


	
DOC NUMBER: <b>569-DB7B-MEC-725-003</b>		CLIENT NUMBER: <b>PRD-MEC-DSH-024</b>	
CLIENT: <b>TAKEDA</b>			
PROJECT: <b>BURITI EPCVM PROJECT</b>			

DATA SHEET  
PLATE HEAT EXCHANGER  
HX-7B-2

0	30/JUL/2021	ISSUED FOR CONSTRUCTION	ASO	LFF	RSP
B	28/JUN/2021	90% DD ISSUE	ASO	LFF	RSP
A	12/FEB/2021	30% DD ISSUE	ASO	LFF	MAJ
REV	DATE	DESCRIPTION	EXEC	CHECK	APPROV

 		 	
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TITLE <b>PLATE HEAT EXCHANGER - HX-7B-2</b>			SHEET: 2/4  REV.: <b>0</b>

## 1. REVISION HISTORY

Rev	Reason For Change
A	ORIGINAL ISSUE
B	GENERAL REVIEW: CHANGED THE HEAT EXCHANGER FLUIDS FROM GLYCOL/WATER TO WATER/WATER. CHANGED DOUBLE WALL PLATE TO SIMPLE.
0	ISSUED FOR CONSTRUCTION

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TITLE

PLATE HEAT EXCHANGER - HX-7B-2

SHEET:

3/4

REV.:

0

CLIENT: Takeda / Baxalta SERVICE.: Chilled Water (6<sup>0</sup> C) - Process

LOCATION: Goiana - PE EQUIPMENT TAG: HX-7B-2

PLANT: Hemobrás' site QTY.: 1 unit

APPLICABLE TO: ☒ Proposal ☐ Purchase ☐ As Built

1	GENERAL - PERFORMANCE DATA			
2	PERFORMANCE			
3	FLUID LOCATION	COLD SIDE		HOT SIDE
4	FLUID	CHILLED WATER		CHILLED WATER
5	TOTAL FLOW (kg /h)	111,699		168,010
6	STEAM (INLET / OUTLET) (kg/h)	-	-	-
7	LIQUID (kg/h)	-	-	-
8	WATER STEAM (kg/h)	-	-	-
9	NON-CONDENSABLE (kg / h)	-	-	-
10	WATER (kg /h)	-	-	-
11	INLET / OUTLET TEMPERATURE (°C)	4.0	11.0	10.7
12	DENSITY - LIQUID (kg/m3)	1,000	997.7	999,7
13	VISCOSITY - LIQUID (cP)	1.50	1.27	1.27
14	VISCOSITY - STEAM (cP)	-	-	-
15	MOLECULAR WEIGHT - STEAM (g/mol)	-	-	-
16	MOL. WEIGHT - NON-CONDENSABLE (g/mol)	-	-	-
17	SPECIFIC HEAT (kcal/kg ° C)	1.0	1.0	1.0
18	THERMAL CONDUCTIBILITY (kcal/h.m°C)			
19	LATENT HEAT (kcal/kg))	-		-
20	OPERATING PRESSURE - INPUT (bar g)	2.0		3.5
21	SPEED (m / s)	(Note 1)		(Note 1)
22	PRESSURE DROP (kgf / cm2)	(Note 1)		(Note 1)
23	DEPOSIT COEFFICIENT (h.m2°C/kcal)	(Note 1)		(Note 1)
24	EXCHANGED HEAT (kcal/h)	781.892		
25	TRANSF. COEF. - SERVICE(kcal/hm2 °C)	(Note 1)		
26	CONSTRUCTION OF AN APPARATUS (note 1)			
27		COLD SIDE		HOT SIDE
28	PRESSURE: DESIGN / TEST (kgf / cm2 G)	6.0 / 9.0		6.0 / 9.0
29	DESIGN TEMPERATURE (° C)	40		40
30	NUMBER OF PASSES:	(Note 1)		(Note 1)
31	FLOW DIRECTION OF PASSES:	(Note 1)		(Note 1)
32				
33				

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PLATE HEAT EXCHANGER - HX-7B-2

SHEET:

4/4

REV.:

0

CLIENT: Takeda / Baxalta SERVICE.: Chilled Water (6<sup>0</sup> C) - Process

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APPLICABLE TO: ☒ Proposal ☐ Purchase ☐ As Built

1	HOT SIDE CONNEC.:	DN	CLASS	STANDARD	NUMBER	FACE
2	INLET:	8"	150	ASME/ANSI B16.5	1	RF
3	OUTLET:	8"	150	ASME/ANSI B16.6	1	RF
4	DRAIN:	-	-	-	-	-
5	PURGE:	-	-	-	-	-
6	COLD SIDE CONNEC.:	DN	CLASS	STANDARD	NUMBER	FACE
7	INLET:	6"	150	ASME/ANSI B16.5	1	RF
8	OUTLET:	6"	150	ASME/ANSI B16.6	1	RF
9	DRAIN:	-	-	-	-	-
10	PURGE:	-	-	-	-	-
11	REAL N° OF PLATES: (Note 1)		EFFECTIVE: (Note 1)		AREA (m²): (Note 1)	
12	TYPE OF PLATE: SIMPLE		MATERIAL: AISI 316L		THICKNESS (mm): (Note 1)	
13	JOINTS OF PLATES:		MATERIAL: (Note 1)		THICKNESS (mm): (Note 1)	
14	STATIONARY HEAD:		MATERIAL: (Note 1)		THICKNESS (mm): (Note 1)	
15	TIGHTENING PLATE:		MATERIAL: AISI 316L		THICKNESS (mm): (Note 1)	
16	BASE: CARBON STEEL		MATERIAL: ASME/ASTM A-36		PLATES MAX. No.: (Note 1)	
17	TIGHTENING ROD:		MATERIAL: (Note 1)		DIAMETER (mm): (Note 1)	
18	EMPTY WEIGHT (kg):		OP. WEIGHT (kg): (Note 1)			
19	LENGTH (mm): (Note 1)		WIDTH (mm): (Note 1)		HEIGHT (mm): (Note 1)	

Notes:

1) SUPPLIER MUST COMPLETE ALL BLANK FIELDS IN THIS DATA SHEET.

2) ALL MATERIALS MUST BE SPECIFIED ACCORDING TO ASME/ASTM.

3) THIS EQUIPMENT MUST BE ABLE TO WORK IN THE CONDITIONS BELOW:

FLUID LOCATION	COLD SIDE		HOT SIDE	
FLUID	PROPYLENE GLYCOL		CHILLED WATER	
TOTAL FLOW (kg /h)	116,700		168,010	
INLET / OUTLET TEMPERATURE (°C)	0.0	6.7	8.7	4.0
EXCHANGED HEAT (kcal/h)	781.892			