

## Softener Duplex FLECK®

### DUPLEX

Lenntech can provide you ion exchange softeners for large capacity industrial application, from 3 m<sup>3</sup>/h to 70 m<sup>3</sup>/h with a operation of 24h/24.

The Duplex systems have a capacity from 2x85 to 2x 2000 liters of softening resins (food grade). Every Duplex module is equipped with valves FLECK®.



The processes of regeneration of the valves FLECK® are:

- Controlled by the volume of treated water;
- Controlled by microprocessors.

**SOFTENER DUPLEX Fleck®**

The DUPLEX systems are equipped with 2 vessels running alternately in parallel in order to ensure a continued softening. The regeneration process is volume-controlled by the valve FLECK ®. It is tailored programmed to regenerate after 6 hours (minimum) treatment, according to your specifications.

### *VOLUME OF THE SOFTENER*

The amount of resin required depends on the speed and on the hardness of the water to be softened. Using these data, we determine the volume of resins tailored to your needs and the appropriate valve FLECK ® to treat the feed flow.

| Duplex     | Dimensions (cm) |         | Valve<br>Fleck®    | Brine tank<br>(Litres) |
|------------|-----------------|---------|--------------------|------------------------|
|            | Diam.           | Height. |                    |                        |
| 2 x 85 L   | 35.5            | 165.1   | 2 x<br>2900 NT-2'' | 2 x 300                |
| 2 x 110 L  | 40.6            | 165.1   |                    | 2 x 300                |
| 2 x 140 L  | 40.6            | 165.1   |                    | 2 x 300                |
| 2 x 200 L  | 45.7            | 165.1   |                    | 2 x 400                |
| 2 x 250 L  | 53.34           | 152.4   |                    | 2 x 400                |
| 2 x 300 L  | 60.9            | 175.3   |                    | 2 x 500                |
| 2 x 350 L  | 60.9            | 175.3   |                    | 2 x 500                |
| 2 x 400 L  | 76.2            | 182.9   |                    | 2 x 1000               |
| 2 x 500 L  | 76.2            | 198.2   | 2 x<br>3900 NT-3'' | 2 x 1000               |
| 2 x 600 L  | 76.2            | 198.2   |                    | 2 x 1000               |
| 2 x 800 L  | 94.5            | 198.2   |                    | 2 x 1000               |
| 2 x 1000 L | 106.7           | 198.2   |                    | 2 x 1500               |
| 2 x 1400 L | 121.9           | 208.3   |                    | 2 x 1500               |
| 2 x 2000 L | 139.7           | 264.2   |                    | 2 x 1500               |

### *REGENERATION*

The vessel is filled with an ion-exchange resin that exchanges cations ( $\text{Ca}^{2+}$ ,  $\text{Mg}^{2+}$ ,  $\text{NH}_4^+$ ,  $\text{K}^+$ , etc...). The resin is regenerated using salt water from the valve FLECK ® automatically. The salt water should be added by the user, according to our recommendations. The water consumption for the regeneration costs about 10 times the volume of resin.