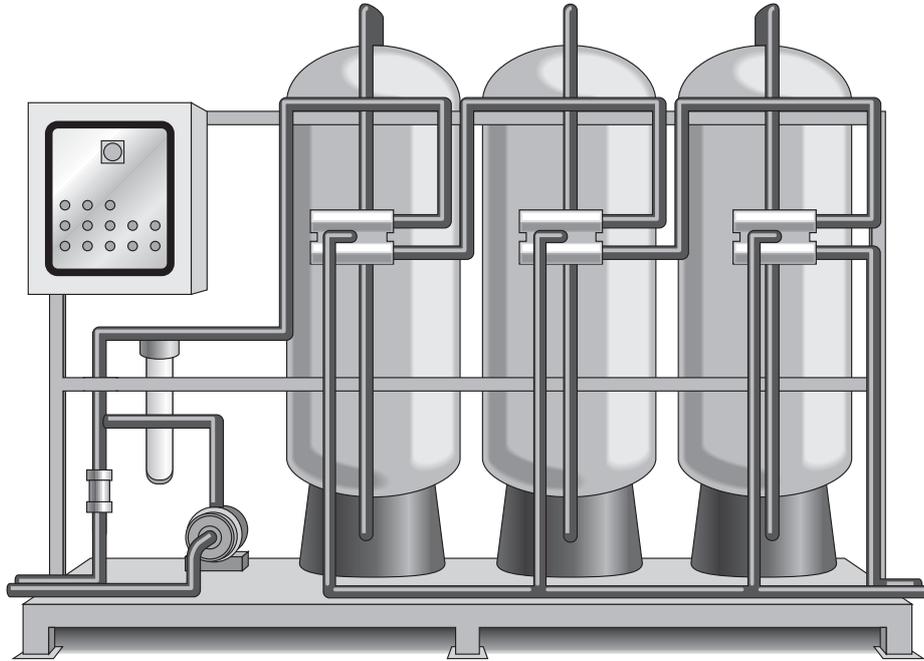


## DEMINERALISATION PLANTS

### 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.

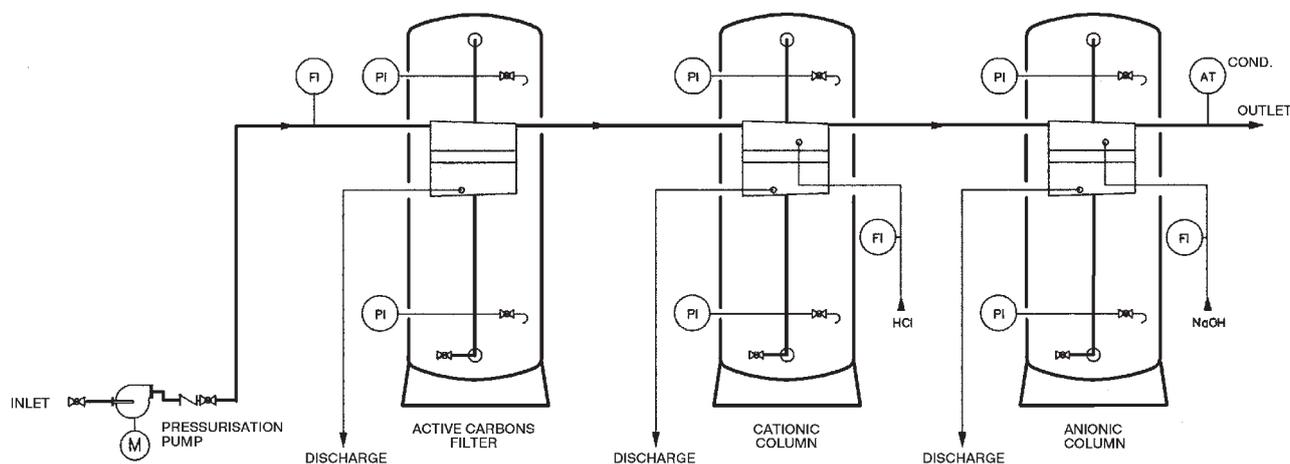
The demineralisation plants can be preceded by another cylinder containing active carbons in case of plants for the washes water recycle or followed by another cylinder containing cationic and anionic resins to obtain a highly pure water.

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 <sub>3</sub> | 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 weight 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.