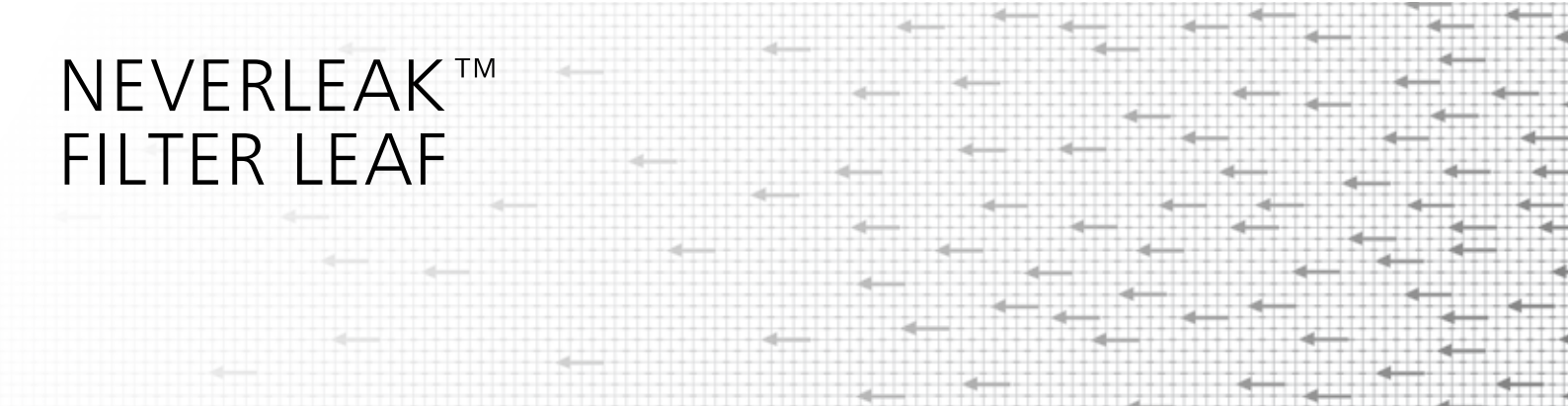


NEVERLEAK™ FILTER LEAF



NEVERLEAK™ FILTER LEAVES:

DURABLE, EFFICIENT, PROFITABLE

Since 1925, GKD-GEBR. KUFFERATH AG has set standards as a developer and manufacturer of precise technical cloth and complex filter media for industrial filtration processes. By using innovative state of the art looms and latest weaving technology, our woven filter media is unsurpassed when it comes to quality and robustness. The same outstanding quality standards apply to the design and fabrication of our NEVERLEAK™ filter leaves for precoat- or pressure filtration. They have been designed as a response to problems caused by conventional tubular-framed riveted leaves.

WEAKNESSES OF THE RIVETED LEAF DESIGN

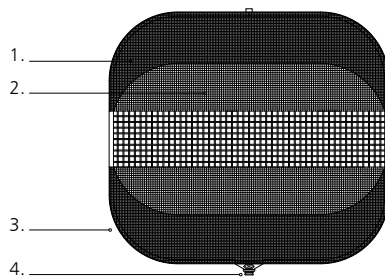
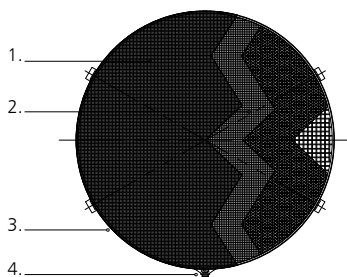
- RIVETED LEAF FILTER CLOTH LOOSENS AND TEARS
- LEAKAGE DEVELOPS WHERE FRAME AND FILTER MESH MEET
- FILTRATION IS INCONSISTENT AND INEFFICIENT
- RE-SCREENING IS INEFFECTIVE OR NOT POSSIBLE



Since NEVERLEAK™ can be simply re-screened, they offer significant saving potential. Leakages are easy to spot, thus rendering unnecessary the time-consuming inspection of used filter leaves.

