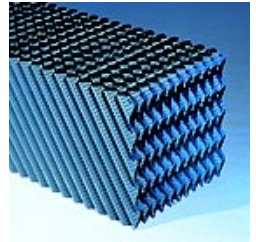




Shriram Tower Tech Ltd. utilises a wide range of high quality components in its cooling towers the major components are:

FILLS

Film flow fills: A range of standard cross corrugated film flow fills are used. These high efficiency PVC fills provide high specific surface areas and high thermal efficiency. This allows for optimising the cooling tower with respect to capital and operating costs. Special fouling resistant designs are available for specific applications. Film fills are typically used in counterflow cooling towers.



Splash fills: A range of timber and PVC splash fills are used for crossflow and counterflow cooling towers. Small crossflow towers typically use timber fills. Larger crossflow towers use the PVC Veebar or the more modern PVC Thermabar. Counter flow towers use triangular timber and PVC fills. Specific fill designs are available for special applications.

DRIFT ELIMINATORS

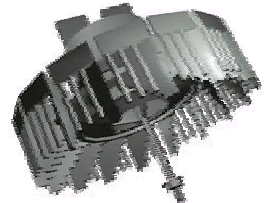
Timber herringbone eliminators are used in crossflow towers. High efficiency multi-pass PVC eliminators are used where extremely low drift losses are specified.

WATER DISTRIBUTION SYSTEM

Cross flow towers use a open pan gravity distribution system. A special flow control valve with a splash box ensure even distribution on the basin. Polypropylene target nozzles distribute water on the fill.

Counter flow towers use a pressurised header lateral system. Piping consists of epoxy coated steel main headers with PVC laterals. A patented rotary spray nozzle ensures the most uniform spray pattern on the fill. The rotary spray nozzle is a large orifice, self-cleaning, non-clog nozzle.

When in operation, the turbulator rotates on a layer of water. The rotating action and shape of the turbulator breaks up the sheet of water exiting the nozzle and generates droplets and ensures uniform water loading over a square pattern area. The spring-loaded nozzle allows the orifice size to vary depending upon the water pressure. This allows the nozzle to operate from 25 m³/hr to 80 m³/hr (320 % variation) with an operating pressure between 0.6 m to 1.7 m. The rotary nozzles discharge water over a very large area while operating at 50 to 75 mm above the fill surface.



AXIAL FLOW FANS

High efficiency multi bladed axial flow fans are used in all the towers. Smaller fans are cast Aluminium bladed with cast iron hubs. Larger fans use Fibre reinforced epoxy blades with MS HDG hubs. The blades use a twisted and tapered aerofoil to maximise fan efficiency.

Fans operate within stacks designed for eased air inlet and low tip clearance. Large fans use velocity recovery fan stacks to minimise power consumption.

