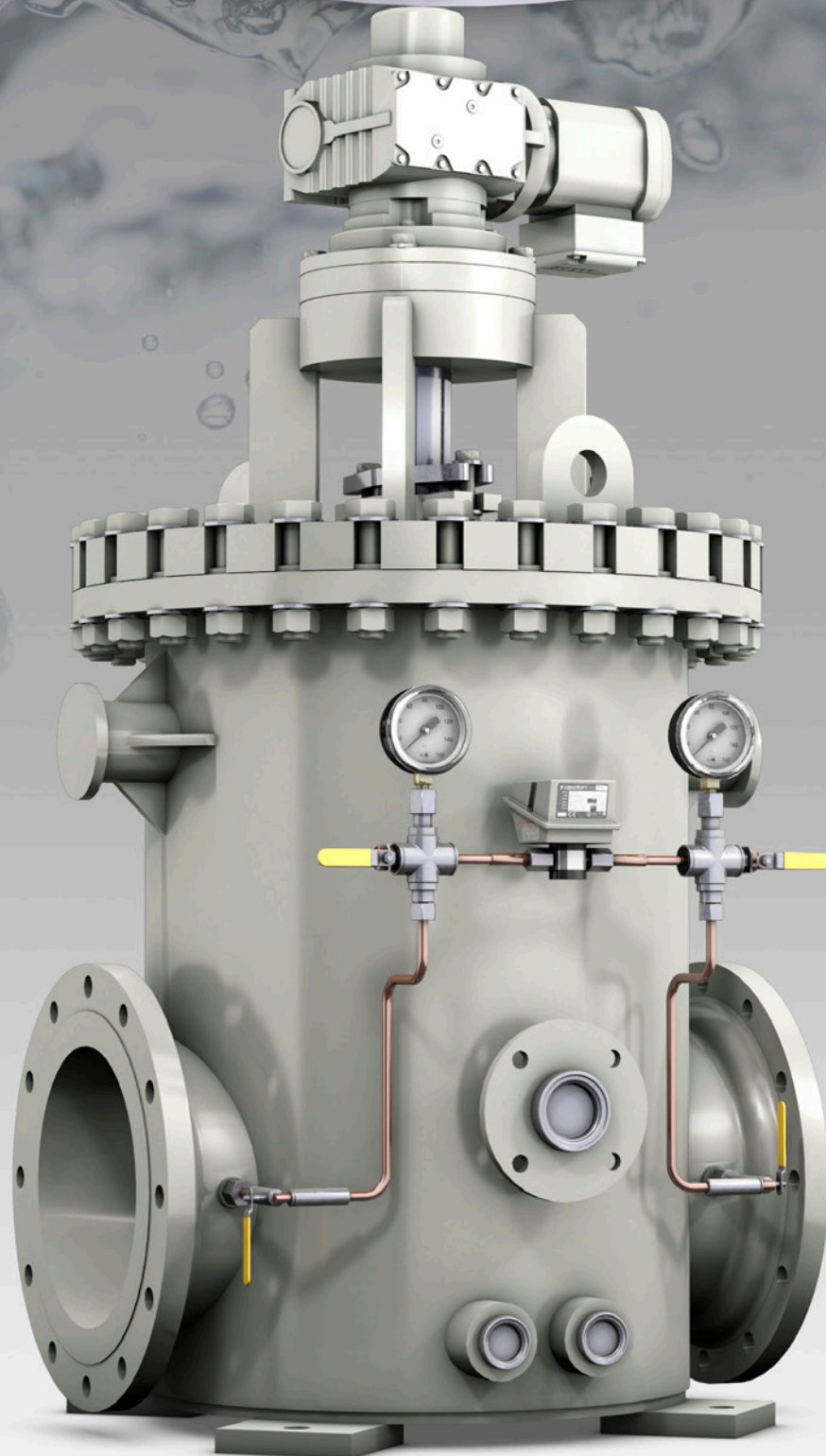


S.P. KINNEY[®]



automatic strainer

Model "AFW-1"

Bulletin 514.4

S.P. KINNEY MODEL "AFW-1" STRAINER

APPLICATIONS

The "Model AFW-1" is a light duty strainer designed for continuous removal of suspended particles from all types of liquids. Applications are in industrial plants using river, lake, well or sea water for cooling, descaling, bearing lubrication, spraying, quenching and similar purposes. Pipeline size: 2"-48".

