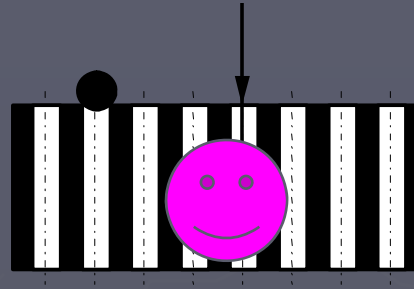


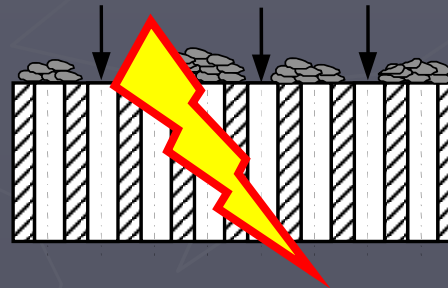
Former theories of filtration when compared with new cognitions

Thorsten Reuther
Hofmann CERAMIC GmbH





a) Sieving effect



b) Filtercake



c) Deep bed filtration

Fig.1 Mechanisms of ceramic filters

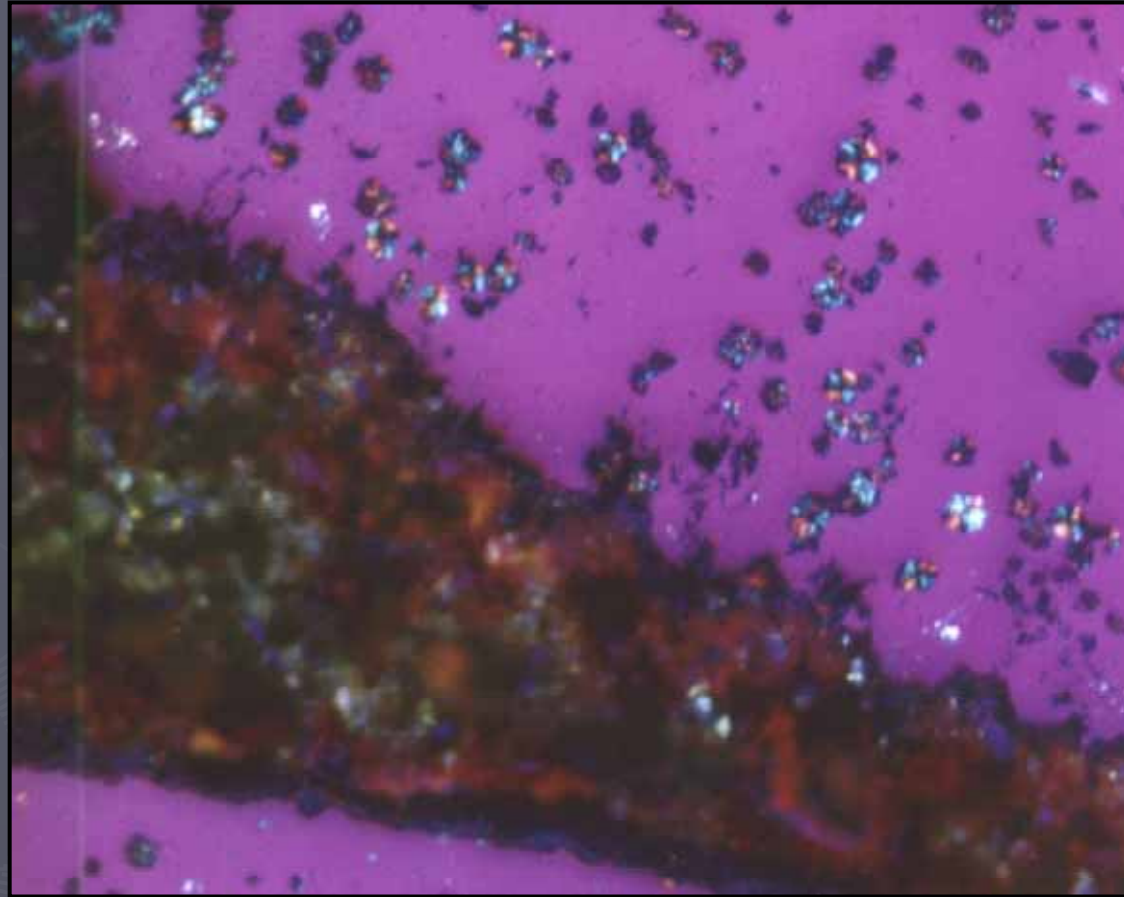


Figure 2a : Slag layer – foam ceramic filter.

