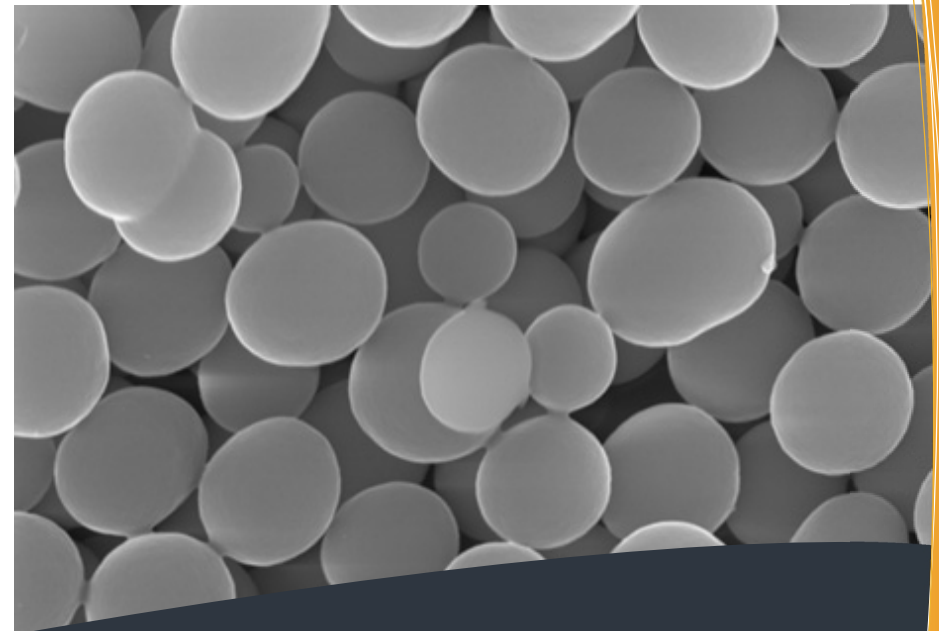


PIE Scientific

LLC



Made in the Silicon Valley, California, U.S.A.



## Tergeo plasma cleaner

3209 Whipple Road  
Union City, CA, 94587  
U.S.A.  
+1 650.204.0875 ph  
+1 650.240.8671 fax  
sales@piescientific.com  
www.piescientific.com

## Tergeo Basic



### LOW COST BASIC PLASMA CLEANER

Compact tabletop plasma cleaner designed for SEM sample cleaning, wafer and IC bonding pad cleaning, ashing photoresist, activating functional groups on polymer, metal and ceramic, achieving hydrophilic wettability, improving bonding strength and printability, promoting biocompatibility on medical devices.

Chamber: high purity quartz; ID:110mm; OD: 120mm; Depth: 280mm.  
Dimension: W450mm, H250mm, D430mm, Weight: 42~50 lbs, 20~23kg  
RF power: 13.56MHz, 75 or 150Watt, auto impedance tuning  
AC input: Universal (110~230V, 50/60Hz)  
Pump: Ultimate pressure < 250mTorr (prefer <50mTorr). Speed > 2cfm.

## Tergeo

Basic low  
cost version

## Tergeo-Plus



### LARGE CHAMBER PLASMA CLEANER

Tergeo-plus is the larger version of the Tergeo plasma cleaner designed for samples up to 150mm wide. Besides applications in research laboratories, it can also be used for low volume production.

Chamber: high purity quartz; ID:160mm; OD: 170mm; Depth: 280mm.  
Dimension: W500mm, H300mm, D430mm, Weight: 50~58 lbs, 23~26kg  
RF power: 13.56MHz, 75 or 150Watt, auto impedance tuning  
AC input: Universal (110~230V, 50/60Hz)  
Pump: Ultimate pressure preferably <50mTorr. Speed > 4cfm.

## Tergeo-Plus

Larger chamber

## Tergeo-EM



### Plasma cleaner for SEM & TEM sample cleaning

Designed to remove hydrocarbon contamination on SEM & TEM samples. Integrated immersion & downstream plasma cleaning modes can clean wide range of samples from heavily contaminated electron optics apertures to delicate samples like graphene, carbon nanotube, diamond like carbon and TEM samples on holey carbon grid. Quartz sample holder can take standard SEM pin stubs. Can clean two TEM sample holder at the same time. Supports FEI, JEOL, Hitachi and Zeiss TEM systems.

Chamber: high purity quartz; ID:110mm; OD: 120mm; Depth: 280mm.  
Dimension: W450mm, H250mm, D430mm, Weight: 50-60 lbs, 23~27kg.  
RF power: 13.56MHz, 75Watt, auto matching  
AC input: Universal (110~230V, 50/60Hz)  
Pump: Oil free dry scroll pump.

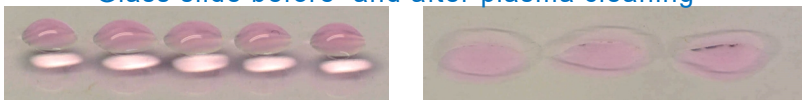
## Tergeo-EM

SEM & TEM  
sample clean

## State-of-the-art plasma technology from PIE Scientific, U.S.A.

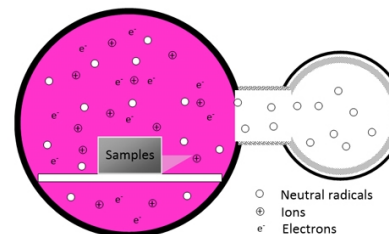
PIE Scientific specializes in developing advanced plasma instruments for SEM/TEM sample cleaning, photoresist etching, plasma enhanced deposition, surface treatment and activation. Our mission is to bring the latest plasma technology developed in semiconductor and nuclear engineering research into affordable plasma instruments for research communities and industrial customers.

Glass slide before and after plasma cleaning

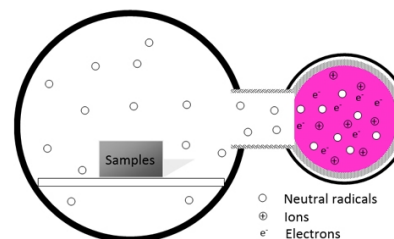


### Features:

- Dual plasma sources in one system. Immersion plasma source for aggressive surface treatment, photoresist etching. Remote plasma source for gentle contamination removal and surface activation on delicate samples.
- Plasma sensor for real time quantitative plasma intensity measurement.
- High purity quartz sample chamber and sample shelf.
- 13.56MHz high frequency rf generator, pulsed operation, automatic impedance matching



High speed aggressive direct / immersion mode plasma clean



Gentle ion-free downstream mode plasma clean



- Intuitive touchscreen user interface with 20-recipe library.
- MFC regulated gas delivery.
- Fully automatic design
- Slow pumping and slow venting for powder samples.

**Affordable**

**High performance**

**Intuitive design**