

Innovative filter technology from hofmann CERAMIC

A new phase, a new look, a new perspective!





The best filters for optimum castings – for more than 70 years!

Hofmann Ceramic GmbH has been developing, manufacturing and marketing a wide range of innovative technical ceramics for a broad range of applications in small workshops, small and medium-sized enterprises and industrial corporations since 1937. For example round-hole filters for foundries. Our round-hole filters are produced using a dry-pressing process that is unique worldwide. These filters greatly increase the quality and durability of cast parts. Filtered cast parts are more stable and reduce tool wear.

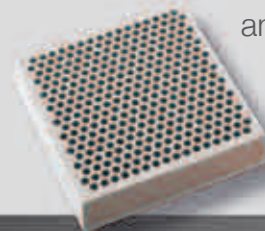
Our 150 employees around the world are always working on innovative product and manufacturing solutions: in our company headquarters in Breitscheid (Germany), the USA, the Czech Republic, and India.

Benefit from the know-how of the leading innovator – increase quality and lower costs!

Do you want to increase the quality of your products and reduce manufacturing costs at the same time? We can assist you with intelligent and flexible solutions for optimum filtration results in casting operations!

This is why we use only high-quality ceramics and focus on a consistent and precise production process. Our particular strength are special solutions tailored to your processes that we develop and produce according to your individual wishes and operating requirements. Together, we can safeguard your production processes, making them clean, defined and reliable!


Our claim as a premium manufacturer also applies to our Service Department: customer-oriented, competent and flexible guidance and assistance in the selection, production and use of ceramic filters in your company.



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“Always the highest quality,
as our customers expect.”



So forget antiquated techniques, use the latest technology – benefit from our understanding of the filtration processes taking place in molten metals!

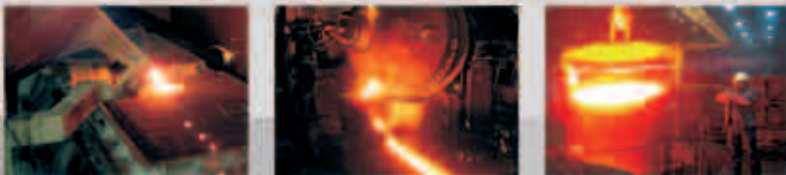
The idea: Filtration does not take place inside the filter but mainly ahead of it and even downstream.

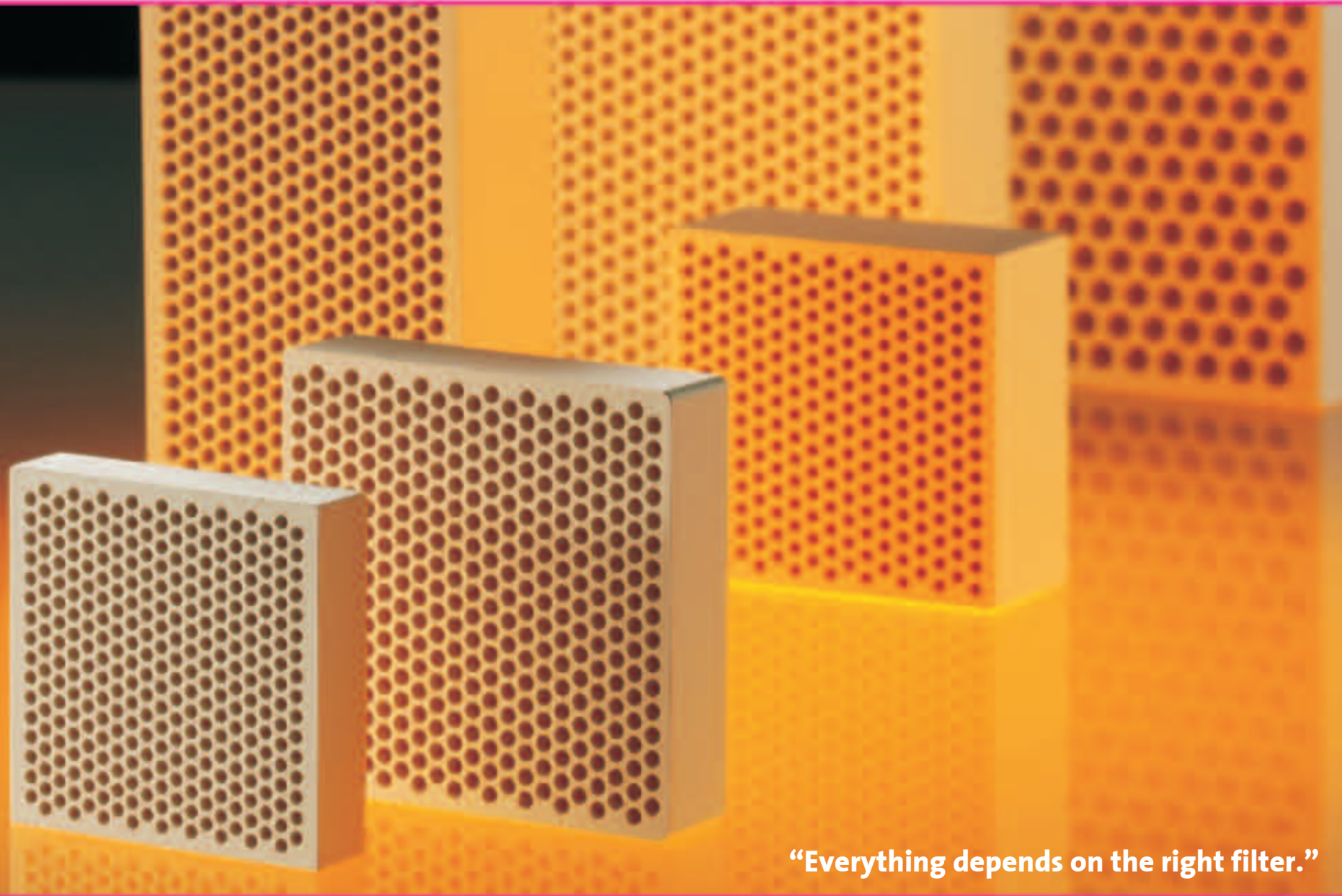
The effect: fewer impurities, less slag formation (re-oxidation) and avoids sand erosion – to ensure more precise, cleaner and more sustainable filtering. The cast part is purer and the tool wear rate is lower.

The technical background: Previous theories were based on three filtration mechanisms: sieving of coarse particles, capture on the filter surface and, in particular, binding of particles to the surfaces inside the filter (depth filtration). However, particle capture and depth filtration are associated with a major inconsistency: there is no room for lighter impurities where the metal is flowing.

hofmann CERAMIC did not stop there, we have developed innovative and precise round-hole filters that have a positive effect on the flowing melt. These filters reduce the flow velocity and thus have a damming effect: the lighter non-metallic inclusions float upwards and are separated upstream of the filter. The melt in the runner continues to flow without turbulence and the coarse particles are sieved out. The laminar flow downstream of the filter prevents formation of new slag and minimises the risk of sand erosion. The high precision of round-hole filters guarantees the highest level of reproducibility. Fluctuations in pour times are minimised.

The innovative round-hole filter from hofmann CERAMIC is clean, cost-effective, precise. And highly efficient!





“Everything depends on the right filter.”

A new phase, a new look, a new perspective!



The book behind the story
“Gating and Filter Technology for Foundries”.
Order now from hofmann CERAMIC:
www.hofmann-ceramic.de



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