

**GENERAL NOTES:** 

- 1. ALL COMPONENT & EQUIPMENT NUMBER ARE PRECEDED BY "7B" TO REPRESENT THE BULK DRUG
- SUBSTANCE (BDS) BUILDING. 2. LAST LINE NUMBER:
- 3. LINE NUMBER NOT USED: NÚMERO DE LINHA NÃO UTILIZADO:
  - 4. LAST MANUAL VALVE NUMBER:
- 5. MANUAL VALVE NUMBER NOT USED: NÚMERO DE VÁLVULA MANUAL NÃO UTILIZADO:
- 6. THIS SYSTEM WAS SIZED ACCORDING TO DOCUMENT PRD-MEC-CLC-004 - CHILLED GLYCOL

## SHEET NOTES

- 3. CHILLER AND CENTRIFUGAL PUMP ONE OPERATING AND THE OTHER STAND-BY. CHILLER E BOMBA CENTRÍFUGA - UM EM OPERAÇÃO E OUTRO RESERV.
- 4. BUFFER TANK = 15 m³ FOR EACH SIDE (COLD / HOT). TOTAL VOLUME = 30 m<sup>3</sup>. BUFFER TANK = 15 m³ PARA CADA LADO (FRIO/QUENTE).
- VAZÃO BAIXA DESLIGA O CHILLER. 6. LOW OR HIGH DIFFERENTIAL PRESSURE
- SHUTDOWNS THE CHILLER. PRESSÃO DIFERENCIAL BAIXA OU ALTA DESLIGA O CHILLER.
- 7. FOR PIPING, VALVES AND PUMPS SIZING, SEE THE DOCUMENT CHILLER WATER SYSTEM (PROCESS) CALCULATION REPORT- PRD-MEC-CLC-004.
- PARA DIMENSIONAMENTO DA TUBULAÇÃO, VÁLVULAS E BOMBAS, VER DOCUMENTO MEMÓRIA DE CÁLCULO SISTEMA DE ÁGUA GELADA (PROCESSO) - PRD-MEC-CLC-004.

  8. PRIMARY PUMP WITH FIXED SPEED:
- DESIGN FLOWRATE = 283 m<sup>3</sup>/h; - MAXIMUM OPERATING FLOWRATE = 215 m<sup>3</sup>/h. THE EXCESS OF FLOWRATE FOR THE MINIMUM OPERATING CONDITION OF THE SECONDARY PUMP
- THROUGH THE BUFFER TANK WHERE THE OVERFLOW WILL OCCUR FROM THE COLD SIDE TO THE HOT SIDE OF THE TANK. BOMBA PRIMÁRIA OPERADA POR VELOCIDADE FIXA: VAZÃO DE PROJETO = 283 m³/h;
- SECUNDÁRIA SERÁ DIRECIONADO PARA ALIMENTAR O CHILLER PELO BUFFER TANK POR TRANSBORDO DO LADO FRIO PARA O LADO QUENTE DO 9. CHEMICAL DOSING VENDOR PACKAGE TO ALL PLANT.
  PACOTE DE FORNECIMENTO DE DOSAGEM QUÍMICA PARA TODO O
- 10. PROVIDE AIR VENT AT THE HIGH POINT OF EACH DROP IN THE CHILLED WATER PIPING SYSTEM. ALL PIPING SHALL GRADE TO LOW POINTS. PROVIDE HOSE END DRAIN VALVES AT THE BOTTOM OF ALL RISERS AND LOW POINTS. PREVER ELIMINADOR DE AR EM PONTO ALTO NO SISTEMA DE ÁGUA GELADA. TUBULAÇÃO COM CAIMENTO PARA PONTOS BAIXOS. PREVER
- 11. PROVIDE VENT AND DRAIN VALVES ON ALL EVAPORATOR AND CONDENSER.
- PREVER VÁLVULAS DE VENT E DRENO EM TODOS EVAPORADORES E condensadores.

  12. PROVIDE PIPING SO THAT FLANGED CONNECTIONS NEAREST EVAPORATORS AND CONDENSERS CAN BE BROKEN FOR TUBE REMOVAL (MAINTENANCE).
- 13. SYMBOLS REFERENCE SEE DOCUMENT 07-M-0-5-01.
- SIMBOLOGIA DE REFERÊNCIA VER DOCUMENTO 07-M-0-5-01.

  14. GLYCOL MAKE-UP

Project Services

Engineering

Design/Build

Compliance

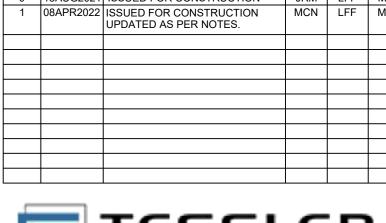
Consulting

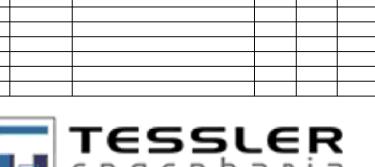
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	REV	DATE	DESCRIPTION	BY	CHECK	APPR
ı	Α	28AUG2020	90% BD ISSUE	LFF	-	-
ı	В	27NOV2020	DESIGN ISSUE	LFF	-	-
ı	С	17MAY2021	90% DD ISSUE	LID	cco	MSS
ı	0	18AUG2021	ISSUED FOR CONSTRUCTION	JRM	LFF	MSS
	1	08APR2022	ISSUED FOR CONSTRUCTION UPDATED AS PER NOTES.	MCN	LFF	MSS
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R. Dr. Cesário Mota Júnior, 424 - Vila Buarque, São Paulo - SP, 01221-020

REVISION C NOTES

FLOWRATES AND DIAMETERS HAVE BEEN UPDATED, AS WELL AS CALCULATIONS. THE EQUIPMENT AND DATA HAVE BEEN UPDATED ACCORDING TO IPS INFORMATION. VAZÕES E DIÂMETROS FORAM ATUALIZADOS, ASSIM COMO OS CÁLCULOS. OS EQUIPAMENTOS E DADOS FORAM ATUALIZADOS CONFORME INFORMAÇÕES

REVISION 0 NOTES

CHEMICAL FEEDING SYSTEM INFORMATION HAVE BEEN

UPDATED ACCORDING SUPPLIER DATA. INFORMAÇÕES DO SISTEMA DE DOSAGEM QUÍMICA ATUALIZADO CONFORME IDADOS DO FORNECEDOR.

SHEET NOTES NUMBER 9 HAVE BEEN UPDATED.

- NOTA 9 ATUALIZADA. AIR SEPARATOR HAS BEEN ADD.
- ADICIONADO SEPARADOR DE AR. SHEET NOTES NUMBER 13 AND 14 HAVE BEEN ADD.
- NOTA 13 E 14 ADICIONADA.
- AS PER N+1 UPDATE CONFORME ATUALIZAÇÃO N+1
- INCLUDED SHEET NOTE NUMBER 15 INCLUÍDA NOTA NÚMERO 15

**REVISION 1 NOTES** 

HOLD LIST

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OF INTEGRATED PROJECT SERVICES.



**BURITI EPCMV** 

**P&I DIAGRAM** DRUG SUBSTANCE **CHILLED GLYCOL GENERATION SYSTEM** 

ARCHITECT DESIGNER IPS PROJECT# ENGINEER DRAWN BY REVIEWED BY SCALE XREF FILE(S) DRAWING NUMBER



ITD19439.01

7B-M-0-5-44\_1\_PID -

CHILLED GLYCOL

GENERATION SYSTEM

CADD FILE NAME