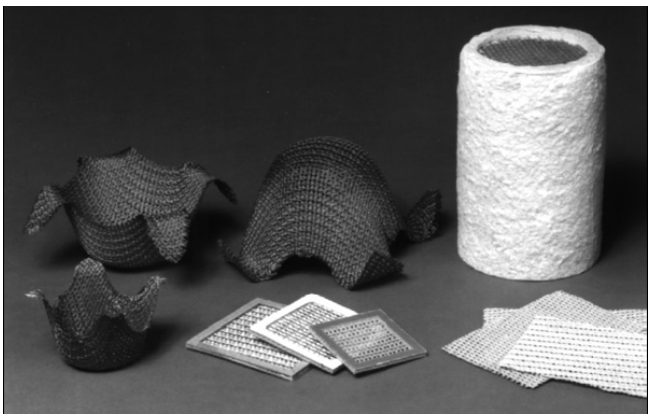
GLASWEVE HT FILTER CUPS

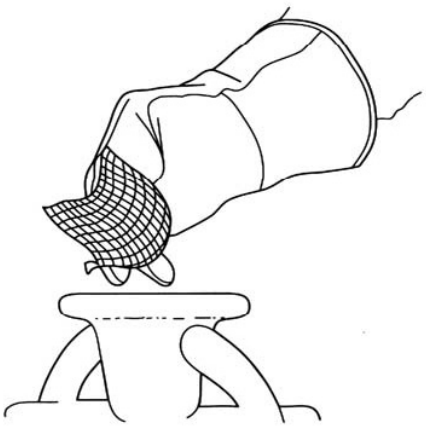
Filtering with Glasweve HT is an effective way to remove inclusions and slag from steel, copper-based metal alloys, aluminium, gray, malleable, white, compacted graphite and ductile cast iron.

Able to withstand pouring temperatures up to 1650°C (3000°F), filtration shapes made from Glasweve HT help trap inclusions and reduce turbulence during the casting process. They also promote better metal distribution and minimize reoxidation while increasing the effective surface area for metal filtration.



On contact with molten metal, the surface fibers of Glasweve HT form a sticky layer of fayalite. This allows the fabric to remove even micron-sized inclusions from the beginning of the pour to the end.

Filters made from Glasweve HT are particularly effective at extracting dross, slag, refractory particles and nonmetallic inclusions.



The most common application of Glasweve HT filter material in the investment casting industry is the preformed cup. The pre-formed Glasweve HT cup fits into the pouring cups positioned at the top of the tree mold.

Investment casters have also placed Glasweve HT material in the wax mold gating system to filter metal at pattern entry. This assists in minimizing reoxidation.

APPLICATIONS:

- Filtering ferrous and nonferrous molten metals
- Filtering specialty metals including tool and die steel

ADVANTAGES:

- Low cost
- Improves fluidity and metal distribution
- Removes micron sized inclusions and impurities
- Can be used with existing pattern equipment
- Reduces turbulence
- Eliminates inclusions created by ceramic chips
- Non-chilling
- Reduces scrap

AVAILABILITY:

- Rolls 35 in x 50 - 55 yards
- Molded cup shapes
- Riser sleeves with Glasweve HT filters placed across bottom of the sleeve or across ports in walls
- Cut pieces for placement in molds to function as filters
- Cut pieces to provide a weakened plane for riser knock-off
- Custom sewn shapes

R&R DENTSPLY

Ransom & Randolph

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FILTERING TIPS FOR SPECIFIC ALLOYS

Brass & Bronze

- Glasweve HT filter material works well with copper alloys, we do not recommend use with pure copper.
- Glasweve HT effectively separates the thin slag in leaded bronze. The smaller the hole size, the better the filtration results.

Steel

- Glasweve HT is rated at 1650°C (3000°F), however, many stainless steel castings have been poured at 1704°C (3100°F). Success with the high-range temperatures is dependant on the volume of the metal to be cast. The smaller the volume, the greater the chance of success. The majority of steel castings are poured under 1621°C (2950°F)
- For stainless steel, the #31 mesh (1 mm) is typically suitable.
- For carbon steel, we recommend trialing with the #31 mesh and increasing the hole size based on the initial trial results.

Gray Iron

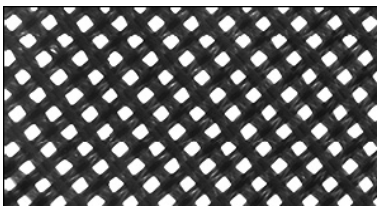
- The #31 mesh (1 mm) material is recommended as gray iron has thin, hard-to-separate slag.

Ductile Iron

- Due to its reduced flow and typically larger inclusions or particles, a #27 mesh (2 mm) material is recommended for initial trials. If the #27 material is effective, you may wish to reduce the hole size to determine if you receive more effective filtration with a #28 filter.

TECHNICAL DATA:

Weave No.	Strands per 10 cm	Strands per in	% Open	Hole Size mm²	Hole Size in²
31	3.5 x 3.1	9 x 8	14.1	1.30	0.0020
28	2.8 x 2.6	7 x 6.5	16.5	2.25	0.0034
27	2.5 x 2.3	6 x 6	22.4	4.00	0.0061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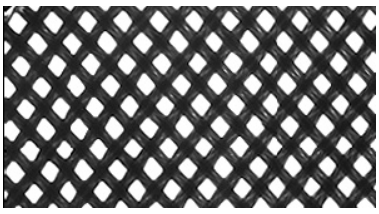
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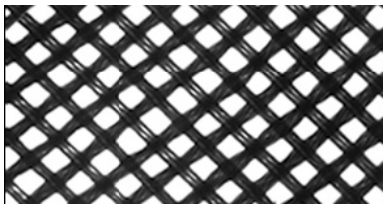
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