

Micron Commercial Fibreglass Filters

Proven Strength and Durability



Manufactured from the highest grade of non corrosive materials and employing the latest in fibreglass winding technology, Micron fibreglass filters are designed and built for many years of trouble free operation. Micron commercial fibreglass filters are available in top mount, side mount and horizontal configurations from filter areas of 0.87m² to 10.0m².

- Precision fibreglass winding
- UV and corrosion resistant
- Hydraulically balanced laterals
- Pressure rated at 250 kPa (36 psi), 400 kPa (58 psi), 600 kPa (87psi) and up to 800 kPa (116 psi)
- Optional sight glasses and lateral man holes
- Optional vinyl ester tanks for commercial / industrial applications

Micron Commercial Fibreglass Filters

Waterco's capacity for manufacturing a wide range of standard equipment as well its capability of adapting the product to customer's specifications has made Micron fibreglass vessels suitable for water theme parks, commercial swimming pools, hotel/resort pools, aquaculture, cooling towers, drinking water systems, food/beverage processing, industrial process, water features, zoos and aquariums.



Resort World - Singapore

12 x Micron MD6500 filters and 11 x Micron M5000 filters were installed to filter over 15 millions litres of water at Universal Studios Singapore.



South Australia Country Water Quality Improvement Program - South Australia, Australia

United Group Infrastructure utilised 8 x Micron SMDD2200 filters and 17 x Micron SMDD2500 filters filled with granular activated carbon to remove unwanted taste and odours in its final filtration stages.



Desalinisation plant - Faw region in Basrah, Iraq

40 x Waterco Micron SMD2000 filters were installed in 4 water desalination plants, constructed in the Faw region in Basrah. Each desalination plant has an output of 100m³/hr and the combined pre-filtration flow rate is approximately 1000 - 1100 m³/hr.



Ammonia removal plant - West Sussex, United Kingdom

Operating at the end of a sewage plant, Waterco custom made Lacron filters process pre-filtered water containing high levels of ammonia. Prior to the installation of the filter, the ammonia levels were far too high to allow the water company to discharge to a nearby river.





Micron fiberglass filters

Micron fiberglass filters embody the latest in fiberglass winding technology. Waterco's digitally controlled filament winding machine faultlessly winds continuous strands of high quality fiberglass filament under controlled tension to create a seamless one-piece vessel with refined consistency and superior quality. There are no welds or seams or special tank linings which can corrode or electrolyse.

Waterco's quality control procedures ensure that the structural requisites of the product are achieved at every stage of production. This results in a 100% compliance of the end product with the specifications.

The design and the manufacturing process of the whole vessel, utilising the latest filament winding machines, incorporation of non metallic fittings plus reinforced manhole openings with proprietary methods, is unique to Waterco.

Why fiberglass instead of steel?

Using non metallic components fiberglass pressure tanks are rapidly replacing steel tanks in numerous applications. Fiberglass vessels offer several advantages in comparison with steel vessels.

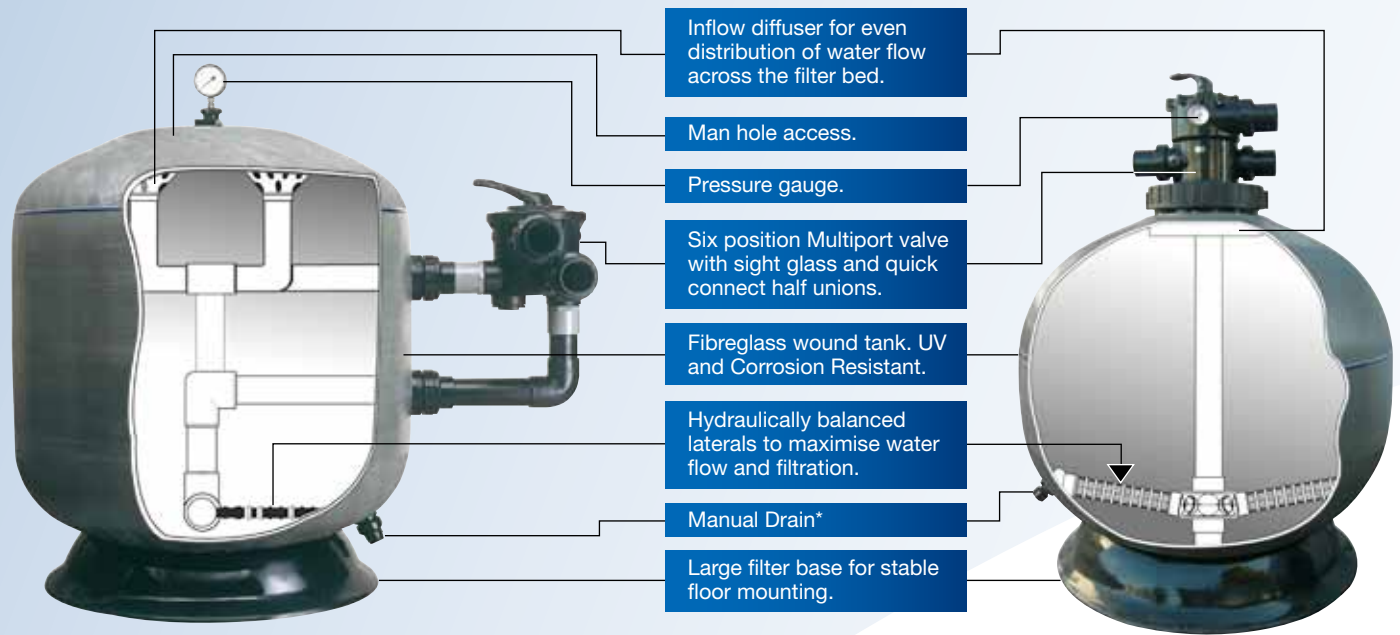
Fiberglass vessels have a superior mechanical and chemical resistance superior to steel. Fiberglass tanks do not rust or corrode and are able to withstand damage from many types of water treatment chemicals.



