



	
DOC NUMBER: <b>569-DB07-MEC-825-001</b>		CLIENT NUMBER: <b>PRD-MEC-MTR-001</b>	
CLIENT: <b>TAKEDA/BAXALTA</b>			
PROJECT <b>BURITI EPCMV</b>			

## MATERIAL REQUISITION – CHILLERS





0	30JUL2021	ISSUED FOR CONSTRUCTION	ASO	LFF	RSJ
B	27APR2021	90% DD ISSUE	ASO	LFF	RSJ
A	12FEB2021	30% DD ISSUE	ASO	LFF	MAJ
REV	DATE	DESCRIPTION	EXEC	CHECK	APPROV.

 		 	
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Rev	Reason For Change
A	Issued for Review
B	Item 3 - Included review of reference documents
	Item 3 -Included items 14, 15, 16, 17 e 23
0	ISSUED FOR CONSTRUCTION

 		 	
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## 1. OBJECTIVE

- 1.1** This Technical Requisition covers the minimum requirements for the supply of seven (7) chillers and two (02) buffer tanks, specified below and in all the attached documents for Buriti Project, in the city of Goiana, Pernambuco, Brazil.
- 1.2** Vendor's proposal shall include, but not be limited to equipment, materials and work specified in list of scope of supply (Item 2) below.
- 1.3** Vendor's proposal for equipment, service and/or materials shall be in strict accordance with conditions stated in this requisition and any attached document. Deviations and alternatives will be valid only if clearly described in a "deviation list" by vendor and approved by owner's engineering.

Supply object			
Applicable to:		<input checked="" type="checkbox"/> Proposal	<input type="checkbox"/> Purchase order
Item	Tag	Qty	Description
1	CH-7A-1	1	Water Cooled Chiller
2	CH-7A-2	1	Water Cooled Chiller
3	CH-7A-3	1	Water Cooled Chiller
4	PCH-7A-1	1	Water Cooled Chiller
5	PCH-7A-2	1	Water Cooled Chiller
6	PCH-7B-1	1	Water Cooled Chiller
7	PCH-7B-2	1	Water Cooled Chiller
8	TK-7A-1	1	Buffer Tank
9	TK-7B-1	1	Buffer Tank

## 2. SCOPE OF SUPPLY





- 2.1** The scope includes at least the following items:

### 2.1.1 Design

- ☒ Material selection
- ☒ Mechanical design
- ☒ Fabrication design
- ☒ Submittal of ALL documentation for approval

### 2.1.2 General Items and accessories

- ☒ Water cooled chillers;
- ☒ Buffer Tanks;
- ☒ All mechanical and electrical components necessary for appropriated operation of equipment supplied by vendor;
- ☒ All drivers and electrical motors necessary for appropriated operation of equipment supplied by vendor;
- ☒ All instruments necessary for appropriated operation of equipment supplied by vendor;

 	 
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- ☒ The required piping, wiring and cabling within package limits;
- ☒ Electrical control and power panel (Including motor starter, heater, other auxiliaries branches, control circuits, etc.);
- ☒ PLC with HMI;
- ☒ Takeda/Baxalta will provide vendor with only one 3 Phase+N+PE, 380V, 60 Hz supply feeder per each air compressor package. Vendor shall distribute the AC power to all auxiliaries and branch circuits by his own electric distribution panel. All required voltage levels should be derived from that feeder by vendor.
- ☒ Sealing, cooling and lubrication systems;
- ☒ Nameplate and support in stainless steel AISI 304;
- ☒ First fill of lubricants;
- ☒ Inspection and tests according to item 7.9 of the document PRD-MEC-TSP-002 Technical Specification – Chillers;
- ☒ Technical documents and drawings according to item 8.5 of the document PRD-MEC-TSP-002 Technical Specification – Chillers;
- ☒ Quality Guarantee System;
- ☒ Earthing lugs;
- ☒ Coupling and coupling guard;
- ☒ Primer and final painting;
- ☒ Anticorrosive protection for storage;
- ☒ Packing and preparation for transport;
- ☒ Transport (\*);
- ☒ Field erection supervision (\*);
- ☒ Training (\*);
- ☒ Data Book with manuals in Portuguese and English.
- ☒ Lifting Lugs;
- ☒ Noise Insulation.

\* These items shall be presented with separated price in Commercial Proposal.

## 2.2 Exclusions from the scope of supply

- ☒ Civil works;
- ☒ Foundation;
- ☒ Field erection;
- ☒ Anchor bolts;

## 2.3 Spare Parts





- ☒ Spare parts for erection, commissioning and start-up (\*);
- ☒ Spare parts for 1 year (\*);

\* These items shall be presented with separated price in Commercial Proposal.