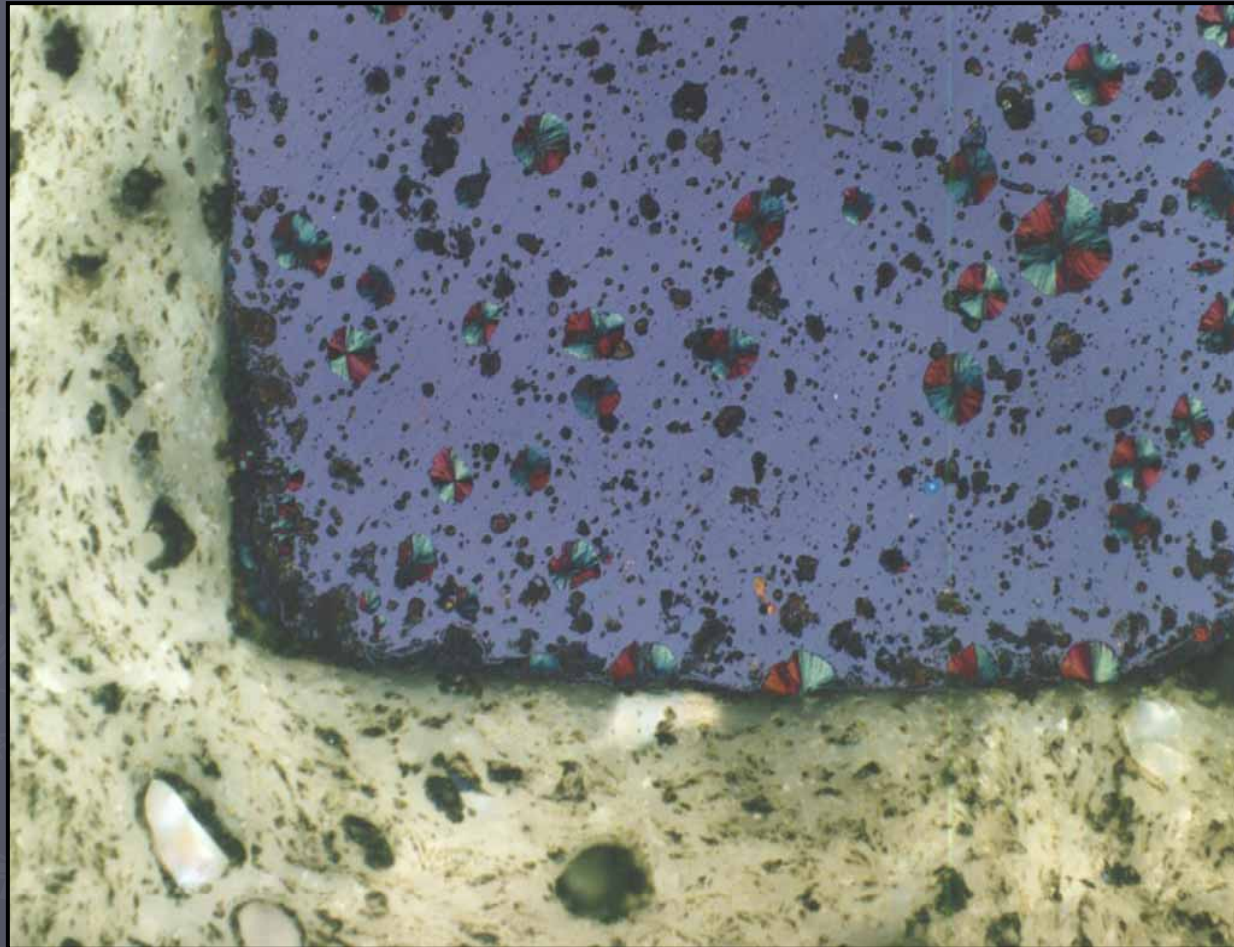


Figure 2b : Slag layer – extruded filter.