Fiberglass vessels weigh only 1/3 the weight of steel vessels while maintaining the same level of strength. Their weight makes them easier to ship to the job site and easier to install.

Once installed there are virtually no maintenance or repairs required. Steel vessels require the anti-corrosive coating to be maintained periodically and certified welders to make repairs to the lining with expensive epoxy coating.

Micron Top and Sidemount Fibreglass Filters



Waterco Sidemount Fibreglass

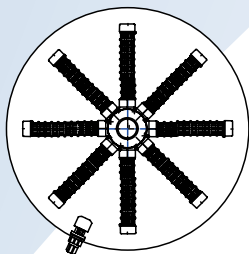
Micron Top Mount Filters

* Optional manual drain

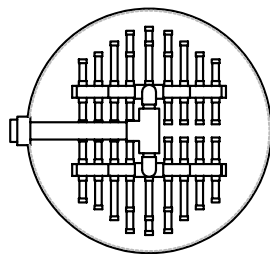
- Maximum working temperature of 50°C (122°F).
- Pressure rated at 250 kPa (36 psi), 400 kPa (58 psi), 600 kPa (87psi) and up to 800 kPa (116 psi).
- Optional fibreglass reinforced vinyl ester vessels for ozone applications are available on request.

Micron “Fish Bone” laterals

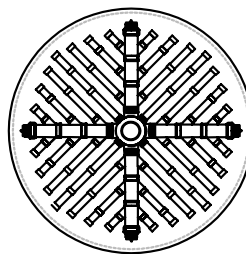
Conventional laterals are not suitable for larger sized commercial filters. “Dead legs” exist between the laterals and water flow is not optimised through the filter bed. Waterco’s “Fish Bone” lateral configuration eliminates any “dead legs” by improving water flow distribution through the filter bed.



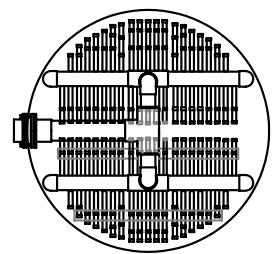
Conventional lateral configuration



Commercial vertical filters with 3" / 80mm ports



Commercial vertical filters with 2 1/2" / 65mm ports as well as the SD1200 and SD1400 with 3" / 80mm ports



Commercial vertical filters with 4"/100mm, 6"/150mm, 8"/200mm ports



Micron Side Mount Filters (SM)



