


CUSTOMER CONNECTIONS			
	DESCRIPTION	CONNECT	MATERIAL
A	WATER INLET	6"-150# R.F.	A105
B	STEAM INLET	16"-150# R.F.	A182 GR.F. 316L/A312 TY. 316
C	HIGH TEMPERATURE RETURN	8"-150# R.F.	A105
D	OVERFLOW	6"-150# F.F.	A105
E	DISCHARGE FROM MANIFOLD	6"-600# R.F.	A105
F	TANK DRAIN W/VALVE	2" NPT	A105
G	RELIEF VALVE DISCHARGE (3)	8"-125# F.F.	CAST IRON, A126 CL A OR B
H	SPARE (2)	3/4" NPT	A105
J	SPARE (2)	1" NPT	A105
K	OVERFLOW DRAINER (2)	6"-150# R.F.	STL
L	CHEMICAL FEED	1/2" NPT	316SS

SHIPPING DATA	
ITEM	DIMENSIONAL DATA
TANK SIZE:	96" DIA X 233" LG. X 106" HEIGHT
TANK WEIGHT (DRY):	10,500 LBS
COLUMN SIZE:	72" DIA X 128" HEIGHT X 90" WIDE
COLUMN WEIGHT (DRY):	6,300 LBS
STAND SIZE:	108" HEIGHT X 175 1/2" LG. X 105" WIDE
(BOTTOM PIECE)	
STAND SIZE:	36" HEIGHT X 175 1/2" LG. X 105" WIDE
(TOP PIECE)	
TOTAL STAND WEIGHT:	20,000 LBS



CleaverBrooks

TRAYMASTER DEAERATOR

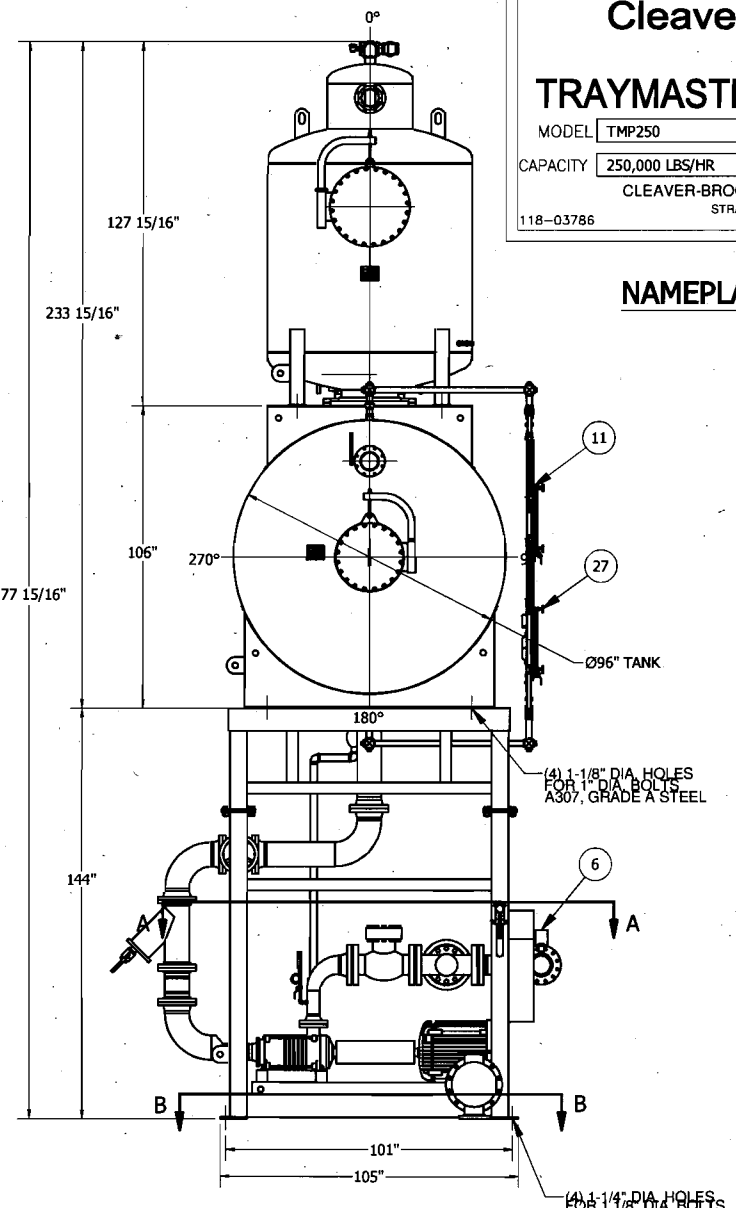
MODEL: TMP250 SERIAL NO. 03682-1-2

CAPACITY: 250,000 LBS/HR DATE SHIPPED: _____

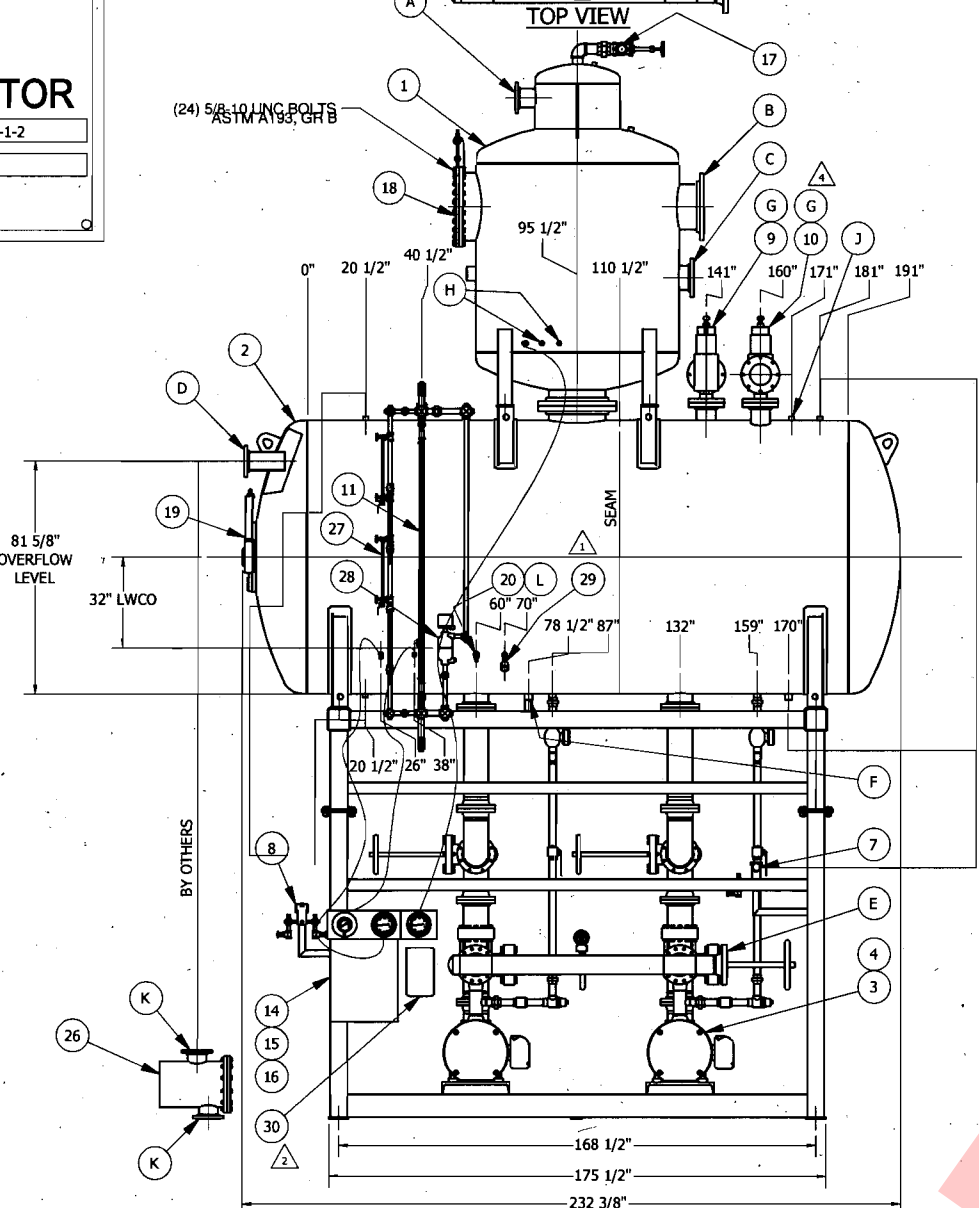
CLEAVER-BROOKS OF CANADA LIMITED
STRATFORD, ONTARIO

