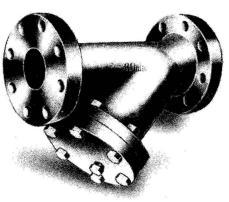
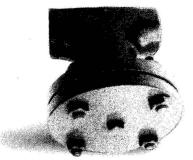


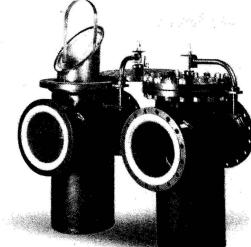
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Y - Type Strainers

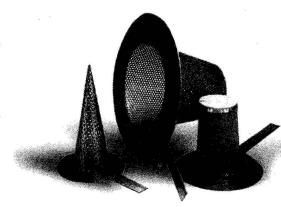




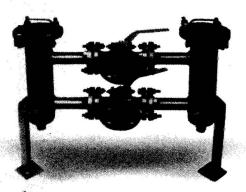
T - Type Strainers



Fabricated Single Strainers



Temporary Strainers



Duplex Type Strainers **BVK** offers a comprehensive range of **BASKET**, **DUPLEX**, 'Y', **CONICAL and TEE type Strainers** for increased life of your pump, valves and other flow control equipments by straining impurities from water, steam, oils, paint and chemicals of every kind. This catalog reveals a broad range of the types and sizes of standard line strainers manufactured by us. Custom made strainers can also be designed and manufactured to meet your special requirements.

#### Screen and Basket facts

#### Perforation:

Depending upon the thickness of the metal, 0.020" thru 1" perforation is available. In the case of metal or stainless steel, the smallest perforation available are usually twice the thickness of the metal. Rather than the use of light gauge sheet metal which would be necessary in obtaining exceptionally small perforations, we suggest heavy gauge perforated metal screens with large perforations lined with wire mesh cloth. This is not necessary for small strainers where lighter gauge metals are satisfactory.

#### Mesh:

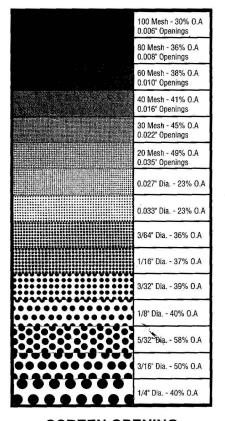
The term "Mesh" applies to woven wire cloth and should not be confused with perforated sheet metal. Mesh screens are satisfactory for small size cast strainers, but are unsuitable for longer strainers except as a liner for perforated metal basket or screen. Mesh screen are primarily furnished for very fine straining with openings so fine they cannot be obtained in perforated metal. Example: 100 mesh means 100 vertical and 100 horizontal strands of wire to the square inch, resulting in 10,000 openings of 0.0055 sq. inch.

Ratio or Capacity: The 6 to 1 ratio means that the open area of the Screen or Basket should be equal to six times the cross-sectional area of the corresponding pipe size.

Diameter of holes	Free Straining area factor			
1/64	0.196	5/64	0.371	
1/32	0.277	3/32	0.304	
3/64	0.283	7/64	0.385	
1/16 0.307		1/8	0.307	
	1			

Strainer	Appx. Screen area in sq. inches			
Size	Y type	Basket type		
1"	13	25		
11/2"	28	57		
2"	51	101		
21/2"	080	159		
3"	115	229		
4"	204	407		
5"	319	636		
6"	458	917		
8"	815	1630		
10"	1274	2547		
12"	1835	3668		

Net free Straining area = Free straining area factor X screen area The net free straining area of 1" Y-strainer with hole size of 7/64" is 13x0.385=5.005 sq.inch.



#### SCREEN OPENING FOR STRAINERS

### **Strianer Selection**

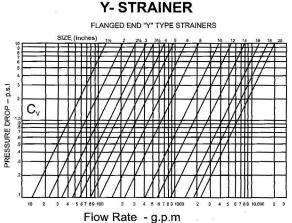
BVK Engineers have observed that to keep the pressure drop within reasonable limits and to have effective straining it is necessary that the free straining area will be at least three times the pipe cross sectional area in the case of Y-Straners and six times in the case of Basket type strainers.