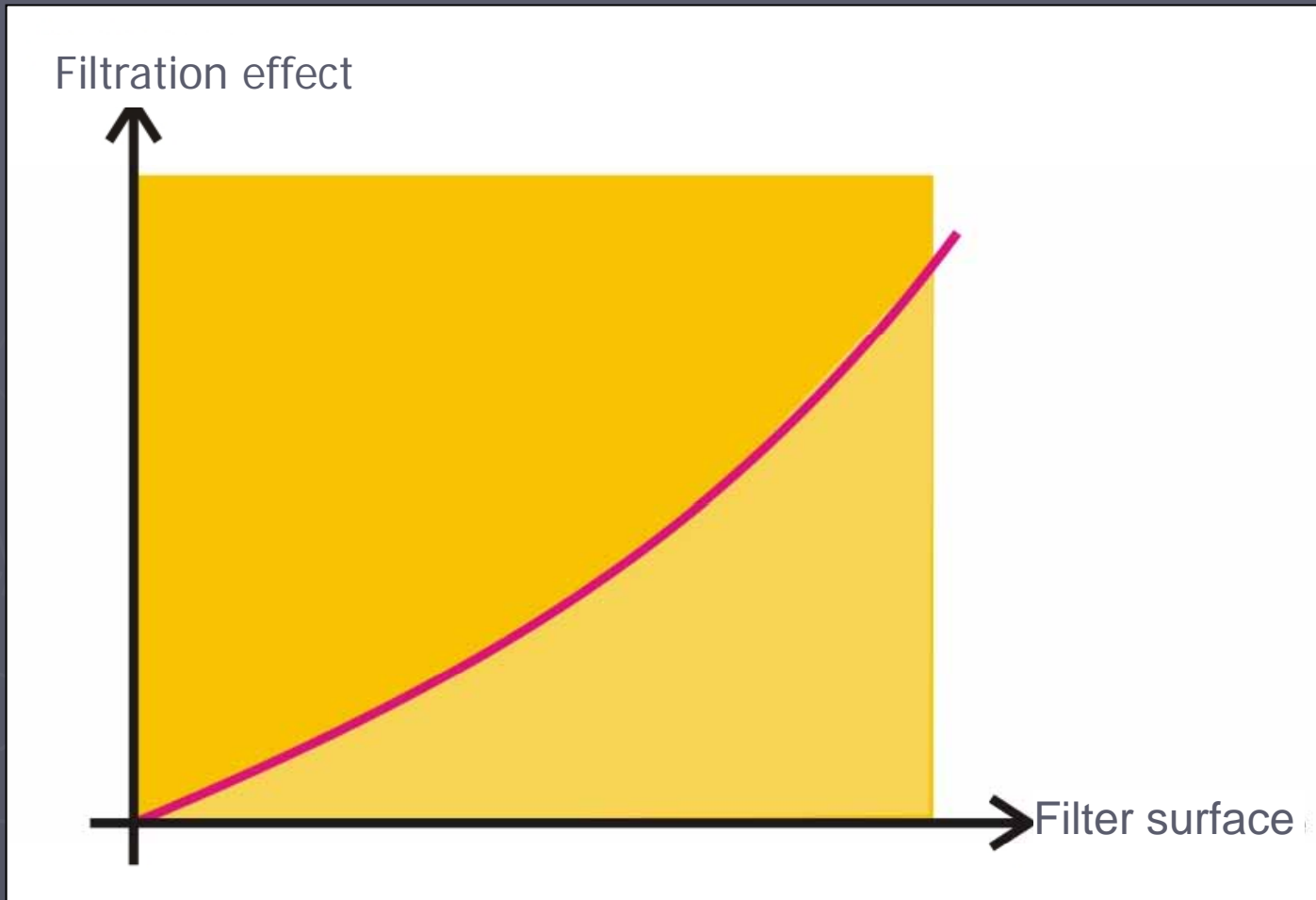


Diagram 1 : Relation filtersurface / filtration effect



Fig. 3a : "Blocked Filter". View from below.



