

PRIMARY WATER TREATMENT PLANTS, DRINKING WATER AND DESALINATION PLANTS

SOFTENING PLANTS

AD/P series



WHAT SOFTENING PLANTS AD/M SERIES ARE

Natural water contains calcium salts, magnesium salts, strontium salts and barium salts and the sum of the first two kinds of salt indicates its hardness.

Such hardness forms incrustations into the domestic and industrial plants, particularly into heating devices, steam boilers and heat exchangers, provoking obstructions and yield losses of these devices. Water hardness is also undesired during various industrial processes such as washes, dyeing, etc.

HOW SOFTENING PLANTS AD/M SERIES WORK

Ionic exchange softeners in sodium cycle work effectively changing calcium and magnesium ions with sodium ions, therefore preventing hardness related to incrustations.

They are composed of a cylinder containing ionic exchange resins in which the water to be treated passes through. Such resins are periodically regenerated with the use of sodium chloride stored into a proper container.

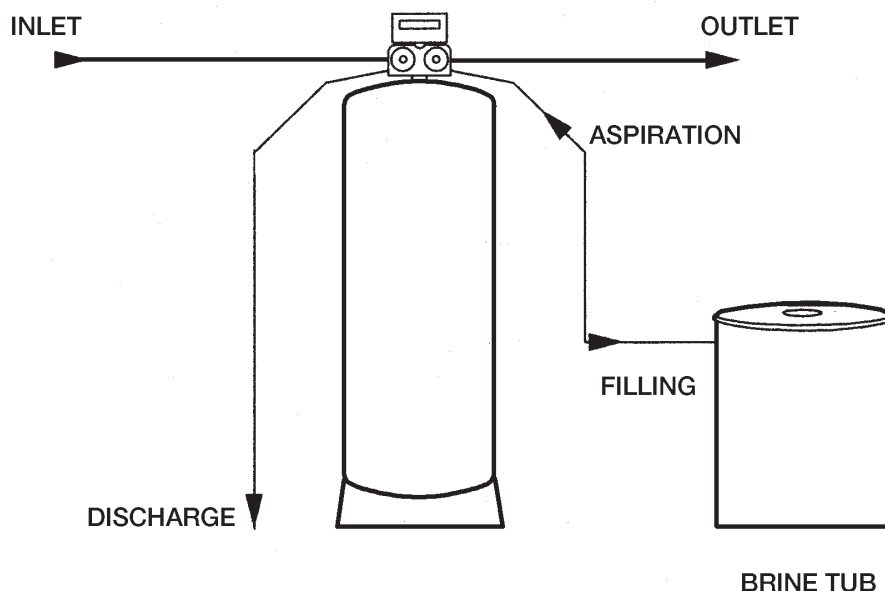
The resin regeneration is automatically managed according to a preset time or volume by an electronic programmer and suitably dimensioned valves made of anti acid material.

In case of softeners for domestic use the resins will be also disinfected during every regeneration process and the softeners will be equipped with a by-pass, non return valve and mixer in compliance with the D.P.R. n. 443/91.

Performances

PLANT MODEL	MEASURE UNIT	AD 15	AD 20	AD 30	AD 40	AD 50	AD 70	AD 100	AD 150	AD 200
Nominal flow rate	Cubic m/h	0,3	0,4	0,6	0,8	1,0	1,4	2,0	3,0	4,0
Max. flow rate	Cubic m/h	0,6	0,8	1,2	1,6	2,0	2,8	4,0	6,0	8,0
Cyclic capacity	Cubic m/°F	90	120	180	240	300	420	600	900	1200
Salt consumption/cycle	kg	2,4	3,2	4,8	6,4	8,0	11,2	16,0	24,0	32,0
INLET/OUTLET connections	DN	1"	1"	1"	1"	1"	1"	1"	1"1/4	1"1/4
Brine tub volume	lt	100	100	100	100	100	200	300	300	500

STANDARD PRODUCTION



Technical specifications

Feeding water pressure	Min 2 - max 6 bar
Feeding water temperature	Min 2 - max 40 °C
Cylinder	PRFV
Filling material	Cationic resins with sodium cycle
Internal diffusion	PP diffusers
Piping	PVC PN 10
Valve	PVC multi-way
Outlet non return valve	Membrane PVC (duplex model)
Valves command	Electropneumatic command electronic programmer
Brine preparation	PE tub and automatic valve
Feeding	220 V / 50 Hz

Optional features

Cartridge filter	10", 50 micron
Cartridge filter	20", 50 micron
Self-cleaning filter	Manual or automatic
Outlet non return valve	PVC Membrane
Flowmeters	With various areas
Support skid	Carbon steel with polyurethane cycle varnishing

Dimensions

PLANT MODEL		AD 15	AD 20	AD 30	AD 40	AD 50	AD 70	AD 100	AD 150	AD 200
Cylinder diameter	mm	200	220	260	260	260	340	360	470	510
Cylinder height	mm	1100	1100	1100	1450	1750	1600	1850	1900	1800
Tub diameter	mm	620	620	620	620	670	730	730	730	940
Tub height	mm	700	700	700	700	1000	1200	1200	1200	1150

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