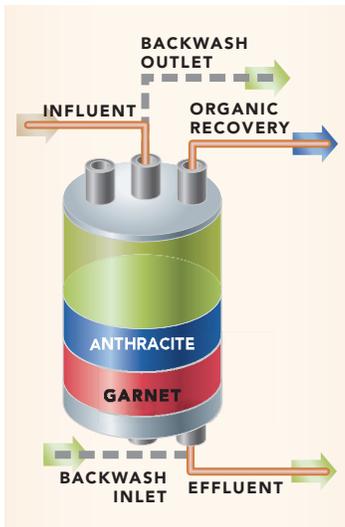


# SpinTek SX Filters

## For Organic-Free and Filtered Electrolyte

*Increase your solvent extraction efficiency while lowering cost. Consider SpinTek!*

### FLOW DIAGRAM



The SpinTek SX filters are specifically designed to provide superior organic removal and filtered electrolyte for the solvent extraction market. The filters are ruggedly designed and built to operate in the difficult environments of solvent extraction plants.

The SpinTek SX filters are free-standing, self-contained units available in a variety of standard sizes with individual unit flow rates of up to 1000 gpm (227 m<sup>3</sup>/hr). Multiple units can achieve much higher flow rates. All vessels, media, piping, instruments and controls are provided for a completely automatic and operational system.

### Controls and Instruments

The SX filters are automatically controlled in service, organic recovery and backwash with a PLC in a NEMA 4X housing to protect it from the environment. Custom controllers can be engineered and built to any specification for single unit or multiple unit control.

Standard instrumentation includes two stainless steel pressure gauges with seals. A magnetic flow

meter, automatic flow controller, delta pressure switch and organic recovery switch, all of 316L SS, are also standard.

### Piping and Valves

Standard valves for the SX filters are 316 SS butterfly with air operators. Two 316 SS sample valves are included for monitoring the system's performance and a 316 SS safety pressure relief valve provides system protection.

Piping is manufactured of 316 SSW or HDPE fusion-welded and can be heat traced to prevent crystallization.

### Media

The SX filters provide for excellent removal of organic and suspended solids from the electrolyte stream. The SX filters use two separate layers of media for coalescing and for filtration. The upper media layer provides for organic removal down to 2 ppm while the second media layer filters the electrolyte down to 10 microns.

# Media filtration

### STANDARD FEATURES

- Fine electrolyte filtration down to 10 microns
- Organic removal down to 2 ppm
- Single unit flow rates up to 1000 gpm (227 M<sup>3</sup>/hr)
- Automatic operation
- Stainless steel ASME code pressure vessels
- HDPE
- Full instrumentation
- Custom modifications available



# SpinTek SX Filters

Media filtration

## Pressure Vessels and Skid

The SX filter pressure vessels are constructed of 316L SS built to the stringent ASME and NB requirements and stamped. Normal pressure vessel rating is 50 psig with the higher ratings available.

Manways, tank supports and windows are standard and are also constructed of 316L SS. All vessel connections are standard ANSI flanges.

The SX filters are mounted on carbon steel skids that have been blasted to SSP-10 and coated with both epoxy and polyurethane for extra corrosion protection.

## Vessel Internals

Vessel internals for inlet flow, backwash and service

outlet are all constructed of 316L SS. In addition, the air and service outlet internals have 316L SS screens for media containment.

## Custom Features

The SX filters can be built to a wide variety of specifications. Typical options include custom controllers, alternate piping and vessel materials (such as fiberglass), specific welding specifications and many others, to meet the demanding requirements of clients and specifying engineering firms.

Please contact SpinTek direct for more information on how the SpinTek SX filters can be designed to meet any special requirements.

