

# **Filtration**

Sand & Carbon filters

#### **Working Principle**

<u>Sand filter:</u> Effective removal of suspended solids in water retention, organic matter, colloidal particles, microorganisms, chlorine, odor and some heavy metal ions, and ultimately to reduce water turbidity, water purification effect of an efficient filtration equipment. Sand filters are generally used as pre-treatment and reverse osmosis equipment ultrafiltration equipment, mainly sediment, colloids, metal ions and organic matter trapped.

Carbon filter: Activated carbon is made of coal, charcoal, fruit stone and husk as raw materials, and is processed by high temperature carbonization and activation. It has a large specific surface area (1 gram of activated carbon has 800~2000). Therefore, activated carbon has a very high adsorption capacity. When activated carbon is used for dichlorination, hypochlorous acid is adsorbed on the surface of activated carbon and decomposed into hydrogen chloride and atomic oxygen. Atomic oxygen and carbon atoms are converted from an adsorbed state to a combined state (carbon oxide). Therefore, activated carbon dichlorination does not have the problem of adsorption saturation, but only loses a small amount of carbon. Therefore, activated carbon dichlorination can run for a long time. Activated carbon can not only dechlorinate, but also filter out suspended solids, humic acid, colloids, heavy metals and odors remaining in water. The regeneration and activation of activated carbon usually adopts the thermal regeneration method, that is, the activated carbon is decomposed into carbon dioxide and water under the high temperature condition of 500~1000C.





### Technical parameters

Specification	Temp.	Area	Filtration flow rate	Thickness (mm)	Working pressure	Pipe size (DN)	Dimension (mm)	
							D <sub>Cylinder</sub> / D <sub>Total</sub>	H <sub>Cylinder</sub> / H <sub>Total</sub>
SCF-300	4-50°C	0.07	8-12 m <sup>3</sup> /h/m <sup>2</sup>	5/5	<0.5 bar	20	300 / 400	1150 / 1400
SCF-400		0.13		5 / 5		25	400 / 500	1150 / 1400
SCF-500		0.2		5/6		32	500 / 600	1550 / 1800
SCF-600		0.28		6/6		32	600 / 750	1650 / 1950
SCF-700		0.38		6/6		40	700 / 850	1750 / 2050
SCF-800		0.5		6/6		40	800 / 950	1900 / 2200
SCF-1000		0.78		6/8		50	1000 / 1050	2200 / 2500
SCF-1500		1.76		8/8		65	1500 / 1560	2450 / 2800
SCF-2000		3.14		8 / 10		80	2000 / 1570	2600 / 2950
SCF-2500		4.9		10 / 10		100	2500 / 2580	2950 / 3300
SCF-3000		7.1		10 / 12		125	3000 / 3100	3250 / 3600

## **Application Industries**

Hotels, Garment Shops, Building Material Shops, Manufacturing Plant, Machinery Repair Shops, Food & Beverage Factory, Farms, Restaurant, Hospitals, Home Use, Retail, Food Shop, Printing Shops, Construction works, Energy & Mining, Food & Beverage Shops, Advertising Company and etc.

# **Optional Features**

- Automatic/ Pneumatic valves
- · Self-cleaning programming
- Local control panel
- Multi-media type
- Seaworthy packing