Figure 3b : "Blocked Filter". Side view.

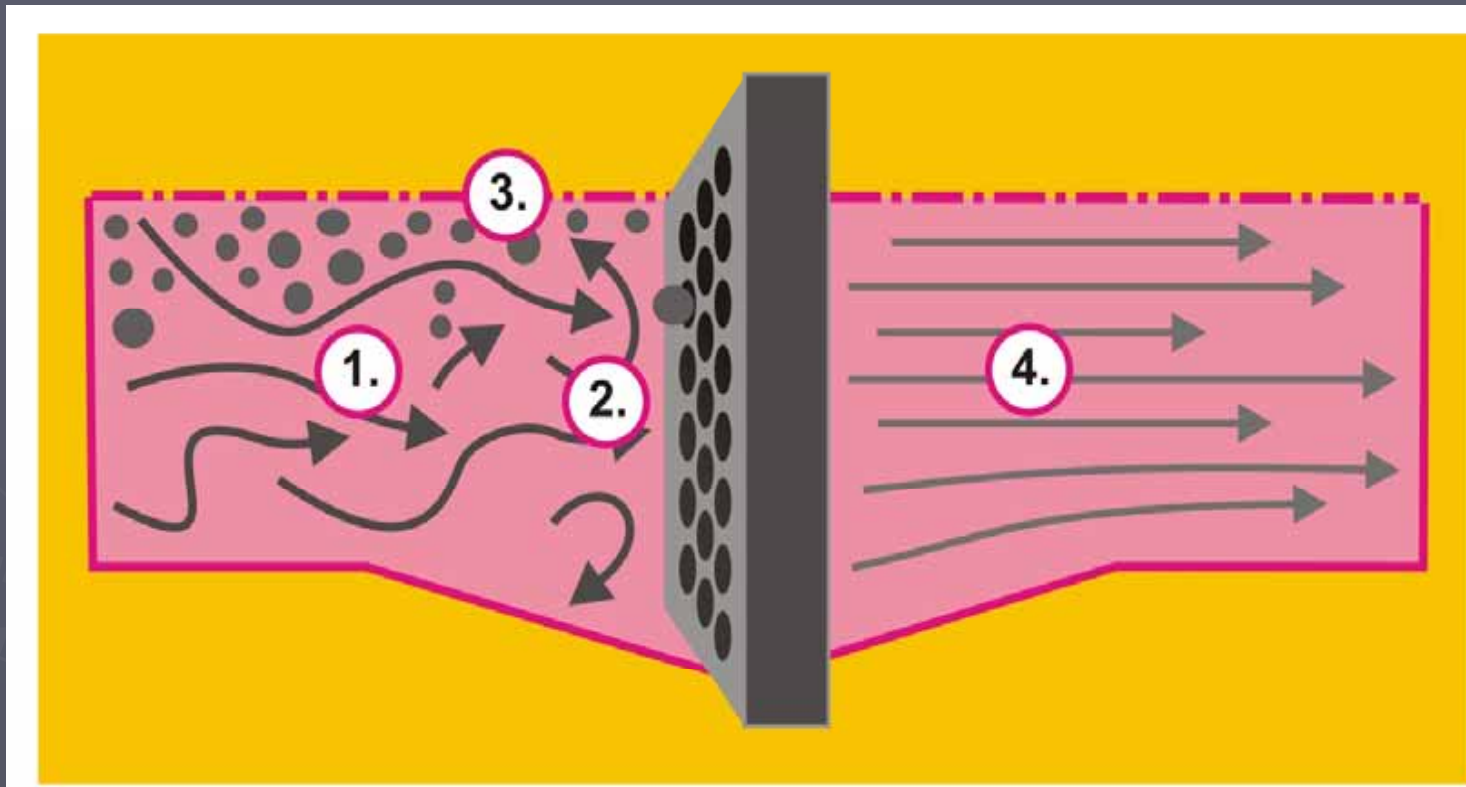


Figure 6 : Flow in front and after a filter.

