

Water Treatment



Engineering & Construction

**Filtration
FAS/R Mod.**

OVERVIEW

FAS/R multilayer filters are different from FAS filters in dimensions, typology, quantity of the filtering media, number and configuration of the valves in filter piping. They are perfect for the reflux refinement from civil waste purification plant. The recurrent filter washing (backwashing with air, backwashing with water and, eventually, final washing) allows the removal of the retained impurities and the reset of the filtering bed.

PROJECT DATA

- S.S.T. in filter entrance ≤ 30 mg/l
- S.S.T. in filter exit ≤ 10 mg/l

TECHNICAL DATA

- Height c.c. 2500 mm

WORKING DATA

- Operation pressure min/max 2/3 bar
- Project/test pressure 4/6 bar
- Backwashing pressure air < 0,5 bar
- Backwashing pressure water 1,5 bar
- Electric power voltage/frequency 220/50 V/Hz

CONSTRUCTION CHARACTERISTICS

Models from FAS/R 180 to FAS/R 280

- **Tank:** vertical cylindrical in electro-welded carbon steel with convex ends, complete with 3 inspection hatches for loading filtering media supplied in sacks. The side hatch complete with David bearing, the upper hatch is supplied with hinge. The interior and exterior tanks are sanded to a finish class of SA 2.5. The internal surface is subsequently treated with a coat of anticorrosive (anticorrosive galvanizer) and with a coat of epoxy paint with a high thickness to obtain a total dry film of 250 µm. The external surface is protected with a coat of an inorganic galvanizer, primer and with acrylic base paint RAL 5012, total thickness 160 µ.
- **Nr 4 lifting eyebolts**
- **Nr 4 bearing legs** in sheet-carbon steel, complete with a base plate and an elephant ear in order to join them to the convex bottom.
- **Water distribution system:** the lower distributor comprises a robust filter-nozzle star with calibrated holes secured with locknut. The upper distribution is guaranteed by a central conveyor which terminal section is an upturned truncated cone form.
- **Filter piping** in AISI 304 stainless steel, flat stub in AISI 304, flanges in hard aluminium.
- **Automatic valve:** butterfly type in painted cast iron, lens in AISI 316, dual stage actuator.
- **Pressure gauges** diameter 100 mm, scale 0-10 bar, with back joint, panel mounted.
- **Nr 2 valves of test points**
- Automatic airvent valve.
- **PVC panel solenoid valves holder:** composed by a plant with 7 solenoid valves 5/2 monostable with rapid joints and polyurethane tubes, and a battery with 14 air flow regulator valves.



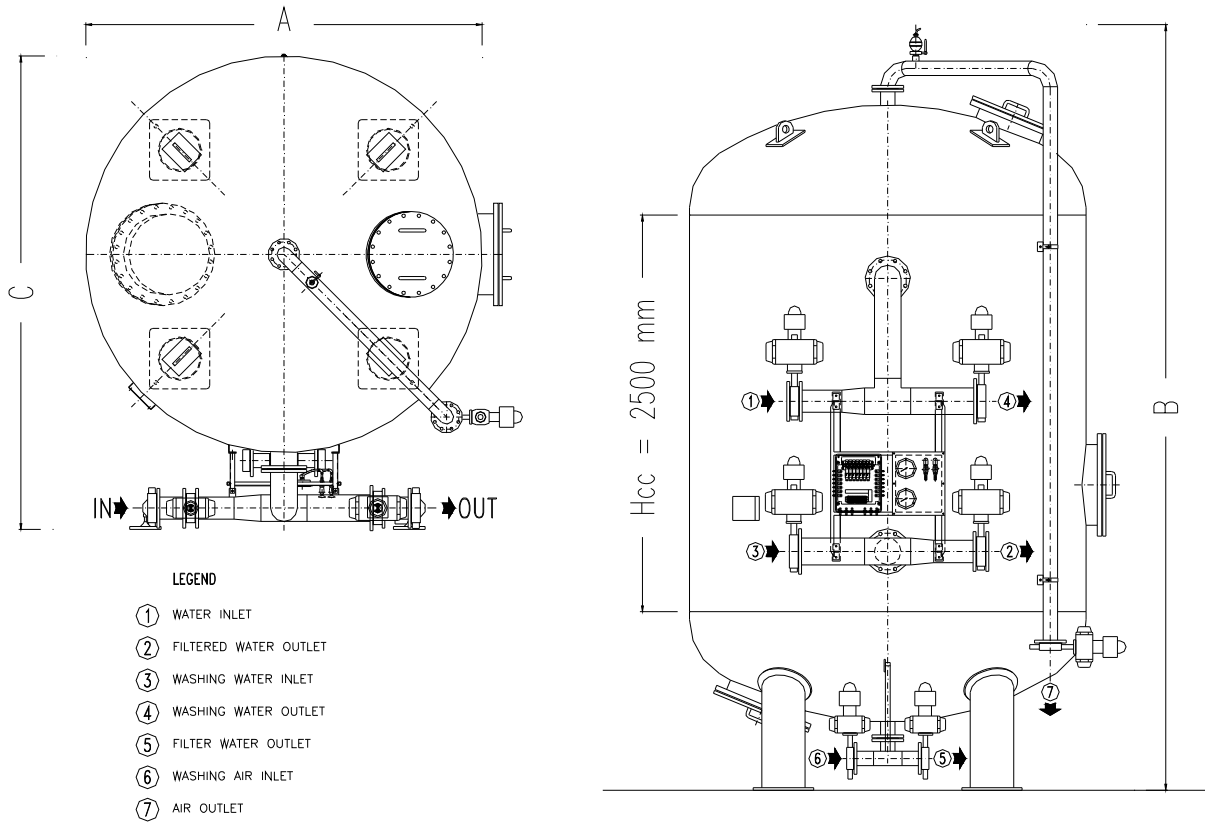
AUTOMATION

- Instructions will be provided for the automation and working of the filter or of the filtration battery.
- On request, the general chart of the automation of the filter or of the filtration battery will be provided.

FILTRATION MEDIA

The upper section of the filter bed is composed by selected anthracite with optimal chemical-physical and mechanical properties to aid flocculation reactions. It serves to retain floc and to filter the coarser impurities, so that the lower layer has the function of retaining the finer impurities. The lower layer comprises high purity quartziferous sand with selected particle size. Below the filter bed there are one or more layers of inert material (quartziferous sand) with pre-set piece size and layer depth.

FAS/R 180 - 280



TECHNICAL DATA

Model	Flow Rates			
	Operating		Backwashing	
	v = 10 m/h	v = 15 m/h	With air	With water
	m ³ /h	m ³ /h	Nm ³ /h	m ³ /h
FAS/R 180	26	38	130	76
FAS/R 200	32	47	160	95
FAS/R 220	38	57	190	115
FAS/R 240	45	68	230	135
FAS/R 250	49	74	245	150
FAS/R 280	62	92	310	185

NB: - For constructional reasons dimensions and weights are not binding.
 - The company holds the right to modify the technical and aesthetic characteristics of each equipment

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Organizzazione con sistema di gestione per la qualità certificato dalla Dasa-Rägister S.p.A.
in conformità alla EN ISO 9001 (2000)