118-03786

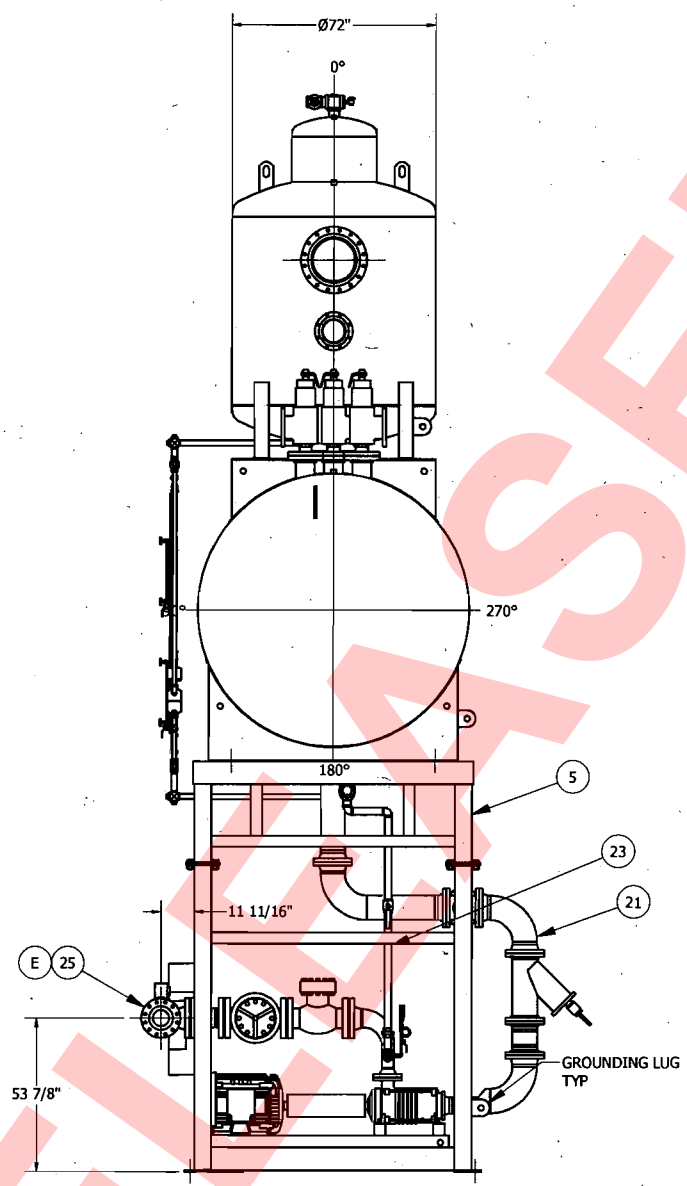
NAMEPLATE DRAWING



LEFT END VIEW



FRONT VIEW



RIGHT END VIEW

REVISIONS

01 10/14/10 FVW
PRV SPECS.
TMP250 WAS
225, 6040 WAS
5820, TEMP
TRANS. ADDED,
FULFLO INFO
ADDED IN
RECIRC., 1.15
SF ADDED TO
MOTOR INFO,
VALVE ADDED
TO TANK
DRAIN
MANIFOLD
ITEM-30,
BENTLEY
MONITORING
SYSTEM
02/08/11 FVW
ROSEMOUNT
3051S WAS
2051,
PRESSURE
GAUGE,
THERMOMETER
AND LEVEL
INDICATOR
MODELS
03/09/11 FVW
RELIEF VALVE
ADDED, PRV
WAS 300# R.F.
CONNECTIONS,
THERMOMETER
C-300 CHANGED
TO 50-300

CAUTION

DIMENSIONS SHOWN ARE APPROXIMATE AND SHOULD NOT BE USED IN RESTRICTIVE LAYOUTS OR TO PREFABRICATE ASSEMBLIES UNLESS CLEAVER-BROOKS HAS BEEN CONSULTED. IT IS STRONGLY RECOMMENDED THAT THE CUSTOMER REQUEST AS-BUILT CERTIFIED DRAWINGS FOR THESE CASES.

WARNING:
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MISSISSIPPI POWER
LIBERTY, MS
03682

DIMENSION DIAGRAM

TRAYMASTER
SHT 1 OF 11

DRWN BY: FVW
CHECKED BY: NCB
DATE: 25/09/2010
SIZE: D

CLEAVER BROOKS
The power of commitment™

TMP TYPE	250	6040	2
CAPACITY	460	60	3
PHASE	3	HEAT	3

DRWG. NO. 03682-1-2DD

Approved

MAJOR COMPONENTS (*=SHIP LOOSE)	
1	TRAY COLUMN WITH 24" DAVITED MANWAY, 250,000 LBS/HR
2	TANK, 6,040 GALLON WITH 20" INTEGRAL MANWAY
3	PUMP, GOULDS 3355 4" X 5"-10A, 512 GPM, 1000 TDH, 9.2 NPSHR (2) WITH BENTLEY VIBRATION MONITORING SYSTEM △
4	MOTOR, 200 HP, 3550 RPM, HI-EFFICIENCY ENCLOSURE, SF 1.15 (2) △
5	STAND, 12'-0", GALVANIZED
6	DISCHARGE MANIFOLD PRESSURE TRANSMITTER FOR D/A PRESSURE, ROSEMOUNT 3051S W/HART △
7	TANK PRESSURE TRANSMITTER FOR D/A PRESSURE, ROSEMOUNT 3051S W/HART △
8	DIFFERENTIAL PRESSURE TRANSMITTER FOR D/A LEVEL, ROSEMOUNT 3051S W/HART △
*9	RELIEF VALVE SET @ 50 PSI, 6"-250# INLET FLANGE, 8"-125# OUTLET FLANGE, KUNKLE 6252 KRP
*10	RELIEF VALVE SET @ 50 PSI, 6"-250# INLET FLANGE, 8"-125# OUTLET FLANGE, KUNKLE 6252 KQP (2) △
11	LEVEL INDICATOR WITHOUT TRANSMITTER, W&T OR JERGUSON △
*12	PRESSURE REDUCING VALVE, FISHER 585C-EWD-DVC6030HC, 8" 300# FLG W/INLET PRESSURE OF 325 PSIG. @ 590 DEG. F., 34,400 LBS/HR (MAX 450 PSIG) △
*13	MAKE UP VALVE, FISHER 657-ET-DVC6030HC, 3", WITH 3"-125# NPS 3 VALVE BYPASS WITH STRAINER
14	CONTROL PANEL, NEMA 4X, W/UL LABEL, WIRED TO NATIONAL ELECTRIC CODE, BLACK NUMBER CODED WIRE, GROUNDING BAR IN CONTROL PANEL
15	PRESSURE GAUGE (0-60 PSIG, 4.5" DIAL) W/SHUT-OFF VALVE (MOUNTED AT EYE LEVEL), ASHCROFT, US GAUGE, OR WIKA. △
16	THERMOMETER (50-300 DEG. F) (2 - 1 FOR COLUMN & 1 FOR TANK) (MOUNTED AT EYE LEVEL), ASHCROFT, US GAUGE, OR WIKA. △
17	AUTO VENT VALVE, 1/2" NPT, AND MANUAL VENT VALVE, 3" NPT, ASSEMBLY, TMP250 △
18	MANWAY ASSEMBLY, 24", DAVITED
19	MANWAY ASSEMBLY, 20", DAVITED
20	CHEMICAL FEED QUILL, 316SS

