

# SENTRY® SENTRY® FILTRATION / PURIFICATION SYSTEMS



### FOR THOSE WHO DEMAND THE FINEST IN PARTICLE RETENTION

ELECTROPLATING / CHEMICAL / PCB
PETROCHEMICAL / WATER TREATMENT
PHARMACEUTICAL / PHOTOGRAPHIC

- Flow rates: 7,200 to 19,000 GPH @ 60 Hz
- Cartridge or horizontal disc
- Solids loading area:
   420, 630 or 840 sq. ft. using cartridges
   60, 78 or 105 sq. ft. using discs

#### **OPTIONAL** —

**Slurry tank** with 3 additional flow control valves for pump priming, precoating and . . .

Carbon purification chamber for organics removal

These filtration systems include design features gained through more than 40 years of experience in developing chemically resistant pumps, filter chambers and systems. High flow rates to quickly remove particles, together with large surface area for solids loading are combined to provide extended operating life of solutions and improve product quality. A wide choice of media is available to best serve your application. Optional carbon chamber and slurry tank make the system extremely versatile.

Sentry filtration systems are engineered to provide efficient removal of particles or organic impurities from a wide range of chemical and plating solutions to 160°F. Chambers and pumps feature non-metallic solution contact. All external steel surfaces are painted two-part epoxy grey enamel. All internals are CPVC.

The following pages contain a representative sampling of available standard systems.

## SENTRY FILTRATION / PURIFICATION SYSTEMS with seal-less magnetic drive pumps

#### **CHOOSE YOUR SYSTEM**

#### FIRST, SELECT

#### **Seal-less Magnetic-Coupled Pump**

Systems may be selected with magnetic-coupled pumps which provide protection from vapor and liquid leaks. Pumps are available in polypropylene to meet a variety of chemical and temperature applications.

#### OR SELECT

#### Single or Double Seal Pump

Systems with mechanical seals should be selected whenever excessive abrasives or ferrous metal particles are present. Standard single and double seal pumps are CPVC and feature silicon carbide (SiC) seal faces with EPDM elastomers.



#### THEN SELECT

#### Filter Chamber for solids holding capacity\*

Chambers are constructed of rubber lined steel for acid solutions. They accept Maxi-Depth® wound, pleated, cleanable sleeve, or carbon cartridges. \*\*

Chambers allow for simultaneous filtration and purification by using carbon cartridges. A separate purification chamber with flow control valve is available. See Options on page 4.

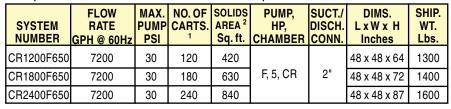
- \* Select a system which will provide 3.5 7.0 square ft. of solids holding area per 50 gallons of solution. Flow rate should be 2-10 tank turnovers per hour, depending on clarity desired. Coarse media and high flows are desirable for high dirt load applications. Increasing the number of cartridges reduces solution flow per cartridge, improves efficiency and reduces cartridge consumption. System comes complete with flow control valve between pump and filter chamber. When unit is de-energized, flow control valve may be closed to maintain prime during media change.
- \*\* Chambers provided with the following Series 'CR' systems are for cartridges.

To specify system for use with discs -

Change CR1200 in System No. to DR60 Change CR1800 in System No. to DR78 or Change CR2400 in System No. to DR105

### RUBBER LINED CHAMBER with MAGNETIC DRIVE POLYPROPYLENE PUMP

Pump includes fluoride-resistant ceramic spindle with EPDM elastomers.



