

Project Services

Engineering

Design/Build

Compliance

Consulting

721 Arbor Way Suite 100 BLUE BELL, PA 19422 PHONE: (610) 828-4090 FAX: (610) 828-3656 www.ipsdb.com

IPS Professional Engineers and Architects, LLC.

| DATE | DESCRIPTION | BY | CHECK | APPR |
|-----------|---|-----|-------|------|
| 28AUG2020 | 90% BD ISSUE | LFF | - | - |
| 28AUG2020 | 90% BD ISSUE | LFF | - | - |
| 27NOV2020 | DESIGN ISSUE | LFF | - | - |
| 14MAY2021 | 90% DD ISSUE | JRM | cco | MSS |
| 30JUL2021 | ISSUE FOR CONSTRUCTION | JRM | LFF | MSS |
| 08APR2022 | ISSUED FOR CONSTRUCTION UPDATED AS PER NOTES. | MCN | LFF | MSS |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |



R. Dr. Cesário Mota Júnior, 424 - Vila Buarque, São Paulo - SP, 01221-020

REVISION D NOTES

- FLOWRATES AND DIAMETERS HAVE BEEN UPDATED. ATUALIZAÇÃO DE VAZÕES E DIÂMETROS.
- THE FOLLOWING EQUIPMENT WERE ADDED IN COOLING WATER - AIR COMPRESSORS - PROCESS WASTE COOLER

OS SEQUINTES EQUIPAMENTOS FORAM ACRESCENTADOS NO SISTEMA DE

- RESFRIADOR DE EFLUENTE DE PROCESSO REVISION 0 NOTES
- INCLUDED SHEET NOTES NUMBER 14. INCLUÍDO NOTA NÚMERO 14.
- INCLUDED "TO BMS" INFORMATION. INCLUÍDO INFORMAÇÃO "PARA BMS".
- REVISION 1 NOTES AS PER N+1 UPDATE
- CONFORME ATUALIZAÇÃO N+1 INCLUDED SHEET NOTE NUMBER 15

INCLUÍDA NOTA NÚMERO 15

ÁGUA DE RESFRIAMENTO:

- COMPRESSORES DE AR

- HOLD LIST
- TORRES DE RESFRIAMENTO 2 TORRES OPERANDO EM PARALELO. EM CASO DE MANUTENÇÃO, CADA TORRE DE RESFRIAMENTO TEM A CAPACIDADE DE
- EXTRAVADOR.

 9. THE COOLING TOWERS SHALL BE IN AN ELEVATION OF
- AS TORRES DE RESFRIAMENTO DEVERÃO ESTAR EM UMA ELEVAÇÃO DE 1.5 M
- SHALL GRADE TO LOW POINTS. PROVIDE HOSE END DRAIN VALVES AT THE BOTTOM OF ALL RISERS AND PREVER ELIMINADOR DE AR EM PONTO ALTO DO SISTEMA DE ÁGUA DE

CONFIDENTIAL THE INFORMATION CONTAINED HEREIN MAY NOT BE USED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION OF INTEGRATED PROJECT SERVICES.



DRUG SUBSTANCE

COOLING WATER SYSTEM

ARCHITECT DESIGNER IPS PROJECT # cco NONE 7BIMD19429.04D-DRAWN BY REVIEWED BY SCALE

7B-M-0-5-42