

The Gradient Fractionator



The era of High Resolution Gradient Analysis has finally arrived. Introducing BioComp's incomparable Piston Gradient Fractionator, the world's highest resolution fractionator.

Developed by a scientist who routinely does 6-30 gradient experiments, this device has more performance-enhancing features than all competing designs combined. You can recover slices from the gradient as small as 10 microns thick (300 micron fractions are more typical), visualize bands of particles as small as ribosomes with the naked eye, fractionate manually to recover visible bands or automatically to produce perfect gradient profiles, and rinse and blow dry your sample tubing after each fraction, eliminating cross-contamination between fractions.

The most important technical advance is our patented "Trumpet Tip"™, an inverted tapered piston cone that gradually compresses bands of particles from horizontal discs into thin vertical columns. This advance greatly reduces the resolution-killing laminar capillary flow that tends to pull sample from a teardrop shaped area directly in front of the needle or cone used by our competitors.

Another significant improvement is the readout of distance (0.00 mm) from the meniscus down, so you know exactly where you are sampling in the tube.

The results are nothing short of spectacular. In a recent paper, Jardine & Coombs (1998) resolved 4 distinct peaks of phage T4 capsids between 300S - 350S where previous reports fractionated by needle puncture had shown only one broad peak. One of the new particles was a new intermediate in head assembly that demonstrated that capsid expansion followed the beginning of DNA packaging.

The combination of the Gradient Master and the Piston Gradient Fractionator offer a quantum leap in reproducibility and resolution. Call today for details.

- Visible light scattering band visualization system for particles as small as viruses and ribosomes.
- >99% accuracy and reproducibility in piston movement with readout to 0.01 mm.
- Programmable fractionation and rinsing.
- Rinse and air pumps to clean sample tubing after each fraction.
- Patented Trumpet Tip™ piston gradually compresses thin bands of particles into vertical columns prior to capture.
- UV scan capability with optional Pharmacia UVM II attachment.
- Internet Programmability:

The software installed in an instrument you purchase today is upgradable by simply downloading a new version into the fractionator directly from your computer using a supplied serial cable.

- Interchangeable Trumpet Tips and Tube Holders:

We currently stock sets of interchangeable piston tips and tube holders for five sizes of swinging bucket rotor tubes: Beckman sizes SW28 [25 mm], SW28.1 [16 mm], SW40 [14 mm], SW41 [14 mm], SW55 [13 mm], SW65 [11 mm] and TLS-55 [11 mm].

- Accessory kit Includes the following:

Mac and PC serial cables

60 cc Syringe Rinse Reservoir

Front Panel Keypad/LCD

Display/Computer

4 adjustable feet

Fraction Collector Advance Cable

Set of 6 Allen Wrenches

1 m of spare tubing

1 spare check valve assembly

2 spare Check Valve Carbide Balls (1/16 in dia.), 002 silicone Orings and 003 silicone Orings

Water level syringe w/ stop for filling tube holders