MAJOR COMPONENTS (*=SHIP LOOSE)	
21	SUCTION PIPING, 8" FLG, 125# (2)
22	DISCHARGE PIPING, 6" FLG, 600# (2)
23	RECIRCULATION PIPING, 2", 600# WELDED WITH CHECK VALVE AND FULFLO AUTO RECIRC. VALVE (2) △
24	DISCHARGE PRESSURE GAUGE, LIQUID FILLED, W/SHUT-OFF VALVE (2)
25	DISCHARGE MANIFOLD, 6" FLG, 600#, 2 PUMPS
26	OVERFLOW DRAINER, 6" FLG, WARREN 313
27	GAUGE GLASS ASSEMBLY - JERGUSON
28	LOW WATER CUTOFF, MERCOID 102, NEMA 4
29	THIN FILM RTD WITH ROSEMOUNT TEMPERATURE TRANSMITTER △
30	BENTLEY VIBRATION SYSTEM MONITORING PANEL. △

MENTAL TO THE COMPANY.

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REVISIONS

SEE SHEET 1 FOR REVISION INFO.



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MISSISSIPPI POWER
LIBERTY, MS
03682
DIMENSION DIAGRAM

DRAWN BY: FW
CHECKED BY: NCB
DATE: 25/09/2010
SIZE: D

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TMP	250	6040	2
TYPE	3	60	3
VOLTS	PHASE	HERTZ	WIRE

DRWG. NO. O3682-1-2DD 04

Approved

NOTES:
 THE DIMENSIONS SHOWN ON THIS DIAGRAM ARE APPROXIMATE AND SHOULD NOT BE USED TO DETERMINE PRE-FABRICATED ASSEMBLIES, UNLESS CERTIFIED.
 ITEMS AND PIPING SHOWN IN DASHED LINES NOT FURNISHED BY C-B. CUSTOMER TO PLUG ALL OPENINGS NOT USED.
 START-UP TO BE IN ACCORDANCE WITH C-B INSTRUCTION MANUAL. ALL BOILER FEED PUMP DISCHARGE PIPING NOT SHOWN TO BE FURNISHED BY CUSTOMER.
ALL DIMENSIONS SHOWN ARE IN INCHES
 FLOW THRU MANUAL VENT ORIFICES BASED ON 5 PSIG OPERATING PRESSURE.
 CUSTOMER TO PROVIDE ADEQUATE DRAINS TO SEWER FOR ALL PUMP DRAIN FITTINGS.
 RELIEF VALVE & VENT VALVE MUST BE PIPED IN ACCORDANCE WITH APPLICABLE LOCAL CODES TO A POINT OF SAFE DISCHARGE.
 OVERFLOW DRAINER MUST BE PIPED IN ACCORDANCE WITH APPLICABLE LOCAL CODES TO A POINT OF SAFE DISCHARGE.
 UNIT IS KNOCKED DOWN AND MATCH MARKED FOR SHIPPING.
 LIFTING LUGS (IF PROVIDED) ON THE STAND SHALL ONLY BE USED TO LIFT STAND, PUMPS AND PIPING SUPPLIED WITHIN THE SCOPE OF C-B AS SHOWN IN THE DIMENSION DIAGRAM.

GENERAL DESIGN SPECS:

DEAERATOR TANK HYDRO TESTED @ 65 PSIG.

MATERIAL & CONSTRUCTION IN ACCORDANCE WITH ASME SECT. 8 DIV. 1 PRESSURE VESSEL CODE.

OPERATING PRESSURE: 5 PSIG. TEMPERATURE: 227°F.

PIPING CONTRACTOR NOTE:

FOR TYPICAL RECOMMENDED PRESSURE REDUCING VALVE PIPING SEE DETAIL "A" OR OPERATING MANUAL.

STAND POSTS ARE HEAVY SQUARE STEEL TUBING.
 FLOOR PLATE 1/4" REINFORCED STEEL.
 CONTROL PANEL MOUNTED ON 2" X 2" ANGLES.
 GAUGES FLUSH MOUNTED ON HEAVY STEEL PLATE.

DEAERATOR SPECIFICATIONS	
STAMP UNIT:	03682-1-2
MODEL:	TMP 250
CAPACITY:	250,000 LBS/HR
TANK SIZE:	96" DIA. X 233" LG.
STAND HEIGHT:	12'-0"
DEAERATOR CAPACITY:	6,040 GALLONS TO OVERFLOW
TANK WEIGHT DRY:	10,500 LB.
TANK WEIGHT FLOODED:	60,000 LB.
DESIGN PRESSURE:	50 PSI

TRAY COLUMN SPECIFICATION	
COLUMN	DIMENSION
COLUMN DIAMETER	72 in
COLUMN WEIGHT	6,300 LBS

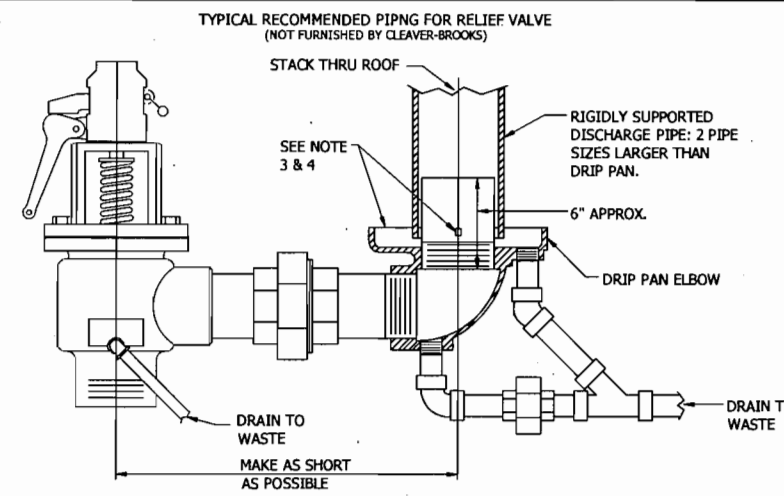
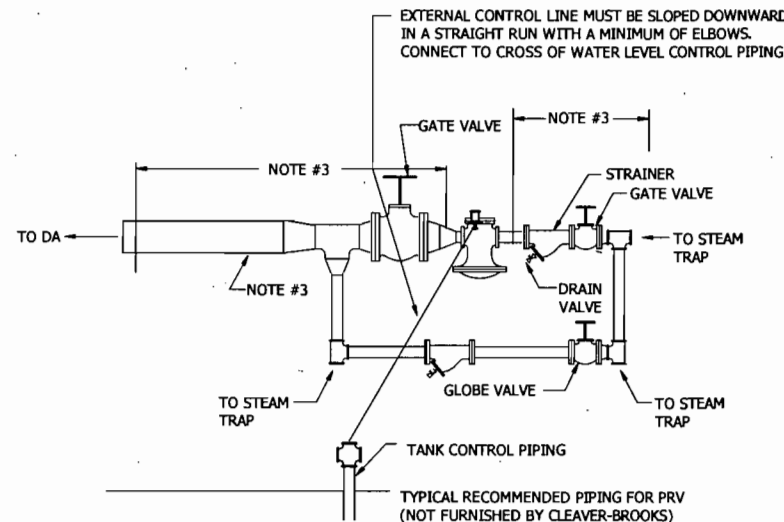
ELECTRICAL DATA	
460 VOLTAGE	3 PHASE 60 HERTZ
CONTROL CIRCUIT	120-1-60
PANEL CONTAINS ALL ELECTRICAL WIRING TO MOTORS AND CONTROLS. FOR COMPONENTS SEE WIRING DIAGRAM WD -03682-1-1-WD. WIRING CONFORMS TO NATIONAL ELECTRICAL CODE.	