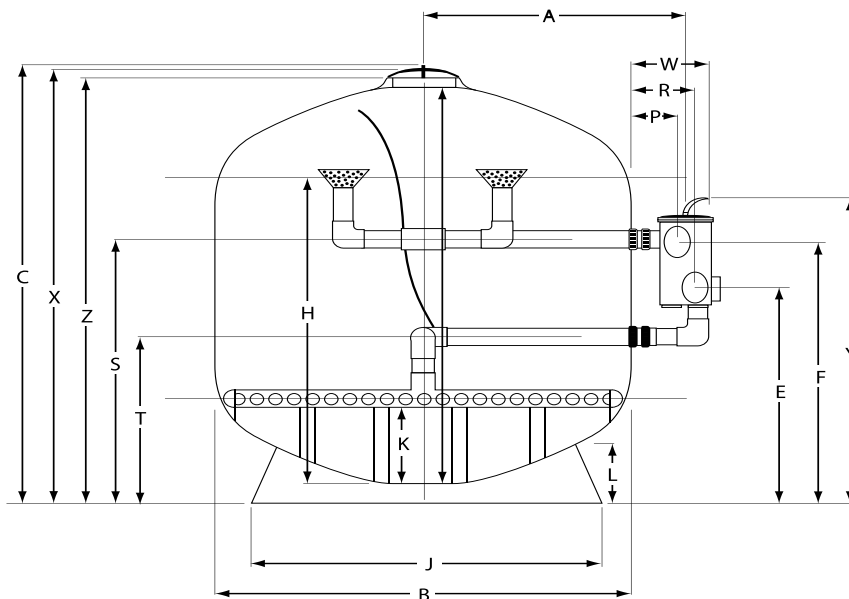
Micron Side Mount Filters (SM) Specification

Filter Model	Valve Size	EU Valve Size	Bed Depth	Inner Diameter	Filter Area	Filtration Flow Rates				Backwash Flow Rates				Filter Media		
						30m³/hr/m²	30m³/hr/m²	36m³/hr/m²	36m³/hr/m²	40m³/hr/m²	40m³/hr/m²	50m³/hr/m²	50m³/hr/m²	Media	Sand	ZeoPlus
						lpm	m³/hr	lpm	m³/hr	lpm	m³/hr	lpm	m³/hr	litres	Kg	Kg
SM750	50	63	400	750	0.44	221	13	265	16	295	18	368	22	195	285	234
SM800	50	63	410	800	0.50	251	15	302	18	335	20	419	25	233	340	279
SM900	50	63	440	900	0.64	318	19	382	23	424	25	530*	32	301	440	362
SM1050	65	75	470	1050	0.87	433	26	520	31	577	35	722	43	432	630	518
SM1200	80	90	580	1200	1.13	566	34	679	41	754	45	943	57	705	1030	847
SM1400	80	90	670	1400	1.54	770	46	924	55	1026	62	1283*	77	1130	1650	1356
SM1600	100	110	670	1600	2.01	1005	60	1206	72	1340	80	1676	101	1483	2165	1779

*Waterco's recommended flow rates per port size. 50mm/63mm(EU), 510lpm, 30.6m³/hr 80mm/90mm(EU), 1080lpm, 64.8m³/hr

Dimension (mm)

Model	Valve Size	EU Valve Size	A	B	C	W	R	P	E	F	K	V	H	L	X	Y	Z	J	S	T
SM750	50	63	613	772	976	334	262	191	541	643	113	763	652	90	943	800	870	620	541	337
SM800	50	63	638	821	1006	334	262	191	560	662	127	790	747	90	973	819	900	620	560	357
SM900	50	63	689	923	1086	334	262	191	591	693	113	860	750	90	1053	850	980	620	591	387
SM1050	65	75	796	1077	1308	389	298	193	737	863	120	1000	880	176	1223	1047	1153	1045	737	437
SM1200	80	90	970	1232	1485	537	404	300	952	1062	150	1145	982	176	1400	1296	1330	1045	952	596
SM1400	80	90	1083	1442	1608	510	363	548	998	1108	190	1217	1065	218	1523	1380	1453	1202	998	642
SM1600	100	110	1765	1644	1875	943	474	629	707	369	205	1520	1300	218	1790	707	1720	1202	1139	707



Micron Side Mount Deep Bed Filters (SMD & SMDD)

The effect of deep media bed improves the filtration efficiency over standard High-rate filters by providing enhanced in-depth filtration and increased dirt capacity. In addition, the greater bed depth permits efficient use of mixed bed filter media and water treatment media such as granular activated carbon.

The filter's 1000mm (SMD) to 1200mm (SMDD) media bed ensures that finer dirt particles and colloidal substances are retained to a far greater level than a filter with a shallower bed depth.



