DATA SHEET
AIR COOLED

CUSTOMER	GS E & C						DATE	2011,12,15		
LOCATION	거제시						DATA NO.	THD109081L		
SERVICE	저압증기복수기						REQ. NO.			
Project	거제시 자원순환시설 설치사업			Job No.			Item No.	H0-0303		
Type	DRAFT	Forced		FRAME	Horizontal		No. of Bay	2		
Surface per Unit-Finned Tube		19090	m2				Bare Tubes	810	m2	
Heat Exchanged		19,500,000	kcal/hr				MTD(Eff.)	36.5	℃	
Transfer Rate-Finned Tube	28.1			Bare Tube- Service:			Clean:		kcal/hr.m2.℃	

PERFORMANCE DATA - TUBE SIDE

Fluid Name	Sat.Steam			Letal Service	Yes ( ) No ( )		IN	OUT
Total Flow Rate	35500		kg/hr	Density		kg/m3	0.812	965
		IN	OUT	Specific Heat		kcal/kg.℃		1.0
Temperature	℃	107.3	90	Therm.Conductivity		kcal/hr.m2.℃		0.583
Liquid	kg/hr			Pour / Freeze Point		℃		
Vapor	kg/hr (MW)			Bubble Point		℃		
Non-Condensable	kg/hr (MW)			Latent Heat		kcal/kg	(592-90)	
Steam	kg/hr	35500		Inlet Pressure		kg/cm2.G	0.3	
Condensate Water	kg/hr		35500	Press.Drop	(Allow./Cal.)	kg/cm2.G	* / 0.1	
Viscosity	cP		0.309	Fouling		hr.m2.℃/kcal	0.0001	

PERFORMANCE DATA - AIR SIDE

Air Quantity	S.m3/hr, 1500000	kg/hr	Altitute		-	m
Air Quantity / Fan	87	A.m3/hr	Temperature	Inlet	35	℃
Face Velocity	3.30	m/sec		Outlet	-	℃
Actual Static Pressure	17.50	mmH2O	Minimum Design Ambient			℃

DESIGN-MATERIAL-CONSTRUCTION

Design Press.	5.0	kg/cm2.G	Test Press.	7.5	kg/cm2.G	Desige Temp.	160	℃		
TUBE BUNDLE			**HEADER**			**TUBE**				
Size	2460 x 11954		Type	Plug	Material -	Type	High Fin	Material	A179	
No.	4 Tube Row	6	Material(T.S/HDR)		A516-70 / A516-70	OD	25.4	Th'k	2.11	
Bays	1 In Parallel	1 In Series	Passes	1	Slope 1/100	Length	11500	Pitch	63.5	
Bundles	2 In Parallel	1 In Series	Plug Gasket		Soft Iron	No./Bundle		225		
Pass Arrangement			Corrosion Allow.		1.6 mm	Fin Type		Embedded		
Row/Pass	6		Nozzle	Inlet	200A x 8,10K	Material		Aluminium		
Ladder & Walk-Way	Yes			Outlet	50A x 4,10K	OD	57.2	Th'k	0.40	
Steam Coil	No		Rating & Facing		SORF	No./m	433	Tube Support	Ring	
Hailscreen	No		Vent	25A	Drain 25A	Code	ASME, API 661, KS	Stamp	No	
Louvers	No		T.I & P.I	No	PSV YES	R/T	No	P.W.H.T	No	
Frame Finish	C.S+Paint		Header Finish		Painting	Tube Hole Grooving		Yes		

MECHANICAL EQUIPMENT

FAN Mfg & Model			DRIVER Type		ELEC. MOTOR	SPEED REDUCER				
No./Bay	2	RPM 240	S.F		Insul./TR	Type		V-Belt		
Dia	3962	Blades 8	No./Bay	2	KW 30.0	Mfg & Model				
Pt Angle	11.5	Tip Speed 49.8 m/s	RPM	1750	Duty	No./Bay		2		
Mat'l Blade	AL.	Hub AL.	Enclosure		TEFC	AGMA KW Rating				
KW/Fan		dB(A) 85.0	V/P/C		380 / 3 / 60	Ratio		1 / 7.292		
Control	100	%Auto	Space Heater		No	Vibration Switch		No		
	(Blade Pitch Control)	% Adj.	Mfg			Support				
Plot Area		m2	Weight:Bundle		31385 kg	Weight:Shipping		67054	kg	

Remarks

REVISION		DATE	PREP'D	CHK'D	APP'D
③					
②					
①					

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