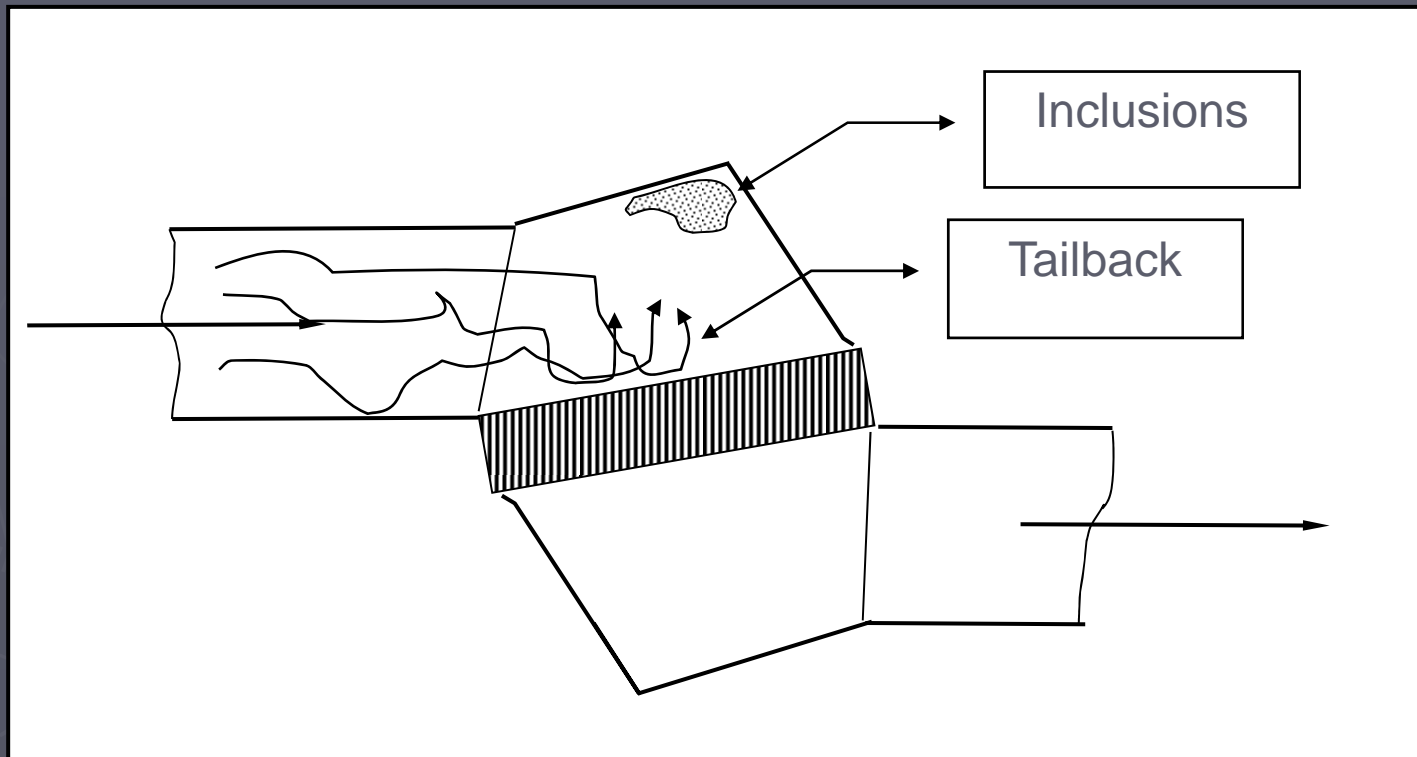


Figure 7 : Flow in front and after a filter.