NOTES:

- 6" OVERFLOW DRAINER
- SEIZMIC ZONE 1-4.
- FULL RADIOGRAPHIC EXAMINATION.
- WET MAGNETIC PARTICLE TESTING.
- GRIND ALL INTERIOR WELDS FLUSH BEFORE STRESS RELIEF.
- STRESS RELIEVE.
- LIQUID FILLED DISCHARGE PRESSURE GAUGES.
- MOTOR SPACE HEATERS.
- BOILER FEED PUMPS TO INCLUDE INDUCERS.
- FULL PENETRATION NOZZLE WELDS.
- GALVANIZED STAND.
- HYDROTEST OF THE VENT CONDENSER SECTION AT 10 PSI.

DETAIL "A"

- SUPPLY PIPING TO PRESSURE REDUCING VALVE ASSEMBLY TO BE SIZED FOR REQUIRED INLET PRESSURE AT REGULATOR.
- DISCHARGE PIPING FROM PRESSURE REDUCING VALVE MUST BE SAME SIZE AS STEAM INLET WITH PIPE EXPANSION AS CLOSE TO PRESSURE REDUCING VALVE AS POSSIBLE.
- A STRAIGHT RUN OF PIPE, LENGTH EQUALING 10 TIMES THE NOMINAL PIPE DIAMETER, IS REQUIRED BEFORE THE PRV. A STRAIGHT RUN OF PIPE, LENGTH EQUALING 20 TIMES THE NOMINAL PIPE DIAMETER, IS REQUIRED AFTER THE PRV.
 I.e. 2" PRESSURE REDUCING VALVE AND 6" STEAM LINE USE AT LEAST A 4" VALVE.



- DIMENSION BETWEEN VALVE & DRIP PAN ELBOW SHOULD BE AS SHORT AS POSSIBLE.
- DISCHARGE PIPING MUST BE INDEPENDENTLY SUPPORTED SO NO STRAIN IS PLACED ON VALVE BODY.
- ALL DRAIN LINES SHOULD BE INDEPENDENTLY SUPPORTED & PROPER EXPANSION PROVISIONS MADE TO ELIMINATE ALL STRAIN ON VALVE BODY.
- ALLOW SPACE TO COMPENSATE FOR UPWARD EXPANSION OF DEAERATOR WHEN HOT. SPACE TO BE 1-1/2" MINIMUM.
- PROVIDE 3 OR 4 EQUALLY SPACED SPACERS TO CENTER DISCHARGE PIPE. MUST BE FREE, TO ALLOW FOR EXPANSION.

JOB NAME: MISSISSIPPI POWER

SALES ORDER: 03682

UNIT#: 03682-1-2

MODEL: TMP 250-6040 GALLON

PERFORMANCE DATA

MAXIMUM LEVEL OF OXYGEN: 0.005 cc/LITER

CAPACITY: 250,000 LB/HR

STORAGE: 6,040 GALLONS

MAKE UP: 243,595 #/HR @ 50 °F

LOW PRESSURE RETURNS: N/A #/HR@ N/A °F

MIXED (AVG) INLET: N/A #/HR@ N/A °F

MAKE-UP VALVE (DEAERATOR)

MANUFACTURER: FISHER MODEL: 657-ET SIZE: 3" 150# FLG

PRESSURE: N/A PSI

STEAM PRESSURE REDUCING VALVE #1

MANUFACTURER: FISHER MODEL: 585C-EWD SIZE: 8" 300# FLG

STEAM INLET PRESSURE: 325 CAPACITY FLOW: 34,400 #/HR

SAFETY RELIEF VALVES

MODEL: KUNKLE 6252 KRP SIZE: 6" INLET W/8" OUTLET

SET POINT: 50 QTY: 1

MODEL: KUNKLE 6252 KQP SIZE: 6" INLET W/8" OUTLET

SET POINT: 50 QTY: 1

FEED PUMP

MANUFACTURER: GOULDS MODEL: 3355 4" X 5"-10A GPM: 512

TDH: 1000 NPSHR: 9.2 FRAME: N/A

HP: 200 RPM: 3550 ENCLOSURE: HI-EF. QTY: 2

- GROUNDING LUGS.
- RIGID AND SEALTITE CONDUIT.
- PIPING 2" AND SMALLER, ASME SA106, SCH. 80 SMLS.
- PIPING 2 1/2" AND LARGER, ASME SA106 SCH. 40 SMLS.
- NO CHINESE OR NORTH KOREAN MATERIAL PERMITTED.
- TAGGING TO COMPLY WITH 9.1 OF CUSTOMER SPECIFICATION.

SEE SHEET 1 FOR REVISION INFO.



WARNING:
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MISSISSIPPI POWER LIBERTY, MS 03682	DATE: 25/09/2010
DIMENSION DIAGRAM	SIZE: D
"TRAY DA" SHT 3 OF 11	

DRAWN BY: FW CHECKED BY: NCB	CLEAVER BROOKS The power of commitment™
DATE: 25/09/2010	TMP 250 CAPACITY 250,000 LBS/HR 6040 GALLONS TO OVERFLOW
SIZE: D	3 PHASE 460 VOLTS 60 HERTZ
DRWG. NO. 03682-1-2DD	2 PAGES 3 WIRE