SYSTEM NUMBER	FLOW RATE GPH @ 60Hz	-	NO. OF CARTS.	AREA 2	- ,	SUCT./ DISCH. CONN.	_	SHIP. WT. Lbs.
CR1200F850	9600	45	120	420			48 x 48 x 64	1325
CR1800F850	9600	45	180	630	F, 5, CR	2"	48 x 48 x 72	1425
CR2400F850	9600	45	240	840			48 x 48 x 87	1625

SYSTEM NUMBER	-	PUMP	NO. OF CARTS.	AREA 2	- ,	SUCT./ DISCH. CONN.	LxWxH	SHIP. WT. Lbs.
CR1200F910	12000	55	120	420			48 x 48 x 64	1365
CR1800F910	12000	55	180	630	F, 10.0, CR	3"	48 x 48 x 72	1465
CR2400F910	12000	55	240	840			48 x 48 x 87	1665



### SENTRY FILTRATION / PURIFICATION SYSTEMS with single or double mechanical seal pumps \*

#### RUBBER LINED CHAMBER with DIRECT DRIVE CPVC PUMP

Pump includes silicon carbide mechanical seal with EPDM elastomers.

SYSTEM NUMBER	FLOW RATE GPH @ 60Hz	MAX. PUMP PSI	NO. OF CARTS. <sup>1</sup>	SOLIDS AREA <sup>2</sup> Sq. ft.	PUMP, HP, CHAMBER	SUCT./ DISCH. CONN.	DIMS. L x W x H Inches	SHIP. WT. Lbs.
CR1200HE330	7500	36	120	420			48 x 48 x 64	1300
CR1800HE330	7500	36	180	630	HE, 3, CR	2"	48 x 48 x 72	1400
CR2400HE330	7500	36	240	840			48 x 48 x 87	1600

SYSTEM NUMBER	FLOW RATE GPH @ 60Hz	MAX. PUMP PSI	NO. OF CARTS. <sup>1</sup>	SOLIDS AREA <sup>2</sup> Sq. ft.	PUMP, HP, CHAMBER	SUCT./ DISCH. CONN.	DIMS. LxWx H Inches	SHIP. WT. Lbs.
CR1200HE450	8500	50	120	420			48 x 48 x 64	1325
CR1800HE450	8500	50	180	630	HE, 5, CR	2"	48 x 48 x 72	1425
CR2400HE450	8500	50	240	840			48 x 48 x 87	1625

SYSTEM NUMBER	FLOW RATE GPH @ 60Hz	MAX. PUMP PSI	NO. OF CARTS. <sup>1</sup>	SOLIDS AREA <sup>2</sup> Sq. ft.	PUMP, HP, CHAMBER	SUCT./ DISCH. CONN.	DIMS. LxWx H Inches	SHIP. WT. Lbs.
CR1200HE575	9600	60	120	420			48 x 48 x 64	1365
CR1800HE575	9600	60	180	630	HE, 7.5, CR	2"	48 x 48 x 72	1465
CR2400HE575	9600	60	240	840			48 x 48 x 87	1665

SYSTEM NUMBER	FLOW RATE GPH @ 60Hz	MAX. PUMP PSI	NO. OF CARTS. <sup>1</sup>	SOLIDS AREA <sup>2</sup> Sq. ft.	PUMP, HP, CHAMBER	SUCT./ DISCH. CONN.	DIMS. LxWx H Inches	SHIP. WT. Lbs.
CR1200H875	15000	27	120	420	11.75.CD		48 x 48 x 72	1475
CR1800H875	15000	27	180	630	H, 7.5, CR	3"	48 x 48 x 87	1675
CR2400H510	19000	50	240	840	H, 10, CR		48 x 48 x 87	1750



#### NOTE:

- \*To order pump with double mechanical seal - Change **HE** to **HED** or **H** to **HD** in System No.
- <sup>1</sup> No. of 10" cartridges. Order separately. See Bulletin M-109.
- With Maxi-Depth cartridges. See Bulletin M-109.

