Pleated elements

Introduction:
Pleated elements significantly increase the filtration area in a given construction space. In addition, they reduce the total volume required for a defined filtration surface. Pleated elements are made from ribbons, which are pleated and cut to size. Endless pleated elements are made having suitable joints.

The individual fabric layers are simultaneously cut and welded along their longitudinal side by means of ultrasonic (US) slitting or heat cutting. Cutting to a defined number of pleats is done using US-slitting or other suitable cutting technologies.
Product details

- Various filter media and filter materials can be combined, e.g. synthetics, steel, glass
- Up to 5 layers are possible, e.g. filter fabric with a support fabric, non-woven depth filter with woven surface filter, etc.

- Pleat width ranges from 20 to 1200 mm

- Pleat heights range from 6 mm to 50 mm
- Different pleat heights can be combined
- Pleat counts are unlimited
Product details

- Endless pleated elements are formed using ultrasonic welding or metal clamping

Packaging and labeling

- Pleated elements can be packed into PE bags that are closed by welding
- Endless pleated elements can be supplied in blister packs
- Pleated elements made of SEFAR MEDIFAB® fabrics are double-bagged
- The label shows all the necessary information and allows complete traceability to the polymer
Benefits

- Customer-tailored solutions
- Extensive choice of filter materials
- Wide range of dimensions
- Optimal utilization of construction space
- Lowest priming volume
- Biocompatible products according to USP Class VI and ISO 10993
- Full traceability
- Blister packaging significantly simplifies handling

Metal clip closure

Previously, US-welding was the most common used technology to fabricate endless pleated elements. However, this technology has its limitations, especially when it must be applied to the wide variety of materials now available. To produce pleated elements for the automotive industry and other general applications, Sefar set up a specialized environment using state-of-the-art technology and machinery. This allows Sefar to produce pleated filter elements suitable for almost all customer needs and using any material.

Advantages of metal clip closure

- Material independent (synthetic fabrics, wire mesh, fleeces,...)
- Independent of thickness (multi-layer)
- Temperature-resistant (limit --> fabric resistance)
- Extremely durable and resistant
- No bulging (supporting effect)
- Multi-layer pleats possible
- No fraying
- Solid connection regardless of material surface and coating.

Application areas

- Oil-filtration
- Fuel filtration
- Air-filtration
- Dust-filtration
- Wet filtration
- Medical filtration