



Double chamber floating bed ion exchanger

Brief introduction

SFS series double chamber floating bed ion exchanger adopts domestic advanced technology, which has the characteristics of good exchange effect, long regeneration cycle, high effluent quality and simple operation. It is widely used in water treatment fields such as water softening and desalination, high-purity water preparation and so on. Due to the complementarity of filling strong and weak



resins in the upper and lower chambers respectively, the product not only has the advantages of single chamber floating bed, but also has the advantages of good effluent quality, low specific consumption of regenerant, acid consumption is only 1.05-1.1 times of theoretical consumption, alkali consumption is only 1.1-1.2 times of theoretical consumption, low self consumption of water, waste water and drug consumption.

Working principle:

Upflow water production: the treated water penetrates the resin layer from bottom to top and boils in two chambers. The resin in the upper and lower chambers of the floating bed forms a boiling layer and a floating layer (compression layer) according to a certain ratio. A water cushion is formed between the boiling layer and the floating layer to strictly separate the two. All ions in the treated water are first exchanged with the resin in the boiling layer, which increases the contact surface and gives full play to the exchange capacity of the resin. Most ions can be removed by the resin exchange in the boiling state, and the remaining ions are refined in the floating layer (compression layer), so as to achieve the best exchange effect and the best effluent quality.

Downstream regeneration: the regenerant flows through the resin layer from top to bottom. The excess fresh regenerant first contacts with the elastic resin of the upper compression layer to fully regenerate the resin layer ensuring the effluent quality. The regenerated waste liquid flows through the weak resin layer to make full use of the regenerant and achieve the best regeneration effect.

External backwashing (optional as needed): with the increase of exercise cycle, fine resin and impurities will be formed. Due to the use of compressed air controlled washing, the backwashing effect of resin with serious pollution is the best.



Technical parameters:

Model	Dimeter (mm)	Velocity of flow (m/s)	Water yield (T/H)	Working C (°C)	Filtration area (m ²)	Working P (MPa)	Weight (kg)
LSFY-150	Φ1500	40	70	<0.6	4-40	1.76	3800
LSFY-160	Φ1600	40	80	<0.6	4-40	2.00	5809
LSFY-250	Φ2500	40	196	<0.6	4-40	4.90	11991
LSFY-300	Φ3000	40	280	<0.6	4-40	7.06	16612

Sketch drawing:

