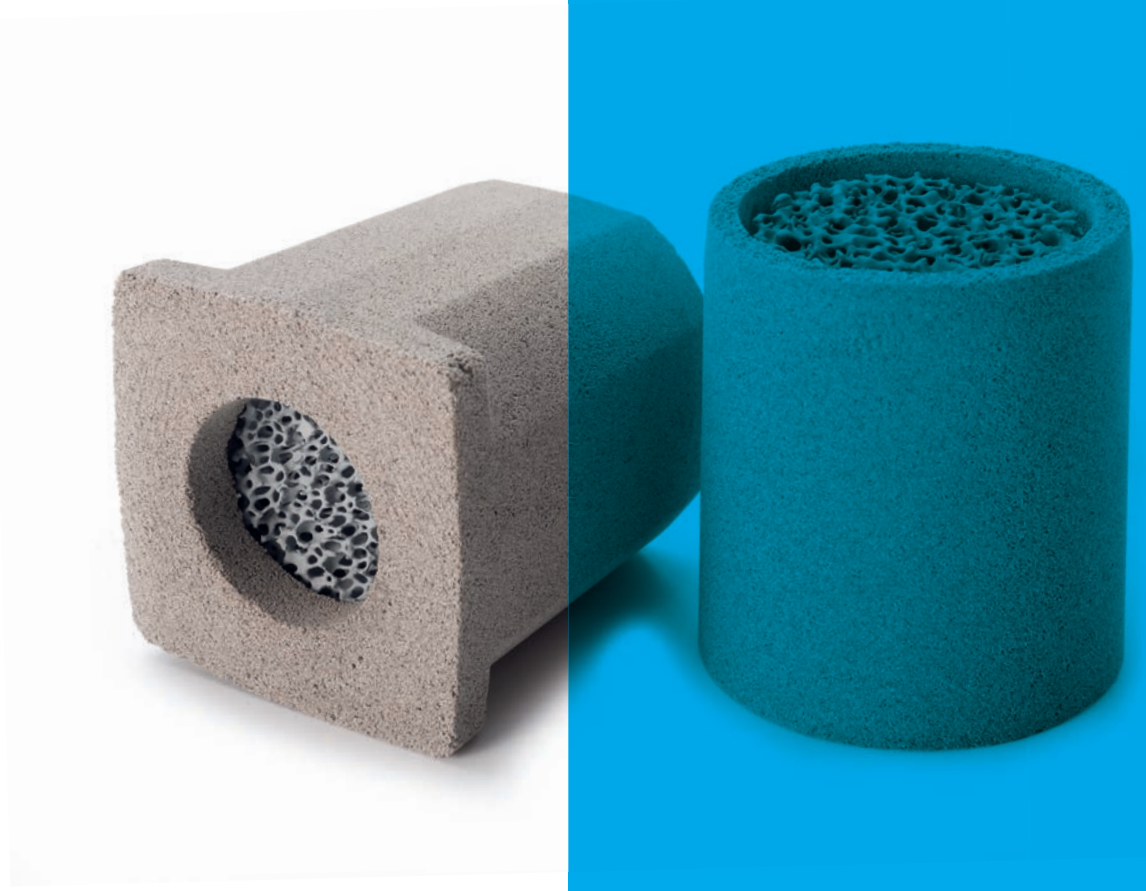
FILTER-Riser



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Product description

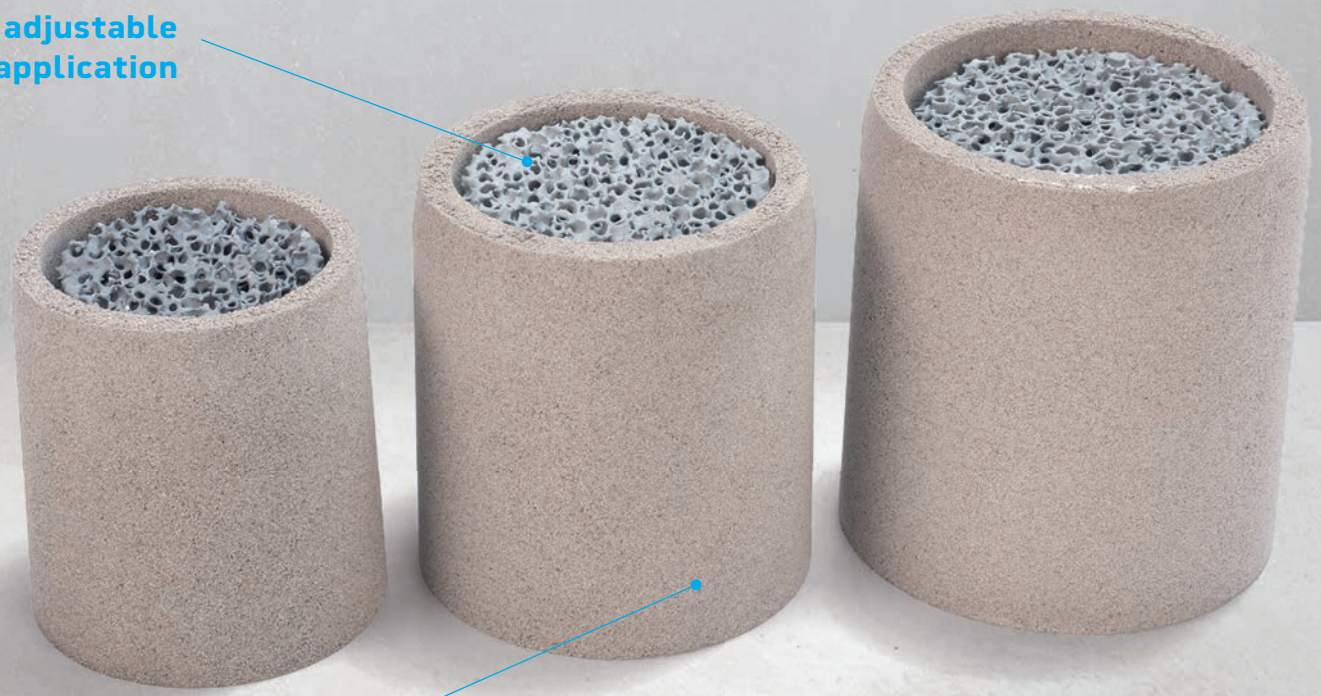
During the casting process, FILTER-Risers can be used to cover the essential tasks of filtering and feeding the casting. Here, a combination of an insulating or exothermic-insulating riser body is made with a ceramic foam filter that allows the foundry to pour the metal directly into the casting.

Due to the flexibility of the system, FILTER-Risers can be used in steel, iron and nonferrous castings as well as in all common molding processes (vertical/horizontal/machine and hand molding). The filter used must be adjusted to suit the casting metal and the desired flow rate.

In order to further reduce cleaning costs, the FILTER-Risers can be equipped with breaker cores. The riser neck dimensions depend on the riser modulus and can be adjusted to the individual application case.

Our FILTER-Risers are manufactured using inorganic riser materials. There these are almost odor- and emission-free in the manufacturing process of our customers.

FILTER-Riser



Product advantages

- Increased yield
- Reduced space requirement for the casting system leads to more efficient usage of the pattern, or a reduction of the molding box size
- Reliable feeding
- Reduction in cleaning costs
- Improved cast surface
- Inorganically bound feeder material – low odor and emission

Image 1: FILTER-Riser with breaker core

Case study 1 – FILTER-Risers for vertically split molds

Particularly when casting with vertically split molds, the foundry desires an efficient pattern design and thus a space-saving pouring and riser system to guarantee efficient production. In this case, the positioning of FILTER-Risers with other elements can be carried out using an automated core setter operating in the machine cycle.

The FS series has been developed to ensure reliable positioning of the riser feeders in a vertically split mold. This has the reverse taper shaped FILTER-Risers on a rectangular base, which ensure a precise fit in the mold.