Liquids other than water, such as chemicals, acids, white water (paper mills), sewage plants, and ammonia flushing liquor (coke plants) can also be effectively strained.

INSTALLATION

Installation is made on the discharge side of a pump or in any piping system operating under a positive pressure. The minimum working pressure required to effectively clean the straining media is 20 psi. The strainer is compact with small face-to-face width and height dimensions. Installation can be made in a horizontal or vertical pipeline.

DESIGN

Similar to many of the automatic strainers on the market, the Model "AFW-1" consists of a one-piece stainless steel cylindrical well screen drum with slotted openings ranging from .005" through .075". Within the drum is contained a rotor, which is essentially a hollow rotating

shaft—supporting two pads extended on each side. These pads are flush with the inside of the drum surface.

OPERATION

The liquid to be strained enters the inlet connection located in the lower portion of the body and flows upward into the inner surface of the drum. The suspended particles are retained, and the clean water can then continue through the outlet connection located diametrically opposite the inlet.

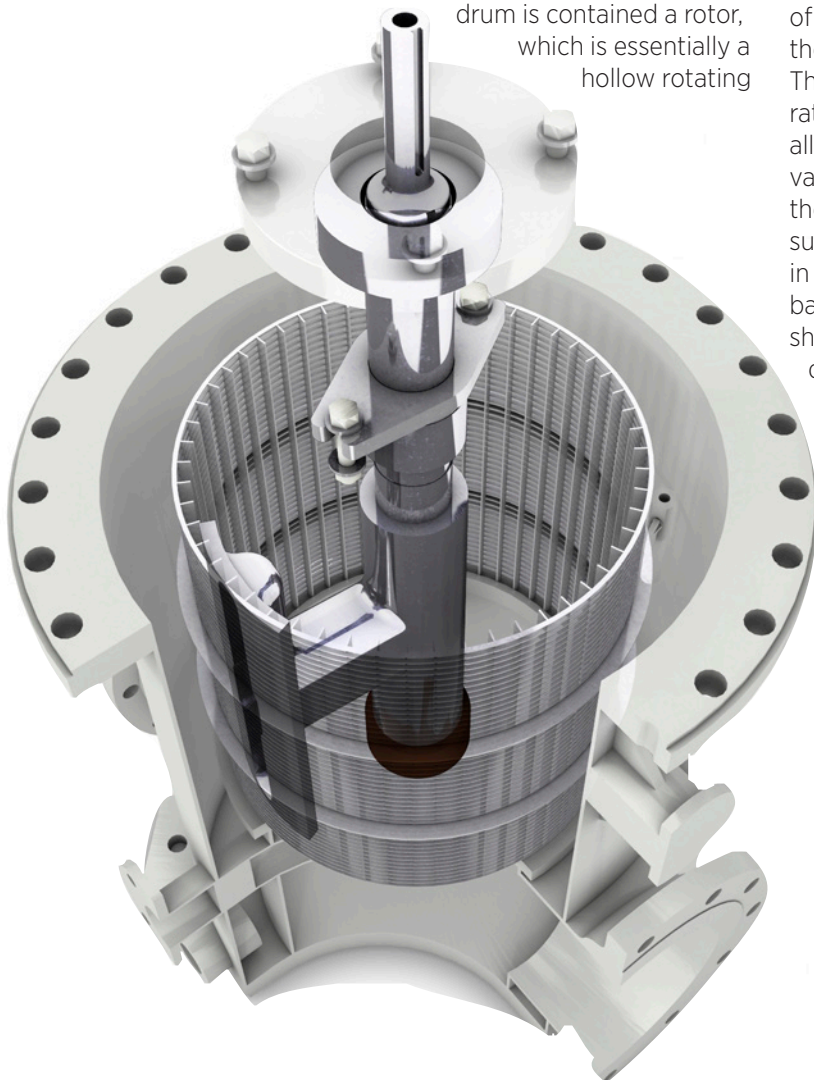
BACKWASH

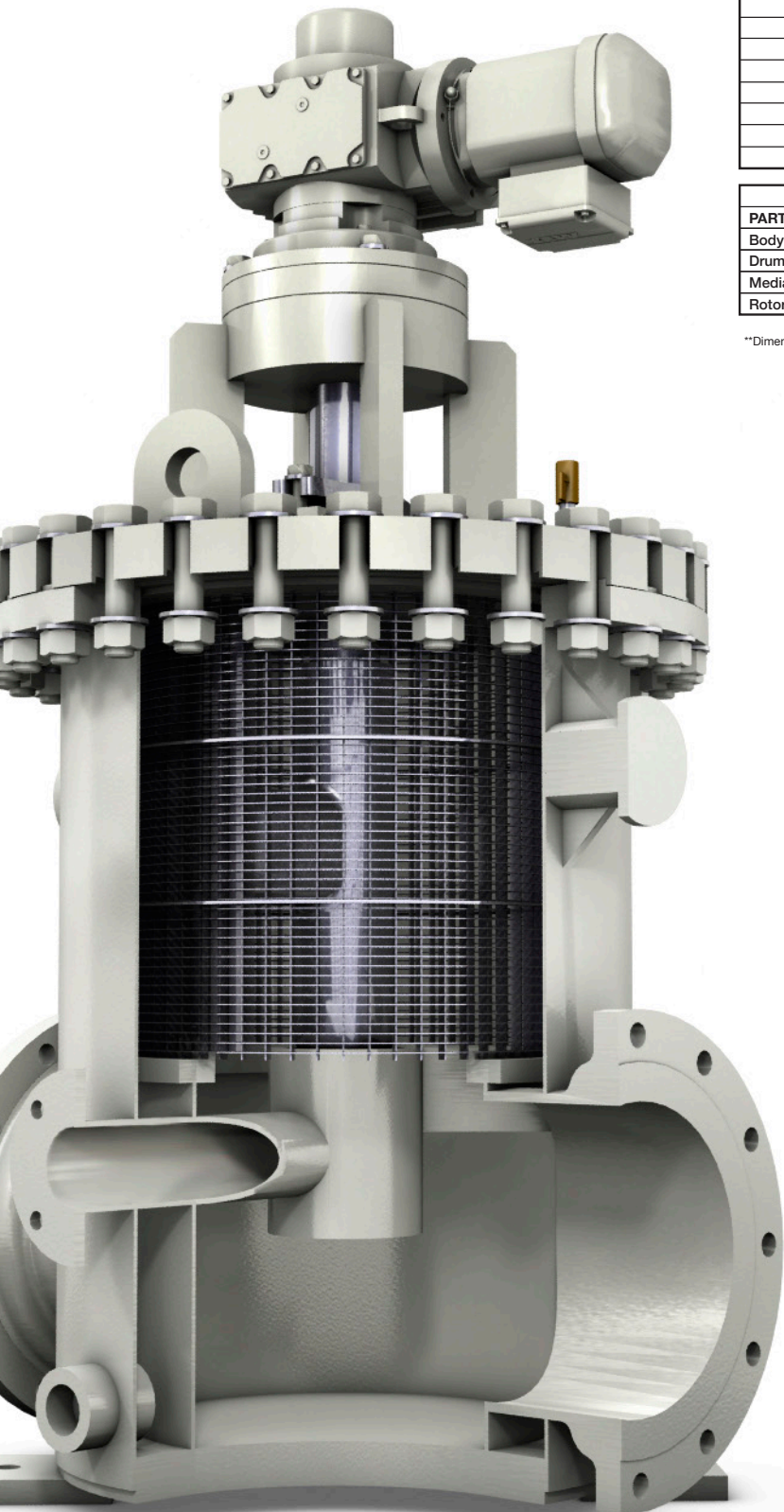
As the rotor sweeps over the drum, a reversal of flow occurs, flushing the suspended particles from the media into the rotor and out through the backwash opening. This reversal of flow is caused by a pressure differential between the interior of the strainer and the atmosphere. The backwash flow rate is exceptionally low and will vary, depending on the amount of the suspended particles in the liquid. The backwash piping should discharge downward into an open funnel immediately after the backwash valve.