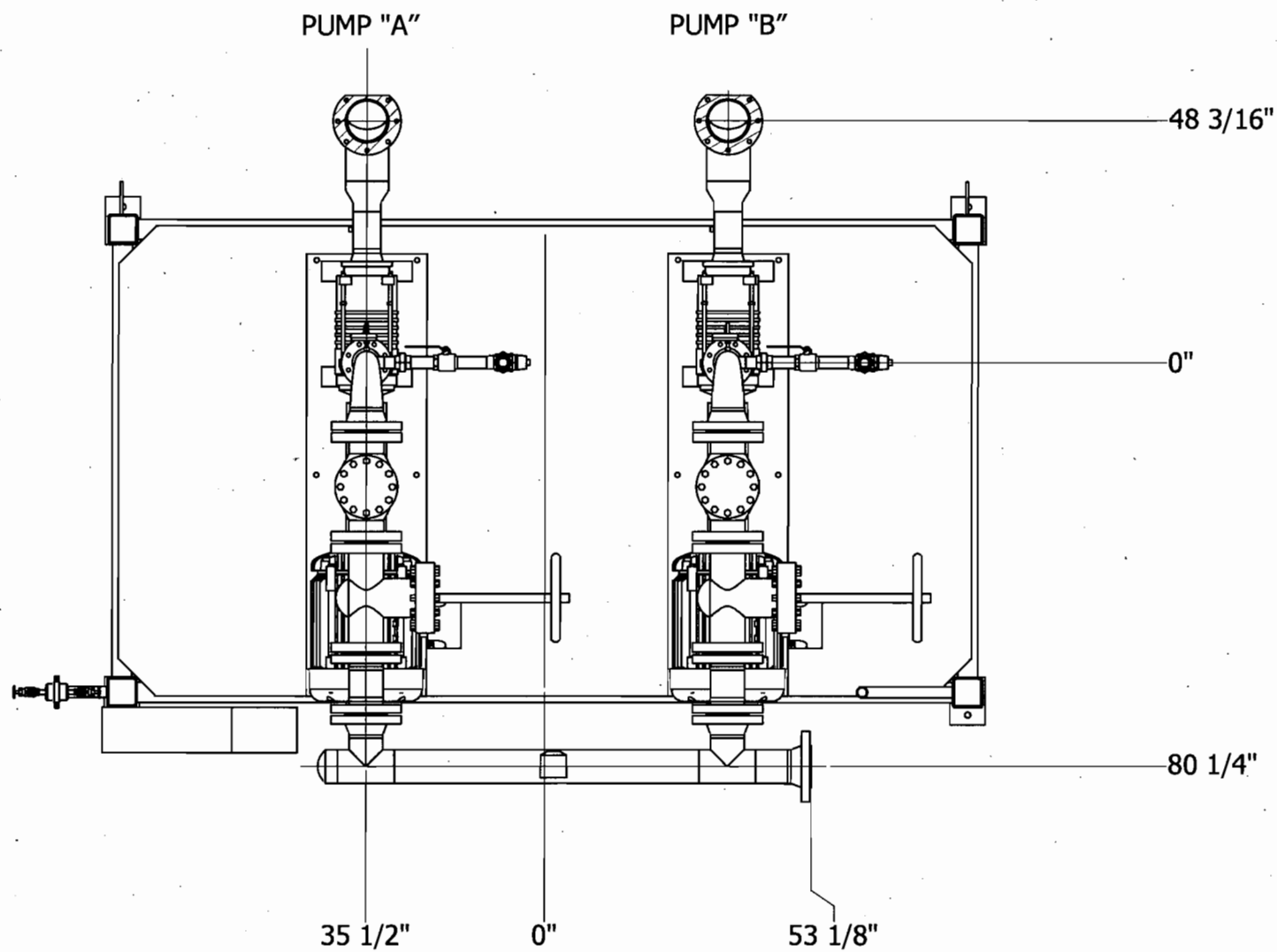
Approved

RENTAL TO THE COMPANY.

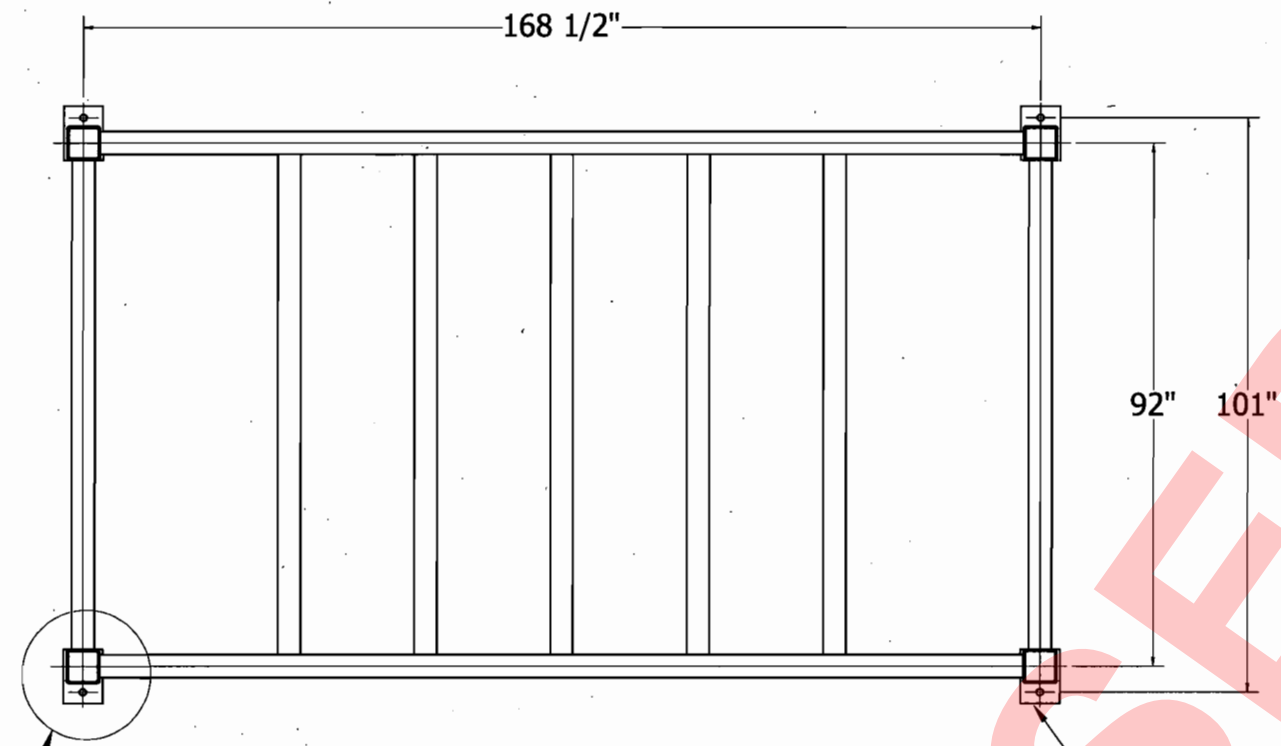
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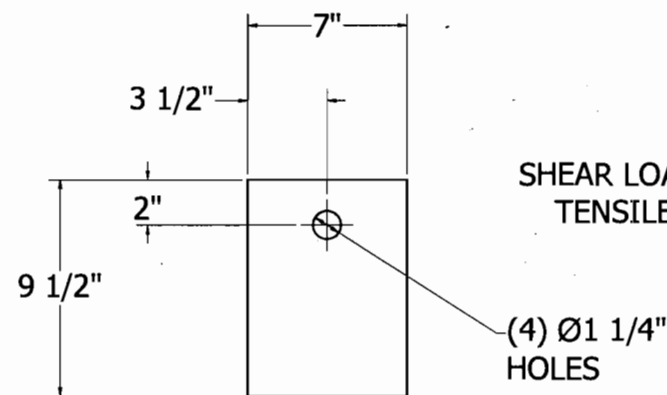
SEE SHEET 1 FOR REVISION INFO.



SECTION A-A



SECTION B-B



ANCHOR BASE PLATE DETAIL

LOAD ON EACH PAD: 17,500 LBS
 PRESSURE ON CONCRETE: 263 PSI
 SHEAR LOAD ON FOUNDATION BOLTS: 1,000 LBS/BOLT
 TENSILE LOAD ON FOUNDATION BOLTS: 0 LBS/BOLT



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MISSISSIPPI POWER
 LIBERTY, MS
 03682