Select the anticipated clogging % at the left of the chart. The example shows a basket 75% clogged. Then, follow that until the curve is intersected. From that point follow downward to the scale along the bottom to read the pressure drop multiplying factor, in this case 4. The resulting pressure drop across the basket at 75% clogged is four times as great as that for a clear basket.

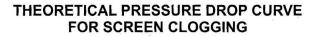
Example: How much is the pressure drop through a 12" Y" strainer for a flow of 1000 GPM of water at ambient temperature with 1/8" perforated basket which is 75% clogged? Find the pressure drop for a clean basket from the curve. At 1000 GPM it is 0.3 psi. As described, the multiplying factor for a 75% clogged basket is 4. The pressure drop is then 0.3 psi. x 4 = 1.2 psi.

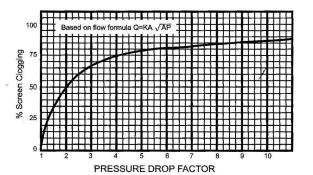
Select the anticipated clogging % at the left of the chart. . The example show a basket 75% clogged. Then, follow that until the curve is intersected. From that point follow downward to the scale along the bottom to read the pressure drop multiplying factor, in this case 4. The resulting pressure drop across the basket at 75% clogged is four times as great as that for a clear basket.

Example: How much is the pressure drop through a 12" Basket strainer for a flow of 2500 GPM of water at ambient temperature with 1/8 " perforated basket which is 75% clogged? Find the pressure drop for a clean basket. At 2500 GPM of water the pressure drop is 0.2 psi. As described, the multiplying factor for a 75% clogged basket is 4. The pressure drop is then 0.2 psi. x 4 = 0.8 psi.



These charts are based on the flow of clean water through 0.033" - 1/4" perforated metal screens.



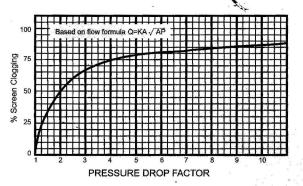


BASKET TYPE STRAINERS PRESSURE DROP -- p.s. C. Flow Rate - g.p.m

**BASKET TYPE STRAINER** 

These charts are based on the flow of clean water through 0.033" - 1/4" perforated metal screens.

#### THEORETICAL PRESSURE DROP CURVE FOR SCREEN CLOGGING



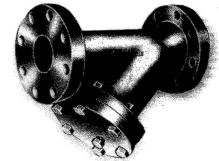
2.

PRESSURE DROP FALNGED END

### Y- Strainer

**BVK** make Y-type strainers are designed for long service under the exacting conditions created by high temperature and pressure. Installaltion of the strainer before any automatic equipment will insure trouble free service and avoid costly repairs or replacements, so often caused by the introduction of foreign matter in pipelines.

**Feature:** All sizes feature a bolted cover machined to securely receive the screen cover gaskets designed to high temperature service. Covers are normally furnished with blow-off tapping. Blind covers are available.



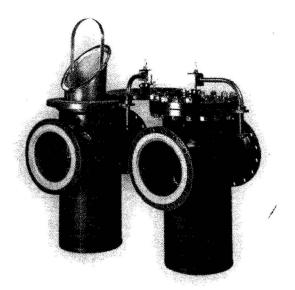
Screen: Heavy, gauge perforated stainless steel normally, furnished with spot-welded seams. For exceptionally, fine straining, we suggest perforated screen lined with wire mesh.