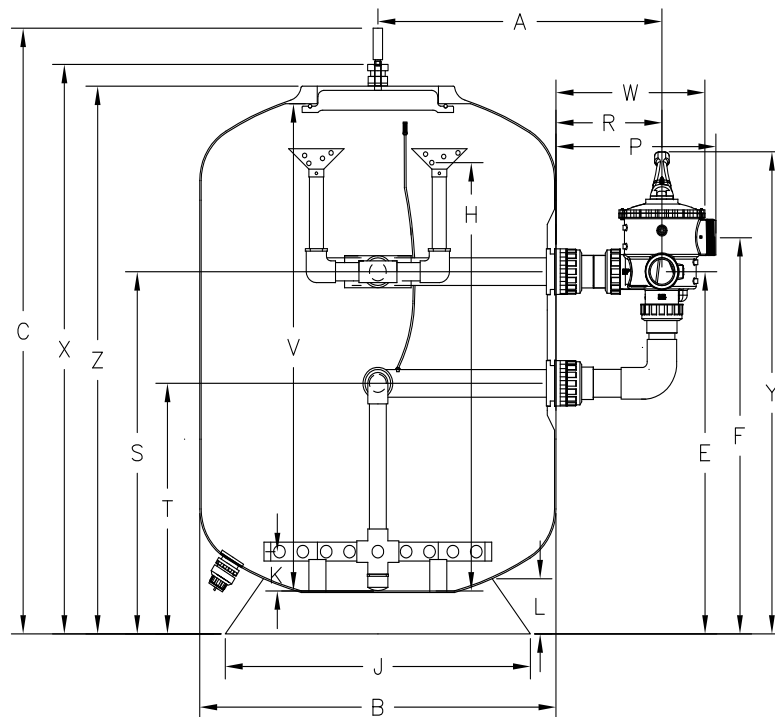
Micron SMD Specification

Filter Model	Valve Size	EU Valve Size	Bed Depth	Inner Diameter	Filter Area	Filtration Flow Rates				Backwash Flow Rates				Filter Media		
						30m³/hr/m²	30m³/hr/m²	36m³/hr/m²	36m³/hr/m²	40m³/hr/m²	40m³/hr/m²	50m³/hr/m²	50m³/hr/m²	Media	Sand	ZeoPlus
	mm	mm	mm	mm	m²	lpm	m³/hr	lpm	m³/hr	lpm	m³/hr	lpm	m³/hr	litres	Kg	Kg
SMD750	50	63	1000	750	0.44	221	13	265	16	295	18	368	22	459	670	551
SMD900	50	63	1000	900	0.64	318	19	382	23	424	25	530*	32	658	960	789
SMD900	65	75	1000	900	0.64	318	19	382	23	424	25	530*	32	726	1060	871
SMD900	80	90	1000	900	0.64	318	19	382	23	424	25	530	32	699	1020	838
SMD1050	65	75	1000	1050	0.87	433	26	520	31	577	35	722	43	973	1420	1167
SMD1050	80	90	1000	1050	0.87	433	26	520	31	577	35	722	43	966	1410	1159
SMD1200	65	75	1000	1200	1.13	566	34	679	41	754	45	942*	57	1219	1780	1463
SMD1200	80	90	1000	1200	1.13	566	34	679	41	754	45	942	57	1175	1715	1414
SMD1200	100	110	1000	1200	1.13	566	34	679	41	754	45	942	57	1192	1740	1430
SMD1400	80	90	1000	1400	1.54	770	46	924	55	1026	62	1283*	77	1723	2515	2067
SMD1400	100	110	1000	1400	1.54	770	46	924	55	1026	62	1283	77	1637	2390	1964
SMD1600	100	110	1000	1600	2.01	1005	60	1206	72	1340	80	1676	101	2092	3055	2515
SMD1600	150	160	1000	1600	2.01	1005	60	1206	72	1340	80	1676	101	2123	3100	2548
SMD1800	100	110	1000	1800	2.54	1272	76	1527	92	1696	102	2121*	127	2880	4205	3456
SMD1800	150	160	1000	1800	2.54	1272	76	1527	92	1696	102	2121	127	2904	4240	3485
SMD2000	150	160	1000	2000	3.14	1571	94	1885	113	2094	126	2618	157	3490	5095	4188

*Waterco's recommended flow rates per port size. 50mm/63mm(EU), 510lpm, 30.6m³/hr 65mm/75mm(EU), 760lpm, 45.6m³/hr 80mm/90mm(EU), 1080lpm, 64.8m³/hr 100mm/110mm(EU), 1800lpm, 108m³/hr 150mm/160mm(EU), 3420lpm, 205.2m³/hr

