



# AQUAFAN 7

## Hydro Powered Cooling Tower Cell

### Indicative Data Sheet

<b>Type</b>		<b>AQF 7</b> Single Cell Counter Flow Induced Draft Cooling tower					
<b>Setting</b>	Cell Unit Tower	AQF 7 1x1 <b>PRE ASSEMBLED</b>					
<b>Duty:</b>		°C				°F	
		HWT	37.0			98.6	
		CWT	32.0			89.6	
		WBT	27.0			80.6	
		Range	5.0			9.0	
		Approach	5.0			9.0	
		Flow	110	m <sup>3</sup> /h		485	
		Thermal capacity	640	kW		182	
	%	Thermal efficiency	50%				
	%	Evaporation	0.82%	L/G		1.96	
<b>Operational Conditions</b>	%	Load	100%	75%	50%	25%	
Pressure required at Inlet*	bar		1.65	1.02	0.5	0.1	
	psi		24.5	15	7.4		
Energy Equivalent**	kW		9.6	4	1.2	-	
	hP		12.9	5.5	1.6	-	
<b>Materials:</b>		FRP pultruded profiles & cladding with SST 304 fasteners.					
Cooling Tower Body		PVC Screens in FRP frame					
Air Inlet		FRP					
Fan Stack		PP					
Infill		Splash	CentraFill 135	2 # 800	PVC		
Drift Eliminator		ZZ-labyrinth	PVC	CentraDeck 135	< 0.005 % PVC		
Water Turbine		PA6+SST 304					
Basin		none					
Nozzles		ABS					
<b>Air:</b>		Axial Fan	Streamline	SF6			
Fan type			1				
Nr. of Fans			4				
Nr. of Blades		Blade	ABS				
Material			1500				
Diameter	mm		13				
Volume	m <sup>3</sup> /s		A8Q				
Drive			24-cup pelton-girard turbine		PA6		
Power Transmission			waterjet				
Nozzle		ZP36	----	mm			
Speed*	rpm		525			* approx	
Bearings			Graflon replacable rings (graphite/teflon) on SST				
Lubrication			water				
Motor Power			none				
Enclosure			none				
<b>Sizes:</b>		L	2300	8'10"			
	mm*	W	2300	8'10"			
	mm*	H	2800	13'2" * approx			
<b>Connections:</b>		Inlet	125	DIN 2632	5"		
	DIN	Outlet	200	DIN 2632	8"		
<b>Weight:</b>			lbs				
Empty	kg		700			1500	
Operated	kg		950+basin		2050+basin * approx		
<b>Shipping Volume:</b>		Components	20'			1	
	m3	1 unit	knock-down condition			40'	
			40'				
<b>Noise:</b>		PWL	SPL at air intake				
	m	FAN	1	5			10
	dB(A)		81	69	62	59 tol +/- 3 dB(A)	
<b>Remarks:</b>	*	Only required at max. thermal load and at most worse climate conditions (max. WBT). During					
	**	The electrical energy needed to operate the AQUAFAN cooling tower at max. thermal load. This Installation and Operation Manual will be provided with shipment.					