Jain Sand Separator

Cyclone Innovation for Clean Water

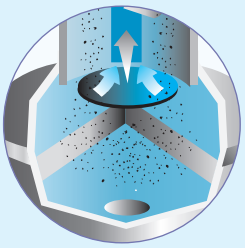
Features & Benefits

Patented Hydrodynamic Design

Innovative hydrodynamic design to create maximum centrifugal action to separate particles heavier than water

Innovative Water Inlet

Innovative water inlet provided to create centrifugal action

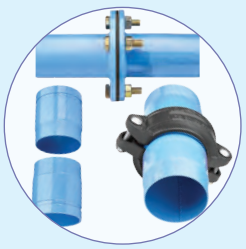


Equipped with Diffuser Plate

Special diffuser plate is provided to settle dirt particle and push them in to chamber

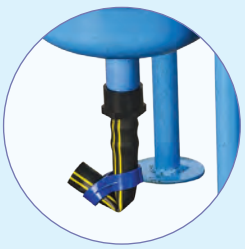
Standard Pure Polyester / Epoxy coating for Protecting from Corrosion

Coated up to 150 micron thick deep blue colored pure Polyester powder on outer surface & Epoxy coating from inner side for protection against corrosion and weather effects



Various Connection Options Available

Threaded connection, Flanged (universal) connection or Easy Fix™ connection available



Effective Draining Facility Provided

20mm '8' shape end stop with tube provided to drain silt/ sand particles from collection chamber

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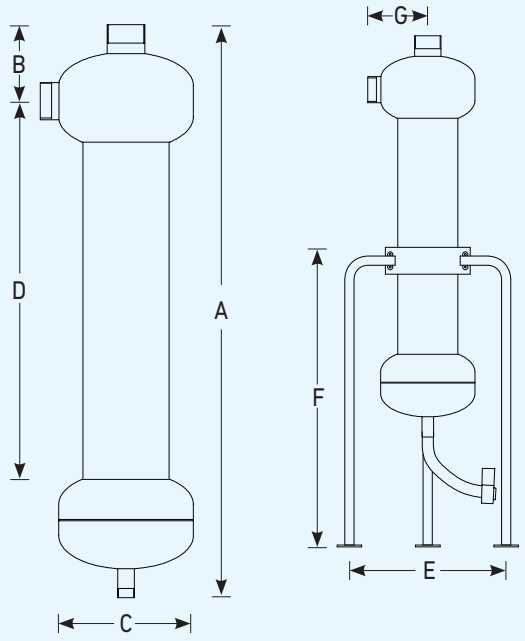
Additional Features

- **No moving parts to wear out -** This eliminates mechanical failures and troublesome replacement parts.
- **Highest trapping efficiency -** 90% trapping efficiency for particle size above 75 micron & specific gravity more than 2.5.
- **No downtime requirements -** All units are designed to operate continuously with no routine shutdowns for cleaning or maintenance.
- **Low pressure loss -** Require no more than 0.3 - 0.8 Kg/cm^2 loss for effective solids removal without troublesome pressure fluctuations.
- **Reduces load on secondary Media / Screen filter -** Reduces the frequency of cleaning for Media / Screen filter when installed before them.
- **Fully Automatic Option -** On demand Jain Sand Separator can also be supplied with fully automatic option.

Applications

Used in micro irrigation systems to remove sand and silt particles from irrigation water.

Dimensional Specifications



Flow	Inlet/ Outlet	A	B	C	D	E	F	G
(m³/hr)	(Inch)	(mm)						
10-15	1½"	762	111	152	472	350	515	121
12-30	2"	854	127	219	613	350	515	140
20-40	2½"	940	140	219	539	350	515	159
40-60	3"	1067	178	273	591	380	610	209

Technical Specifications

Flow	Max. Pressure	Inlet/ Outlet	Weight	Drain Size	Drain Capacity
m³/hr	kg/cm²	Inch	Kg	Inch	Lit
10 - 15	10	1½"	12.2	¾"	2.50
12-30	10	2"	23.6	¾"	3.03
20-40	10	2½"	27.2	¾"	4.73
40-60	10	3"	45.8	¾"	8.33

Clean Pressure Drop Chart

Size	K	m	Pressure Drop(kg/cm²) w.r.t. Flow (m³/hr)										
Inch			5	10	15	20	25	30	40	50	60	80	100
1½"	0.052	0.151	-	0.24	0.50	-	-	-	-	-	-	-	-
2"	0.042	0.084	-	0.10	0.15	0.23	0.35	0.53	-	-	-	-	-
2½"	0.090	0.051	-	-	-	0.25	0.32	0.42	0.70	-	-	-	-
3"	0.073	0.038	-	-	-	-	-	-	0.33	0.48	0.70	-	-

Governing equation, $h = k\, e^{m\chi}$; h = Pressure drop (kg/cm^2); χ = Flow rate (m^3/hr); K = Pressure drop constant; m = Flow constant (for k & m values refer table)

Note: Filters are tested under standard laboratory test conditions.

Ordering Specifications

	XX	X
	Flow (m³/hr)	No. of Units
JSS	10 to 15 - 16	Single - Blank
	12 to 30 - 30	
	20 to 40 - 40	
	40 to 60 - 60	
	80 - 80	Duplex - D
	120 - 120	
	180 - 180	Triplex - T

Example: JSS30 - This code represents Jain Sand Separator Filter - Gold with mild steel construction having 12 to 30 m^3/hr nominal flow capacity