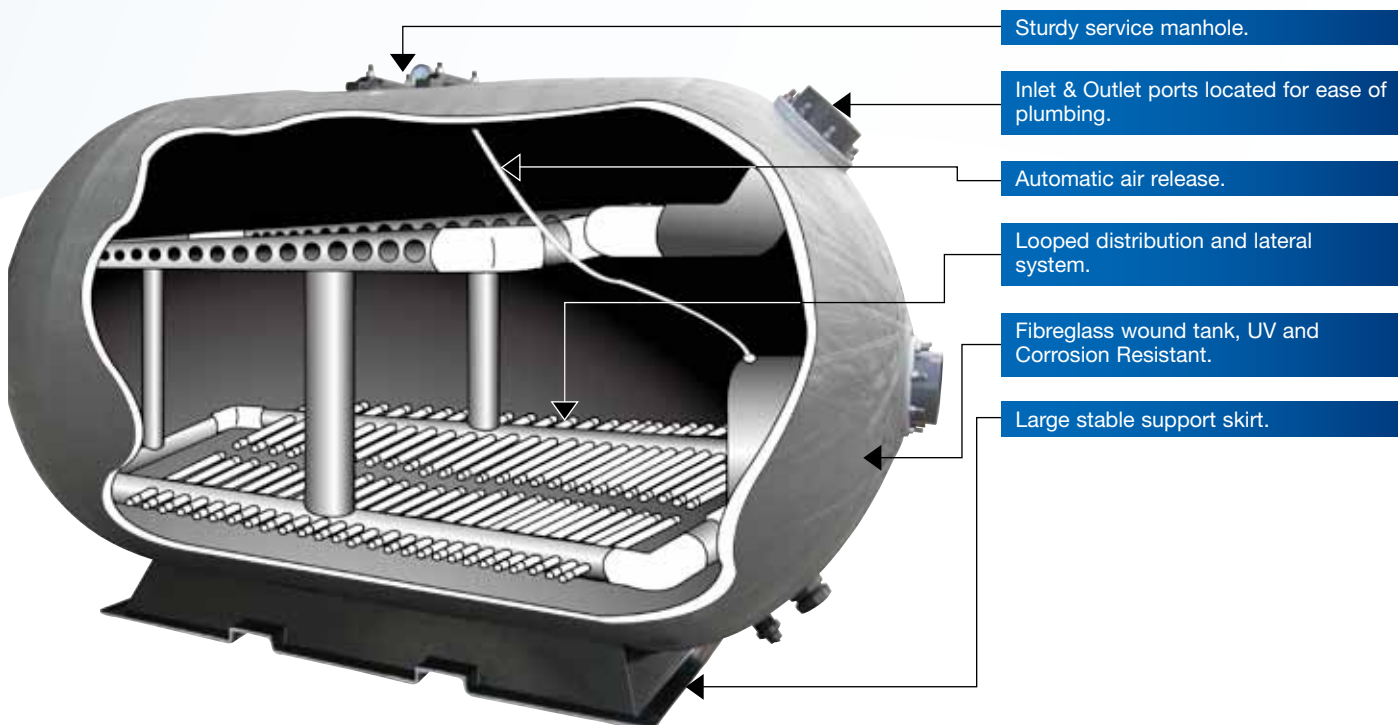
Micron SMD Dimension (mm)

Model	Valve Size	EU Valve Size	A	B	C	W	R	P	E	F	K	V	H	L	X	Y	Z	J	S	T
SMD750	50	63	689	923	1762	334	262	191	1274	1376	113	1455	1363	120	1729	1533	1656	678	1274	1071
SMD900	50	63	689	923	1762	334	262	191	1274	1376	113	1455	1363	120	1729	1533	1656	678	1274	1071
SMD900	65	75	719	923	1918	389	298	193	1300	1426	223	1580	1473	120	1833	1610	1763	678	1300	1000
SMD900	80	90	824	923	1918	510	363	548	1406	1516	190	1580	1440	120	1833	1788	1763	678	1406	1050
SMD1050	65	75	796	1077	1890	389	298	193	1044	1170	220	1587	1470	176	1805	1354	1735	1045	1044	744
SMD1050	80	90	901	1077	1890	510	363	548	1100	1210	220	1587	1470	176	1805	1482	1735	1045	1100	744
SMD1200	65	75	873	1229	1905	389	298	193	1098	1224	190	1568	1440	176	1820	1408	1750	1045	1098	798
SMD1200	80	90	977	1229	1905	510	363	548	1154	1264	150	1568	1400	176	1820	1536	1750	1045	1154	798
SMD1200	100	110	1558	1229	1905	943	474	629	760	422	180	1568	1430	176	1820	760	1750	1045	1192	760
SMD1400	80	90	1083	1442	1955	510	363	548	1204	1314	250	1615	1500	218	1870	1586	1800	1202	1204	848
SMD1400	100	110	1664	1442	1955	943	474	629	810	472	200	1615	1450	218	1870	810	1800	1202	1242	810
SMD1600	100	110	1765	1644	1994	943	474	629	757	419	180	1615	1430	218	1909	757	1839	1202	1189	757
SMD1600	150	160	-	1644	1994	-	-	-	-	-	220	1615	1470	218	1909	-	1839	1202	1200	717
SMD1800	100	110	1863	1839	1985	943	474	629	751	413	300	1660	1550	315	1900	751	1830	1755	1183	751
SMD1800	150	160	-	1839	1985	-	-	-	-	-	320	1660	1570	315	1900	-	1830	1755	1168	685
SMD2000	150	160	-	2042	2063	-	-	-	-	-	300	1765	1550	245	1978	-	1908	1755	1215	732



