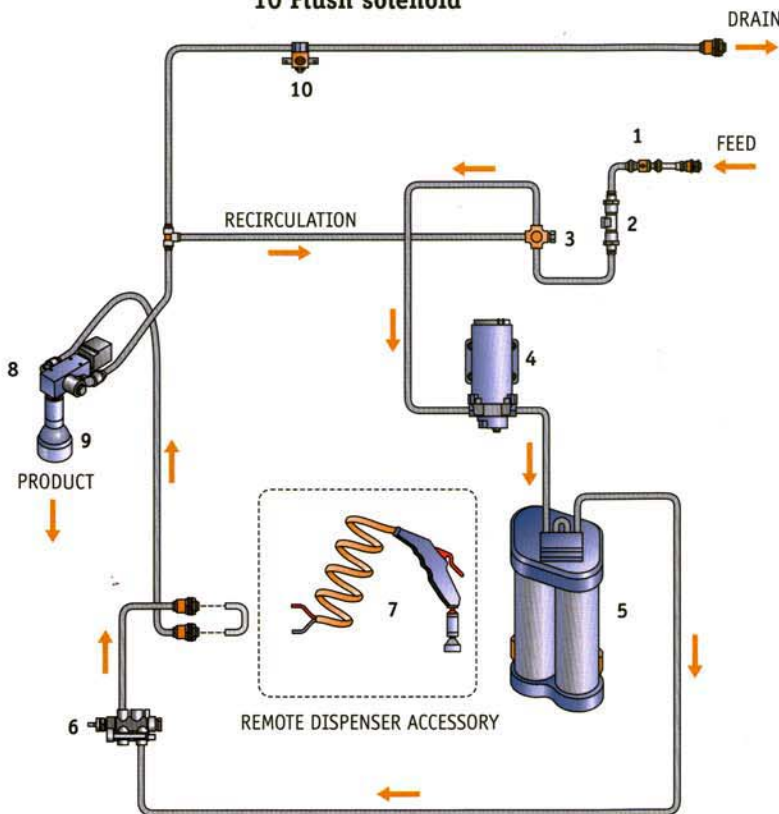


## Diamond Analytical Unit

The perfect system for most general laboratory applications. The Reagent Grade water (Type 1) system meets the strictest requirements for TOC and resistivity.

### The common elements of Diamond ultrapure water systems

- 1 Check valve (back-flow preventer)
- 2 Flow sensor
- 3 Pressure regulator
- 4 Pump
- 5 Purification cartridge pack
- 6 Resistivity cell
- 7 Remote dispenser (optional)
- 8 Dispense manifold
- 9 Final filter
- 10 Flush solenoid



### Purification cartridge pack

At the heart of all DIAMOND systems is the cartridge pack – which is easily installed with one connection. The pack uses two types of activated carbon to adsorb organic compounds, and chlorine, and the highest purity semiconductor-grade ion-exchange resins for removing the last trace of ionic contaminants. Systems fed with deionized water (DI) have their own pack – designed to remove problematic organic and colloidal compounds associated with central DI feed.

### Final filtration

Final filtration is performed with an absolute 0.2µm gamma irradiated filter. The naturally hydrophilic hollow fibers provide high surface area for longer filter life. The fibers are made of cellulose acetate and are encased in a clear polycarbonate housing.

### Other materials of construction

All wetted parts beyond the purification cartridge pack are constructed of low-extractable, corrosion-resistant materials, including the tubing and fittings, which are made of fluoropolymer. The cell well and cartridge pack are constructed of virgin polypropylene, and the cell is constructed of corrosion-resistant titanium.