

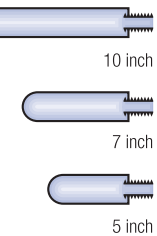
Ceramic Water Filter Candles and Cartridges

Sterasy[™] Ceramic

At the heart of every Doulton[®] and British Berkefeld[®] water filter candle is a 'Sterasy[™]' silver impregnated ceramic microfilter. Fairey Industrial Ceramics is the world's leading manufacturer of ceramic materials with closely controlled pore sizes. This expertise gives Doulton[®] and British Berkefeld[®] candles the highly consistent and controlled pore structure necessary to remove a wide range of water borne contaminants over the life of the filter. The incorporation of silver locked within the ceramic structure inhibits the growth of bacteria giving the candles self-sterilising properties and removes the need for regular boiling. By incorporating activated carbon in the form of a fine coating, granular carbon or carbon block, the Sterasy[™] ceramic can also be produced in Super Sterasy[™] and Supercarb[™] grades which combine the advantages of ceramic and carbon treatment within a single filter element. At the top end of the product range the ATC Super Sterasy[™] and Ultracarb[™] candles have an additional ion exchange media which reduces Lead and other harmful heavy metals.

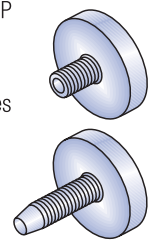
Dimensions

These Doulton[®] and British Berkefeld[®] Ceramic Filter candles are manufactured to a diameter of 2 inches/50mm and are available in three standard lengths - 10 inches/254mm, 7 inches/177mm and 5 inches/127mm. Other sizes can be manufactured to individual customer specification. Please quote the candle length required when ordering.



Mount Sizes

Doulton[®] and British Berkefeld[®] Candles are manufactured with a 1/4 inch BSP threaded mount in two lengths - 3/4 inch/19mm (short mount) or 1 1/4 inch/36mm (long mount). Other types of mount can be manufactured to match specific filter housings and details are available on request. Please quote the mount type required when ordering.



Quality Control

Close control of material processing, manufacturing methods and quality and inspection procedures are essential to produce the highest quality ceramic filter candles. All genuine Doulton[®] and British Berkefeld[®] ceramic filter candles are manufactured in accordance with ISO 9001:2008 quality assurance procedures which ensures highly consistent product quality with full batch traceability in operation. Independent quality control approvals such as the NSF International standard 42 and 53, and WRAS approval ensures that product performance claims are verified to the highest level. Copies of third party and independent certifications are available on request.



Shipping Specifications

CANDLE GRADE	Quantity per carton	Gross weight per carton		
		5 inch	7 inch	10 inch
Sterasy [™]	25	5kg	6kg	8kg
Super Sterasy [™]	25	6kg	8kg	9kg
ATC Super Sterasy [™]	25	6kg	8kg	9kg
Supercarb [™]	25	6kg	8kg	9kg
Ultracarb [™]	25	6kg	8kg	9kg

Standard carton size 31 x 31 x 34cm

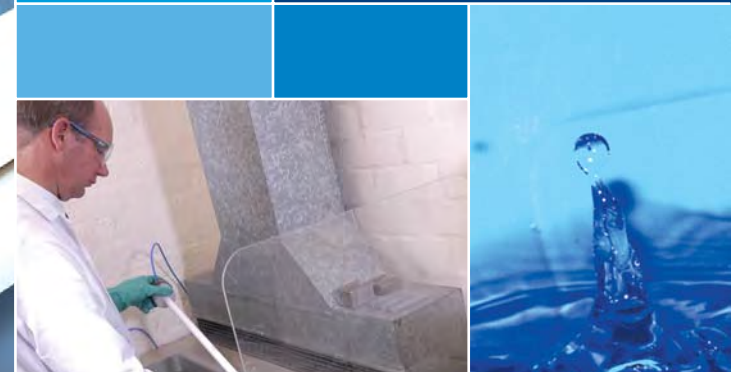
CARTRIDGE (OBE) GRADE	Quantity per carton		Gross weight per carton	
	49mm	67mm	49mm	67mm
Sterasy [™]	25	9	8kg	6kg
Super Sterasy [™]	N/A	9	N/A	6kg
Supercarb [™]	25	9	9kg	6kg
Ultracarb [™]	25	9	9kg	6kg

Standard carton size 31 x 31 x 34cm
All sizes and weights are approximate

Distributed by:

Due to a policy of continuing product development Fairey Industrial Ceramics Ltd reserves the right to change any information without prior notice.

