

Technical specification for ceramic foam filters VUKOPOR® S

This specification is applicable for filtration of nodular, cast iron and other ferrous alloys as well.

Trade mark	VUKOPOR® S
Material	SiC, Al ₂ O ₃ , SiO ₂ (free of phosphate binder)
Binding system:	ceramic
Colour	grey
Porosity	10, 20, 30 PPI (pores per linear inch)
Maximum temperature of usage	1 450 °C
Basic shapes	square, round, rectangular
Other shapes	according to the customer's demand
Basic plate thickness	15, 22 and 25 mm

The filter material must maintain a sufficient mechanical resistance during prolonged immersion in liquid metal.

The filter plates must have a sufficient mechanical strength so that no damages are caused during unpacking, transportation and assembly either into the filter box or running system (careful treatment provided with regard to ceramic filter nature)

The crumbling of ceramic mass out of the filter body (abrasion during transportation) must be as low as possible.

Dimensional tolerances

dimension up to 100 mm	+ 0 mm	- 2 mm
dimension over 100 mm to 150 mm	+ 0 mm	- 3 mm

Straightness of the filter surface maximum deviation 1,5%, less than 3 mm

Cracks, closed pores (clogged), holes on both working surfaces of the filter are not acceptable. Side walls of the filter can be filled in with ceramic mass.

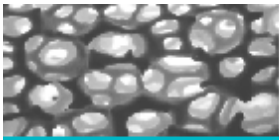
Deviation of colour

Different grades of grey colour are admissible.

Packing and identification

Foundry filters are packed into appropriate cardboard boxes to provide unbreakable placing. Each box must show the identification so that the supplier has the specific data in case of any complaint. The identification involves following information:

filter type, porosity, dimension, date of packing, series number, order No., check worker's signature, subsidiary labels (fragile).



Quality control

Quality control system for production of VUKOPOR® ceramic foam filters is in accordance with ISO 9001:2001. Further information is available on request.

Dimensional and technical summary

Maximum recommended values												
dimension (mm)	10 PPI				20 PPI				30 PPI			
	CAPACITY (kg)		FLOW-RATE (kg/s)		CAPACITY (kg)		FLOW-RATE (kg/s)		CAPACITY (kg)		FLOW-RATE (kg/s)	
	GREY	DUCTILE	GREY	DUCTILE	GREY	DUCTILE	GREY	DUCTILE	GREY	DUCTILE	GREY	DUCTILE
40x40x15	74	32	4	3	52	19	3	2	43	14	2	1
50x50x15	115	50	6	4	81	30	4,5	2,5	68	23	3,5	2
50x50x22	115	50	6	4	81	30	4,5	2,5	68	23	3,5	2
60x60x18	166	72	9	6	117	43	6	3,5	97	32	5	2,5
75x75x22	259	113	14	9	182	68	10	5	152	51	8	4
100x75x22	345	150	18	12	243	90	13	7	203	68	11	5
100x50x22	230	100	12	8	162	60	9	5	135	45	7	4
100x100x22	460	200	24	16	324	120	18	10	270	90	15	7
150x100x22	690	300	36	24	486	180	27	14	405	135	22	11
150x150x22	1035	450	54	36	729	270	40	22	608	203	33	16

Capacity values can be taken as basic and are dependent on operative conditions, they are only guidelines based on our knowledge and experience but with no responsibility taken.

Handling with filters:

Operators working with ceramic foam filters have to adjust handling to their brittle nature. Before placing into gating system the filter has to be blown out with pressed air to make sure small particles that may release during packing are removed.

Transport and storage:

Cardboard boxes are usually placed on wooden pallets, transported in closed means of transport. The boxes have to be stored in closed and dry warehouse. Stacking is allowed up to seven layers.