## 2.4 Battery Limits

The limits of the scope of supply are:

-Control/Electrical panel and flanges;

 		 	
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### 3. REFERENCE DOCUMENTS AND ATTACHMENTS





Item	Number	REV	Title
01	7A-M-3-3-30	0	DRUG PRODUCT - MECHANICAL EQUIPMENT PLAN - SECOND FLOOR
02	7A-M-0-5-43	0	DRUG PRODUCT - PID - CHILLED WATER GENERATION SYSTEM (HVAC)
03	7A-M-0-5-45	0	DRUG PRODUCT - PID - CHILLED WATER GENERATION SYSTEM (PROCESS)
04	7B-M-3-3-30	0	DRUG SUBSTANCE - MECHANICAL EQUIPMENT PLAN - SECOND FLOOR
05	7B-M-0-5-44	0	DRUG SUBSTANCE - PID - CHILLED WATER GENERATION SYSTEM (PROCESS)
06	PRD-MEC-TSP-006	0	TECHNICAL SPECIFICATION – PRESSURE VESSELS
07	PRD-ELE-TSP-503	0	TECHNICAL SPECIFICATION - LV ELECTRICAL DISTRIBUTION PANELS
08	PRD-ELE-TSP-506	0	TECHNICAL SPECIFICATION - VFD
09	PRD-ELE-CRT-513	0	ELECTRICAL – DESIGN CRITERIA
10	PRD-PIP-TSP-501	0	PIPE CLASS AND SPECIFICATIONS
11	PRD-PIP-TSP-504	0	TECHNICAL SPECIFICATION - GENERAL INSULATION CLASS
12	PRD-AIC-TSP-014	0	TECHNICAL SPECIFICATION - BMS SYSTEM AND COMPONENTS
13	PRD-MEC-CRT-001	0	DESIGN CRITERIA - MECHANICAL
14	7A-I-0-7-04	0	DRUG PRODUCT - BMS NETWORK ARCHITECTURE
15	7B-I-0-7-04	0	DRUG SUBSTANCE - BMS NETWORK ARCHITECTURE
16	PRD-MEC-DSH-002	0	DATA SHEET - WATER COOLED CHILLER - CH-7A-1/CH-7A-2/CH-7A-3
17	PRD-MEC-DSH-003	0	DATA SHEET - WATER COOLED CHILLER - PCH-7A-1/PCH-7A-2
18	PRD-MEC-DSH-010	0	DATA SHEET - BUFFER TANK - BT-7A-1
19	PRD-MEC-DSH-014	0	DATA SHEET - WATER COOLED CHILLER - PCH-7B-1/PCH-7B-2
20	PRD-MEC-DSH-021	0	DATA SHEET - BUFFER TANK - BT-7B-1
21	PRD-MEC-TSP-002	0	TECHNICAL SPECIFICATION – CHILLERS
22	PRD-PRO-MDE-001	0	CHILLED WATER DISTRIBUTION SYSTEM FOR HVAC - DESCRIPTION REPORT
23	PRD-PRO-MDE-002	0	CHILLED GLYCOL SYSTEM (PROCESS) - DESCRIPTION REPORT
24	PRD-PRO-MDE-003	0	CHILLED GLYCOL SYSTEM (PROCESS) - DESCRIPTION REPORT

### 4. DEVIATIONS

- 4.1** Any deviation to this Requisition and its attachments shall be indicated in a Deviation List. Otherwise, no deviations will be accepted for this supply.

### 5. INSPECTION AND TESTS

- 5.1** The fabrication of the equipment at the manufacture's shop or at sub-suppliers shops will be followed by inspection by the purchaser or his representative inspector.

 		 	
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- 5.2** Client reserves the right to witness all tests and inspect all components during raw material receipt, application and storage; such as audit and expedite, at any time, Quality and Manufacturing Control Process at Supplier's and sub-supplier's shop.
- 5.3** Inspection will include, as minimum:
- 5.3.1** Verification material certificates
  - 5.3.2** Verification of destructive and non-destructive examinations
  - 5.3.3** Verification of welding procedures
  - 5.3.4** Welding visual inspection
  - 5.3.5** Qualification of welding procedures and welders
  - 5.3.6** Tolerances inspection during assembly
  - 5.3.7** Visual inspection
  - 5.3.8** Dimensional Inspection
  - 5.3.9** Run & operation test
  - 5.3.10** Noisy and vibration test