

# Clean Master® Multiple

More Flow Better Filtration



## Features & Benefits



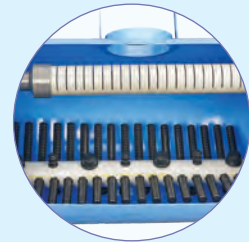
### Unique Manifold Design

Unique design of manifold for single tank unit facilitates flushing with filtered water.



### High Quality Silica Sand as Media

Filtration media is crushed silica sand/quartz gravel of particle size 1 mm to 2 mm (0.039 to 0.078 inch)



### Innovative Candle Assembly

Innovative Candle assembly provided to pass filtered water in system



### 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



### Various Options for Backwash

Available in manual, semi automatic and fully automatic backwash options

# Clean Master® – Gold

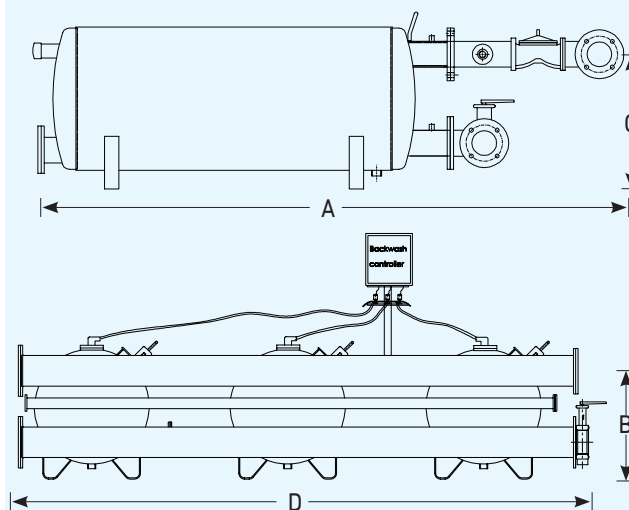
## Additional Features

- Manufactured from mild steel as per international fabrication standards.
- Designed for uniform distribution of incoming raw water over the media bed which ensures very effective filtration & backwash.
- Effective filtration of 75 micron (200 mesh).
- High filtration efficiency due to uniform grade of filtration media (silica sand / quartz gravel) and specially designed outlet candles.
- Maximum pressure rating 10 kg/cm<sup>2</sup> (142 psi).
- Clean-Master can also be supplied with stainless steel body.
- Optional multi tank modules for higher filtration capacities available.

## Applications

- For filtration of water in micro irrigation systems to prevent clogging due to physical and biological impurities.

## Dimensional Specifications



Nominal Flow Rate		A		B	C	D
		Manual	Semi/Fully Automatic			
m <sup>3</sup> /hr	gpm	mm	mm	mm	mm	mm
80	303	2550	2200	500	310	1250
100	379	2550	2200	600	370	1450
120	454	2360	1820	500	310	2020
150	568	2360	1820	600	370	2300

## Technical Specifications

Nominal Flow Rate		Connection		Flow per unit area	**Back Wash Flow	Quantity of Media		Gross Weight			
		Inlet/Outlet	Back Wash / By Pass					Manual		Semi / Fully Automatic	
m <sup>3</sup> /hr	gpm	inch	inch	m <sup>3</sup> /hr/m <sup>2</sup>	m <sup>3</sup> /hr	kg	lbs	kg	lbs	kg	lbs
80	303	4"	1½"	69	24	390	858	236	519.20	200	440.00
100	379	4"	2"	71	32	600	1320	310	682.00	276	607.20
120	454	6"	2"	69	24	540	1188	510	1122.00	512	1126.40
150	568	6"	2"	71	32	900	1980	540	1188.60	538	1183.60

\*\* Backwash flow for single tank unit at a time.

## Clean Pressure Drop Chart

Size	Flow	K	m	Pressure Drop(kg/cm <sup>2</sup> ) w.r.t. Flow (m <sup>3</sup> /hr)													
				50	60	70	80	90	100	110	120	130	140	150	160	180	
inch	m <sup>3</sup> /hr																
4	80	0.043	0.023	0.13	0.17	0.21	0.27	0.33	0.42	0.53	0.66	0.83	1.05	1.32	1.65	2.62	
4	100	0.035	0.018	0.09	0.11	0.13	0.15	0.18	0.22	0.27	0.32	0.39	0.46	0.56	0.67	0.97	
6	120	0.032	0.018	0.08	0.09	0.11	0.13	0.16	0.19	0.23	0.27	0.33	0.39	0.47	0.56	0.80	
6	150	0.024	0.015	0.05	0.05	0.06	0.07	0.09	0.10	0.12	0.14	0.16	0.19	0.22	0.25	0.34	

Governing equation,  $h = k e^{m \lambda}$ ;  $h$  = Pressure drop (kg/cm<sup>2</sup>);  $\lambda$  = Flow rate (m<sup>3</sup>/hr);  $K$  = Pressure drop constant;  $m$  = Flow constant (for  $k$  &  $m$  value refer table). Note: Filters are tested under standard laboratory test conditions.

## Ordering Specifications

CM	XXX	X	X
	Flow (m <sup>3</sup> /hr)	No. of Units	Type of backwash manifold
	050; 080; 100	D-Duplex	O - Without manifold M - Manual Backwash S - Semi Auto. Backwash F - Fully Auto. Backwash
	120; 150	T-Triplex	

Example: CM080DS - This code represents Clean-Master® having flow rate of 80 m<sup>3</sup>/hr, Duplex unit with semi automatic backwash type manifold. Note

- Clean-Master® - single tank unit manual backwash option is also available with economical plastic manifold please specify code as CM025SMP instead of CM025SM
- Clean-Master® of any other flow capacity or end connections can be supplied On demand.