Doulton[®] is a trade mark. Used under licence by Fairey Industrial Ceramics Ltd. British Berkefeld[®], Sterasy[™], Super Sterasy[™], ATC Super Sterasy[™], Supercarb[™] and Ultracarb[™] are trademarks registered to Fairey Industrial Ceramics Ltd.



Candle Grade 49mmø							
Selection of the most appropriate grade of candle allows filter performance to be matched to the requirements of the local water conditions.			Sterasyl™ Silver impregnated ceramic microfilter	Super Sterasyl™ Sterasyl microfilter plus granular activated carbon	ATC Super Sterasyl™ Sterasyl microfilter plus granular activated carbon and heavy metal removal media	Supercarb™ Sterasyl microfilter plus carbon block core	Ultracarb™ Sterasyl microfilter plus carbon block core and heavy metal removal media
Filtration Rating (% particulate filtration efficiency)	Absolute (defined as >99.99%)	0.9 micron	0.9 micron	0.9 micron	0.9 micron	0.9 micron	0.9 micron
	Nominal (defined as >99.9%)	0.5 to 0.8 micron	0.5 to 0.8 micron	0.5 to 0.8 micron	0.5 to 0.8 micron	0.5 to 0.8 micron	0.5 to 0.8 micron
Working Pressure (for pressure filter use)	Minimum	10 psi	10 psi	N/A	10 psi	10 psi	10 psi
	Maximum	125 psi	125 psi	N/A	125 psi	125 psi	125 psi
Working Parameters	Working Temperature Range	5 - 38 (°C)	5 - 38 (°C)	5 - 38 (°C)	5 - 38 (°C)	5 - 38 (°C)	5 - 38 (°C)
	Working pH Range	5.5 - 9.5	5.5 - 9.5	5.5 - 9.5	5.5 - 9.5	5.5 - 9.5	5.5 - 9.5
	Suitable for use in Gravity Filters	YES	YES	YES	NO	NO	NO
	Recommended Change Frequency	12 months	6 months	6 months	6 months	6 months	6 months
Flow Rate	Unrestricted Flow at 3 Bar Pressure	Litres per minute	5	4.5	N/A	3.7	3.3
		US gallons per minute	1.33	1.2	N/A	1	0.9
	To achieve maximum performance	Litres per minute	N/A	1.5	1.2 l/hr under gravity	1.9	1.9
		US gallons per minute	N/A	0.4	0.3 g/hr under gravity	0.53	0.53
Capacity	Before replacement to guarantee performance	Litres	10,000	2000	1500	3740	2244
		US gallons	2600	535	400	1000	600
Quality Approval	NSF approved version available	YES	NO	NO	YES	YES	YES
	WRAS approved	YES	YES	NO	YES	YES	YES
	NSF turbidity reduction std. 53	>98%	>98%	>98%	>98%	>98%	>98%
Pathogenic Organisms	% Bacteria Removal	E. Coli	>99.99%	>99.99%	>99.99%	>99.99%	>99.99%
		Vibrio Cholerae (Cholera)	>99.99%	>99.99%	>99.99%	>99.99%	>99.99%
		Shigella	>99.999%	>99.999%	>99.99%	>99.999%	>99.999%
		Salamonella Typhi (Typhoid)	>99.999%	>99.999%	>99.99%	>99.999%	>99.999%
		Klebsiella Terrigena	>99.999%	>99.999%	>99.99%	>99.999%	>99.999%
	% Cyst Removal	Cryptosporidium	>99.999%	>99.999%	>99.99%	>99.999%	>99.999%
	Giardia	>99.999%	>99.999%	>99.99%	>99.999%	>99.999%	
Trace Organics Removal	Insecticides	Lindane @ 0.1ppb presence	N/A	NO DATA	> 80%	> 85%	> 85%
	Herbicides	Atrazine @ 1.2ppb presence	N/A	NO DATA	> 80%	> 85%	> 85%
	Phenols	TCP @ 1.2ppb presence	N/A	NO DATA	> 80%	> 50%	> 50%
	Polyaromatic Hydrocarbons	PAH's @ 0.2ppb presence	N/A	NO DATA	> 80%	> 95%	> 95%
	Trihalomethanes	Chloroform @ 150ppb presence	N/A	NO DATA	> 66%	> 50%	> 50%
Inorganics Removal	Free Chlorine Removal	2mg cl/l challenge	N/A	Under Gravity > 95% Under pressure > 50%	> 95% under gravity > 94% under gravity	> 97% NSF Class 1 std. 42	> 97% NSF Class 1 std. 42
	Lead Removal	@ pH 6.5 after 2,244L	N/A	N/A	> 94% under gravity	N/A	98.3% NSF std. 53
		@ pH 8.5 after 2,244L	N/A	N/A	N/A	N/A	98.3% NSF std. 53



