

S.P. KINNEY[®]



automatic strainer

Model 'A' CAST

Bulletin 510

S.P. KINNEY MODEL "A" CAST STRAINER

APPLICATIONS

The Model "A" is 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 sizes: 2" - 42" or larger upon application. Liquids other than water, such as chemicals, acids, white water (paper mills), sewage, 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.

DESIGN

The strainer consists of a conical drum with a number of threaded holes containing one of many types of straining media. The drum is supported on a rotating shaft fitted with bearings and is contained in a body having a vertical backwash slot opening adjacent to the drum surface.

OPERATION

The liquid to be strained enters the inlet connection located in the lower portion of the body and flows around the outer surface of the drum. The suspended particles are retained in the media pockets, and the clean liquid passes through the media to the inside and bottom opening of the drum. The clean water can then continue through the outlet connection located diametrically opposite the inlet.

BACKWASH

As each row of straining media passes the backwash slot, a reversal of flow occurs, flushing the suspended particles from the media pockets. 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 suspended particles in the liquid.



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).

ADJUSTMENT AND SHEARING ACTION

The clearance between the backwash slot and the drum is equal to or smaller than the opening presented in the media and can be adjusted easily by two locknuts on the threaded part of the top section of the shaft.



The backwash slot contains a knife-like edge which enables the strainer to shear debris such as wood, shells, fish, and other suspended materials which may extend beyond the surface of the drum - with no resultant damage to the drum, straining media, or drive unit.

INSPECTION

The Kinney Model "A" strainer eliminates troublesome disassembly by providing an opening in the side of the strainer body. To inspect the straining media, simply remove the cover and manually rotate the drum.

As each row of media passes the inspection opening, easy access to the media is achieved.



CUSTOM BUILT IN THE U.S.

All S.P. Kinney strainers are custom built to order in the United States using only the highest grade American steel.

CALL TODAY

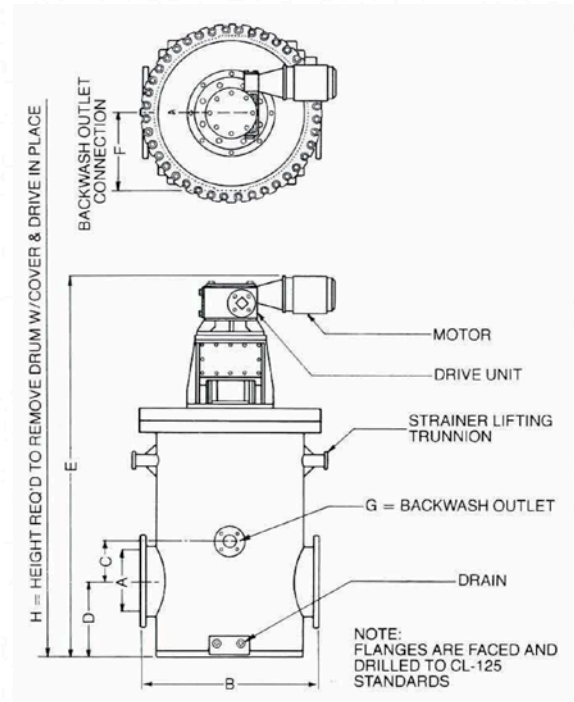
Call us today at 1-800-356-1118 or visit www.spkinney.com to set up a free consultation.



STRAINER SIZE-A	MODEL "A" CAST DIMENSIONS (inches)								MOTOR H.P.	APPROX. SHIP WT. LBS.
	B	C	D	E	F	G	H			
2	18	1	4	38	6.75	1.25	42	.5	460	
3	18.5	1	4.5	39.5	6.75	1.5	45.5	.5	525	
4	18.5	1.25	5	39	6.75	2	49	.5	625	
6	21	5	9	54.75	8.625	2	60.75	.75	1,200	
8	26	6.125	9.5	60.25	10.75	2	80.25	.75	1,800	
10	31	8.25	11	65	13.125	3	89.375	.75	2,500	
12	36	9.75	12.5	79.875	15	3	111.875	1	4,860	
14	41	10.5	14.5	81	17.125	4	115	1	5,500	
16	45	10.5	19.25	102	19.125	3*	139.75	1.5	8,300	
20	52	13	20	107	22.375	4*	148	1.5	11,000	
24	62	17.5	17.75	119.75	28.5	4*	174.75	3	14,700	
30	72	23.5	21.5	134.5	32.25	6*	169.75	3	18,300	
36	86	25.5	25	155.625	39	6*	224.25	5	27,000	
42	90	27.5	27	175	42.75	6*	259.25	5	35,000	

CONSTRUCTION				
PART	STANDARD	SEA WATER	WHITE WATER	AMMONIACAL LIQUOR
Body	Cast Iron	Cast Iron	Cast Iron	Cast Iron
Drum	Cast Iron	Aluminum Bronze	Stainless Steel	Cast Iron
Media	As Specified	As Specified	As Specified	As Specified
Media Retainers	Delrin	Delrin	Delrin	Stainless Steel
Shaft	Steel	Stainless Steel	Stainless Steel	Stainless Steel

*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.





S.P. KINNEY ENGINEERS, INC.

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

PHONE: 1-800-356-1118

FAX: (412) 276-6890

WWW.SP KinNEY.COM

INFO@SP KinNEY.COM