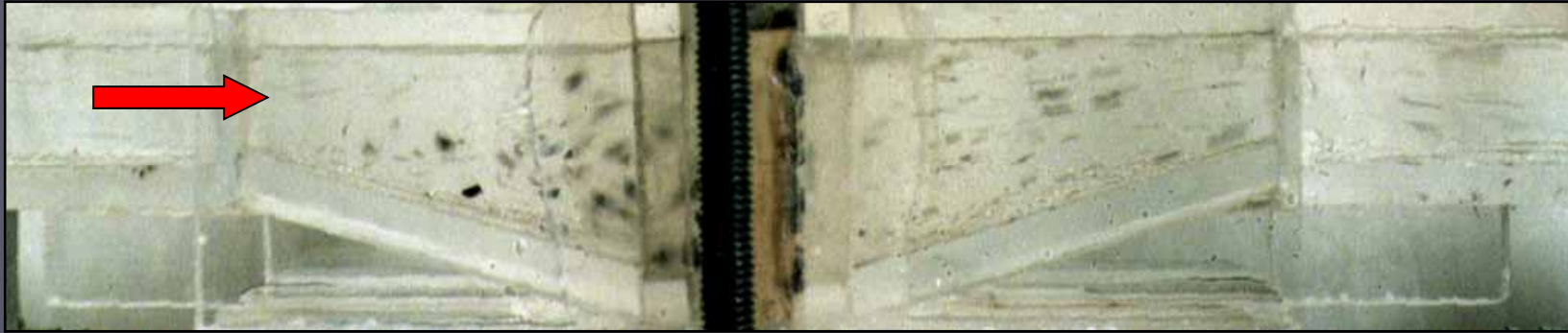


Figure 8 : Flow simulation with water.



Figure 9 : Inclusions in front of the filters.



Figure 10 : " Clean" filterstructure.

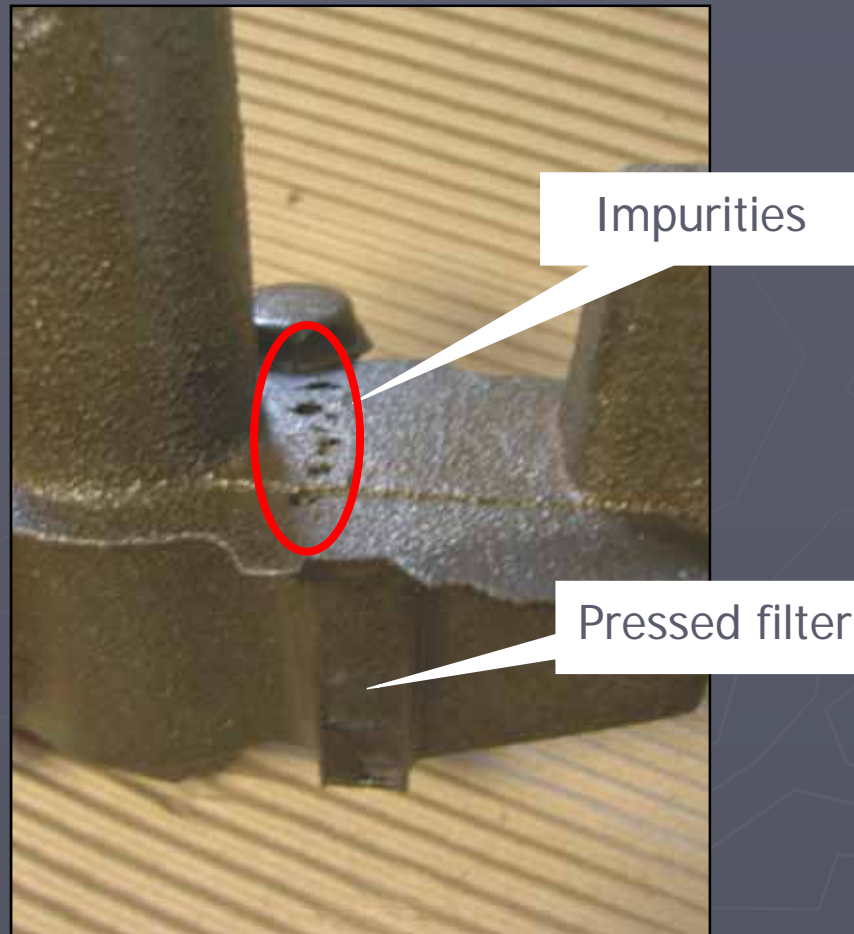


Figure 11 : Impurities in front of a pressed round hole filter.



