

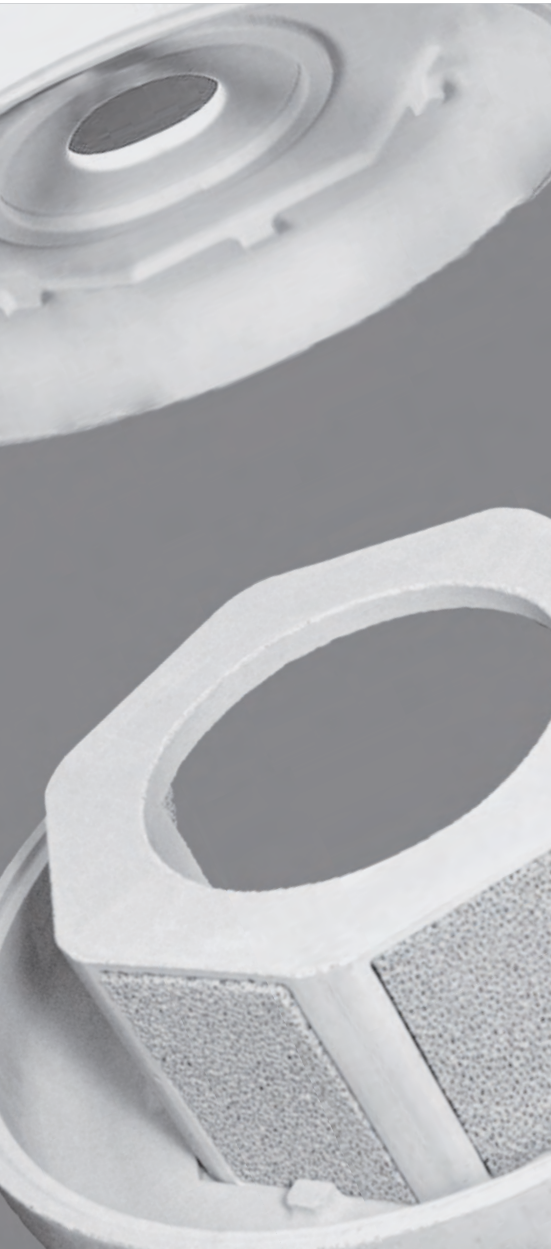


HOLLOTEX* CFU



HIGH CAPACITY FILTRATION DEVICES FOR FOUNDRIES

- + Cleaner castings
- + Improved surface appearance
- + Reduced upgrading
- + Reduction of turbulence



High capacity filtration devices

Simple application

The filtration of ferrous metals is an established technology for improving steel and iron casting quality and performance.

Application of filters to large iron and steel castings has until now been complicated and with a risk of filter failure. The HOLLLOTEX CFU system has been developed to allow the simple and effective application of a filtration unit to large ferrous castings.

The HOLLLOTEX CFU system is a self contained unit incorporating seven STELEX* ZR filters. The system is incorporated into the castings running system.

As the metal enters the HOLLLOTEX CFU unit during mould pouring, the metal is directed to ensure rapid and complete priming of all the filters. This promotes steady and uninterrupted filling of the mould cavity. Centrifugal forces on the metal within the unit reduce the rate of filter blockage providing a high filter capacity before blockage occurs. Castings up to 40 tonne poured weight have been produced using multiple HOLLLOTEX CFU units in one mould.

The largest HOLLLOTEX CFU unit currently available incorporates seven 200 x 150 mm STELEX ZR filters and has a capacity of between 6 - 12 tonnes for molten iron and steel.

Key Benefits

- + Cleaner castings
- + Reduced scrap
- + Reduced machining stock allowances
significant reduction in man-power
energy and consumables used for cleaning,
welding and inspection of castings
- + Interchangeable Clean-Out Port and Exit
Port Adapter features allow HOLLLOTEX CFU
systems to be used in both right and left
spin applications

HOLLOTEX CFU

Fewer defects in large steel and iron castings

1. STELEX ceramic foam filters

- + Removes non-metallic inclusions through complex filtration mechanisms
- + Reduces generation of re-oxidation products through a reduction in turbulence
- + Reduces cleaning, welding and inspection costs
- + Reduces machining allowance; improves yield
- + Reduces machining costs

2. One-piece filter support

- + Eliminates metal by-pass
- + Maximises filter efficiency
- + Minimises risk of filter breakage during pouring