Micron Horizontal Filters

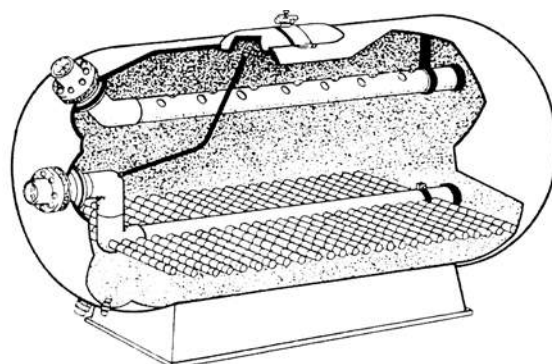
The Micron Horizontal Filter is a space-saving high performer; its compact horizontal design allows installation with minimum waste of space. The shape of the Micron horizontal filter is both attractive and functional. The spherical ends are designed to give uniform flow from both inlet and outlet collection assemblies. Micron Horizontal filters are available with a 500mm (M) filter media bed and a 1200mm (MD) filter media bed.



Looped distribution and lateral system

Waterco has introduced a looped lateral configuration for its entire range of commercial horizontal fibreglass filters. Conventional horizontal filter lateral systems consist of straight piping fitted with laterals along the length of the horizontal filter.

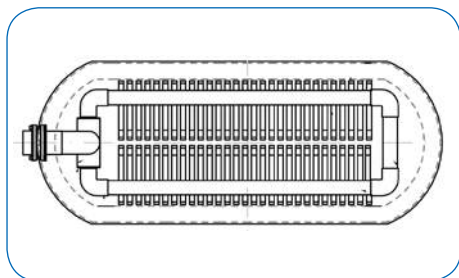
A conventional lateral system results in uneven fluidisation of the filter media bed. The beginning of the lateral system experiences a strong flow of water, which gradually decreases along the length of the lateral piping. Backwash flow also decreases towards the end of each lateral, resulting in non-uniform lifting of the filter media bed.



Conventional horizontal filter lateral configuration

Waterco has vastly improved the hydraulic efficiency its horizontal filter lateral system by looping its horizontal filter's distributors and laterals. The new lateral configuration provides a more natural flow of water through the filter, ensures optimum water filtration and balanced fluidisation of the filter bed during backwashing. Its individual laterals are shortened while maintaining filter media bed coverage, reducing the friction head loss of each lateral, further improving the filter's hydraulic efficiency.

Waterco's looped lateral system reduces backwash run times, saves water and produces flatter more uniform filter media bed after backwashing.



Looped lateral system - Top view



Looped lateral system - Inside view

Micron Horizontal Filters (M) Specification

Filter Model	Valve Size	EU Valve Size	Bed Depth	Inner Diameter	Filter Area	Filtration Flow Rates				Backwash Flow Rates				Filter Media		
						30m³/hr/m²	30m³/hr/m²	36m³/hr/m²	36m³/hr/m²	40m³/hr/m²	40m³/hr/m²	50m³/hr/m²	50m³/hr/m²	Media	Sand	ZeoPlus
	mm	mm	mm	mm	m²	lpm	m³/hr	lpm	m³/hr	lpm	m³/hr	lpm	m³/hr	litres	Kg	Kg
M2500	100	110	500	1480	2.50	1250	75	1500	90	1667	100	2083	125	1452	2120	1742
M3750	150	160	500	1485	3.75	1875	113	2250	135	2500	150	3125	188	2370	3460	2844
M5000	150	160	500	1486	5.00	2500	150	3000	180	3333	200	4167	250	3190	2660	3830

Micron Horizontal Filters (M) Dimension (mm)