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 DATE: 25/09/2010
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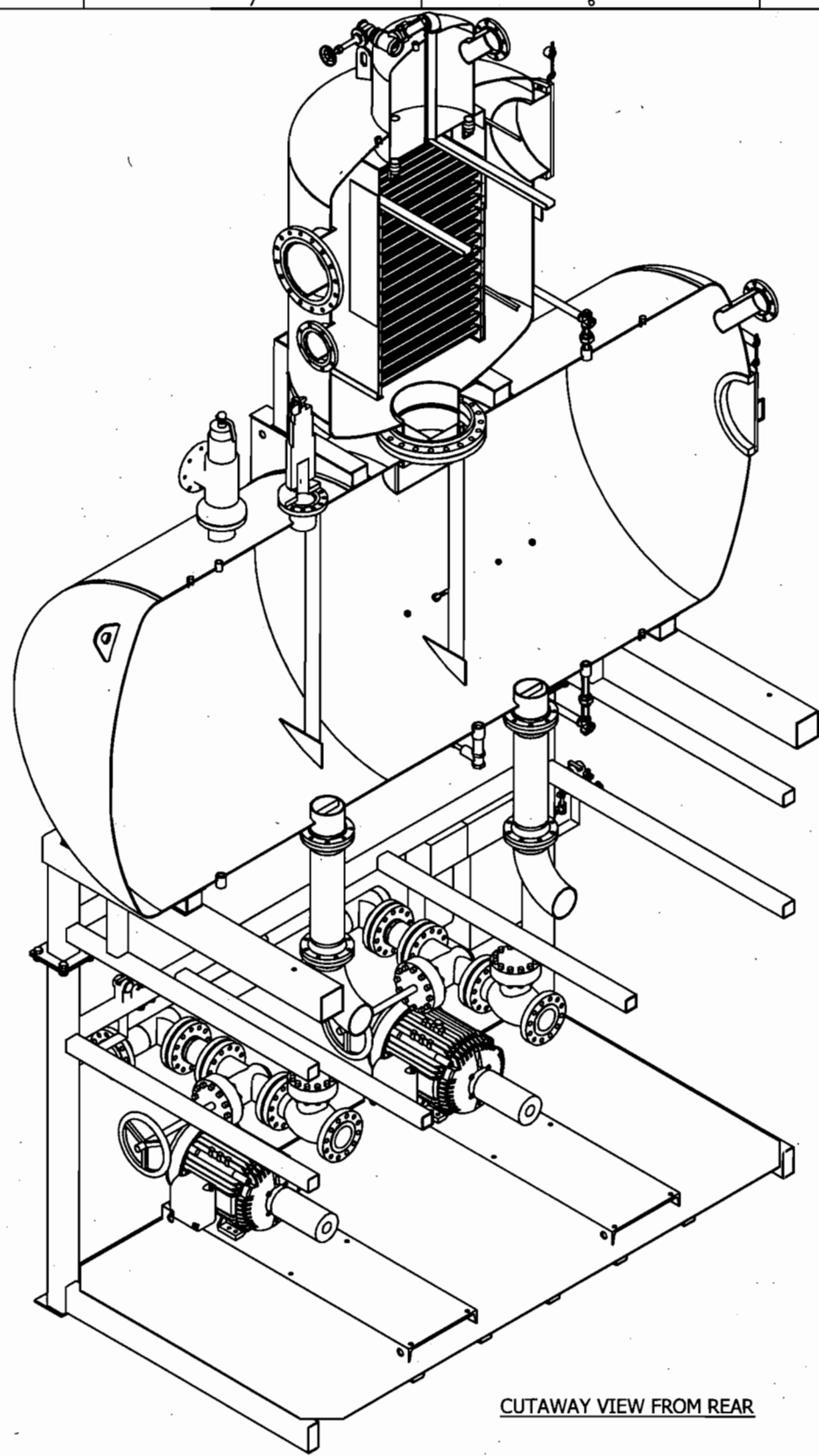
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TMP	250	6040	2
TYPE	CAPACITY	LOADING	TRUCK
460	3	60	3
VOLTS	PHASE	HERTZ	WHEEL

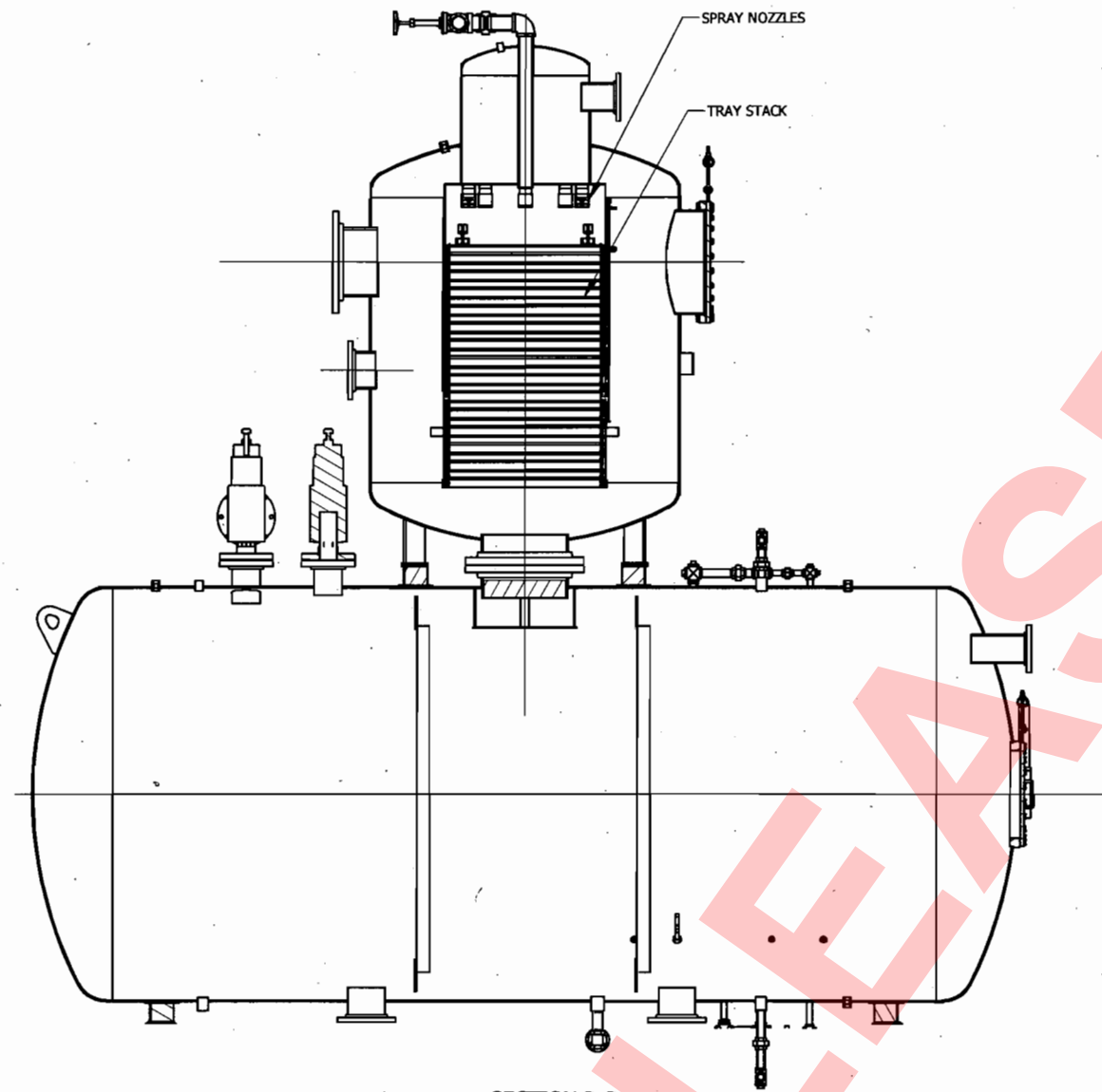
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SHT 4 OF 11