The all-new NEVERLEAK™ concept was specifically developed for the industrial production and processing of

- edible oils from soybeans, corn, and other seeds and grains
- cane and beet sugars
- organic and inorganic chemicals
- pharmaceuticals
- soaps



All NEVERLEAK™ filters feature

1. GKD high quality filter mesh
2. multi-ply robust support mesh
3. rigid, bend-resistant bar frame
4. authentic GKD high flow outlet

FORMULA FOR SUCCESS:

HIGH QUALITY, VERSATILE, SECURE



The new leaf construction is a perfect combination of materials, components, and design. We use the finest raw materials to weave first-class filter cloth. Our weaving looms are the newest state of the art. The range of our filter fabrication is one of the world's most versatile. We design our components to high standards in order to ensure the efficiency of our filter elements.

SOLUTION

- newly developed, automated manufacturing process
- allows for multiple re-screening of the elements
- automated weld process to secure filter cloth to the bar frame
- continuously welded, secure sealing
- smooth and tight filter cloth builds an even filter cake
- the GKD-designed precision wide mouth outlet is welded to the bar frame
- high mechanical strength and precision fit
- solid-formed bar frame



ADVANTAGES

- robust, strong, and secure
- rests securely in the manifold
- easy handling and maintenance
- achieves even filter cake

RE-SCREENING

The greatest economic value from solid bar NEVERLEAK™ leaves comes from the ability to produce a like-new leaf by re-screening. This process can be repeated up to five times, thereby saving 40 percent or more in costs for a product superior in every respect.

OUR RE-SCREENING SERVICE

- inspection of the filter leaf
- documentation of the results
- removal of the old filter cloth
- leaf is fitted with new GKD filter cloth
- finished to first quality, like a new leaf

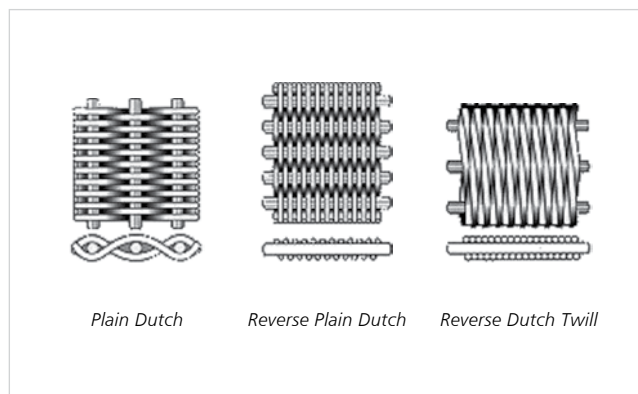
GKD - GEBR. KUFFERATH AG

Metallweberstraße 46
 52353 Düren
 Germany
 fon: +49 (0) 2421-803-0
 fax: +49 (0) 2421-803-233
 industrialmesh@gkd.de
 www.gkd.de

GKD-FILTER CLOTH:

INNOVATIVE, QUALITY-TESTED, EFFICIENT

As the world's premier producer of sophisticated filter mesh and media from metal and other weavable material, GKD controls the process of its products – from wire sourcing through weaving and processing – in order to ensure consistent product quality. Having the most advanced technology, our looms produce filter mesh for the respective application at the highest level. Recommended filter cloths for NEVERLEAK™ leaves are listed next in the table. Additionally, special weaves can be provided based on application.



MESH	WEAVE TYPE	MESH THICKNESS IN mm (INCHES)	GEOMETRIC PORE SIZE IN μm
24 X 110	PLAIN DUTCH	0,54 (0.021)	152
24 X 128	PLAIN DUTCH – TWIN WARP (2)	0,58 (0.023)	75
30 X 150	PLAIN DUTCH – TWIN WARP (2)	0,53 (0.021)	85
PZ 80	REVERSE PLAIN DUTCH	0,77 (0.029)	91
KPZ 55	REVERSE DUTCH TWILL	0,73 (0.029)	100

Our simulation software called GEODICT and its tool WEAVE-GEO create models of woven wire mesh and calculate parameters such as highest permeability, maximum glass bead, filter efficiency, retention rate, decrease in pressure or bubble

point. WEAVEGEO customizes weave constructions quickly and accurately – without lengthy tests. Virtual weave models support the efficient design as well as the process-specific improvement of your filter cloth.