AUTOMATIC BACKWASH CONTROL

In lieu of a manually operated backwash valve, an automatic control can be furnished to permit intermittent backflushing. This control consists of an electric or pneumatically operated ball valve, actuated by a timer or a pressure differential switch (or both).

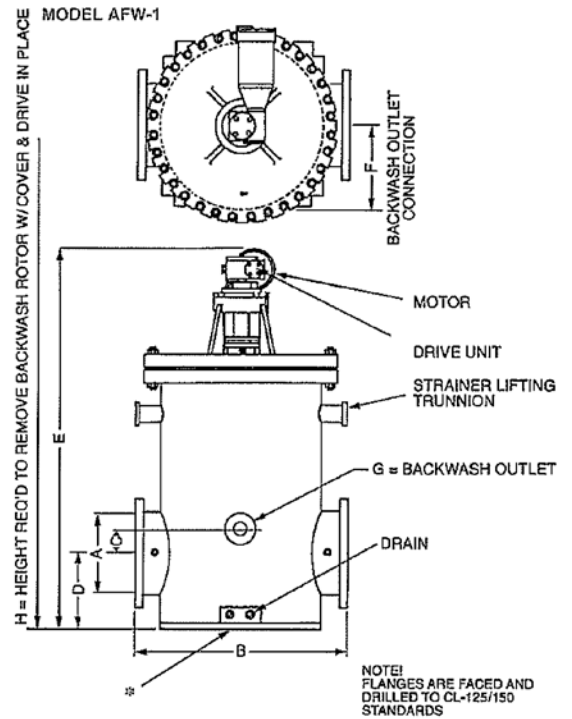




MODEL "AFW-1" STRAINERS										
STRAINER SIZE-A	DIMENSIONS (inches)								MOTOR H.P.	APPROX. SHIP WT. LBS
	B	C	D	E	F	G	H			
2	18	*	4	27	*	1.25	34	.33	370	
3	18.5	*	4.5	29.5	*	1.5	39	.33	420	
4	18.5	*	5	32.875	*	2	46	.33	560	
6	21	2	6	40.5	8.5	2	55.5	.33	950	
8	24	3	7.25	48.75	9.5	2	68	.33	1,200	
10	26	2.5	8.5	51.25	11	3	72.5	.33	1,560	
12	31	3.5	10.5	57.125	13	3	78.875	.33	2,000	
14	38	4.5	14.5	70.625	15.75	3	99.375	.33	3,570	
16	38	5.5	13.5	70.625	15.75	3	99.375	.50	3,620	
18	45	4	18.25	90.25	19.125	4	130	.50	5,520	
20	45	5	17.25	89.25	19.125	4	129	.50	5,775	
24	56	7	17.5	99.5	25.75	4	142.5	.50	7,200	
30	62	9.75	20	112.125	29	4	163.125	.50	9,540	
36	72	6.75	27	130.5	33.5	6	181	.50	16,000	

CONSTRUCTION				
PART	STANDARD	SEA WATER	WHITE WATER	AMMONIACAL LIQUOR
Body	Cast Iron or Fab Stl	Cast Iron	Cast Iron/Stn. Stl	Cast Iron
Drum-Wedge Wire	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Media (Str. Opening)	As Specified	As Specified	As Specified	As Specified
Rotor	Cast Iron	Stainless Steel	Stainless Steel	Cast Iron

*Two backwash openings
 **Dimensions provided above are for reference only. Actual dimensions shall be provided on certified drawings when order is placed.
 ***Additional sizes and variations may be available for custom builds. Please call for information.



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S.P. KINNEY ENGINEERS, INC.

143 FIRST AVE. P.O. BOX 445, CARNEGIE, PA 15106-0445, USA

PHONE: 1-800-356-1118

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WWW.SP KinNEY.COM

INFO@SP KinNEY.COM