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CUTAWAY VIEW FROM REAR



SECTION D-D

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MISSISSIPPI POWER
LIBERTY, MS
03682
DIMENSION DIAGRAM
SHT 5 OF 11

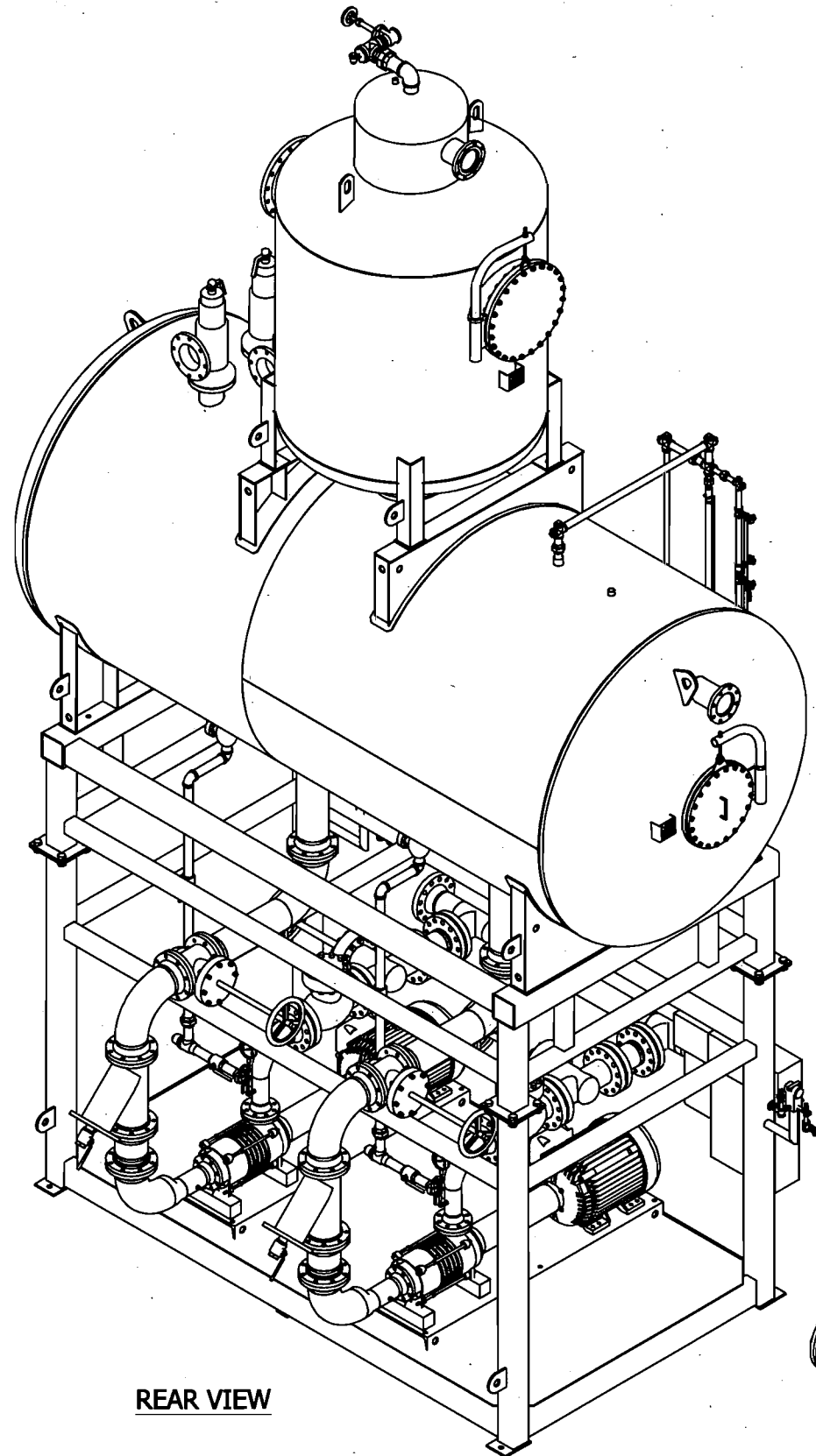
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CHECKED BY: NCB
DATE: 25/09/2010
SIZE: D

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T.M.P. 250 6040 2
CAPACITY 3 60 3
VOLTS 460 60 HERTZ
PHASE 3 WIRE
DRWG. NO. 03682-1-2DD 04

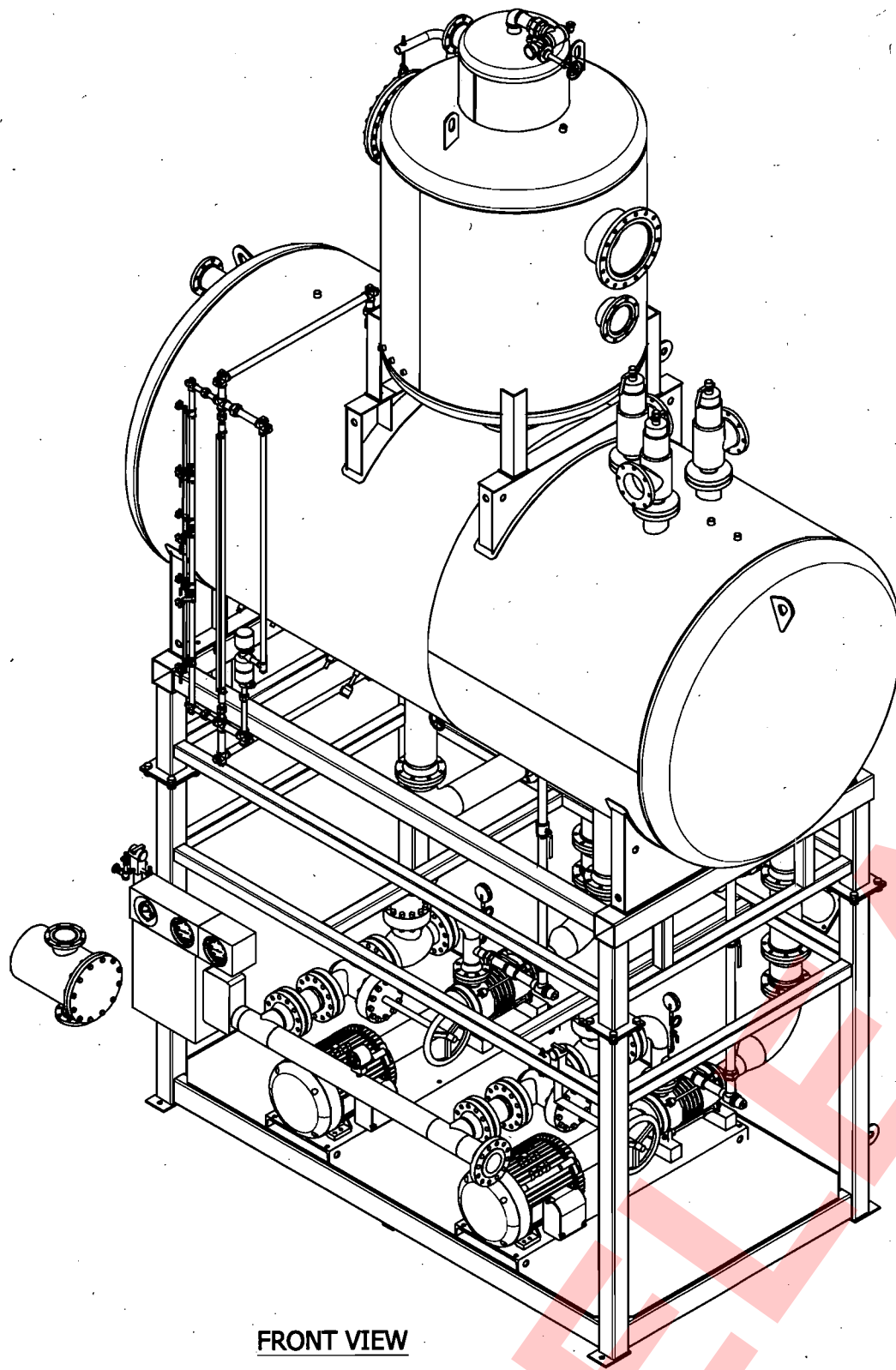
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REAR VIEW



FRONT VIEW

REVISIONS

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MISSISSIPPI POWER
LIBERTY, MS
03682

DIMENSION DIAGRAM

"TRAY.DA"
SHT 6 OF 11

DRAWN BY: FW
CHECKED BY: NCB
DATE: 25/09/2010
SIZE: D

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TMP TYPE	250	60-40	2
CAPACITY	3	60	3
VOLTS	460	60	3
PHASE	3	60	3
HERTZ	60	60	3

