

## Ultrafit® Welded CALIBRATED TEST BAG®

Absolute Rated, Graded-Density, Composite Layer Design  
 with IP Series- Integrated Polymeric Support™

The **Ultrafit** Welded *Calibrated Test Bag* is an economical and rapid method for evaluating the size and distribution of solids present in a liquid. Six unique layers of absolute rated, melt-blown microfiber collect larger solids in the upstream section, while finer particles are captured in the downstream layers that follow. Observation of visible loading in one or more of the calibrated layers can assist users in determining the required micron rating of **Ultrafit** Welded Liquid Filter Bags to meet their filtration needs. The *Calibrated Test Bag* may also be used to verify material specifications of incoming bulk liquid.

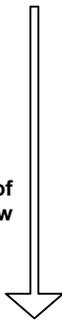
Accurate selection of a filter bag, using information relative to the size and distribution of particles in a liquid, can save money by reducing disposable media costs and minimizing downtime. A filter bag, with a micron rating that is too fine, requires more frequent change-outs due to over-filtration. Conversely, a filter bag having a micron rating too large for a particular application will not adequately filter. Therefore, choosing the best **Ultrafit** Welded Liquid Filter Bag for your application optimizes filtration performance and value.

### CALIBRATED TEST BAG COMPOSITION CHART

500 Series, Polypropylene, 50µ - 1µ

Liquid Flow Path	Composite Layers (Upstream to Downstream)	Micron Retention Level
Upstream Jacket		
1st Layer	PP Microfiber	50 µ
2nd Layer	PP Microfiber	25 µ
3rd Layer	PP Microfiber	10 µ
4th Layer	PP Microfiber	5 µ
5th Layer	PP Microfiber	2.5 µ
6th Layer	PP Microfiber	1 µ
<i>IP-Integrated Polymeric Support</i>		
Outer Support Jacket		

Direction of  
Liquid Flow



Direction of  
Liquid Flow



#### Materials of Construction:

100% FDA Compliant Polypropylene, including *Zero-Bypass®* Collar  
 Filter Media: Polypropylene Melt-Blown Microfiber  
 IP Layer: Polypropylene Monofilament  
 Support Jacket: Polypropylene Spunbond  
 Maximum Flow Rate: 20gpm  
 Recommended Change-Out for Testing: Initial Pressure plus 30psig  
 Available in Size #2 (7" dia. x 33" long)

The *Ultrafit* Welded *Calibrated Test Bag* is Patented - Patent No. US 6,511,606 B2.

*Ultrafit*, *Zero-Bypass*, *Over-The-Top*, and *Calibrated Test Bag* are Registered Trademarks of Mechanical Mfg. Corp.,  
 Filtration Systems Division

© 2004 Mechanical Mfg. Corp.

www.filtrationsystems.com

## Ultrafit Welded CALIBRATED TEST BAG®

### INSTRUCTIONS FOR USE

- 1) Read the “Installation, Operating and Safety Manual for Liquid Filter Bags and Housings”.
- 2) Install the **Ultrafit Welded Calibrated Test Bag** into a support basket and place it in a **Filtration Systems Over-The-Top** design filter housing.
- 3) Seal the filter housing and begin the filtration process using the liquid to be tested.
- 4) Run the test until the differential pressure indicates that the bag is 80% loaded (Recommended Test Removal: Initial Pressure plus 30psig).
- 5) Relieve pressure to the vessel; open the housing and remove the **Ultrafit Welded Calibrated Test Bag**. Let the bag “air dry” thoroughly for optimum solids visibility.
- 6) Cut out a small section at the bottom of the bag (approximately 4” x 4”). Peel back each sequential layer, noting where particulate is captured. Observe the varying amount of solids in each layer to assess where the greatest loading occurs. Refer to the *Calibrated Test Bag* Composition Chart to identify the corresponding micron rating of each layer observed.
- 7) According to your liquid filtration requirements, select the **Ultrafit Welded Filter Bag** that corresponds in composition to the layers utilized in the *Calibrated Test Bag*. Refer to the **Ultrafit** Filter Bag Composition Charts in Bulletin UF-4/03.

**If you have any questions, or need our assistance, please call us at (954) 572-2700.**

**Filtration Systems** filter vessels are designed to filter liquids under pressure, in accordance with the temperature and pressure restrictions stamped on the nameplate. Follow the Instructions in the “Installation, Operating & Safety Manual for Liquid Filter Housings and Filter Bags”. Wear protective garments, splash protection, eye protection and respirators, as required. In certain operating environments, static electrical charges or sparks may cause combustion or explosion of volatile materials. Properly ground equipment, as required.

Removing filter media from packaging may produce static electrical sparks. To avoid risk of combustion or explosion, never open static packaging in or around areas containing potentially flammable or explosive materials, liquids or gases. Dispose of filter media properly. A filter bag that has been used with a hazardous liquid may contain residual amounts of this material and should be handled with the same safeguards that would be used in handling hazardous and/or toxic material. Media should be disposed of in accordance with federal, state and/or local laws or requirements.