

REQUIREMENTS & ACCESSORIES

MINIMAL REQUIREMENTS

- Gas-compatible vacuum pump with 23 L/min minimum pump speed and ≤ 200 mTorr ultimate total pressure

OPTIONAL ACCESSORIES

- Quartz Chambers
- Quartz and Pyrex Sample Trays
- PlasmaFlo Gas Flow Mixer
- Vacuum Gauge and Digital Meter

QUARTZ CHAMBERS

PDC-00Q | PDC-32Q

- Recommended for use with reactive and fluorinated gas (e.g. CF₄) and for applications sensitive to trace impurities in Pyrex



SAMPLE TRAYS

QUARTZ: PDC-00T | PDC-32T

PYREX: PDC-00T-P | PDC-32T-P

- Facilitates loading and unloading of small samples for batch processing

OIL-BASED VACUUM PUMPS

PDC-VP/VP-2 | PDC-VPE/VPE-2

- Use hydrocarbon pump oil
- Compatible with air and inert gases (Ar, N₂), but NOT with O₂ gas

OXYGEN SERVICE PUMPS

PDC-OPD/OPD-2 | PDC-OPE/OPE-2 | PDC-OPF/OPF-2

- Required to avoid hazardous combination of O₂ with hydrocarbon oil in oil-based pumps
- Compatible with O₂, air, and inert gases (Ar, N₂)
- Fomblin-based pump (PDC-OPF/OPF-2) uses Fomblin fluid instead of hydrocarbon oil
- Dry oxygen service pumps (PDC-OPD/OPD-2, PDC-OPE/OPE-2) use no oil or fluid
 - No risk of oil contamination into chamber
 - Beneficial even if not using O₂ but require a clean system for plasma processing

All vacuum pumps include necessary accessories (vacuum hose, pump inlet adapter, clamps and seals) to connect plasma cleaner to pump inlet



VACUUM GAUGE & DIGITAL METER

PDC-VCG/VCG-2

- Vacuum gauge and digital meter as a stand-alone accessory
- Digital meter displays pressure range of 1 mTorr to 760 Torr
- Monitoring vacuum pressure is beneficial for process repeatability and consistency

PLASMAFLO

PDC-FMG/FMG-2

- More precise, quantitative control of gas flowrate and monitoring of vacuum pressure to ensure process consistency
- Two gas inputs into flowmeters for gas mixing or independent control of two gases
- Add a second gas source without needing to manually swap gas lines
- Digital meter displays pressure range of 1 mTorr to 760 Torr

