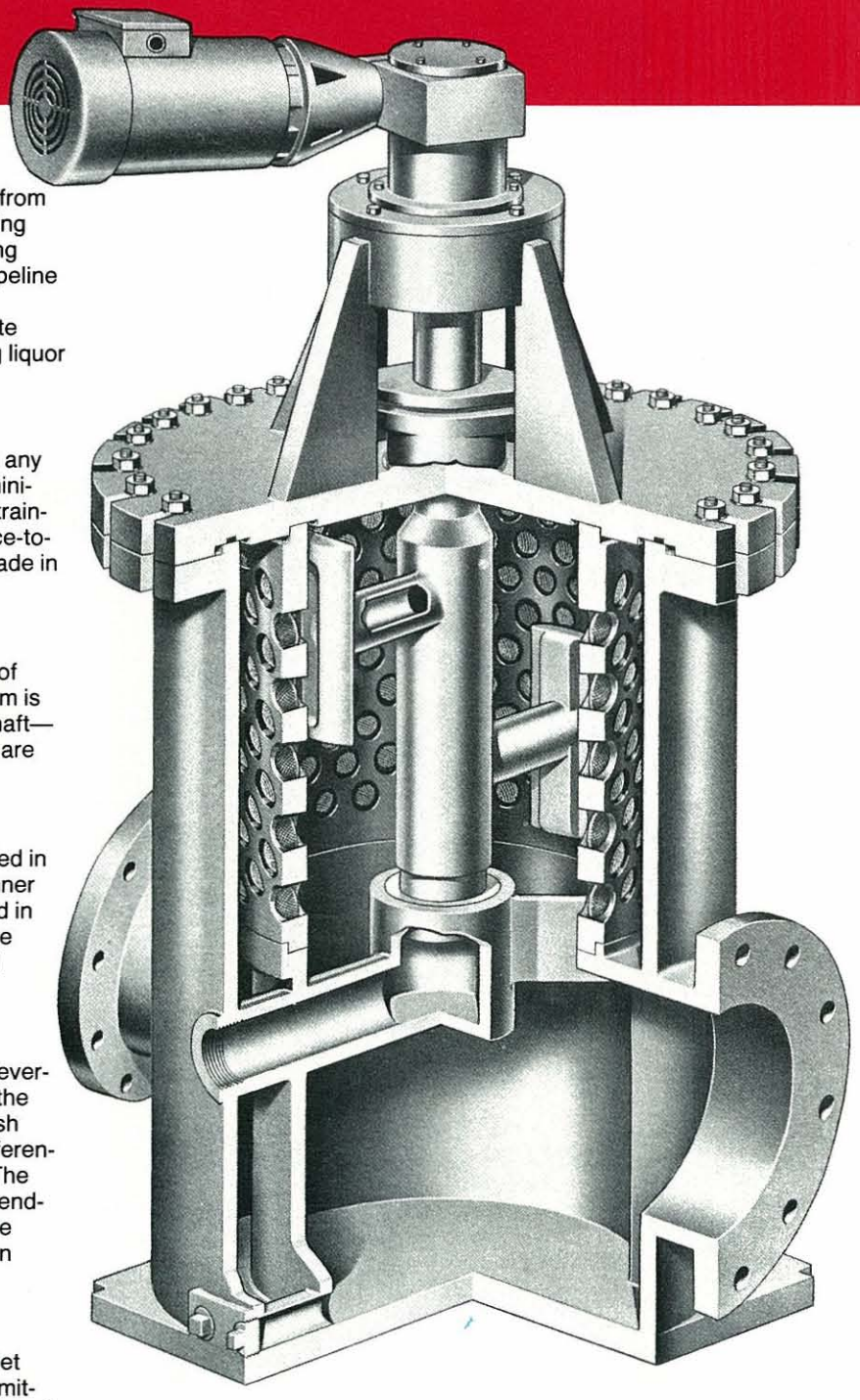
Bulletin 514.1

AUTO-FLO

(Fabricated)

KINNEY AUTOMATIC SELF-CLEANING STRAINER



APPLICATIONS

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: 8″- 36″ or larger.

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

The strainer consists of a cylindrical drum with a number of threaded holes containing straining media. 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

