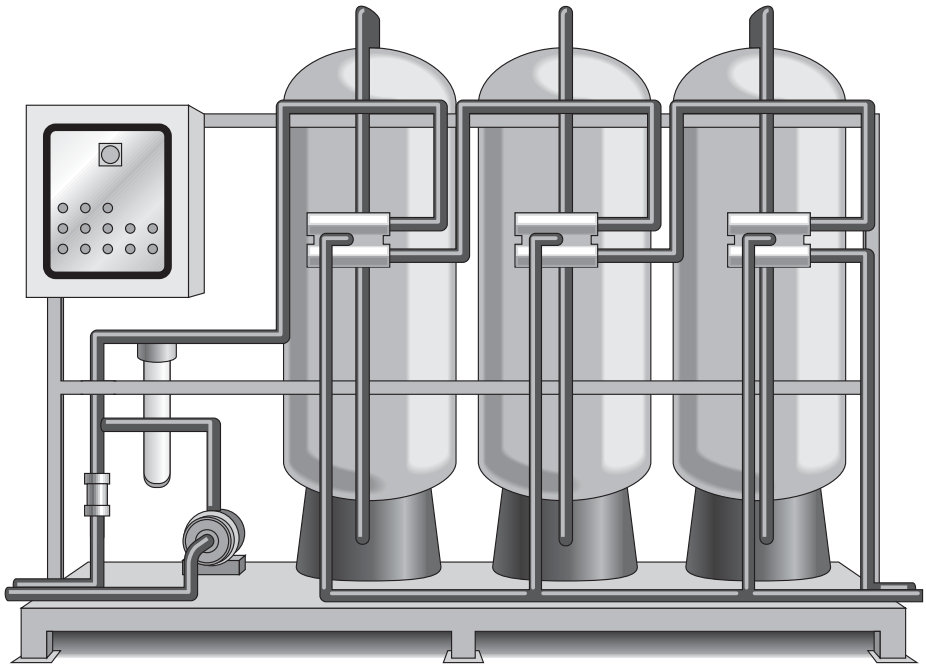
DEMINERALISATION PLANTS

DPR series



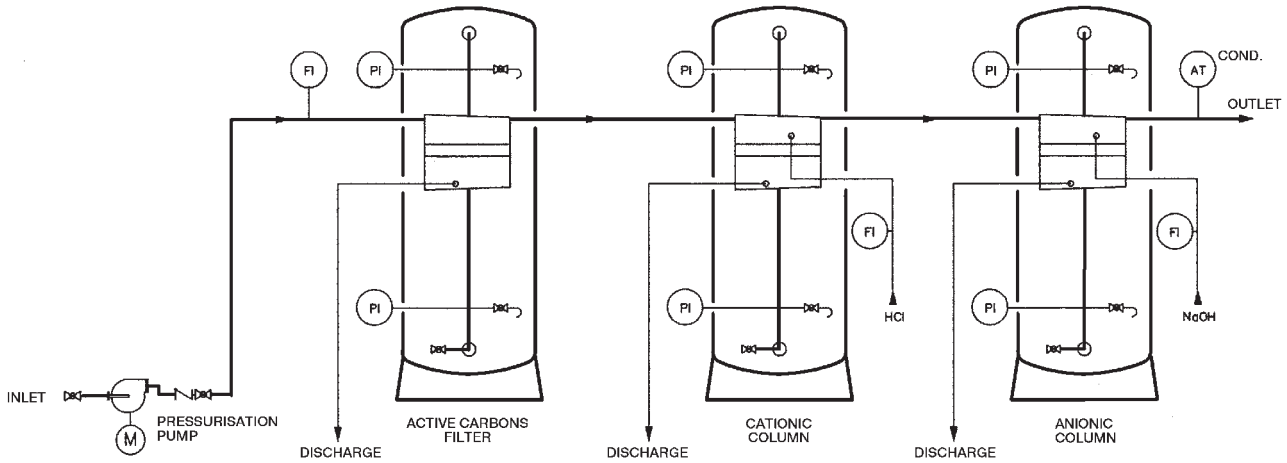
WHAT DEMINERALISATION PLANTS DPR SERIES ARE
The ionic exchange resin demineralisation plants allow to eliminate the salts dissolved into the water to be treated, specifically salts that can cause inconveniences during the various industrial processes or incrustations into the steam generators.
Their feeding can happen by means of network water for installations producing demineralised water or by means of washing process for water recycling installations.

HOW DEMINERALISATION PLANTS DPR SERIES WORK
These plants are mainly composed of a cylinder containing cationic resins, which has to be regenerated with hydrochloric acid; another cylinder contains anionic resins, which have to be regenerated with caustic soda. The inlet water passes first through the exchanging cationic resins and then through the anionic resins and once they are saturated they have to be regenerated in order to allow a new demineralisation process.
The resins exercise and regeneration is automatically performed thanks to an electrical command panel and suitably dimensioned valves made of anti acid material.
The demineralisation plants can be preceded by another cylinder containing active carbons in case of plants for the washes water recycle or followed by another cylinder containing cationic and anionic resins to obtain a highly pure water.
These installations can be used to feed thermal power stations or food/chemical/pharmaceutical/galvanic factories etc.

Performances

PLANT MODEL	MEASURE UNIT	DPR 100	DPR 150	DPR 200	DPR 300	DPR 500	DPR 750
Feeding salinity	mg/l	< 1000					
Approx. outlet salinity	%	1					
Standard capacity	mc/h	2	3	4	6	10	15
Cyclic capacity	kg $CaCO_3$	10	15	20	30	50	75
Granular active carbon quantity	litres	100	150	200	300	500	750
Strong cationic resins quantity	litres	100	150	200	300	500	750
Strong anionic resins quantity	litres	100	150	200	300	500	750
Feeding pump power	kW	0,75	0,9	1,1	1,1	1,85	3
INLET/OUTLET connections	DN	25	25	32	32	50	50

STANDARD PRODUCTION



Technical specifications

Working pressure	Min 1,5 - max 6 bar
Cylinders	PRFV
Filling material	Granular active carbon, cationic resins and anionic resins
Internal diffusion	PP diffusers
Piping	PVC PN 10
Valves	PVC multi-way
Valves commands	Hydropneumatic
Feeding flow meters	With various areas
Reagents flow meters	With various areas
Conductivity meter	Digital display, cell made of AISI 316
Control system	Microprocessor
Electrical command cable	In compliance with the current laws
Controls and samplings	Manometers and inlet/outlet valves
Frame and support	Sanded carbon steel with polyurethane cycle varnishing
Feeding tension	380 V 7 50 Hz

Optional features

Cartridge filter	40", 50 micron
Cartridge filter	40", 50 micron, high flow rate
Self-cleaning filter	Manual or automatic
Quartzite filter	Automatic, equal to an active carbon filter
Support skid	AISI 304 with transparent varnishing
Reagent storage	PE tanks

Dimensions and weights

PLANT MODEL	DPR 100	DPR 150	DPR 200	DPR 300	DPR 500	DPR 750
Cylinder dimensions	14 x 65"	18 x 65"	20 x 62"	24 x 71"	30 x 72"	36 x 72"
Dimensions (LxWxH) m	2,5 x 1 x 2	2,5 x 1 x 2	2,5 x 1 x 2	3 x 1,5 x 2,2	3 x 1,5 x 2,3	3 x 1,5 x 2,3
Approximate weigth kg	500	650	800	1200	1800	2500

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