

Low Volume Flocells

The Low Volume Flocell (LVF) is available for use with either the Q500 or Q700 system. The Flocell (#4650) is equipped with 1/4" (6 mm) hose barb fittings and does not include a probe. A 1/2" (12 mm) replaceable tip probe (#4643) or 1/2" (13 mm) solid probe (#4644) must be ordered separately. These probes feature a flange for proper mounting with the LVF. The replaceable tip probe is for use with aqueous samples only. Solid tip probes can be used with all types of solvents or low surface tension liquids.

Sonication generates heat so a Water Jacket (#4655) is available if the process requires cooling. The water jacket slides over the LVF and is used to recirculate cold water around the exterior of the flocell body. The water jacket includes 1/4" (6 mm) hose barb fittings.

The LVF is recommended for processing sample volumes above 1L. Routine applications include cell lysis, mixing, solubilizing and deagglomerating/dispersing nanoparticles.



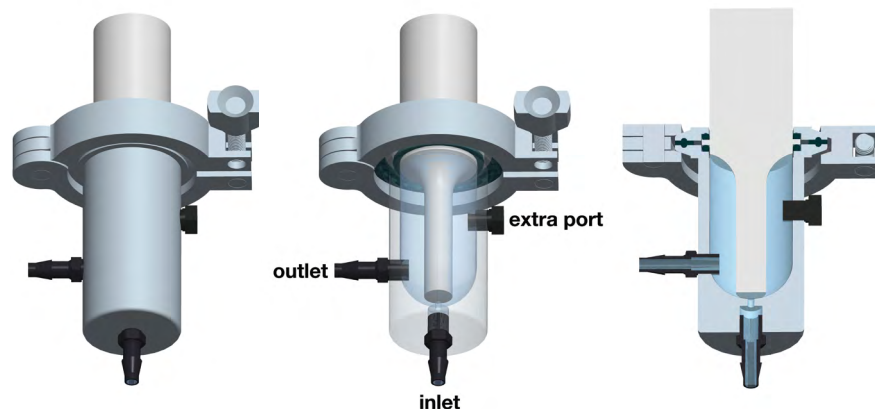
LVF Assembly with Probe



Flocell Assembly with Water Jacket



Probe



Part #	Description
4650	Low Volume Flocell <ul style="list-style-type: none"> • Material: 316L Stainless Steel • Operating pressure: 40-100 psi max. • Internal volume: 65ml • Maximum flow rate: 0.5L/min • Hose barb fittings for 1/4" (6 mm) ID tubing • Dimensions (H x D): 9.1 x 3.5 in. 228 x 89 mm) — dimensions include probe and clamp
4643	1/2" (13 mm) Replaceable tip probe with flange for #4650
4644	1/2" (13 mm) Solid tip probe with flange for #4650
4655	Water Jacket for #4650

How Flocells Work

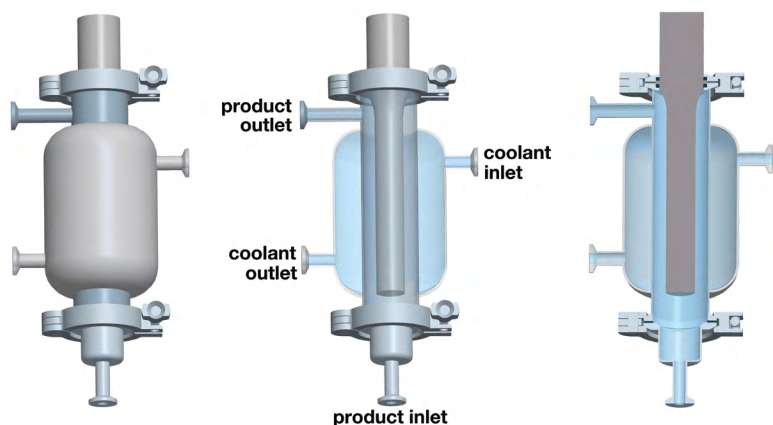
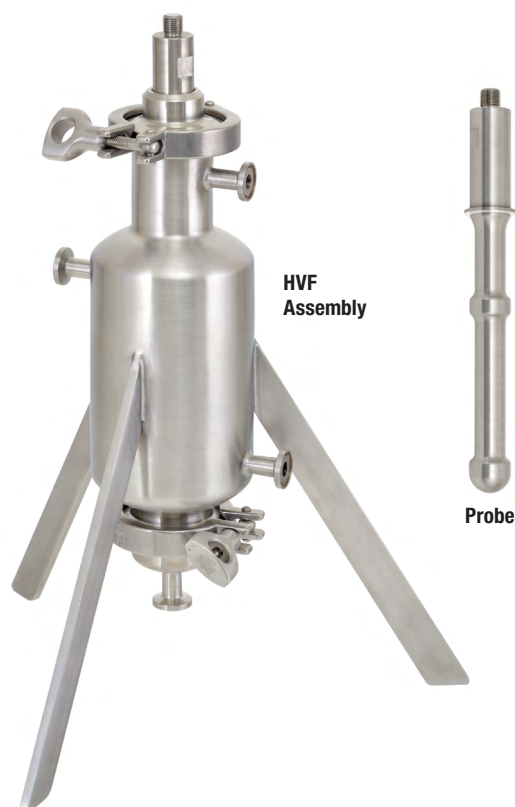
Flocells offer inline or continuous, large volume, batch sample processing. Flocells are ideal for mixing and dispersing applications. Batch volumes can be re-circulated through the system multiple times if increased sonication time is needed. Multiple units can be used in series to reduce processing time and/or maintain an even higher flow rate.

The liquid sample is pumped into the Flocell through the inlet at the bottom of the unit. As the sample passes through the cavitation field, it is processed. The processed liquid exits the unit through an outlet port. The degree of processing can be controlled by adjusting the intensity of sonication as well as flow rate.

High Volume Flocells

The High Volume Flocell (HVF) is available for use with either the Q700 or Q1375 System. The Flocell (#4549) is equipped with ½" (13 mm) sanitary connections, a water jacket and 1" (25 mm) Diameter probe (#4625). The water jacket can be used to recirculate cold water around the exterior of the flocell body. This helps reduce the heat generated during ultrasonic processing.

The HVF is recommended for processing batch volumes of 5L or more. Routine applications include cell lysis, mixing, solubilizing and deagglomerating/dispersing nanoparticles.



Part #	Description
4549	High Volume Flocell <ul style="list-style-type: none"> • Dimensions (H x D): 17 x 16 in. (431 x 406 mm) • Includes #4625 Probe • Material: 316L Stainless Steel • Operating pressure: up to 100psi • ½" (13 mm) Sanitary connections • Internal volume: 400ml • Maximum flow rate: 20L/min • Water jacketed for cooling
4625	1" (25 mm) Diameter Flocell Probe