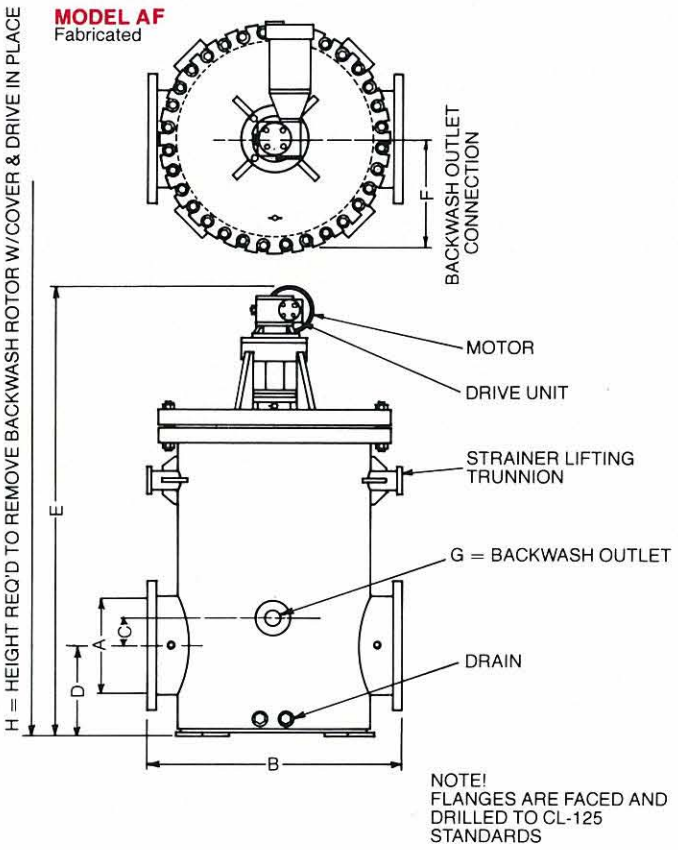
The liquid to be strained enters the inlet connection located in the lower portion of the body and flows upward into the inner surface of the drum. The suspended particles are retained in the media pockets and the clean liquid passes through the media—leaving the body at the outlet connection located diametrically opposite the inlet.

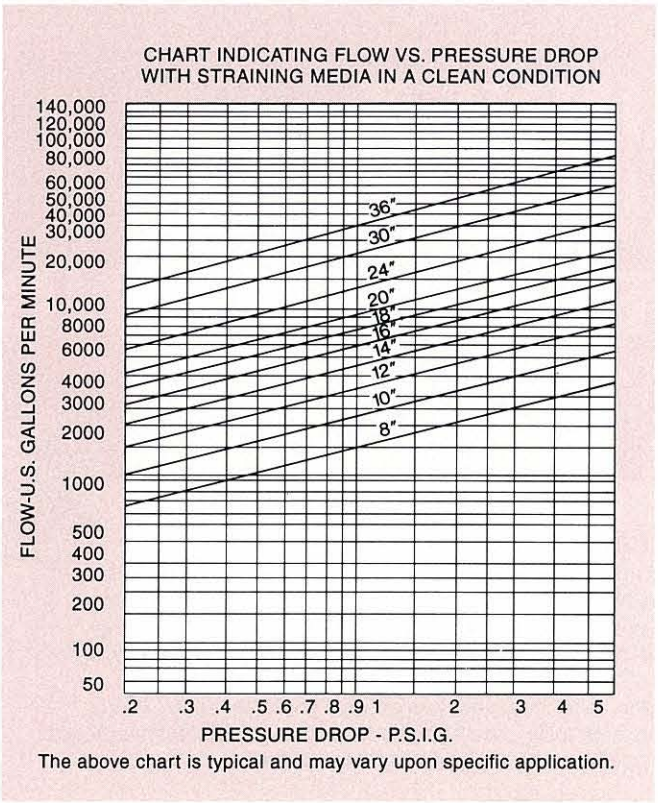
BACKWASH

As the rotor sweeps past each row of straining media, a reversal of flow occurs, flushing the suspended particles from the media pockets 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 atmosphere. The backwash flow rate is exceptionally low and will vary, depending on the amount of 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 valve on the backwash outlet line, an automatic control can be furnished to permit intermittent backflushing. This control consists of a motor or pneumatic cylinder operated ball valve actuated by a timer or a pressure differential switch (or both).





The above chart is typical and may vary upon specific application.

MODEL AF FABRICATED									
STRAINER SIZE-A	DIMENSIONS (IN INCHES)								APPROX. SHIP. WT. LBS.
	B	C	D	E	F	G	H		
8	31	1½	12½	57⅞	16	3 ▲	79		2,100
10	31	2½	11½	57⅞	16	3 ▲	79		2,150
12	41	3½	15½	71¼	18¾	3 ▲	99⅜		3,520
14	41	4½	14½	71¼	18¾	3 ▲	99⅜		3,560
16	45	3	19¼	87⅛	22⅜	4	128⅛		6,075
18	45	4	18¼	87⅛	22⅜	4	128⅛		6,200
20	56	5	20	89⅛	24⅜	4	128¾		7,680
24	62	7	23¾	110½	27⅝	4	159⅝		11,270
30	72	8½	27	127½	33½	6	178		15,530
36	88	13¾	31	134½	38½	6	192		23,500

▲ Pipe tap Do not use for construction—certified prints will be furnished

CONSTRUCTION				
PART	STANDARD	SEA WATER	WHITE WATER	AMMONIACAL LIQUOR
BODY	Fabricated Steel (Epoxy Lined)	Fabricated Steel (Epoxy Lined) or Stainless Steel	Stainless Steel	Fabricated Steel
DRUM	Cast Iron	Ni-Resist	Stainless Steel	Cast Iron
MEDIA	As Specified	As Specified	As Specified	As Specified
MEDIA RETAINERS	Delrin	Stainless Steel	Delrin	Stainless Steel
ROTOR	Ductile Iron	Stainless Steel	Stainless Steel	Ductile Iron

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