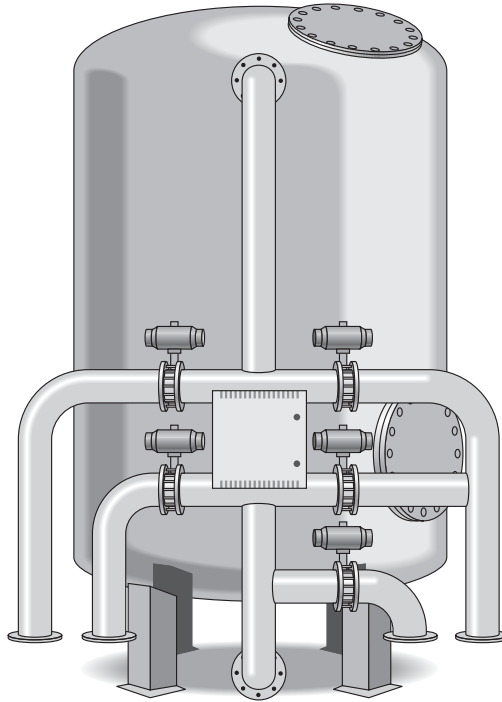


# PRIMARY WATER TREATMENT PLANTS, DRINKING WATER AND DESALINATION PLANTS

## QUARTZITE FILTERING

### QAA series



#### WHAT QUARTZITE FILTERING PLANTS QAA SERIES ARE

The water destined for human consumption or industrial uses may contain suspended solids, colloids or turbidity, which have to be eliminated.

The quartzite filters perform a mechanical action while the water passes through the bed removing also small particles. Because of their effectiveness quartzite filters are also used in the discharge water treatment for the removal of suspended solids and their related COD.

#### HOW QUARTZITE FILTERING PLANTS QAA SERIES WORK

The quartzite filters are made of varying gradation filtering material with the thickest grading located on the top of the bed.

A top anthracite layer may be inserted for a further increase of the filtering capacity.

During the filtering process the particles stopped on the bed keep on gathering and therefore increase the filter charge losses. When they reach a given quantity the bed will be washed with water flowing opposite the filtering direction.

The filters are composed of cylinders containing quartzite and a valve group allowing the normal exercise procedure and the backwashing procedures, possibly using air for filters with considerable diameters.

The quartzite working and backwashing are automatically controlled by a command panel and suitably dimensioned valves; the filters may be manual and in such cases these operations have to be manual.

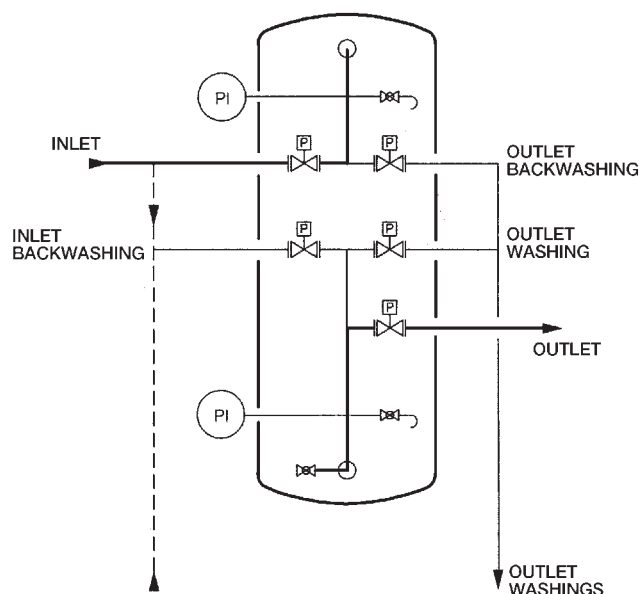
#### Performances

MODEL	AREA smq	CAPACITY mc/h				VALVES DIAMETER DN	BED HEIGHT mm	CYLINDER HEIGHT mm
		Vf = 10 m/h	Vf = 15 m/h	Vf = 20 m/h	Vf = 30 m/h			
QAA 600	0,28	3	4	6	8	40	1400	2000
QAA 700	0,38	4	6	8	12	40	1400	2000
QAA 800	0,50	5	8	10	15	50	1400	2000
QAA 900	0,64	6	10	13	19	50	1400	2000
QAA 1000	0,79	8	12	16	24	65	1400	2000
QAA 1100	0,95	9	14	19	28	65	1400	2000
QAA 1200	1,13	11	17	23	34	80	1400	2000
QAA 1300	1,33	13	20	27	40	80	1400	2000
QAA 1400	1,54	15	23	31	46	80	1400	2000
QAA 1500	1,77	18	26	35	53	100	1400	2000
QAA 1600	2,01	20	30	40	60	100	1400	2000
QAA 1800	2,54	25	38	51	76	100	1400	2000
QAA 2000	3,14	31	47	63	94	125	1800	2500
QAA 2200	3,80	38	57	76	114	125	1800	2500
QAA 2500	4,91	49	74	98	147	150	1800	2500

## STANDARD PRODUCTION

### Technical specifications

Working pressure	Min 1,5 – max 16 bar
Cylinder	Electrically welded carbon steel
Varnishing	Internal: epossidic cycle, external: polyurethane cycle
Manholes	Top side and bottom (with bottom plate)
Filling material	Varying gradation quartzite
Internal diffusion	PP diffusers, bottom plate mod. QAA 1500 – 2500
Piping	Galvanized carbon steel
Valves	Butterfly valves made of cast iron and EPDM with pneumatic actuator
Valves command	Electropneumatic panel on board
Controls and samplings	Manometers and inlet/outlet valves
Mixed air/water washing	Models QAA 1800 – 2500



### Optional features

Additional filling	Anthracite
Backwashing compressor	With lobes, for mixed air/water washing
Flowmeters	With various areas
Flowmeters	Electronic, 4-20 mA
Electrical command panel	In compliance with the current laws
Command group	Made of PVC piping and valves
Support frame	Carbon steel with polyurethane cycle varnishing

### Dimensions and weights

MODEL	FILTER DIAMETER MM	FILTER HEIGHT MM	FILTER WEIGHT KG	TOT. FILTER WEIGHT KG
<b>QAA 600</b>	600	2800	390	980
<b>QAA 700</b>	700	2800	410	1250
<b>QAA 800</b>	800	2900	450	1600
<b>QAA 900</b>	900	2900	550	2000
<b>QAA 1000</b>	1000	3000	620	2300
<b>QAA 1100</b>	1100	3000	670	2700
<b>QAA 1200</b>	1200	3100	740	3200
<b>QAA 1300</b>	1300	3100	810	3700
<b>QAA 1400</b>	1400	3200	940	4400
<b>QAA 1500</b>	1500	3200	1400	5100
<b>QAA 1600</b>	1600	3300	1500	5700
<b>QAA 1800</b>	1800	3400	1950	7200
<b>QAA 2000</b>	2000	4000	2500	10800
<b>QAA 2200</b>	2200	4100	3200	13400
<b>QAA 2500</b>	2500	4200	3800	16800

The reported values are for information only. EURO MEC keeps the right to change them any moment. By request particular solutions can be dimensioned.