High Efficiency Liquid Filter Bags

It is with great pride that we announce the development of two new and advanced filter line series to meet your high efficiency needs... the Knight High Efficiency (KHE) 300 and 500 series. Knight Corporation has a long history of providing industry with the highest quality liquid filter bags for high efficiency applications. Since 1988, we have continued to expand our expertise and improve our manufacturing techniques on high efficiency filters to keep pace with changing needs and demands of the filtration industry.

The new KHE 300 and 500 series have further improved the performance of the original Knight all microfiber design by adding special media which increases filter life and efficiency. With the aid of independent testing, Knight Corporation has designed a unique configuration of variable micron rated special media and microfiber that uses the entire filter, resulting in very fine particle retention and maximum dirt load.

The KHE series offers low initial pressure drop, high dirt holding capacity and exact particle retention. Since fewer filters are required, inventory and disposal costs are reduced. All filters come standard with lift handles for simple and fast removal. Dirt is contained inside the filter bag which promotes easy disposal, less risk of fluid contamination during change out and minimal operator exposure. Both KHE series have a cover to prevent any fiber migration and have no exposed seams. They are silicone free and made from 100% polypropylene media which is ideal for oil absorption and easy disposal by incineration.

The 300 series is available in ten different sizes and four style tops to fit most bag filter vessels. The 500 series has up to ten layers of media, including six layers of prefilter media that are individually sealed and inserted into the filter for structural strength and maximum use.

Independent Testing Results

The following charts reflect the results of tests performed by an independent test laboratory on a number 2 filter in a RK 30 vessel. Counts were taken on an automatic particle counter.

300 SERIES PART NUMBER	EFFICIENCY (A) 93%	96%	MAX (B) FLOW GPM
KHE 323P2SSL	1 µm	2 µm	75
KHE 325P2SSL	3 µm	5 µm	75
KHE 327P2SSL	8 µm	18 µm	75
KHE 329P2SSL	18 µm	25 µm	75
500 SERIES PART NUMBER	**EFFICIENCY (A) 96%**	**99%**	**MAX (B) FLOW GPM**
KHE 523P2SSL	1 µm	2 µm	50
KHE 525P2SSL	3 µm	5 µm	50
KHE 527P2SSL	8 µm	18 µm	50
KHE 529P2SSL	18 µm	25 µm	50

(A) Efficiency represents the initial efficiency on a clean element challenged on a single pass through a water base slurry of PTI fine test dust at 3 GPM. Efficiencies are derived by counting the ratio of upstream versus downstream particles. µm = micron.

(B) Flow data based on gallons per minute (GPM) for 1 pound (PSID) of pressure across a clean filter.

	300 SERIES	500 SERIES
Max Dirt Grams of Dust (C)	1,200	2,042
Max Total Filter Layers	5	10
Max Sq. Ft. Surface Area	23	43
Quantity Per Large Box	20	10
Max Temperature	200° F	200° F
Pure Polypropylene Media	Yes	Yes
Felt & Microfiber Sections	Yes	Yes
Easy Lift Handles	Yes	Yes
Silicone Free	Yes	Yes
No Exposed Sewn Seams	Yes	Yes
Oil Absorption & Removal	Yes	Yes
Batch operations	Yes	Yes
Continuous Operations	Yes	Yes

