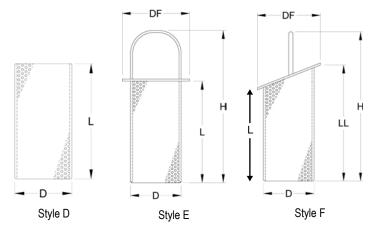
# **REPLACEMENT SCREENS**





## **OPENING RATIOS**

The following steps should be taken to determine the ratio of openings through strainer screens to the area of the inlet pipe size.

- 1. Determine the size of mesh or perforation required to give the desired particle retention
- 2. Multiply the total area of the screen by the percent of open area of the perforation or mesh material. The result is the open area of the screen
- 3. The open area of the screen divided by the area of the pipe will give the ratio of open area of the screen to the area of the pipe
- 4. To determine the ratio of open area to the pipe on mesh lined reinforcing screens, complete step two (2) to find the open area of the mesh. Multiply the open area of the mesh by the percent of open area of the reinforcing material. The result divided by the area of the pipe will be the ratio of open area of the screen to the area of the pipe.

#### SPECIFY:

- Style
- Material
- Perforations and Mesh (If liner is required)
- All Lettered Dimensions Shown



#### STRAINER SCREEN DATA

Our strainer screens are made in a variety of perforations and mesh openings to best suit the application. Standard material is 304 stainless steel. Other screen materials are available upon request

When screens are constructed of very fine mesh wire cloth they are reinforced with a rigid outer shell of perforated sheet. Perforated sheets are made of sheet stainless steel, the thickness of which is not greater than half the size of the perforations.

### AREA OF SCHEDULE #40 PIPE

Inches	Pipe Size Area	Inches	Pipe Size Area	Inches	Pipe Size Area
1/2	0.304	2	3.355	6	28.89
3/4	0.533	2-1/2	4.788	8	50.03
1	0.864	3	7.393	10	78.86
1-1/4	1.495	4	12.73	12	111.93
1-1/2	2.036	5	20.01	14	135.28

1/4" Dia 40% O.A.	3/16" Dia 50% O.A.	5/32" Dia 58% O.A	1/8" Dia 40% O.A.	3/32″ Dia 39% O.A	1/16″ Dia 37% O.A.	3/64" Dia 36% O.A.	1/32" Dia 40% O.A.	0.027" Dia 23% O.A.	20 Mesh - 49% O.A. 0.035" Openings	30 Mesh - 45% O.A. 0.022" Openings	40 Mesh - 41% O.A. 0.016" Openings	60 Mesh - 38% O.A. 0.010" Openings	80 Mesh - 36% O.A. 0.008" Openings	100 Mesh - 30% O.A. 0.006″ Openings





## Particle Size Comparison and Conversion Chart

	Mesh	Inches	Microns		Mesh	Inches	Microns	Mesh	Inches	Microns
	3250	0.0002	6		130	0.0043	110	24	0.028	718
	1600	0.0005	14		120	0.0046	118	20	0.034	872
	750	0.0010	25		110	0.0051	131	18	0.039	1000
	325	0.0016	40		100	0.0055	149	16	0.045	1154
	250	0.0024	62		90	0.0061	156	14	0.051	1308
	200	0.0029	74		80	0.0070	179	12	0.060	1538
	180	0.0033	85		70	0.0078	200	10	0.075	1923
	170	0.0035	90		60	0.0092	238	8	0.097	2488
	160	0.0038	97		50	0.0117	300	6	0.132	3385
	150	0.0041	100		40	0.015	385	5	0.159	4077
	140	0.0042	108		30	0.020	513	4	0.203	5205
0 ∟		0.001 	0.00	2	0.0	003 	0.004 	0.005	0.	006 Inches
0   0 	10	0.001   20 30 	0.00  40 50	et 200	0.0 50 70	003 		0.005     120 130 		006 Inches I 0 Microns

200 Mesh Screen

Human Hair



**Red Blood Cells** 

Bacteria

Fog

**Visibility Limit**