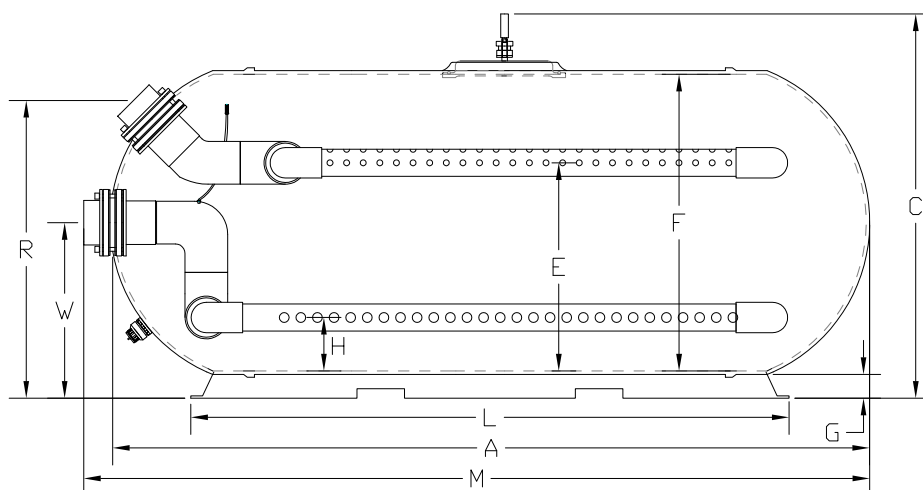
Model	Valve Size	EU Valve Size	A	B	C	W	R	L	E	F	G	H	M
M2500	100	110	2245	1260	1620	740	1320	1400	1005	1260	150	255	2327
M3750	100	110	3230	1265	1620	740	1320	2520	1005	1260	150	255	3312
M3750	150	160	3230	1265	1620	740	1320	2520	945	1260	150	275	3312
M5000	150	160	4220	1270	1620	740	1320	3570	945	1260	150	275	4301

Micron Horizontal Deep Bed Filters (MD)

Filter Model	Valve Size	EU Valve Size	Bed Depth	Inner Diameter	Filter Area	Filtration Flow Rates				Backwash Flow Rates				Filter Media		
						30m³/hr/m²	30m³/hr/m²	36m³/hr/m²	36m³/hr/m²	40m³/hr/m²	40m³/hr/m²	50m³/hr/m²	50m³/hr/m²	Media	Sand	ZeoPlus
	mm	mm	mm	mm	m²	lpm	m³/hr	lpm	m³/hr	lpm	m³/hr	lpm	m³/hr	litres	Kg	Kg
MD6500	200	210	1200	2244	6.50	3250	195	3900	234	4333	260	5417	325	7548	11020	9058
MD8000	200	210	1200	2173	8.00	4000	240	4800	288	5333	320	6667	400	9795	14300	11753
MD10000	250	260	1200	2173	10.00	5000	300	6000	360	6667	400	8334	500	12115	12116	14540

Micron Horizontal Filters (MD) Dimension (mm)

Model	Valve Size	EU Valve Size	A	B	C	W	R	L	E	F	G	H	M
MD6500	200	210	3765	2000	2260	1120	2066	2405	1890	2000	230	240	3900
MD8000	200	210	4516	2000	2260	1120	2066	3155	1906	2000	230	306	4690
MD10000	250	260	5580	2000	2260	1120	2032	4055	1883	2000	230	283	5730

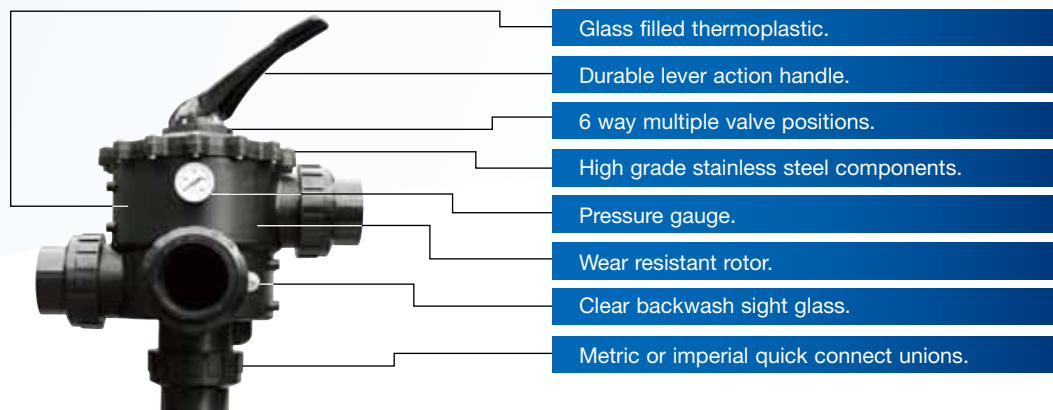


Warranty

Waterco is proud to show its ultimate confidence in its range of commercial fibreglass filters by offering a 5 year (1 year full + 4 year pro rata) tank warranty for commercial installations.

