

## Applications



Food Processing



Automobiles



Boiler Feed



Chemicals



Commercial Applications



Cooling Towers



Distillery



Fertilisers



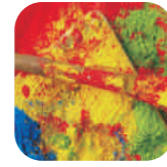
Food & Beverages



Hospitality



Hospitals



Paint Industry



Paper Industry



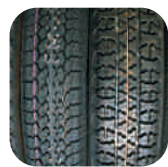
Petrochemical Industry



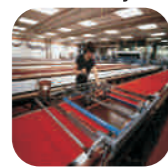
Poultry



Power Plants



Rubber Industry



Textile Industry



Tobacco Industry

## Advantages

All standard filters are painted internally with anti-corrosive paint & externally with two coats of enamel paint.

### Versa Features

- Improved aesthetics & rugged design.
- Variety of cost effective & standard models.
- Easy operation & maintenance.
- Simpler distribution & collection systems.
- Versatility in applications.

### EZ Features

- Improved aesthetics & rugged design.
- Variety of cost effective & standard models.
- Easy operation & maintenance.
- Single multi-port valve operation.
- Quick availability.



**THERMAX**

Sustainable Solutions in Energy & Environment

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### International offices at

Indonesia, Russia, Kazakstan, Saudi Arabia, Malaysia, Bangladesh, Belgium, Sri Lanka, China, Philippines, Thailand, UAE, Kenya, Nigeria, Brazil, UK, USA

## Thermax Business Portfolio

Water & Waste Solutions

Air Pollution Control

Chemicals

Boilers & Heaters

Absorption Cooling

Power



## Water & Waste Solutions



# FILTERS

Ergonomic & Modular Filtration Systems

**Improving your business is our business**

Thermax offers products, systems and solutions in energy and environment engineering to industrial and commercial establishments around the world. Its business expertise covers heating, cooling, waste heat recovery, captive power, water treatment & recycling, air pollution control & waste management and performance chemicals.

Thermax brings to customers extensive experience in industrial applications and expertise through technology partnerships and strategic alliances.

Operating from its headquarters in Pune (Western India), Thermax has built an international sales & service network spread over South East Asia, Middle East, Africa, Russia, UK and US. It has full fledged ISO 9001:2000 and ISO 14000 accredited manufacturing setup.

**Water & Waste Solutions Division**

offers expertise in water management recycling. Its water and waste water treatment systems support power plants, oil & gas installations, fertilisers, petrochemicals and others. Its waste management systems serve health and hospitality sectors, townships and colonies.

**FILTERS**



**Introduction**

Filtration is a process of physical removal of suspended matter. For removal of turbid suspended matter in the raw water, pressure sand & dual media filters are used. For reduction in iron content (suspended form), either an iron removal filter or an activated carbon filter with pre-chlorination can be used. Fine filtration is achieved by using garnet filters. Free chlorine in water can be adsorbed by using activated carbon filters. Filtration systems are normally designed, based on raw water velocity.

Thermax offer a wide range of filtration systems standardised on the basis of specific velocities for each type of filter. Filters are available with single 5-way valve operation & multiple valve operation depending on the flow rate & the application. Filters are available in MS (painted), FRP & HDPE construction.

**Operating Principle**

**Dual Media Filter :** Dual Media Filter consists of "Sand & Anthracite" as filtering medium. Anthracite has a higher dirt holding capacity and hence can be operated at higher velocities. DMF can be typically used to filter out turbidity in the raw water upto to level of 50-100 NTU.

**Activated Carbon Filter :** Activated Carbon is primarily used for removal of free Residual Chlorine, Colour, Odour & Oil in Fewer quantities. Activated charcoal is used as media for removal of above said impurities. Activated Carbon works on surface absorption principle.

**Iron Removal Filter :** Iron Removal Filter is used to remove Iron from water. IRF consists of a Manganese Dioxide layer, which works as a catalyst in converting Ferrous to Ferric which, can be easily precipitated and filtered physically.

**Garnet Filter :** GF is used as a polishing filter where the outlet turbidity quality requirement is stringent. Garnet media is used for this purpose which has higher porosity and higher dirt holding capacity is achieved.

**Pressure Sand Filter :** Pressure Sand Filter out turbidity from the raw water upto to a load of 25-50 NTU. Fine mesh sand is used as the filtering media. PSF can be operated only at lower velocities.



**Technical Specifications**

VERSA	FLOW RANGE (m <sup>3</sup> /hr)
DMF	10-200
ACF	10-200
IRF	7.5-200
GF	10-100

FXL	FLOW RANGE (m <sup>3</sup> /hr)
DMF	0.3-13
ACF	0.3-12
IRF	0.3-12
GF	0.3-12
PSF	0.3-10

EZ	FLOW RANGE (m <sup>3</sup> /hr)
DMF	0.3-13
ACF	0.3-12
IRF	0.3-12
GF	0.3-12
PSF	0.3-10

Semi-Automatic versions are also available. For any requirement outside this range, Please contact our nearest representative.