3. Contoured internal flow channel

- + Promotes non-metallic inclusions, separation from the melt from centrifugal & buoyancy forces
- + Maximises filtration efficiency and reliability

4. Contoured entry choke

- + Avoids direct metal impingement of filters and reduces filter breakage
- + Acts as a choke in the running system to ensure flow rate consistency

5. Clean-out port

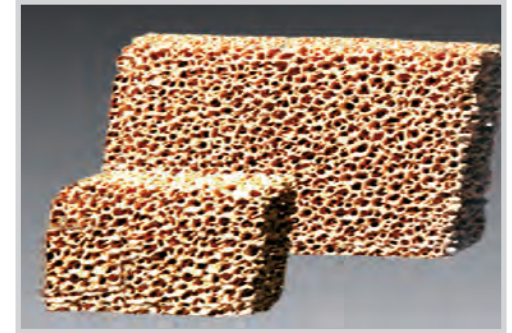
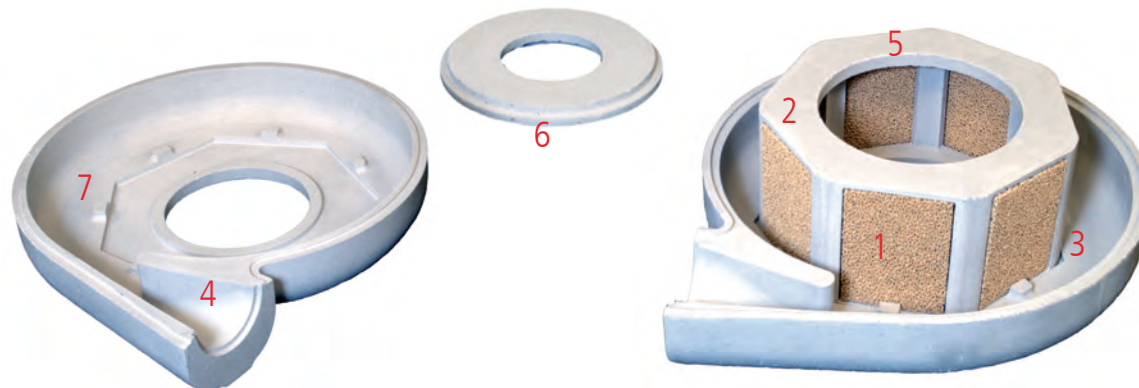
- + Allows filters to be realigned and removal of sand and other contaminants during moulding

6. Exit port adapter

- + Offers maximum flexibility when choosing holloware

7. Streamlined, symmetrical design

- + Lightest possible weight for ease of handling
- + No sharp edges
- + Allows orientation in mould for right and left hand spin



The balance of contaminants are trapped by STELEX filters



Application of a HOLLOTEX CFU



Cast gating system including HOLLOTEX CFU unit

Application and services

Application

HOLLOTEX CFU units are easily integrated within ceramic holloware running systems using common elbows and joints.

HOLLOTEX CFU systems are manufactured so that no pre-heating of the holloware running system is required prior to pouring.

When using HOLLOTEX CFU systems, the flow rate and filtration capacity achieved will depend on foundry and casting variables including metal temperature, metal grade, metal head pressure and the relative cleanliness of liquid metal.

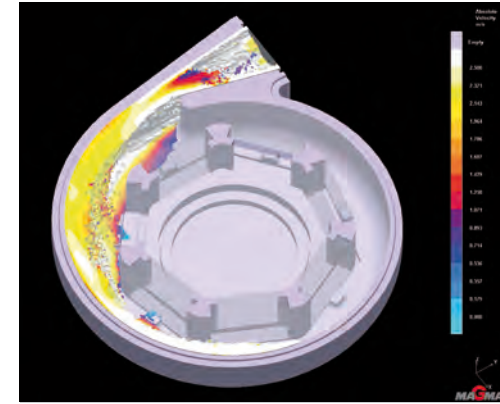
Service

Our engineers and product managers work in partnership with our customers to help them improve productivity, process control, casting quality and the working environment.

Simulation

Solidification simulation is an essential tool for the modern methods engineer. All our experts have access to the latest simulation technology through our alliance with MAGMA® GmbH - the world leader in solidification and Flow Simulation technology for the foundry industry.

Simulation support



Application advice



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