

Tower Tech vs. Conventional Cooling Towers

Tower Tech Modular Cooling Towers have a superior design which delivers better cost efficiency, lowest life-cycle costs, highest quality construction and industry-leading sustainability.

Feature	Conventional Counterflow	Conventional Crossflow	Tower Tech Counterflow
WATER CONSUMPTION			
Typical Drift Emission	0.002%	0.002%	0.0004%
Typical Interaction by Water Types:			
TSE/RO Friendly	Less	Less	Yes
Sea Water Friendly	No	No	Yes
Impact of Increased COC	Poor	Poor	Good
Reduced Evaporation % at Part-Load	No	No	Yes
WATER TREATMENT			
Chemical Consumption	Standard	Standard	30-40% Less
Dirt and Sand Entrapment	Reduced	High	Ultra Low
Algae Growth Potential	High	High	None
Risk for Legionella	Elevated	Elevated	Near Zero
ENERGY CONSUMPTION			
Typical Pump Head	15-35'	18-35'	13'
Typical Installed Fan HP	Standard	Standard	0-50% Higher
Actual Fan Energy Consumed	Standard	Standard	15-50% Lower
Total Annual Energy Consumed	Standard	Standard	25-45% Lower
AESTHETICS			
Plume	Typical	Typical	Reduced
Open Louvers	Yes	Yes	No
Rotating Equipment Location	Top	Top	Below (Hidden)
Noise:			
Fan	Competitive	Competitive	Competitive
Water	Standard	Standard	Near Zero
Hidden Behind Parapet Wall	Usually	Usually	Rarely



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WARRANTY & LIFE EXPECTANCY			
Typical Warranty Terms:			
Internal Components	5 Years	5 Years	5 Years
Structure	5 Years	5 Years	15 Years
Typical Life Expectancy:			
Internal Components	5-10 Years	5-10 Years	12-15 Years
Structure	5-20 Years	5-20 Years	35+ Years
MAINTENANCE & RELIABILITY			
Built-in Redundancy	None	None	High/Fan Wall
Inspection & Maintenance Frequency:			
Nozzles	Quarterly	Monthly	Semi-Annually
Basins	Quarterly	Monthly	Annually
Fill Media	Semi-Annually	Quarterly	Annually
Check Gearbox Oil	Monthly	Monthly	N/A
Change Gearbox Oil	Semi-Annually	Semi-Annually	N/A
Driveshaft	Semi-Annually	Semi-Annually	N/A
Ease of Inspection & Maintenance	Low	Low	High
Worker Safety	Reduced	Reduced	High
CAP-EX COST			
Total Installed Equipment Cost:			
Galvanized Metal/Thin FRP	Low	Low	35-100% More
All Stainless Steel	Competitive	Competitive	Competitive
Pultruded FRP	Competitive	Competitive	Competitive
Weight/Structural Requirements:			
Factory Assembled	Competitive	Competitive	Competitive
Field Erected	Standard	Standard	50% Less
Installation Time	Days/1000 TR	Days/1000 TR	1 Hr/1000 TR
Parapet Wall Cost	Standard	Standard	None/50% Less
Space Required	Standard	Standard	Flexible
Typical Need for N+1	Frequent	Frequent	No
LIFE CYCLE COST			
Structural Replacement in 25 Years	1 to 3	1 to 3	0
Typical ROI	N/A	N/A	0-3 Years
Life Cycle Modeling Software by Mfgr	No	No	Yes



LONGER LIFE



LESS MAINTENANCE



COMPETITIVE WITH QUALITY CONSTRUCTION



BEST RETURN ON INVESTMENT