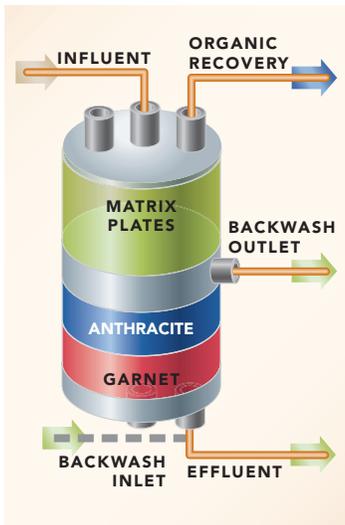


CoMatrix™ Tower

Excellent Organic Recovery, Plus 5x Flow Rate of Standard SX Filters

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

FLOW DIAGRAM



The SpinTek CoMatrix™ system is specifically designed to provide excellent organic recovery and electrolyte filtering for the solvent extraction market. The system is designed to operate at five times the flow rate of traditional SX filters. This translates to a 65% cost reduction and reduced backwash volumes of 70%. The CoMatrix™ systems are free standing, self-contained units available in a variety of standard sizes with individual unit flow rates of up to 3,800 gpm (875 m³/hr). Multiple units can facilitate much higher flow rates. All vessels, media, piping, instruments and controls are provided for a completely automatic and operational system.

Controls and Instruments

The CoMatrix™ is 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 CoMatrix™ are 316 SS butterfly with air operators. 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 SS or HDPE fusion welded, and can be heat traced to prevent crystallization.

Media and Matrix Plates

The matrix plates are fabricated of PVC and perform excellent coalescing and recovery of the organic. The CoMatrix™ uses two separate layers of media for final organic coalescing and filtration down to 10 microns.

Media filtration

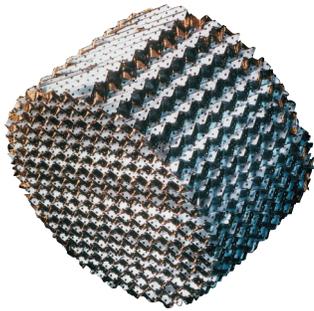
STANDARD FEATURES

- Easily recovered organic
- Five times the flow rate of SX filters
- Single unit flow rates up to 3,800 GPM (875 M³/HR)
- Fine electrolyte filtration down to 10 microns
- Organic removal down to 2 ppm
- 65% less capital cost than SX filters
- 70% less backwash required than SX filters
- Lower installation cost



CoMatrix® Escondida - 1880 m³/hr.

CoMatrix™ Tower



Matrix plates

Media filtration

Pressure Vessels and Skid

The CoMatrix™ 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 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 CoMatrix™ system is mounted on a carbon steel skid that has been blasted to SSPC-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

backwash, air and service outlet internals have 316L SS screens for media containment.

Custom Features

The CoMatrix™ system 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 directly for more information on how the CoMatrix™ can be designed to meet any special requirements.

SPECIFICATIONS FOR COMATRIX™ SYSTEMS

(English)

Model Number	Service Flow	Backwash Flow	Piping Size	Vessel Diameter	Height	Dimensions Depth	Width	Shipping Weight	Operating Weight
CM-960	80 GPM	30 GPM	2"	2'	21'	4'	4'	3,200 LBS	6,300 LBS
CM-980	170 GPM	70 GPM	3"	3'	22'	5'	5'	6,100 LBS	13,100 LBS
CM-1000	310 GPM	125 GPM	4"	4'	22'	6'	6'	10,800 LBS	23,400 LBS
CM-1010	490 GPM	200 GPM	6"	5'	22'	7'	7'	15,900 LBS	35,800 LBS
CM-1020	700 GPM	280 GPM	6"	6'	22'	8'	8'	22,100 LBS	51,100 LBS
CM-1030	960 GPM	390 GPM	8"	7'	23'	9'	9'	29,400 LBS	69,100 LBS
CM-1040	1,250 GPM	500 GPM	8"	8'	24'	10'	10'	39,700 LBS	92,100 LBS
CM-1050	1,550 GPM	625 GPM	10"	9'	24'	11'	11'	50,600 LBS	117,500 LBS
CM-1060	1,670 GPM	775 GPM	10"	10'	25'	12'	12'	61,600 LBS	144,900 LBS
CM-1070	2,350 GPM	950 GPM	12"	11'	26'	13'	13'	73,700 LBS	175,500 LBS
CM-1080	2,800 GPM	1,150 GPM	12"	12'	26'	14'	14'	89,300 LBS	211,600 LBS
CM-1090	3,300 GPM	1,350 GPM	14"	13'	27'	15'	15'	107,800 LBS	252,700 LBS
CM-1100	3,850 GPM	1,550 GPM	14"	14'	27'	16'	16'	126,600 LBS	296,200 LBS

(Metric)

Model Number	Service Flow	Backwash Flow	Piping Size	Vessel Diameter	Height	Dimensions Depth	Width	Shipping Weight	Operating Weight
CM-960	18 M ³ /HR	7 M ³ /HR	50mm	.61M	6.40M	1.22M	1.22M	1,455 KG	2,846 KG
CM-980	39 M ³ /HR	16 M ³ /HR	76mm	.91M	6.71M	1.52M	1.52M	2,773 KG	5,955 KG
CM-1000	70 M ³ /HR	28 M ³ /HR	100mm	1.22M	6.71M	1.83M	1.83M	4,909 KG	10,636 KG
CM-1010	111 M ³ /HR	45 M ³ /HR	150mm	1.52M	6.71M	2.13M	2.13M	7,277 KG	16,273 KG
CM-1020	159 M ³ /HR	64 M ³ /HR	150mm	1.83M	6.71M	2.44M	2.44M	10,045 KG	23,227 KG
CM-1030	218 M ³ /HR	89 M ³ /HR	200mm	2.13M	7.01M	2.74M	2.74M	13,364 KG	31,409 KG
CM-1040	284 M ³ /HR	114 M ³ /HR	200mm	2.44M	7.32M	3.05M	3.05M	18,045 KG	41,864 KG
CM-1050	362 M ³ /HR	142 M ³ /HR	250mm	2.74M	7.32M	3.35M	3.35M	23,000 KG	53,409 KG
CM-1060	380 M ³ /HR	176 M ³ /HR	250mm	3.05M	7.62M	3.66M	3.66M	28,000 KG	65,864 KG
CM-1070	534 M ³ /HR	216 M ³ /HR	300mm	3.35M	7.92M	3.96M	3.96M	33,500 KG	79,773 KG
CM-1080	636 M ³ /HR	261 M ³ /HR	300mm	3.66M	7.92M	4.27M	4.27M	40,591 KG	96,182 KG
CM-1090	750 M ³ /HR	307 M ³ /HR	350mm	3.96M	8.23M	4.57M	4.57M	49,000 KG	114,864 KG
CM-1100	875 M ³ /HR	352 M ³ /HR	350mm	4.27M	8.23M	4.88M	4.88M	57,545 KG	134,636 KG

SpinTekfiltration
10863 Portal Drive
Los Alamitos, CA 90720 USA

Telephone: (714) 236-9190
Facsimile: (714) 236-9196
Internet: www.spintek.com

 SpinTekfiltration
Advancing the flow of industry