#### **SENTRY systems include:**

- Stationary steel mounting base coated with corrosion resistant 2-part epoxy paint.
- Motors are 230-460V/3/50-60, TEFC, 1725 or 3450 RPM. Systems wired for 230V/3/60 unless otherwise specified.
- Piping is solvent sealed CPVC, with EPDM "O"rings at threaded connections.
- O-60 PSI pressure gauge with gauge guard.
- Two flow control valves one between pump and filter, second at filter discharge.
- Ball valves are solvent sealed CPVC at filter inlet and outlet.
- Capped tee on filter inlet and outlet for drains or field installation of bulk carbon.
- CPVC vent valve assembly.
- 1" drain valve on filter.

#### Available for all models:

Granular carbon purification chamber installed on filter discharge with flow control valve is an available option. This allows filtered solution to pass through the activated carbon on a convenient "ON-OFF" basis before returning to the process tank. In addition to pump priming and chemical mixing, optional slurry tank with three additional valves allows precoating of media with filter aid and/or carbon. See Optional on the next page.

#### **OPTIONS**

78-1604

DESCRIPTION	PRICE CODE NO.				
MOTOR STARTERS - NEMA 4X Watertight push button					
230 - 460V/3/50-60 (3 - 7.5 H.P.) 230 - 460V/3/50-60 (10 - 15 H.P.)	O-MS3P O-MS3P-S				
230 - 400 V/3/50-00 (10 - 15 H.P.)	0 10001 -0				

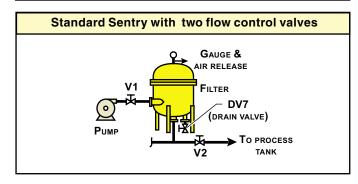
NOTE: Specify operating voltage
O-MS3P-S is required for any size system
ordered with a DRI-STOP® Pump Protector.

DR105 / CR240

DRI-STOP® PUMP PROTECTOR							
DRI-STOP 2R for use with double mechanical seal pumps.	O-2DS2R						
DRI-STOP 3 for use with magnetic drive or single mechanical seal pumps.	O-DS3C						
DAVIT COVER LIFT							
For Model: DR78 / CR180	78-1603						

SLURRY TANK and VALVES	PRICE CODE NO.
For chemical mixing, pump priming or precoating. Includes polyethylene tank, three additional CPVC flow control valves, steel frame. Completely piped and assembled with	
filter and pump on a standard base. 30 gal. slurry w/3 add'l valves 60 gal. slurry w/3 add'l valves	O-SV3-30 O-SV3-60
DVI (BRAIN VALVE)	E ROCESS NNK

DESCRIPTION	PRICE CODE NO.					
CARBON PURIFICATION CHAMBER Order carbon media from Bulletin M-305.						
Includes adapter kit, flow control valve, drain valve and 10 ft. of nylon reinforced vinyl hose, PVC chamber and internal canister(s) for use with granular carbon.						
Single 5" x 28" canister, 7.5 lbs. capacity Triple 5" x 28" canister, 22.5 lbs. capacity Triple 5" x 48" canister, 42 lbs capacity	O-1528 O-3528 O-3548					
Chamber for single 5" x 28" Maxi-Carb cartridge (3.0 lbs. carbon)						
Polypropylene CPVC	O-PP1528M O-1528M					
GAUGE & AIR RELEASE  TO PROCESS TANK  PUMP DV7 (DRAIN VALVE) V2  CARBON FILTER  TO PROCESS TANK  TO PROCESS TANK						



### DISC MEDIA FILTER DISCS, CELLULOSE

Packaged in carton of 250

MICRON F

**RATING** 

5

10

20

40

**PRICE** 

CODE NO.

78-1420

78-1421

78-1422

78-1423

SENTRY FILTRATION SYSTEMS						
CARTRIDGE DISC						
MODEL	SOLIDS AREA Square feet	MODEL	SOLIDS AREA Square feet			
CR1200 CR1800 CR2400	420 630 840	DR60 DR78 DR105	60 78 105			

Specifications subject to change without notice.

F.O.B. Northbrook, Illinois



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**DISC MODEL** 

CE5x24

CE10x24

CE20x24

CE40x24