Doulton's NSF certified products are only listed for specific claims against standard 42 and 53 as shown above.

Product Performance Claims

Contamination of drinking water takes many forms. Particular matter, dissolved chemicals and harmful bacteria are amongst the most common causes of poor drinking water quality. It is of vital importance that manufacturer's claims on the effectiveness of their products at removing these contaminants, are fully supported by proven test data. Fairey Industrial Ceramics places great emphasis on this aspect of product quality and has a programme of regular testing of its water filter products. Specially designed in-house test rigs are capable of measuring specific aspects of filter performance over prolonged periods. In addition, many of the world's leading independent laboratories, including NSF and Spectrum Laboratories in the USA, WRAS (formally WRC) and Hyder in England, regularly provide independent verification of all major product performance claims.

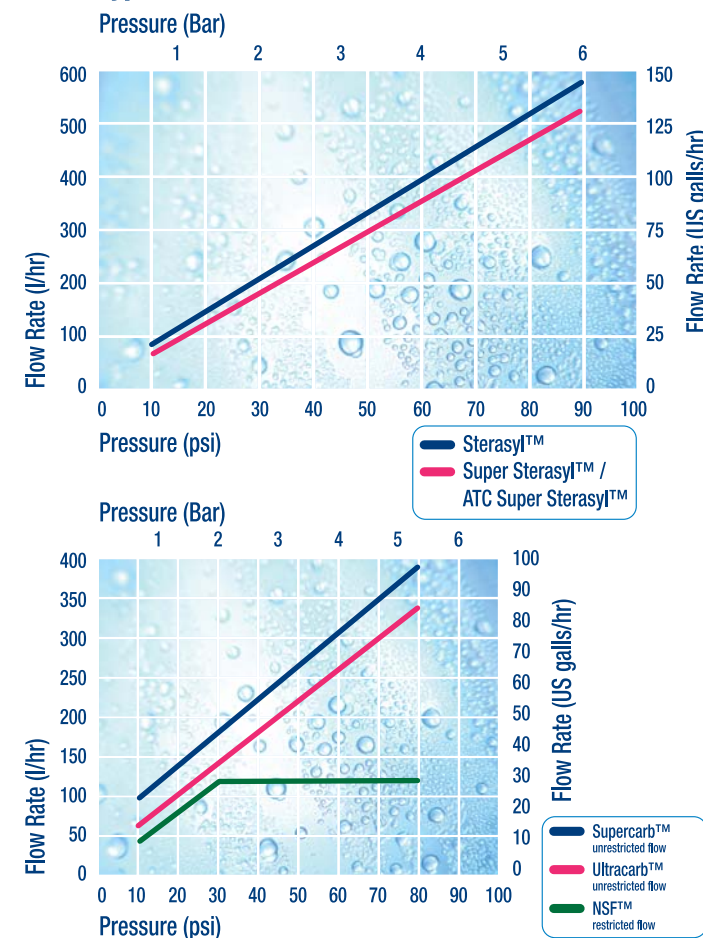
Fairey Industrial Ceramics Ltd - Doulton Water Filters

The Doulton® water filter has been continuously manufactured in the UK for over 150 years, and is in daily use world-wide in over 140 countries.

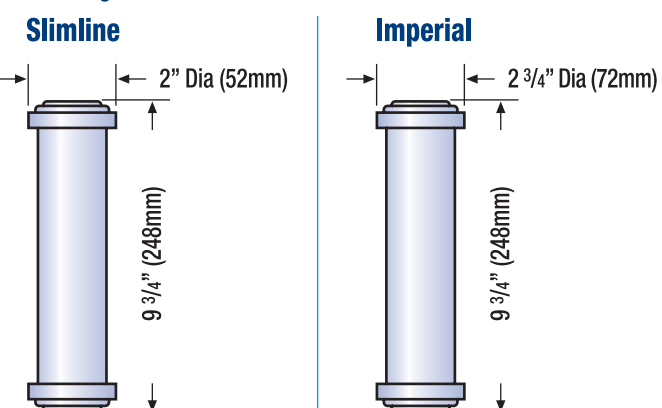
Today, Doulton® and British Berkefeld® water filters are manufactured close to the 'Potteries' area of North Staffordshire by Fairey Industrial Ceramics Limited, part of the Taylor Tunnicliff Group of Companies, which produce both Industrial and Consumer related ceramic products for a global market.