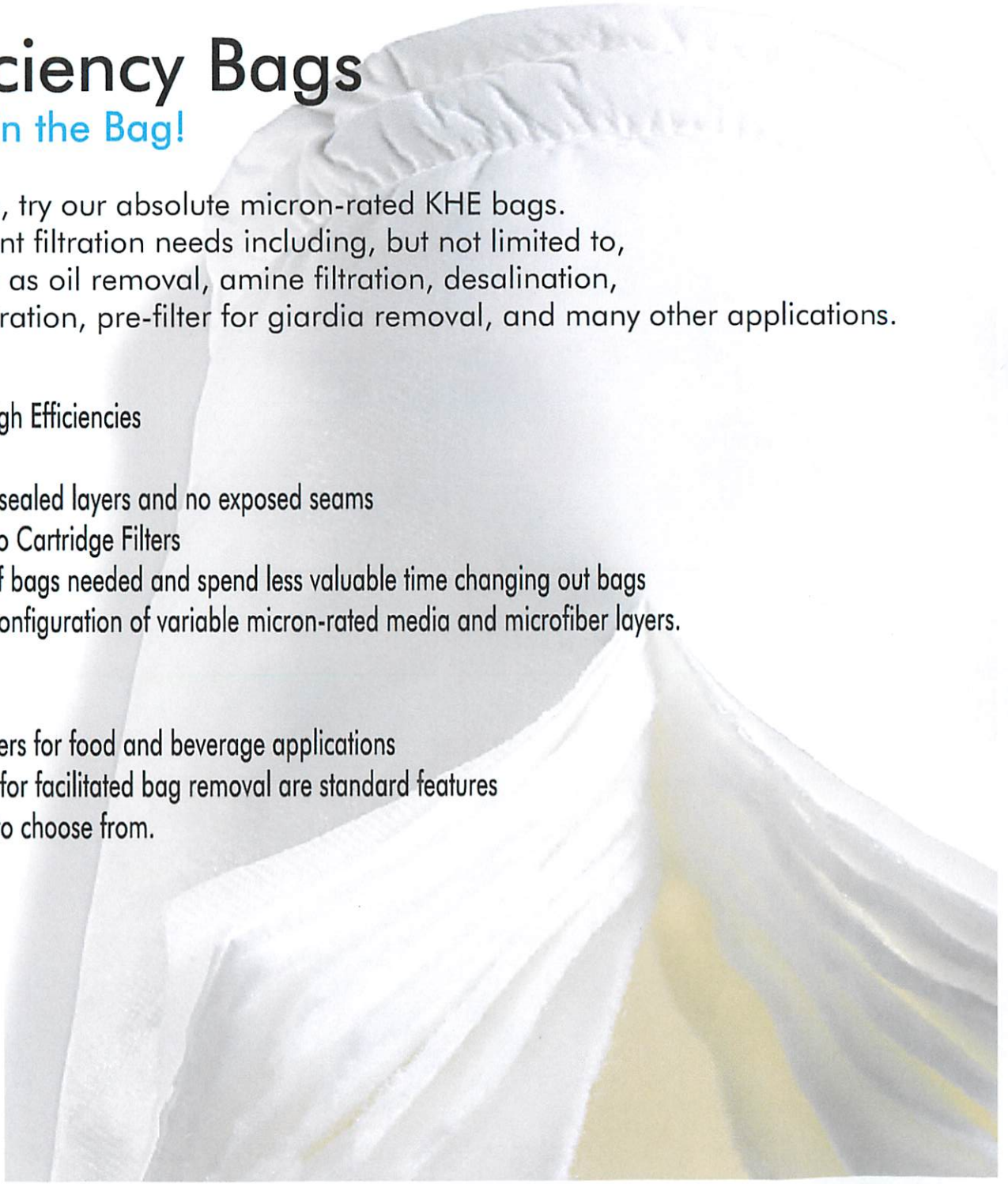
(C) Dirt load conducted until vessel pressure reached 40 pound (PSID).

Knight High-Efficiency Bags

We have High Performance in the Bag!

For your high efficiency filtration needs, try our absolute micron-rated KHE bags. Manufactured to meet the most stringent filtration needs including, but not limited to, fine process filtration applications such as oil removal, amine filtration, desalination, hydraulic fluid processing, lubricant filtration, pre-filter for giardia removal, and many other applications. In stock and ready to ship!

