

E-glass Fiberglass Filter Mesh for Aluminum Filtration (EFG)



Above - filtration mesh without coating (white colour)

E-glass fiberglass filter for molten aluminum filtration is designed and woven for the diffusion and filtration of molten aluminum. Molten aluminum is very easy to be oxidized when exposed to air, so with the use of EFG, the pure molten aluminum is easier to obtain during primary melting, foundry casting and scrap recycling.

Main Types

- ❖ Without coating (white colour)
- ❖ With resin coating (yellow or dark brown colour)
- ❖ Smokeless carbonized treatment - premium type (black colour)



Above - filtration mesh with coating (yellow or dark brown colour)



Above - filtration mesh - smokeless carbonized treatment - premium type (black colour)

Specifications

- ❖ Yarn type: Alkali free E-glass
- ❖ SiO₂ contents:58%
- ❖ Weave pattern: Leno
- ❖ Weight:180-350g/m²
- ❖ Width: 2.10 /2.0 / 1.50 / 1.15 /1.0 /0.95 / 0.93m/roll
- ❖ Length per roll:50/100/150/200/300m or as per request
- ❖ Mesh size:1.0 x 1.0mm,1.2 x 1.2mm,1.5 x 1.5mm,2.0 x 2.0mm,2.5 x 2.5mm
- ❖ Thickness: 0.18 to 0.35mm
- ❖ Working temperature:700-800 °C (1290-1472 °F)
- ❖ Soft Point: 900°C (1652°F)
- ❖ Continuous Working Time: <20 minutes
- ❖ Tensile Strength (N/4ends): ≥ 6

Product Codes →	EFG-100	EFG-135	EFG-200	EFG-64
Warp x Weft	10 x 10	11 x 12	14 x 14	8 x 8
Mesh size (mm)	2.0 x 2.0	1.5 x 1.5	1.0 x 1.0	2.5 x 2.5
Thickness (mm)	0.35	0.25	0.18	0.25
Weave Type	Leno			
Weight (g/m²)	300	200	200	220
Colour	White / yellow / black			
Max Temperature	800 °C (1472 °F)			

Features

- ❖ Brings down the casting rejection rate due to slag inclusions
- ❖ Cheap and cost effective, easy installation
- ❖ No need to change molten metal element or contaminate molten aluminum
- ❖ Stay away from molten aluminum and easy to handle the aluminum scrap recycling (Fiberglass mesh)
- ❖ Can float on top of the molten metal when the metal is recycled and can be scooped out) -- this can greatly reduce cost
- ❖ Reduces molten metal turbulence and improves molten metal distribution and flow
- ❖ Remove oxides and inclusions to improve castings mechanical properties and surface finish.
- ❖ Excellent stiffness and toughness -good impact resistance
- ❖ Mesh and grid is well organized and has high integrity

Application

- ❖ As the first step filtration for primary smelting (Second filtration will be followed by ceramic foam filter generally)
- ❖ In gating system application like filtration for sand casting, gravity casting or low pressure die casting etc.
- ❖ As the removal plane to help riser easily to be knocked off from the castings

Filtration ability (Based on experience only)

- ❖ For gravity casting: 8-9kg/cm²
- ❖ For pressure casting: 24 - 27kg/cm²

Above area is the effective area that the poured molten metal passes, not including extra part for fixing or holding the mesh filter.

Different cut pieces sizes and shapes - caps, tubes, funnels etc are available upon request

