



## FILTERTECHNIK JÄGER GMBH

Siemensstraße 1 - Werk 1 / Benzstraße 7 - Werk 2 • D-89264 Weißenhorn, Germany  
phone: +49 (0) 7309 9548-0 • Fax: +49 (0) 7309 9548-20  
www.filtertechnik-jaeger.de • email: info@filtertechnik-jaeger.de

# Operating instructions

## Product: CORA®PLEAT Type E, S and P

CORA®PLEAT filter elements are developed for the use in bag filter systems. Due to the special design and the filter medium used, this element is intended in particular for special applications with high requirements on the filtration process. In order to safely achieve an appropriate result, it is strongly recommended to read and follow these operating instructions.

### Fitting the element into the filter housing:

**The use of a restrainer basket is strictly necessary!**

It must be ensured that the filter element fits into the restrainer basket and into the sealing contour of the filter housing.

This applies in particular to the length of the filter element. It is necessary for the element to touch the bottom of the restrainer basket. A negative tolerance of about 8 mm is balanced by the flexible sealing part. An excess length of the element in the restrainer basket with the bottom of about 8mm is also allowed.

If the filter element does not fit into the basket, please contact Filtertechnik Jäger GmbH. If necessary, an equivalent Cora®Pleat suited element of another type is available.

### Preparation before starting up:

Depending on the model of the Cora®Pleat product, the elements are less or non-wettable with aqueous media. Normally the filter material of the filter elements with nominal rating (N-series) is made of needle-felt. The fibers of these needle felts must be provided with

fiber treatment for production reasons (Avivage). This finishing makes hydrophobic (water-repellent) fibers slightly wettable. The water-soluble avivage passes into the filtrate. The proportion on the fiber is very low and the finishing product ecologically safe, suitable for food contact, in most cases of filtration application not disturbing. It is basically recommended, if possible, the filter to rinse the filter beforehand.

This not only removes or reduces unwanted components but also removes loose fibers from the clean side.

If the filtration process particularly critical, then an initial circulation filtration should be made. Loose fibers lying on the clean side will be thus retained on the inflow side in the filter element.





## FILTERTECHNIK JÄGER GMBH

Siemensstraße 1 - Werk 1 / Benzstraße 7 - Werk 2 • D-89264 Weißenhorn, Germany  
phone: +49 (0) 7309 9548-0 • Fax: +49 (0) 7309 9548-20  
www.filtertechnik-jaeger.de • email: info@filtertechnik-jaeger.de

For filtrations process that do not allow the dispensing of fibre, CORA®PLEAT filter elements are available in pure polypropylene or polyester (A-series).

These elements are hydrophobic (water-repellent) and must be wetted with aqueous media before filtration. For this purpose agents are used, which reduces the surface tension of water, e.g. alcohol (isopropyl alcohol 50%), surfactants (detergents) or other substances which do not interfere with the filtration process but reduce the surface tension. The wetting can take place before being inserted into the filter housing or in the housing itself. A wetting time of at least 5 minutes must be observed. This process is also recommended for polyester elements.

### **Start-up:**

After checking the correct insertion, wetting and sealing of the filter housing, the filtration process can be started or restarted.

Pressurisation of the filter should be as careful as possible, i.e. pressure surges are to be avoided in any case and pumps are to be started slowly or shut-off valves should be opened slowly.

The system should be degassed well.

Gas pressure cushions in the housing should be avoided, as experience has shown that these can lead to pressure shocks. Uneven flow on the filter element almost always leads to a worse filtration result and can lead to total failure in extreme cases (destruction of the filter element). A gas cushion can also block a part of the filter surface, in particular filter systems such as bag filter housing, which are flowed through from top to bottom, are particularly at risk. Here, even at high flow rates degassing by entrainment of gas in the liquid flow is not guaranteed.

### **Filter change:**

The filter change should be latest at the differential pressure of 2 bar. FTJ recommends filter change at values between 0.8 and 1.2 bar, depending on the process quality requirements. Higher values are usually uneconomical (increased energy consumption) or jeopardize the filtrate quality (possible breakthroughs). The filter change itself is to be carried out as described under preparation before starting up.

### **Storage:**

CORA®PLEAT filter elements should be stored dry in the original packaging and preferably at room temperature. The packaging should only be removed immediately before use.

### **Disposal:**

In practice, the most varied substances will be filtered. These can be environmentally neutral or dangerous (unhealthy). Since residues always remain in the filter element, appropriate disposal by the user must be regulated and carried out.

This instruction has been prepared to the best of our knowledge and with care, and is strictly technical at the time of printing. Changes are made without special notification.