Figure 12 : Impurities in front of the filters
and on top of the pouring
basin.

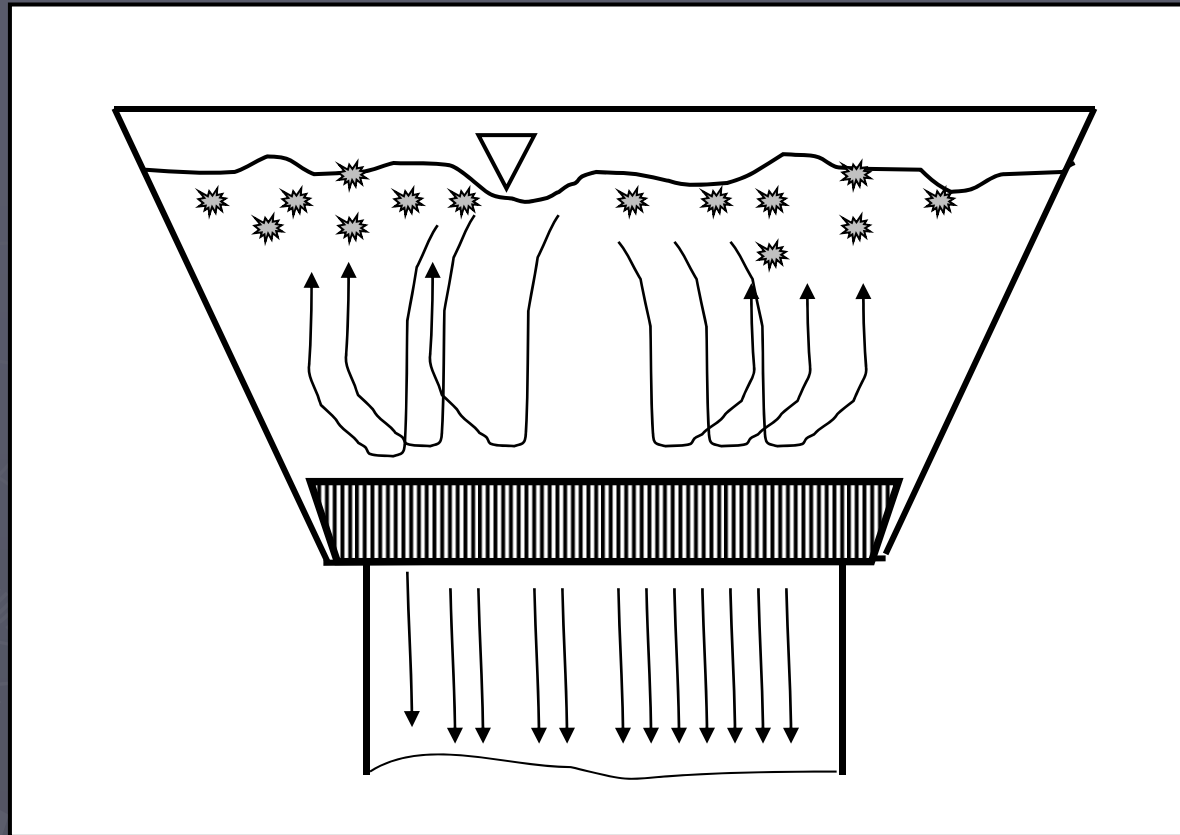


Figure 13 : Scheme of the function of a strainer core.