Image 2: FILTER-Riser for vertical applications

Case study 2 – Casting cluster with a central filter unit

The pattern usage can be made more efficient by replacing a conventional casting system by a casting system with a FILTER-Riser. This results in a more economical sand-iron ratio, a reduction in recycled material, and an improved feed.

Main features

Casting weight	14.3 kg
Casting cluster weight	19.3 kg
Yield	74.4%

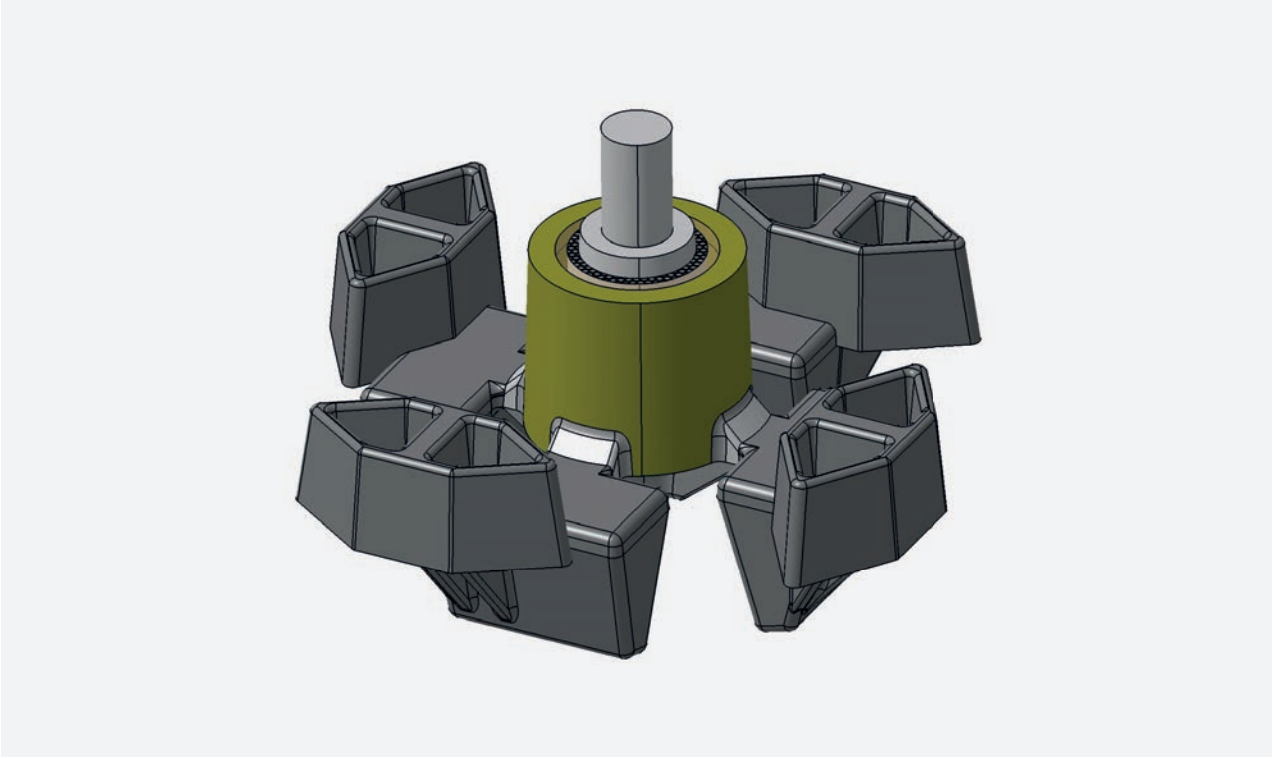


Image 3: 3-D model with FILTER-Riser

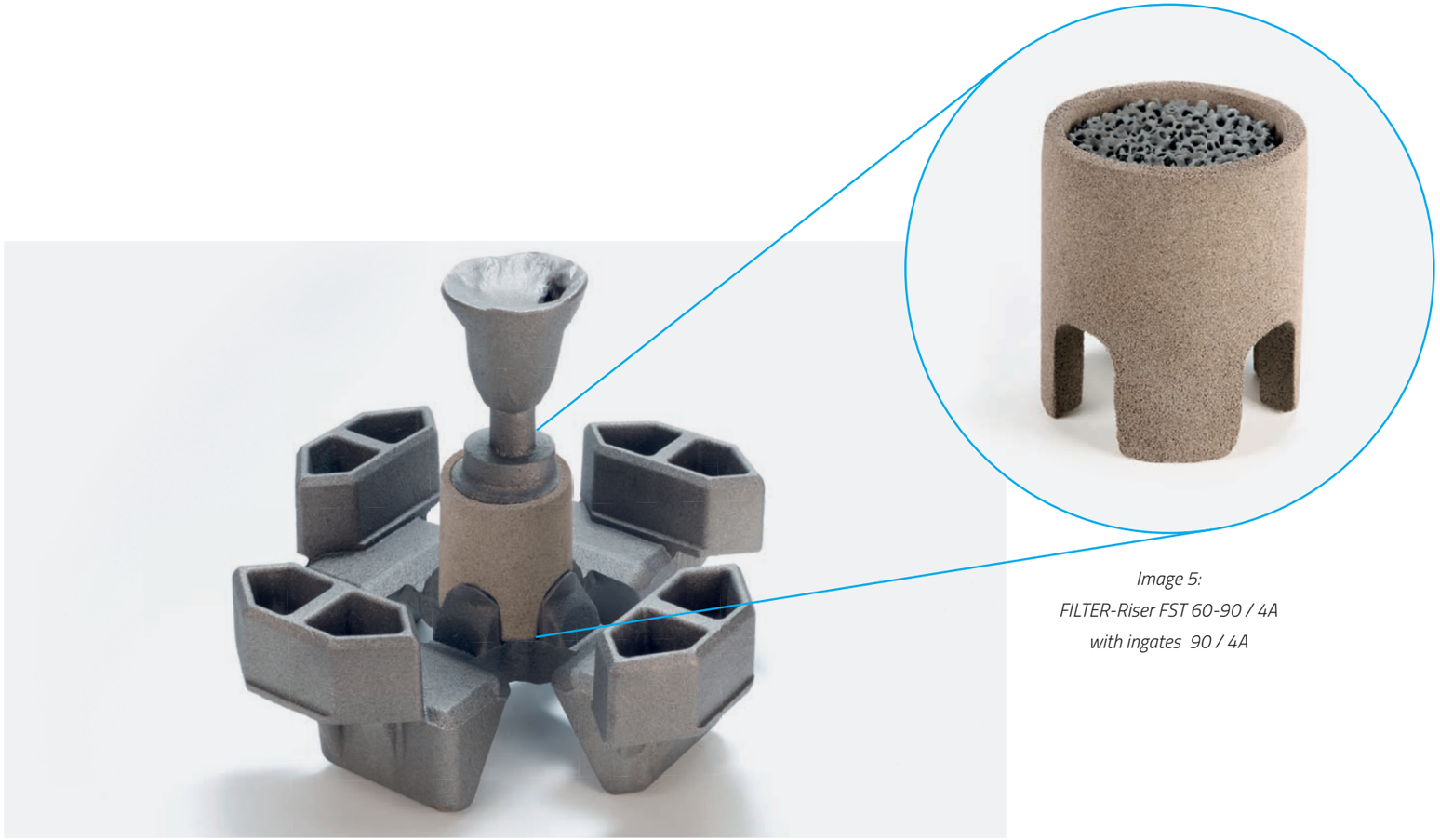


Image 4: Casting with FILTER-Riser FST 60-90 / 4A

Image 5:
FILTER-Riser FST 60-90 / 4A
with ingates 90 / 4A

Highlights

- Yield improvement
- Efficient feeding utilizing smallest space
- Emission-free due to inorganic riser material
- Applicable in horizontal and vertical molding

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