

Foam Filters CF-3 “Non-Ferrous Casting”

CF-3 foam filters are widely used in the nonferrous metal casting industry. It is a phosphate bonded and high purity alumina based product. Due to high thermal shock resistance it has, CF-3 foam filters ensure removal of inclusion and impurities in the liquid metal during the filtering process. CF-3 is produced in the range of 7-23” and 10-60 ppi.

Advantages

CF-3 foam filters are widely used for removal of mass inclusions in the aluminium melt and develop its flow rate by ensuring the liquid aluminium to fill the mould gap. Its cleaning efficiency varies depending on the application conditions and generally enhances when the filter pore sizes and metal flow rate reduce.



CF-3		
Width x Length x Thickness		Pore Size
inch	mm	(ppi)*
17 x 17 x 2	432 x 432 x 50 ± 2	20
20 x 20 x 2	508 x 508 x 50 ± 2	30
23 x 23 x 2	584 x 584 x 50 ± 2	40-50
15 x 15 x 2	381 x 381 x 50 ± 2	10-20
		30
12 x 12 x 2	305 x 305 x 50 ± 2	40
		10-20
9 x 9 x 2	228 x 228 x 50 ± 2	30
		40
		20

*Number of pore per square inch

Pore Size (ppi)	Optimum Flow Rates for Molten Aluminium (kg / minute)					
	9" x 9"	12" x 12"	15" x 15"	17" x 17"	20" x 20"	23" x 23"
20	40-120	80-240	120-360	160-480	350-530	-
30	30-80	60-160	80-240	110-320	290-420	400-700
40	25-75	50-160	70-220	100-300	270-350	360-550
Filtering Capacity (ton)	10	15	25	30	35	40

Installation Instructions for Filter/Filter Box

1. Clean the filter box and remove the mass inclusion.
2. Make sure the seal is fit in place completely and then place the filter into the filter case and then press slightly downward to align the filter with the filter box supports.
3. Bring the filter and filter bowl temperature to about 700 °C just before the casting by the help of a heater and, after this action, especially keep the filter to preheating process homogenously.
4. Watch the change in aluminium melt level on the filter during the casting carefully. Aluminium will rise by 50-250 mm depending on the filter pore size and, after sufficient hydrostatic pressure is provided, it will start to penetrate to the porous structure of the filter and thus transfer will start. Subsequently, check throughout the casting process that the metal level on the filter to be 25-60 mm on average, and thus the process will be completed quickly.

Caution: Do not touch the filter and filter box throughout the casting process in order to prevent the particles, filtered and separated, from coming back to the metal.

5. After completion of the casting process, remove the filter by drilling a hole at its centre by help of a metal bar and clean the filter box for the next use.

The values given herein are typical average values obtained in accordance with standard test methods and subject to normal manufacturing variations. They are supplied as a technical data and may change without notice. Contact with our company to obtain detailed information.