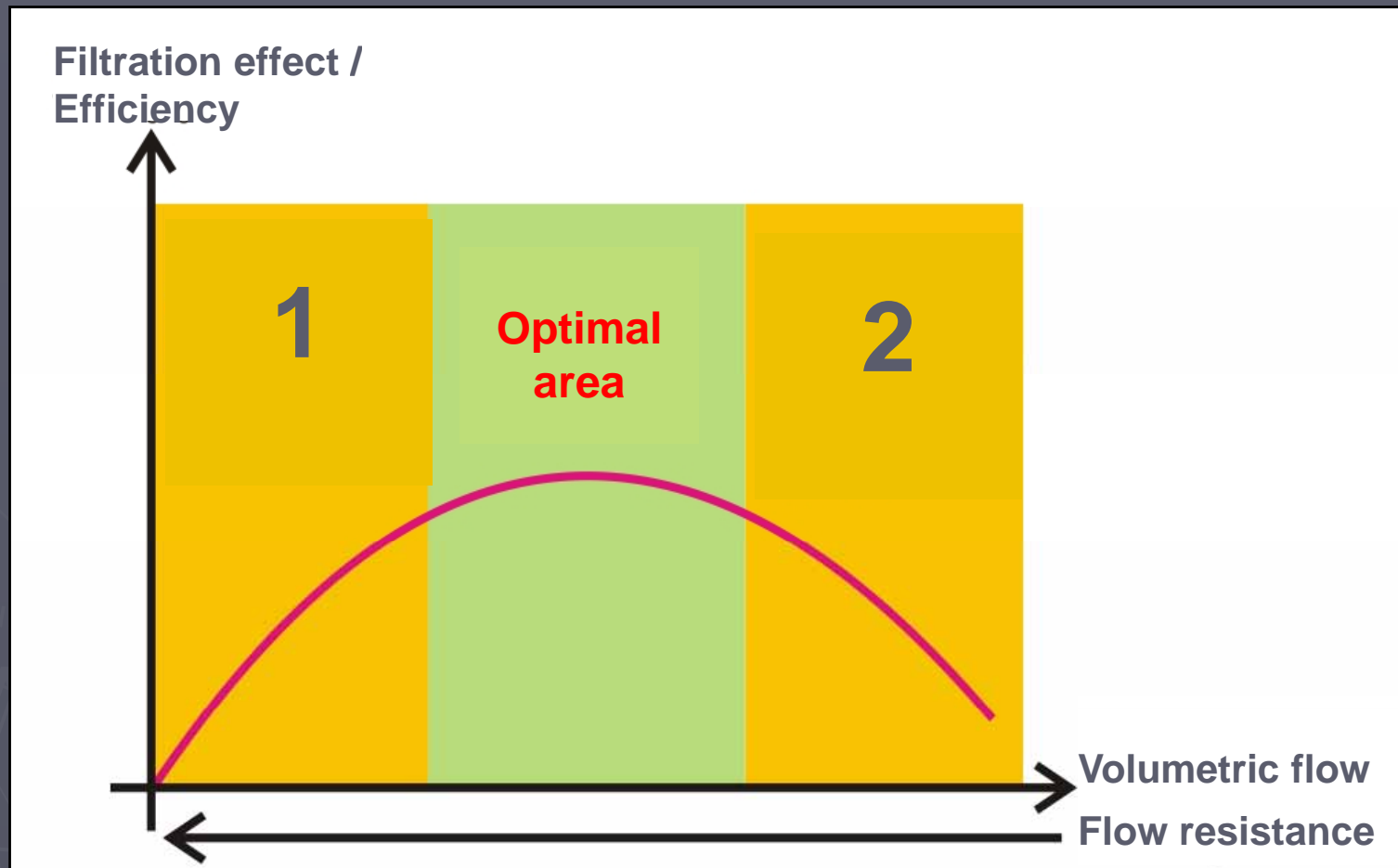


Diagram 2 : Ratio of volumetric flow and flow resistance to the filtering capacity.

**For additional information, please
contact:**

Thorsten Reuther

Mühlweg 14, 35767 Breitscheid, Gemany

+49 (0) 2777/9145-35

+49 (0) 2777/9145-55

T.reuther@hofmann-ceramic.de

www.hofmann-ceramic.de

“Glück auf”

Thank you for
your attention!