

## ADVANCE MIST COOLING SYSTEM

*High efficiency Cooling in Pond of small size*

MIST COOLING SYSTEM is used as a superior alternative for various types of spray systems and conventional cooling towers. Due to unique design of our Advance MCS, you can expand your sugar factory without any extension of your spray pond.

While expanding the plant capacity it becomes necessary to extend the Spray Pond, causing tremendous civil construction cost as well as consuming additional space. Considering this aspect, MREPL has introduced a new concept of Revolutionary 8-way Header Design with Enhanced Efficiency Mist Creator Nozzles. It is now possible to install entirely new MCS for Final expanded capacity of Sugar Plant by replacing old Spray System in the existing Spray Pond only, saving considerable cost and space. This is achieved without compromising the original efficiency of our Mist Cooling System.

Advance MCS ensures a constant cold water temp. of 32°C with a temperature drop of 10°C to 12°C throughout year with a very low working pressure of 0.8 to 1 kg/cm<sup>2</sup>. **Advance MCS has been successfully commissioned at various plants with Gravity Condensing System also.**

You may also adopt our "Louver Type Mist Cooling System (LTMCS) Design" which requires very small area, which many Sugar Plants have started adopting



*Advance Mist Cooling System.*



*Louver Type Mist Cooling System.*

Advance Mist Cooling System - Cost Benefit Analysis								
	Sugar Plant Capacity	Spray System					Advance Mist Cooling System	
		Pond Size in mtrs	Expanded Area For Spray Pond	Cost Incurred for regular expansion of Pond			Pond Size in Mtrs	MCS Cost of Equipment for Final capacity
				Civil	Spray System	Total		
CASE - A	Original = 2500 TCD	40x80	-	-	-	-	-	-
	Expanded = 5000 TCD	60x80	1600 m <sup>2</sup>	65 Lakhs	15 Lakhs	80 Lakhs	40x80	60 Lakhs
CASE - B	Original = 5000 TCD	60x80	-	-	-	-	-	-
	Expanded = 8500 TCD	80x100	3200 m <sup>2</sup>	125 Lakhs	20 Lakhs	145 Lakhs	60x80	100 Lakhs

**Note - The above table shows how Advance Mist Cooling System gets installed in the original pond size for final expanded capacity of plant saving huge initial investment and precious land.**

## MIST COOLING TOWER (MCT)

*for condensate water cooling in Stainless Steel 304 MOC*

Mist Cooling Tower built out of complete stainless steel material of construction is effectively used to cool hot water from 90°C to around 32°C in one stroke, thus saving huge amount of pumping / fan power. Plot size required is equivalent to Cooling Tower. Due to special Material of Construction which is suitable for Hot Water Temperature upto 95°C, it ensures a minimum life of 10-15 years.

