

102100 \$ 102701



CONVE & AVS Inc.
Specification sheet for: PLATE HEAT EXCHANGER

Project: CARISAL
Location: TRINIDAD, W. INDIES

P& ID Number: TTK-3831-P-061

Data Sheet For: Hypochlorite Cooler

TAG: 1-E-6101
2-E-6101

Quantity Units: 2
Specification: TTK-3831-M-E6101
File Name: TTK-3831-M-E-6101-REV 1.doc
Sheet: Page 1 of 2

Plate Heat Exchanger Data Sheet

Ref.: JJE70567/1 (C)



Duty:	HYPOCHLORITE COOLER		
Company:	CONVE & AVS INC.		
Project:	CARISAL	Item No:	1&2-E-6101
PHE Type:	TR9GN	Engineer:	JJE
Quotation No:	JELI-73NR8J	Date:	2007.Jun.12

Process Data		Hot	Cold
Fluid		HYPOCHLORITE	WATER
Mass Flow Rate	kg/h	238152	238804
Volume Flow Rate	m ³ /h	200.2	240.2
Inlet Temperature	°C	43.9	32.0
Outlet Temperature, Duty	°C	35.8	39.5
Pressure Drop, calculated	bar	0.480	0.460
Heat Exchange Rate, Duty	kW	2077.3	
Log Mean Temp Difference, Duty	°C	4.1	
Design (Duty) HTC	W / (°K m ²)	4864.5	
Clean HTC	W / (°K m ²)	5410.8	
% Difference in HTC		11.2%	
Fluid Volume in PHE	liter	166.8	166.8

Fluid Properties		Hot	Cold
Density	kg / m ³	1191	994
Specific Heat Capacity	kcal/ kg°C	0.779	0.998
Thermal Conductivity	W / (m °K)	0.680	0.622
Inlet Viscosity	cP	0.70	0.76
Outlet Viscosity	cP	0.75	0.65

Plate Heat Exchanger Specifications	
PHE Type	TR9GN
Frame Type / Size	M-11/1. Painted Floor Mount Tie:CS, Carry:CS, max. 168 plates
Dimensions (H*W*L)	in 85x32x60
Total Number of Plates	125
Total Active Area	m ² 104.0
Hot Side Flow Arrangement	1*62
Cold Side Flow Arrangement	1*62
Plate Material	0.6 mm Ti Gr1 SB265 Paraclip
Gasket Material	EPDM RC (Paratemp) Paraclip

REV	DATE	DESCRIPTION	REVISED	APPROVED
1	13 .SEP.07	For PURCHASE	VC	HM
0	14 .MAY.07	For QUOTATION	VC	HM



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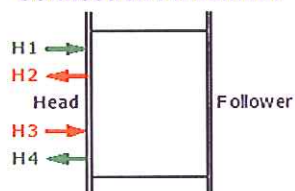
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Hot Side Connection - Inlet	H3	NPS 8.0 Flange (Studded) Titanium Class 150 (Mates With) ANSI B16.5			
Hot Side Connection - Outlet	H2	NPS 8.0 Flange (Studded) Titanium Class 150 (Mates With) ANSI B16.5			
Cold Side Connection - Inlet	H1	NPS 8.0 Flange (Studded) Titanium Class 150 (Mates With) ANSI B16.5			
Cold Side Connection - Outlet	H4	NPS 8.0 Flange (Studded) Titanium Class 150 (Mates With) ANSI B16.5			
Design Code		A.S.M.E. VIII Div. 1			
Certificate		A.S.M.E.			
Design Temperature	°C	Max.	160	Min.	-29
Design Pressure	bar		6.5		
Test Pressure	bar	Balanced	8.5	Differential	8.5
Mass	kg	Flooded	2514	Empty	2149
Approx. Shipping Mass & Volume	kg	Std Packing	2285		

Accessories

AutoCAD Drawing w/ Frame Dimensions (1); Standard Paint APV Blue (APV3196) (1); ASME Inspection and U Stamp (1); Spray Deflector (1)

Connection Placement



Remarks

1	13 .SEP.07	For PURCHASE	VC	HM
0	14 .MAY.07	For QUOTATION	VC	HM
REV	DATE	DESCRIPTION	REVISED	APPROVED

FO-AC-020-2