

MetCon
FILTERS 
ENGINEERED CAPACITY. CONSISTENCY. STRENGTH.

ENGINEERED CAPACITY.

Ability to design a capacity to suit
the required application.

CONSISTENCY.

Every filter of a given porosity has a
repeatable & consistent structure.

STRENGTH.

Class-leading hot strength for large
filters, long pour times & demanding
applications.

MetCon filters are a unique carbon-bonded filter/flow control device designed for exceptional performance, particularly where filter priming is an issue.

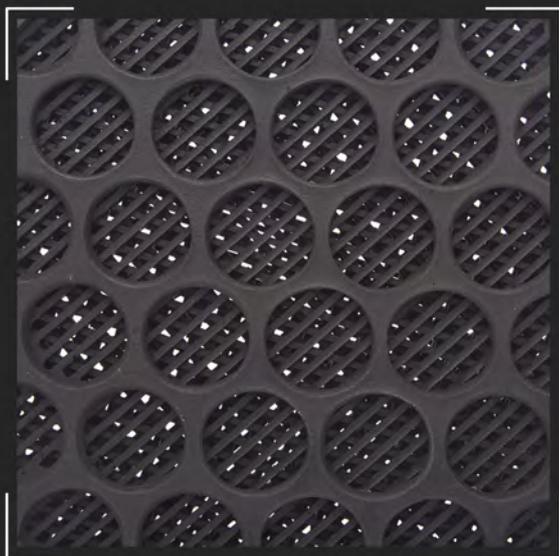
Manufactured from a specially developed carbon bonded ceramic, our filters give superior hot and cold strength alongside excellent thermal shock resistance.

Our filters are suitable for the filtration and flow control of steels with a carbon content greater than 0.2% (such as manganese steels, low alloy steels) and heavy iron castings.

CONSISTENT GEOMETRY & FLOW RATE

FILTER BENEFITS

- Carbon-bonded, so no need to prime
- Superior strength allows for 'direct pour' delivering greater efficiency
- High flow volume for increased productivity
- Eliminates Spalling (Friability)
- Filters out impurities
- Reduced turbulence in the molten metal stream





APPLICATION

The superior strength of MetCon filters makes them particularly suited to use as part of a filter/sleeve combination for large, demanding castings. Whether pouring from bottom pour ladles with a high ferrostatic head, or from lip pour ladles from a great height – the strength of MetCon C filters can withstand even the most challenging of applications.

The unique way MetCon C filters are manufactured allows us to produce very high capacity and high flow rate filters. Foam filters are limited by their pore size and can often prematurely block and/or freeze off with some alloys. MetCon C filters can be designed to suit a particular alloy to give the capacities and flow rates that are needed.

POROSITY DESIGNED TO SUIT THE ALLOY

COMPARISON

COMPARISON WITH TRADITIONAL FILTERS

	FOAM	PRESSED	EXTRUDED	METCON
FILTRATION EFFICIENCY	✓	✗	✗	✓
FLOW MODIFICATION	✓	✗	✗	✓
CONSISTENCY	✗	✓	✓	✓
NO FRIABILITY (SPALLING)	✗	✓	✓	✓
COLD STRENGTH	✓	✗	✗	✓
HOT STRENGTH	-	-	-	✓

THE PROBLEM WITH FOAM FILTERS

While foam filters are effective, their porosity and structure is inconsistent and variable. Every foam filter is as unique as a finger print and has a different structure. For a given porosity, the flow rate and capacity can vary as much as 20%.

TECHNICAL

SUPERIOR THERMAL SHOCK RESISTANCE

FLOW RATE & CAPACITY

	FLOW RATE GUIDE*		CAPACITY GUIDE**	
	POROSITY		POROSITY	
	3G2S	4G2S	3G2S	4G2S
ROUND FILTERS				
125mm Dia	10-15kg/s	12-25kg/s	200-600kg	300-800kg
150mm Dia	12-25kg/s	15-30kg/s	300-800kg	400-1000kg
175mm Dia	15-35kg/s	20-45kg/s	650-1500kg	800-2000kg
200mm Dia	20-40kg/s	30-60kg/s	800-2000kg	1000-3000kg
200mm Dia Tapered	15-35kg/s	20-45kg/s	650-1500kg	800-2500kg
250mm Dia Tapered	20-40kg/s	30-60kg/s	800-2000kg	1000-3000kg
SQUARE FILTERS				
127x127mm	10-15kg/s	15-30kg/s	300-800kg	400-1000kg
177X177MM	10-15kg/s	30-60kg/s	800-2000kg	1000-3000kg



* Flow rate is meant as a guideline only. This is based on experience and will vary based with alloy. The system choke should control the flow rate of a casting – not the filter.

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