- Absolute Micron-Rated Particle Capture at High Efficiencies
- Maximum Dirt Load Capacity
- Structural Strength with up to 10 individually sealed layers and no exposed seams
- High Performance & Lower Cost Alternative to Cartridge Filters
- Due to longer filter life, reduce the amount of bags needed and spend less valuable time changing out bags
- Outperforms the competition with a unique configuration of variable micron-rated media and microfiber layers.
- Low Initial Pressure Drop
- Silicone-Free
- Made with FDA acceptable Polypropylene fibers for food and beverage applications
- Stainless Steel Ring and Heavy-Duty handles for facilitated bag removal are standard features but there are many different sizes and styles to choose from.
- Thermally welded seams also available



Knight Filter Corporation

P.O. Box 332
Ardmore, PA 19003-0332
Phone: (610) 853-2161
Fax: (610) 853-1080

10885 Fallstone Rd
Houston, TX 77099-3411
Phone: (281) 933-5363
Fax: (281) 933-8111

Visit our website: www.knightcorp.com

INDEPENDENT TESTING RESULTS

The following charts reflect the results of tests performed by an independent test laboratory on a size 2 Knight High Efficiency filter bag in a standard size 2 vessel. Counts were taken on an automatic particle counter.

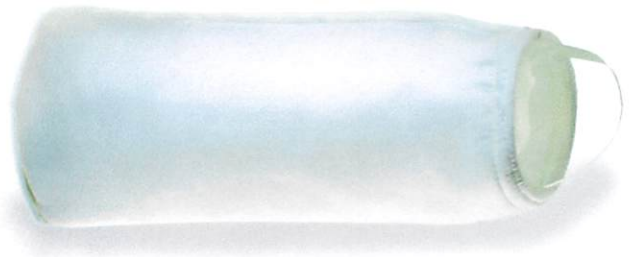
300 SERIES PART NUMBER	EFFICIENCY (A) 93%	96%	MAX (B) FLOW GPM
KHE 323P2SSL	1 µm	2 µm	75
KHE 325P2SSL	3 µm	5 µm	75
KHE 327P2SSL	8 µm	18 µm	75
KHE 329P2SSL	18 µm	25 µm	75
500 SERIES PART NUMBER	**EFFICIENCY (A) 96%**	**99%**	**MAX (B) FLOW GPM**
KHE 523P2SSL	1 µm	2 µm	50
KHE 525P2SSL	3 µm	5 µm	50
KHE 527P2SSL	8 µm	18 µm	50
KHE 529P2SSL	18 µm	25 µm	50

(A) Efficiency represents the initial efficiency on a clean element challenged on a single pass through a water base slurry of PTI fine test dust at 3 GPM. Efficiencies are derived by counting the ratio of upstream versus downstream particles. µm = micron.

(B) Flow data based on gallons per minute (GPM) for 1 pound (PSID) of pressure across a clean filter.

	300 SERIES	500 SERIES
Max Dirt Grams of Dust (C)	1,200	2,042
Max Total Filter Layers	5	10
Max Sq. Ft. Surface Area	23	43
Quantity Per Large Box	20	10
Max Temperature	200° F	200° F
Pure Polypropylene Media	Yes	Yes
Felt & Microfiber Sections	Yes	Yes
Easy Lift Handles	Yes	Yes
Silicone Free	Yes	Yes
No Exposed Sewn Seams	Yes	Yes
Oil Absorption & Removal	Yes	Yes
Batch operations	Yes	Yes
Continuous Operations	Yes	Yes

(C) Dirt load conducted until vessel pressure reached 40 pound (PSID).



PRODUCT APPLICATIONS

MEMBRANE PRE-FILTER

Knight High Efficiency Filter Bags offer excellent results when used as a pre-filter for membrane filtration by retaining a large quantity of contaminant that could unnecessarily clog membrane filters. Membrane Filters can be very expensive.

REPLACE EXPENSIVE CARTRIDGE FILTERS

You can use Knight High Efficiency Filter Bags where dirt carrying needs previously required expensive cartridges. Bags cost less, are easier to install and remove, require less storage space, can be disposed of by incineration, and prevent the downstream contaminant associated with cartridges.

FDA ACCEPTABLE CONSTRUCTION

Constructed with FDA acceptable fibers, KHE bags are ideal for food and beverage applications. Our natural fiber is produced from virgin polypropylene resin that meets FDA approval and the Code of Federal Regulations, Food and Drugs, 21 CFR CH. Parts 176.170, 176.280, and 176.210. We also have spin finish polypropylene and polyester felt available that also meets these standards.