Material Of Consturction	:	CS/CI/SS304/SS 316/ 216 WCB And as per customer's request.
Connection	:	S&rewed / Flanged / Any international standard
Size	:	Screwed : 15 NB - 50 NB
		Flanged : 15 NB - 900 NB
Other Size	:	As per customer's request
Free straining area	:	Minimum of three times the pipe cross-sectional area

#### Basket Type Strainer

**BVK** make basket type strainers are used to strain foreign matter form pipe line and provide inexpensive protection of costly pumps, meters, valves and similar mechanical equipment. They are available in a variety of materials. They can be specified for drinking water, cooling water, hot water system and sea water. Just a few application in the chemical process industry, are Brine, Paint, Heat Exchanger, condensers, fuel oil, Organic and Inorganic chemicals.

Features: BVK Basket Strainer have been designed for applications where easy maintenance and large capacity straining



area are needed. The Machined Basket with gasket eliminates particle by-pass with the appropriate wire mesh, these strainers can be used to strain particles as small as 5 microns.

Material Of Consturction

Connection standard Size Other Size Free straining area : CS/CI/SS304/SS 316/ 216 WCB And as per customer's request. : Flanged / Any international

- : 15 NB 900 NB
- : As per customer's request : Minimum of six times the
- pipe cross-sectional area

### **Duplex type Strainers**

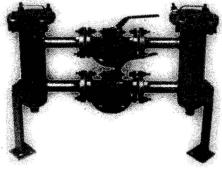
**BVK** make Duplex type strainers are designed for use in fluid handling systems where the flow cannot be shut down for Basket cleaning such as cooling water, pumps, compressors, condensers, fire line, fuel lines lubricating systems, salt and fresh water systems, chemical process systems and positive suction head service.

Features: Duplex type strainers feature a single shaft drive to operate the flow diverter valves. Baskets are gasketed and

securely positioned to prevent particles by-pass. The large capacity Baskets provide generous open area ratio. The single Basket design is easily and quickly cleaned.

Material Of Consturction

Connection Size Other Size : CS/CI/SS304/SS 316/ 216 WCB
And as per customer's request.
: Flanged / Any international standard
: 25 NB - 600 NB
: As per customer's request



### Tee Type Strainer

BVK make **Tee type** strainers are designed to remove particles from pipelines where a compact accessible strainer is needed for protection of pumps, valves and similar equipments.



Material Of Construction Connection Size Other Size

action : CS/CI/SS304/SS 316/ 216 WCB And as per customer's request. : Weld able end : 50 NB - 600 NB : As per customer's request

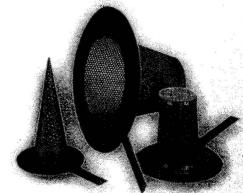
#### **Temporary Strainers**

**BVK** specifically designed for the filtration of debris, for the protection of fluid and Gas handling equipment during the commissioning and start up periods of plant.

The strainers are easily installed between flange faces without any modification to the surrounding pipe work and without the need for special spool pieces.

Of roust design these strainers are constructed work at high differential pressure. The strainer is clearly seen to be in position by virtue of its signal arm, elongated for easy identification.

The flow normally passes from inside to out, collecting debris in the cage rather than in the pipe facilitating removal. If required strainers can be manufactured for reverse flow or to suit customer specification.

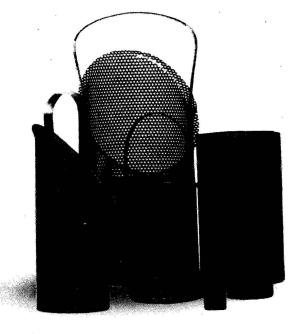


Material Of Consturction

Size Other Size

ie.

: CS/SS304/SS 316 And as per customer's request. : 40 NB - 600 NB : As per customer's request



## OTHER PRODUCTS

LEVEL GAUGES MAGNETIC LEVEL INDICATORS OIL LEVEL INDICATORS LEVEL SWITCHES SIGHT FLOW INDICATORS SAFETY VALVES THERMOWELLS BALL VALVE BALL FLOAT VALVE U-TUBE MANOMETER ALL TYPE OF TOUGHENED BOROSILICATE GLASSES



Marketing by