AQUAFAN 12
Hydro Powered Cooling Tower Cell
Indicative Data Sheet

Type		**AQF 12**						
		Single Cell Counter Flow Induced Draft Cooling tower						
Setting	Cell			AQF 12				
	Unit	<370 m3/h		1x1				
	Tower							
Duty:			°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	330	m3/h	1450	gpm		
		Thermal capacity	1,919	kW	547	RT		
	%	Thermal efficiency	50%					
	%	Evaporation	0.82%	L/G	1.96			
Opeartional Conditions	%	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			21.2	8.9	2.7	-	
	hP			28.4	12	3.5	-	
Materials:								
Cooling Tower Body			FRP pultruted profiles & cladding with SST 304 fasteners.					
Air Inlet			PVC Screens in FRP frame					
Fan Stack			FRP					
Infill		Splash	PP	CentraFill 135		2 # 800	PVC	
Drift Eliminator		ZZ-labyrint	PVC	CentraDeck 135		< 0.005 %	PVC	
Water Turbine			PA6+SST 304					
Basin			none					
Nozzles			ABS					
Air:								
Fan type		Axial Fan	Streamline	SF6				
Nr. of Fans			1					
Nr. of Blades			4					
Material		Blade	ABS					
Diameter	mm		2400					
Volume	m^3/s		39					
Drive		A8Q	24-cup pelton-girard turbine			PA6		
Power Transmission			waterjet					
Nozzle		ZP36	----	mm				
Speed*	rpm		330				* approx	
Bearings			Graflon replacable rings (graphite/teflon) on SST					
Lubrication			water					
Motor Power			none					
Enclosure			none					
Sizes:								
L	mm*		3900		12'10"			
W	mm*		3900		12'10"			
H	mm*		4500		14'9"		* approx	
Connections:								
Inlet	DIN		250	DIN 2632	10"			
Outlet	DIN		350	DIN 2632	14"			
Weight:					lbs			
Empty	kg		1300		2800			
Operated	kg		1550+basin		3400+basin		* approx	
Shipping Volume:		Components				20'	1	
	m3	1 unit		knock-down condition		40'	0	
Noise:		PWL	SPL	at air intake				
	m	FAN	1			5	10	
	dB(A)	84	72			65	62	tol +/- 3 dB(A)
Remarks:	*	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.						