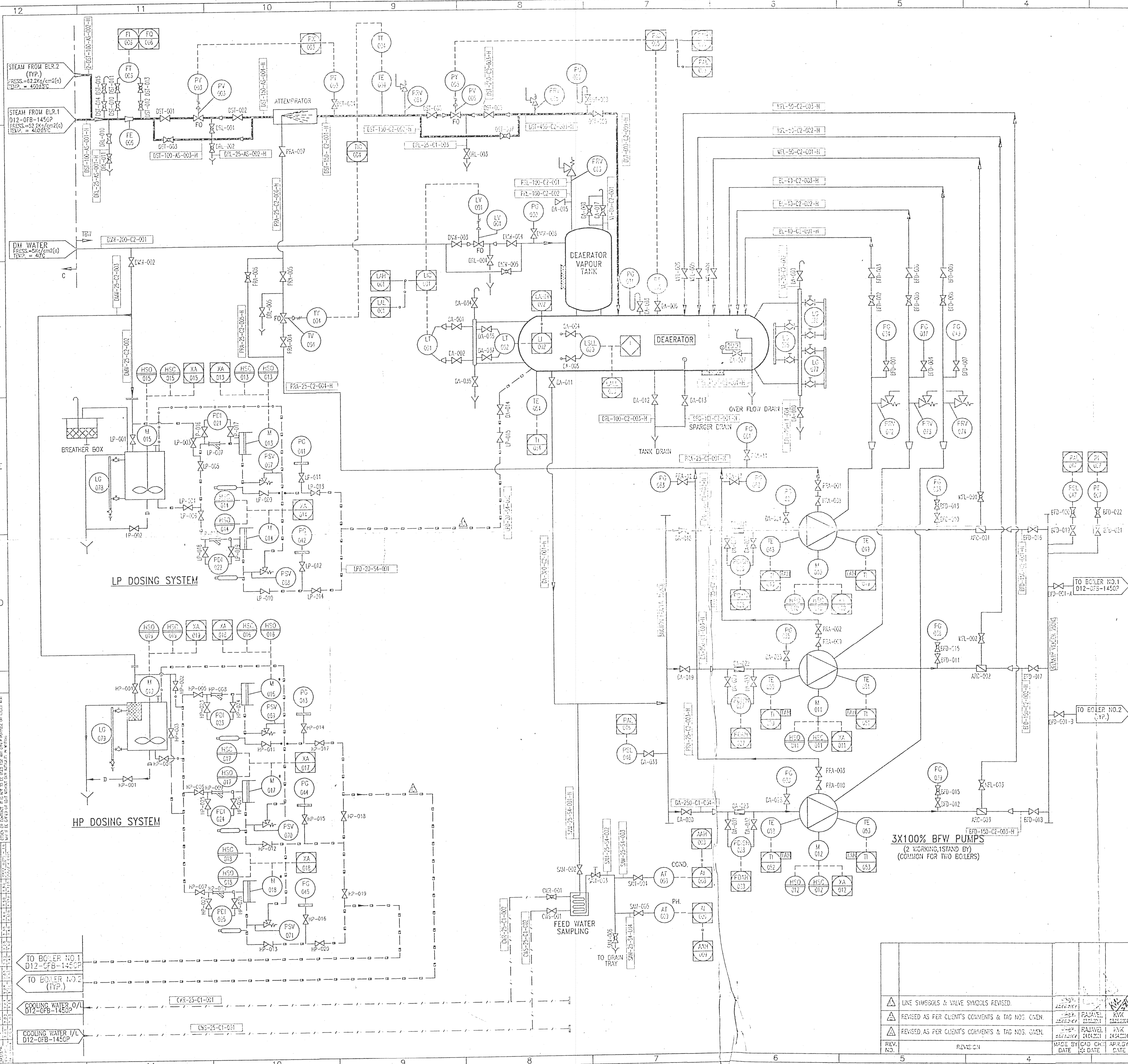


DO NOT SCALE
IF IN DOUBT, ASK



- NOTES**
- UNLESS OTHERWISE MENTIONED SCOPE OF SUPPLY SHALL BE AS PER CONTRACT.
 - FOR VALVE SYMBOLS REFER SD-02-0105
 - FOR LINE SYMBOL REFER SD-02-0106
 - FOR EQUIPMENT SYMBOLS REFER SD-01-0115
 - SCOPE: TBW= THERMAX BABCOCK & WILCOX'S SCOPE. C= CLIENT'S SCOPE.