Waterco Multiport Valves

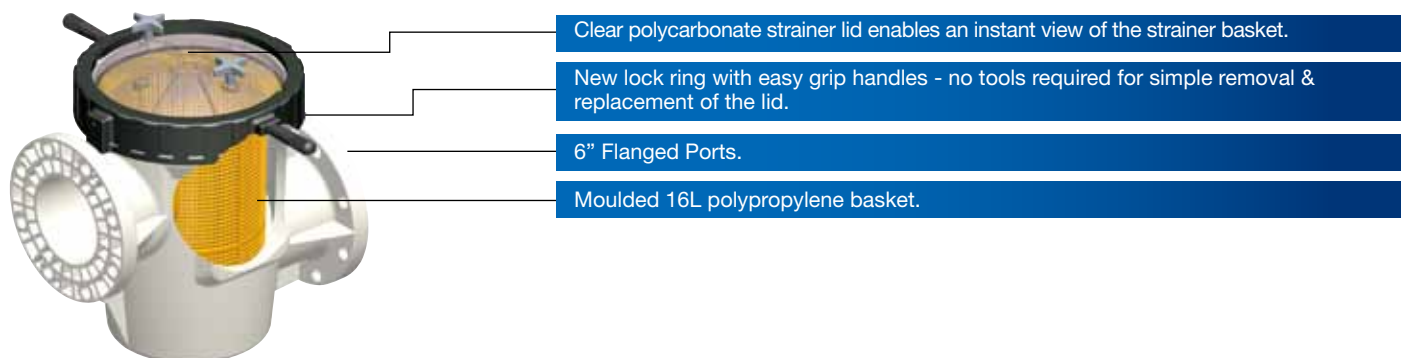
Constructed from heavy duty ABS and GFPP, Waterco Multiport valves are designed for maximum performance and working pressures. Waterco's entire range of Multiport valves are engineered to withstand a working pressure of up to 400 kPa (58 psi) with a test pressure of 600 kPa (87 psi).



Waterco MPV's are available in 40mm / 50mm (EU) / 1 1/2", 50mm / 63mm (EU) / 2", 65mm / 75mm (EU) / 2 1/2", 80mm / 90mm (EU) / 3" and 100mm / 110mm (EU) / 4"

Hydro Commercial Strainer

Constructed from composite materials, the Hydro Commercial Strainer is a totally non corrosive strainer, designed for aquatic facilities, water parks and large commercial swimming pools.



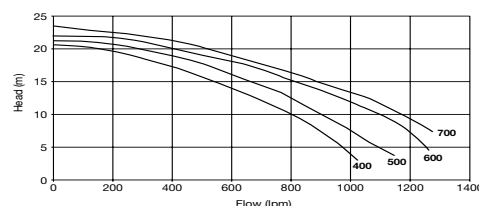
Waterco Commercial Pumps

Waterco commercial pumps incorporate the latest technology in design and construction to produce a high performance, energy saving pump ideal for any situation that demands maximum output.

Hydrostar Pump



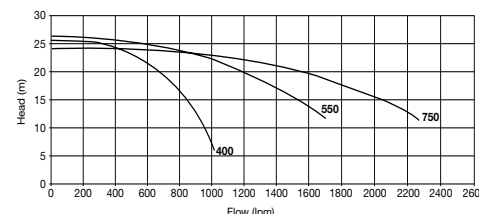
Hydrostar MKIII pumps efficiently deliver high flow rates and incorporate an innovative quarter lid & lock ring assembly for easy maintenance.



Hydrosteel Pump



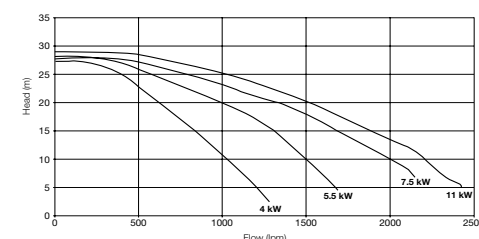
Hydrosteel pumps are the first hybrid of its kind; the pre-strainer is constructed from glass filled thermoplastic, while its impeller and volute are constructed from 316 grade stainless steel.



Hydro5000 Pump



The Hydro5000 pump is a high performance, self priming pump, designed for aquatic facilities, water parks and large commercial swimming pools. Hydro5000 commercial pump incorporates a reinforced thermoplastic strainer housing for significant weight reduction and improved corrosion resistance.





Established since 1981, Waterco is an Australian public listed company involved in the manufacture and distribution of:

Swimming pool/spa equipment and chemicals
Domestic water filters, softeners and purifiers
Commercial and Industrial water treatment equipment.

Waterco's research & development team has created an innovative range of award winning products.

The company's advanced fibreglass winding and pioneering plastic moulding techniques have delivered premium quality products to over 40 countries via its branches operating in Australia, New Zealand, Malaysia, China, the United Kingdom, United States of America, Canada, Indonesia and Singapore.



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