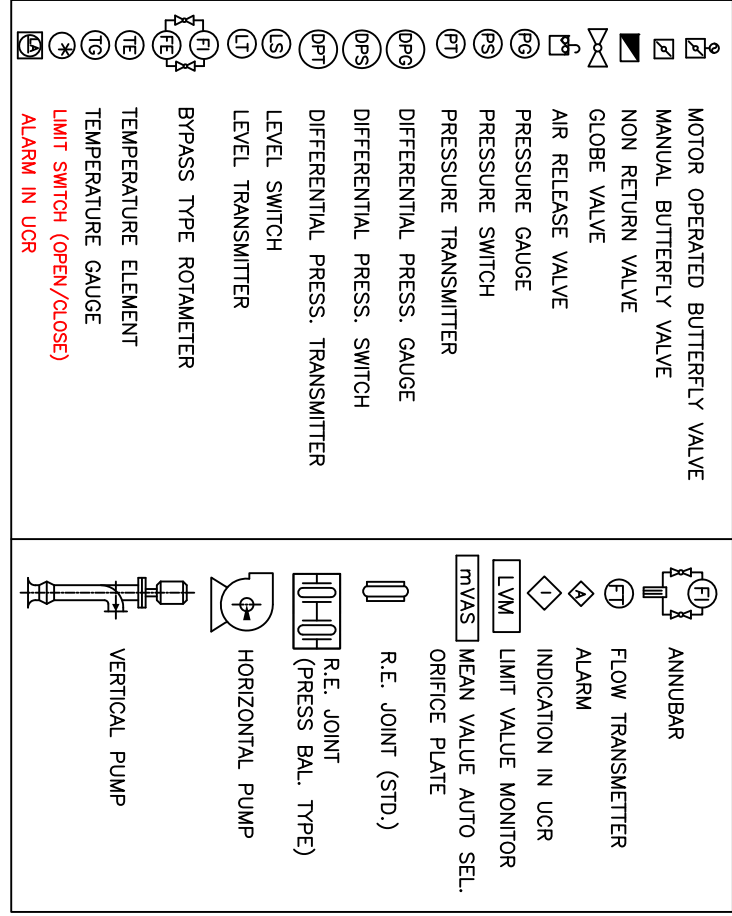


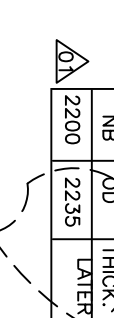
- DESIGN PRESSURE : 5.0 Kg/cm² (g) FOR C.W.SYSTEM,
DESIGN PRESSURE : 7.5 Kg/cm² (g) FOR A.C.W.SYSTEM,
DESIGN A.C.W INLET TEMP. TO CONDENSER & VACUUM PUMP HEAT EXCH. = 33 °C
DESIGN A.C.W INLET TEMP. TO PHE'S = 36 °C
DESIGN MECHANICAL TEMPERATURE : 50 °C
- MATERIALS OF CONSTRUCTION:-
- PIPE UP TO AND INCLUDING 300 NB SHALL BE SS CONFORMING TO ASTM-A-312 OR 316
B) PIPING FROM 65 NB AND UP TO 150 NB CARBON STEEL AS PER IS-1239 HEAVY GRADE WITH PU(POLYURETHANE)
COATING INTERNALLY AS PER AWS-C-222
C) PIPING 200 NB AND ABOVE SHALL BE CARBON STEEL ROLLED AND WELDED AS PER IS-3589 FROM CS PLATES AS PER
IS2062 WITH PU (POLYURETHANE) COATING INTERNALLY AS PER AWS-C-222
D) PART OF 2200 NB PIPING SHALL BE GRP AS INDICATED
E) MATERIALS OF CONSTRUCTION FOR BUTTERFLY VALVES AND GATE/ GLOBE/ CHECK VALVES/
APV'S SHALL BE AS PER CW/ A.C.W DESIGN PHILOSOPHY (REFER DOC. NO. PE-DC-281-165-N101)
3. ALL PRESSURE TAPINGS & ROOT VALVES TO BE OF 15 NB
4. CW SYSTEM : 150 NB SIZE PIPING & ROOT VALVES SHALL BE PROVIDED AS REQD. AS PER LAYOUT
A.C.W SYSTEM : 50 NB SIZE PIPING & ROOT VALVES SHALL BE PROVIDED FOR PHE'S 400 NB & ABOVE 25 NB
FOR PHE'S 150 NB & BELOW
5. INSTRUMENTS MARKED ▲ MUST BE PROVIDED FOR PHE SIZES UP TO 150 NB AS PER LAYOUT REQUIREMENTS
6. RE-JOINT AT CONDENSER INLET & OUTLET SHALL BE PRESSURE BALANCING TYPE
7. PAINTING/PROTECTION - PIPES
7.1 CW PIPE BURIED PORTION COATING UNDER PAUL OR ROAD SHALL BE CONCRETE ENCASED.
7.2 UN-BURIED GRP PIPING SHALL BE SUITABLY UV PROTECTED.
7.3 UN-BURIED CARBON STEEL PIPING SHALL BE EXTERNAL PROTECTION WITH APPLICATION OF ONE COAT OF RED LEAD PRIMER
FOLLOWED BY ABSOLUTE NO. OF FINISH COATS OF SYNTHETIC ENAMEL PAINT TO ACHIEVE TOTAL DFT OF 125 MICRONS.
8. REFERENCE DRAWINGS:-
8.1 CW/ A.C.W SYSTEM DESIGN PHILOSOPHY AND SYSTEM WIREUP - DOC. NO. PE-DC-281-165-N101.
PLANT WATER P&ID - DRG. NO. PE-DC-281-172-N001.
8.2 COT'S FLOW DIAGRAM - DRG. NO. PE-VO-281-165-N202
8.3 SCS FLOW DIAGRAM - DRG. NO. PE-VO-281-165-N152
9.0 ■■■■■ INDICATES GRP PIPE.

PIPE SIZES-CARBON STEEL

NB	OD	THICK
150	168.5	5.4
200	219.1	6.0
250	273.0	6.0
300	323.9	6.0
350	355.6	6.0
400	406.4	6.0
450	457.2	6.0
500	508.0	6.0
600	610.0	6.0
700	711.0	7.0
800	813.0	8.0
900	914.0	8.0
1200	1219	10.0
1800	1829	14.0
2200	2235	18.0



PIPE SIZES-GRP PIPES



2 X 100% SELF CLEANING STRAINERS

PE-VO-281-165-N231

3 X 50% A.C.W PUMPS
CAP. (EACH) : 960 M³/Hr.

4 X 33% PLATE TYPE HEAT EXCHANGERS