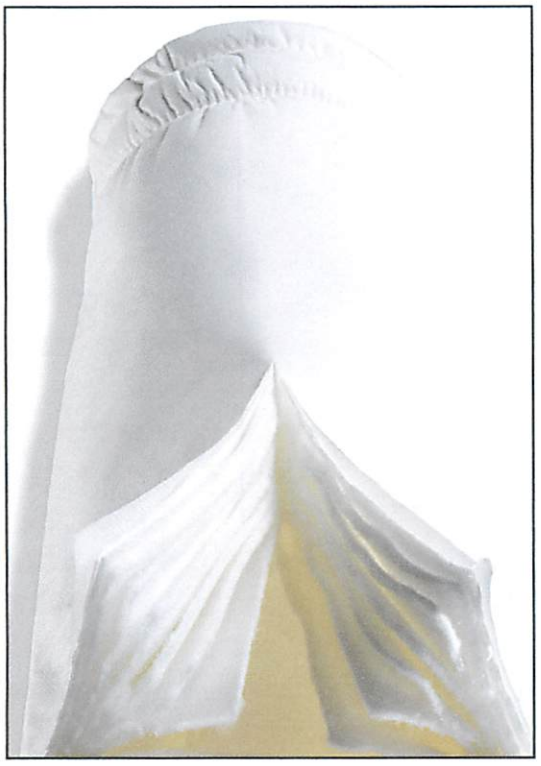
GIARDIA PRE-FILTER

Giardia Lamblia (commonly referred to as Giardia) is a single-celled microbe or protozoa which measures about 8-12 microns in size. When ingested, Giardia can cause a gastrointestinal disease called giardiasis. KHE bags can be used as a pre-filter to help extend the life of the final filter, when filtering water that may be contaminated with Giardia.

OTHER SPECIALTY APPLICATIONS

- Oil particulate removal
- Desalination: Potable water from salt water
- Cleaning Amine
- Other Absolute Micron Filtration Applications

KNIGHT HIGH EFFICIENCY FILTER BAGS
500 SERIES



FEATURES

- Absolute Micron-Rated Particle Capture at High Efficiencies
- Maximum Dirt Load Capacity
- Structural strength with up to 10 individually sealed layers
- No exposed seams
- High performance and lower cost alternative to cartridge filters
- Longer filter life reducing amount of bags needed and time spent on bag change-out
- Outperforms competition with a unique configuration of variable micron-rated media and microfiber layers.
- Low initial pressure drop
- Silicone-Free
- Standard with FDA acceptable materials for food and beverage applications
- Alternative with thermally welded seams also available
- Designed to fit most size 1 and size 2 filter vessels
- In stock and ready to ship!

ITEM DESCRIPTION

MATERIAL: Polypropylene or Polyester

MICRONS: 1/2, 1, 2, 3, 5, 8, 18, 25

SIZES: 1 or 2

DIAMETER: 7”

APPROXIMATE LENGTH: 16” or 32”

TOP: Standard with Stainless Steel Ring

Many other top options available.

CONSTRUCTION: Standard is Sewn

Also available with welded seams

PRODUCT SPECIFICATIONS

MAXIMUM OPERATING TEMPERATURE: 180°F*

FLOW RATE (size 2): up to 50 gpm*

CHANGE OUT: 15 psi*

MAX DIFFERENTIAL PRESSURE: 35 psid*

**please consult chemical resistance chart, as temperature, flow rate, and bag change-out may be affected by chemical being filtered, viscosity, micron, and various other factors.*

Although the information contained in this brochure is accurate to the best of our knowledge, due to the many variables that may be present in an application, Knight Filter Corporation makes no guarantees as to the results that may be obtained and assumes no obligation or responsibility because of this Information.

Ardmore, PA
(610) 853-2161

www.knightcorp.com

Houston, TX
(281) 933-5363