Fairey Industrial Ceramics Limited are renowned for manufacturing the world famous Doulton® and British Berkefeld® drinking water filters to the world's recognised Drinking Water quality standards, such as NSF, WRAS and the Water Quality Association. It is this attention to detail that sets us apart from the rest.

Typical Candle Flow Rates 49mmø

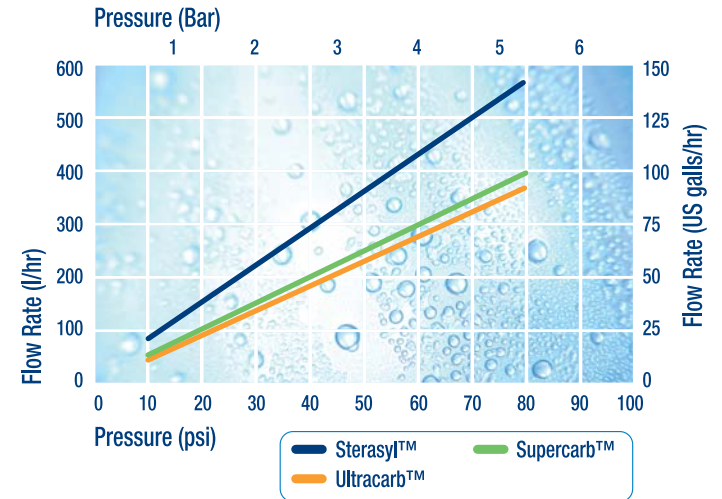


Cartridges Dimensions

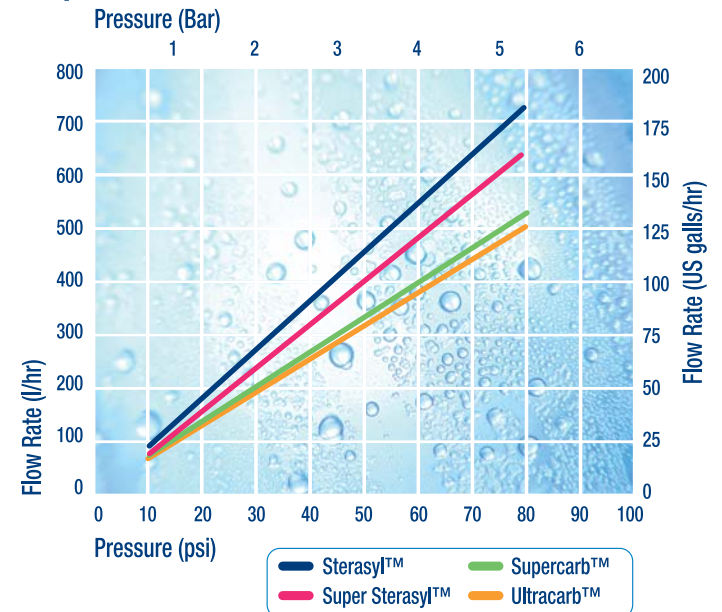


Ceramic Filter Cartridges (OBEs) to fit Industry Standard 10" Filter Housings

Slimline 49mmø



Imperial 67mmø



Ceramic Filter Cartridges (OBEs) Availability

GRADE	49mm Diameter	67mm Diameter
Sterasyl™	✓	✓
Super Sterasyl™	✗	✓
Supercarb™	✓	✓
Ultracarb™	✓	✓

Independently tested by the following institutions

Hyder (Formerly Acer / Altwell) Cheshire - UK • Spectrum Labs. Minnesota - USA
WRAS Buckinghamshire - UK • Clare Microbiological, Suffolk - USA
NSF Michigan - USA • Loughborough, University Leicestershire - UK
Thresh, Beale & Suckling, Birmingham - UK • WRc Gwent - UK • University of Arizona - USA