## SPECIFICATIONS FOR SPINTEK SX FILTERS

(English)

Model Number	Service Flow	Backwash Flow	Piping Size	Vessel Diameter	Height	Dimensions Depth	Width	Shipping Weight	Operating Weight
SX-1000	60 GPM	100 GPM	2"	4'	11'	6'	6'	5,100 LBS	8,700 LBS
SX-1010	100 GPM	160 GPM	3"	5'	11'	7'	7'	7,700 LBS	13,600 LBS
SX-1020	140 GPM	225 GPM	3"	6'	12'	8'	8'	11,100 LBS	19,800 LBS
SX-1030	190 GPM	300 GPM	4"	7'	13'	9'	9'	15,100 LBS	27,300 LBS
SX-1040	250 GPM	400 GPM	4"	8'	14'	10'	10'	20,400 LBS	36,900 LBS
SX-1050	325 GPM	510 GPM	6"	9'	15'	11'	11'	26,600 LBS	48,100 LBS
SX-1060	400 GPM	630 GPM	6"	10'	16'	12'	12'	32,900 LBS	60,300 LBS
SX-1070	475 GPM	760 GPM	6"	11'	17'	13'	13'	36,900 LBS	74,100 LBS
SX-1080	565 GPM	910 GPM	6"	12'	18'	14'	14'	48,800 LBS	90,600 LBS
SX-1090	665 GPM	1,060 GPM	8"	13'	19'	15'	15'	59,500 LBS	109,800 LBS
SX-1100	770 GPM	1,230 GPM	8"	14'	20'	16'	16'	70,500 LBS	130,400 LBS
SX-1110	885 GPM	1,420 GPM	8"	15'	21'	17'	17'	81,400 LBS	151,900 LBS
SX-1120	1,000 GPM	1,610 GPM	10"	16'	21'	18'	18'	93,200 LBS	174,500 LBS

(Metric)

Model Number	Service Flow	Backwash Flow	Piping Size	Vessel Diameter	Height	Dimensions Depth	Width	Shipping Weight	Operating Weight
SX-1000	14 M <sup>3</sup> /HR	23 M <sup>3</sup> /HR	50mm	1.22M	3.35M	1.83M	1.83M	2,318 KG	3,955 KG
SX-1010	23 M <sup>3</sup> /HR	36 M <sup>3</sup> /HR	76mm	1.52M	3.35M	2.13M	2.13M	3,500 KG	6,182 KG
SX-1020	32 M <sup>3</sup> /HR	51 M <sup>3</sup> /HR	76mm	1.83M	3.66M	2.44M	2.44M	5,045 KG	9,000 KG
SX-1030	43 M <sup>3</sup> /HR	68 M <sup>3</sup> /HR	100mm	2.13M	3.96M	2.74M	2.74M	6,864 KG	12,409 KG
SX-1040	57 M <sup>3</sup> /HR	91 M <sup>3</sup> /HR	100mm	2.44M	4.27M	3.05M	3.05M	9,273 KG	16,773 KG
SX-1050	74 M <sup>3</sup> /HR	116 M <sup>3</sup> /HR	150mm	2.74M	4.57M	3.35M	3.35M	12,091 KG	21,864 KG
SX-1060	91 M <sup>3</sup> /HR	143 M <sup>3</sup> /HR	150mm	3.05M	4.88M	3.66M	3.66M	14,955 KG	27,409 KG
SX-1070	108 M <sup>3</sup> /HR	173 M <sup>3</sup> /HR	150mm	3.35M	5.18M	3.96M	3.96M	18,136 KG	33,682 KG
SX-1080	128 M <sup>3</sup> /HR	207 M <sup>3</sup> /HR	150mm	3.66M	5.49M	4.27M	4.27M	22,182 KG	41,182 KG
SX-1090	151 M <sup>3</sup> /HR	241 M <sup>3</sup> /HR	200mm	3.96M	5.79M	4.57M	4.57M	27,045 KG	49,909 KG
SX-1100	175 M <sup>3</sup> /HR	280 M <sup>3</sup> /HR	200mm	4.27M	6.10M	4.88M	4.88M	32,045 KG	59,273 KG
SX-1110	201 M <sup>3</sup> /HR	323 M <sup>3</sup> /HR	200mm	4.57M	6.40M	5.18M	5.08M	37,000 KG	69,045 KG
SX-1120	227 M <sup>3</sup> /HR	366 M <sup>3</sup> /HR	250mm	4.88M	6.40M	5.49M	5.49M	42,364 KG	79,318 KG

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