

PULSESHIELD™ TECHNOLOGY



KEY COMPONENT

The most important component of a fluid filter is the filter element and its structure. Many market competitors use cheap, low-quality materials and usually buy from the same suppliers. At FGI, we develop these in close collaboration with manufacturers, some of whom are also members of Filtration Group Corporation. The following features are the secret of high filter performance:

- Quality of the filter materials
- Smart combination of filter materials - benefit from over 60 years of experience at FGI!
- Availability - it should be possible to use the full filter surface over the entire service life time!

PATENTED PULSESHIELD™ TECHNOLOGY

FGI PulseShield™ technology starts at the pleat-blocking process. The outer jacket is mounted over the pleat star and thermally shrunk. So it fixes the pleat tips mechanically (see comparison Fig. 1), prevents the formation of pleat blocks and excludes uneven dirt loading (see Fig. 2). The full filter area is available over the entire service life of the filter element, resulting in the following advantages:

- Reduced pressure drop, thus reduced energy demand
- Better availability of dirt holding capacity (DHC) compared to competitors (see diagram 1)
- More stable β -values over the entire service life (see diagram 2)



Figure 2:
Consequences
of pleat-blockage

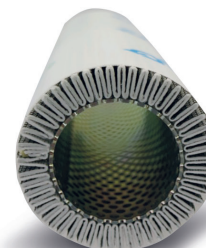
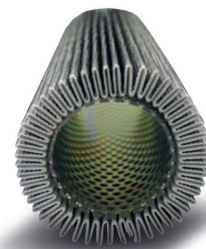
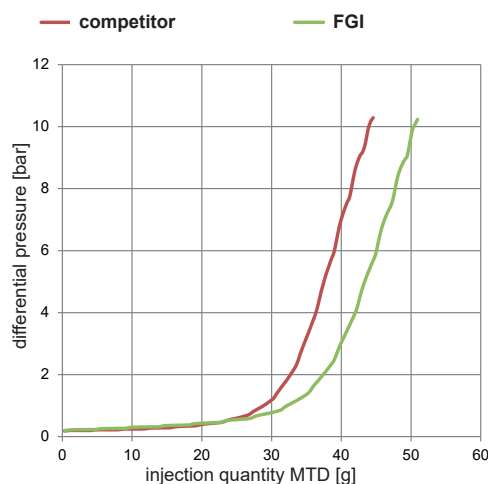


Figure 1:
top -
Competitor without PulseShield™
below -
FGI Element with PulseShield™

FGI has a patent that ensures the exclusivity of this technology. None of our market competitors realizes this or a comparable function on their filter elements. This can be clearly demonstrated by comparing FGI filter elements with those of market competitors (see diagrams 1 & 2).

DP vs. DHC



Beta value for 10 µm vs. Differential pressure