- REFERENCE DRAWING NOS.**
- P & I DIAGRAM FOR STEAM & WATER - D12-CFB-1450P
 - P & I DIAGRAM FOR COAL FEEDING & BEDDASH COOLING SYSTEM - D12-CFB-1451P
 - P & I DIAGRAM FOR AIR & GAS - D12-CFB-1452P
 - P & I DIAGRAM FOR START UP OR FIRING SYSTEM - D12-2FB-2541P.
 - P & I DIAGRAM FOR ASH HANDLING SYSTEM (LATER)
 - P & I DIAGRAM FOR ESP (LATER)

SYMBOLS FOR LINES

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	STEAM LINE		PROCESS MEASURING LINE
	FEED WATER LINE		CHEMICAL DOSING LINE
	DRAIN LINE		ELECTRICAL SIGNAL LINE
	PNEUMATIC LINE		CAPILLARY
	COMBUSTION AIR LINE		COMPUTER SIGNAL BUS LINE
	COOLING WATER LINE		
	FLUE GAS		

SYMBOLS FOR VALVES

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	GATE		COCK
	GLOBE		SAFETY VALVE
	NON RETURN VALVE		VENT
	AUTO RECIRCULATION VALVE		DRAIN
	STRAINER		PRV
	SLEEVE		ISO VALVE
	NEEDLE VALVE		DAMPER
	EXPANSION BELLOW		KGV/SLIDING GATE
	MOTORISED		
	HAND OPERATED		

P & ID FOR ONE BOILER IS SHOWN, SECOND BOILER IS TYPICAL. TAG NO. WILL END WITH B INSTEAD OF A.

ALL THE INSTRUMENTS WILL HAVE A PREFIX 50 FOR TAG NUMBERS.

50 - INSTRUMENT
 PG - PRESSURE GAUGE
 035 - TAG. NO. (EOTH BOILERS PA0171 & PA0172)

CLIENT : OSWAL STEEL.
 CONSULTANT : DESEIN CONSULTANTS PVT. LTD.

THIS SYMBOL IN THE BLOCK INDICATES THAT THIS BLOCK IS PICKED FROM BLOCK LIBRARY.

REVISION IN CAD DRAWING SHALL BE RELEASED ONLY AFTER ENSURING THAT IT IS INCORPORATED IN THE RELEVANT CAD FIELD. REVISION IS INVALID IF CAD CHECK SIGN IN REV IS ABSENT.

Thermax Babcock & Wilcox Limited PUNE 411 034

TP PROJECT PA0171/PA0172

SCALE	DRAWN	DATE	REV. NO.
NIS	CHECKED	RAJAVEL	21.03.2001
	APPROVED	KVK	21.03.2001
DRG. NO.			REV. NO.
D12-1FB-3091P			C

P & I DIAGRAM FOR DEAERATOR, FEED PUMPS & DOSING SYSTEM (COMMON FOR TWO BOILERS)

REV. NO.	REVISION	DATE	BY	CHKD BY	DATE
	LINE SYMBOLS & VALVE SYMBOLS REVISED.				
	REVISED AS PER CLIENT'S COMMENTS & TAG NOS. CHEN				
	REVISED AS PER CLIENT'S COMMENTS & TAG NOS. GWEL				

ACCEPTABLE DEVIATION FOR UNFINISHED DIMENSION

SIZE	DEVIATION
0 - 25	±0.10
25 - 50	±0.15
50 - 100	±0.20
100 - 150	±0.25
150 - 200	±0.30
200 - 300	±0.40
300 - 400	±0.50
400 - 500	±0.60
500 - 600	±0.70
600 - 800	±0.80
800 - 1000	±1.00
1000 - 1500	±1.20
1500 - 2000	±1.50
2000 - 3000	±2.00
3000 - 4000	±2.50
4000 - 5000	±3.00
5000 - 6000	±3.50
6000 - 8000	±4.00
8000 - 10000	±5.00