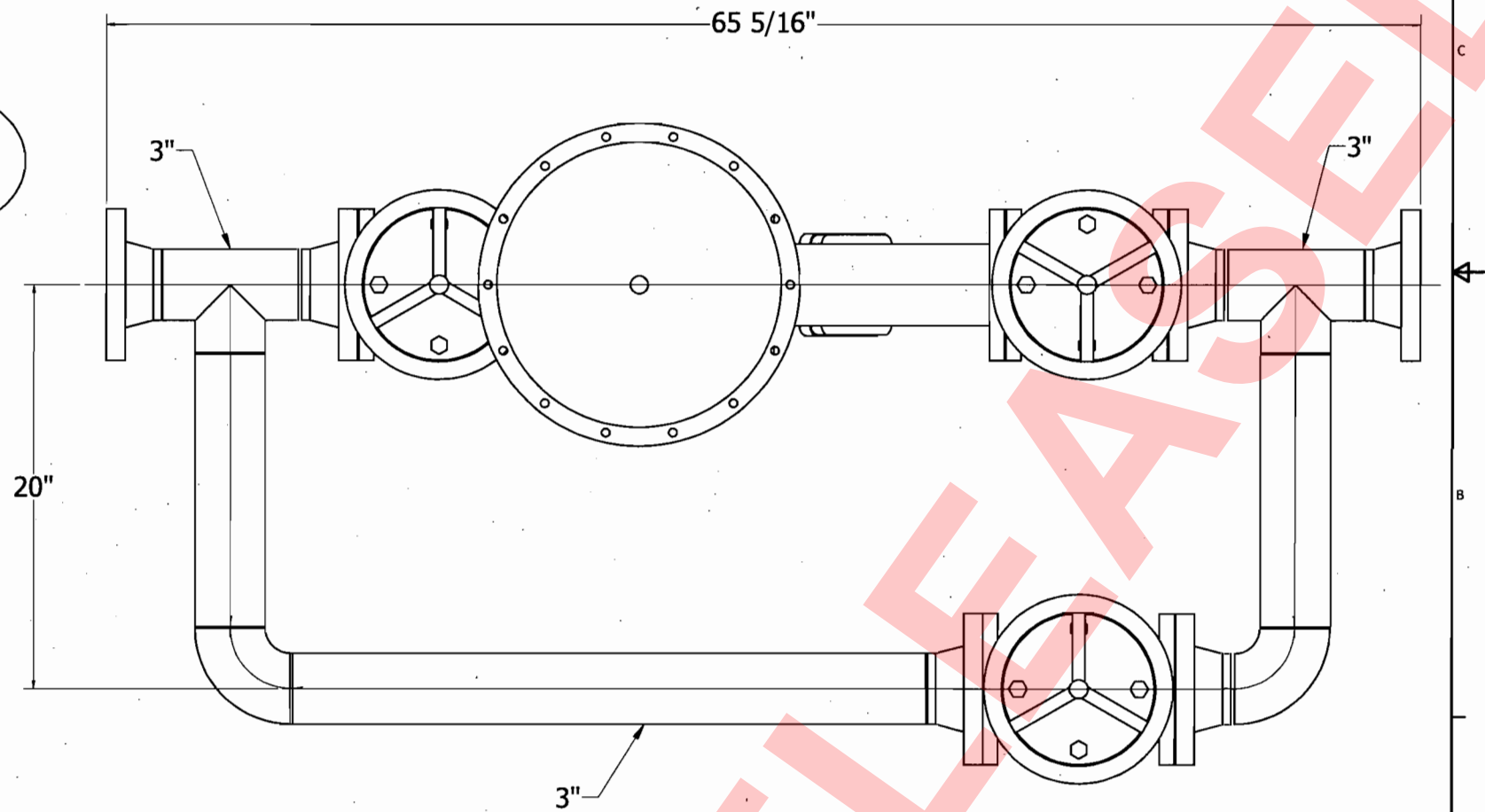
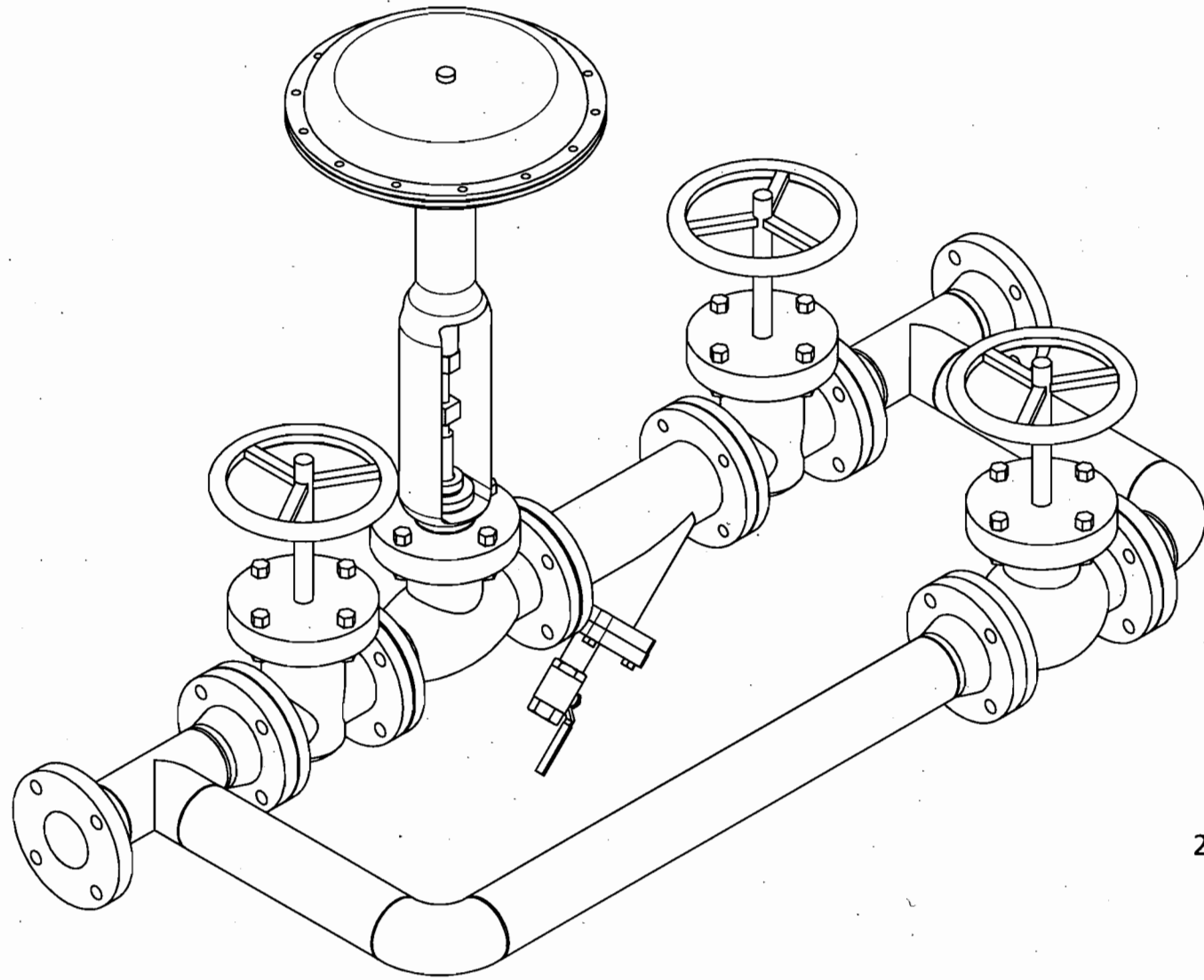
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Approved
APPROVED

GENERAL NOTES:

1. PIPING TO BE SCH. 40 STEEL.
2. CHINESE AND NORTH KOREAN MATERIAL NOT PERMITTED.



ITEM-13 3" MAKE-UP VALVE WITH 3" STRAINER AND 3 VALVE BYPASS, 125#

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MISSISSIPPI POWER
LIBERTY, MS
03682
DIMENSION DIAGRAM

DRAWN BY: FW
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DATE: 25/09/2010
SIZE: D

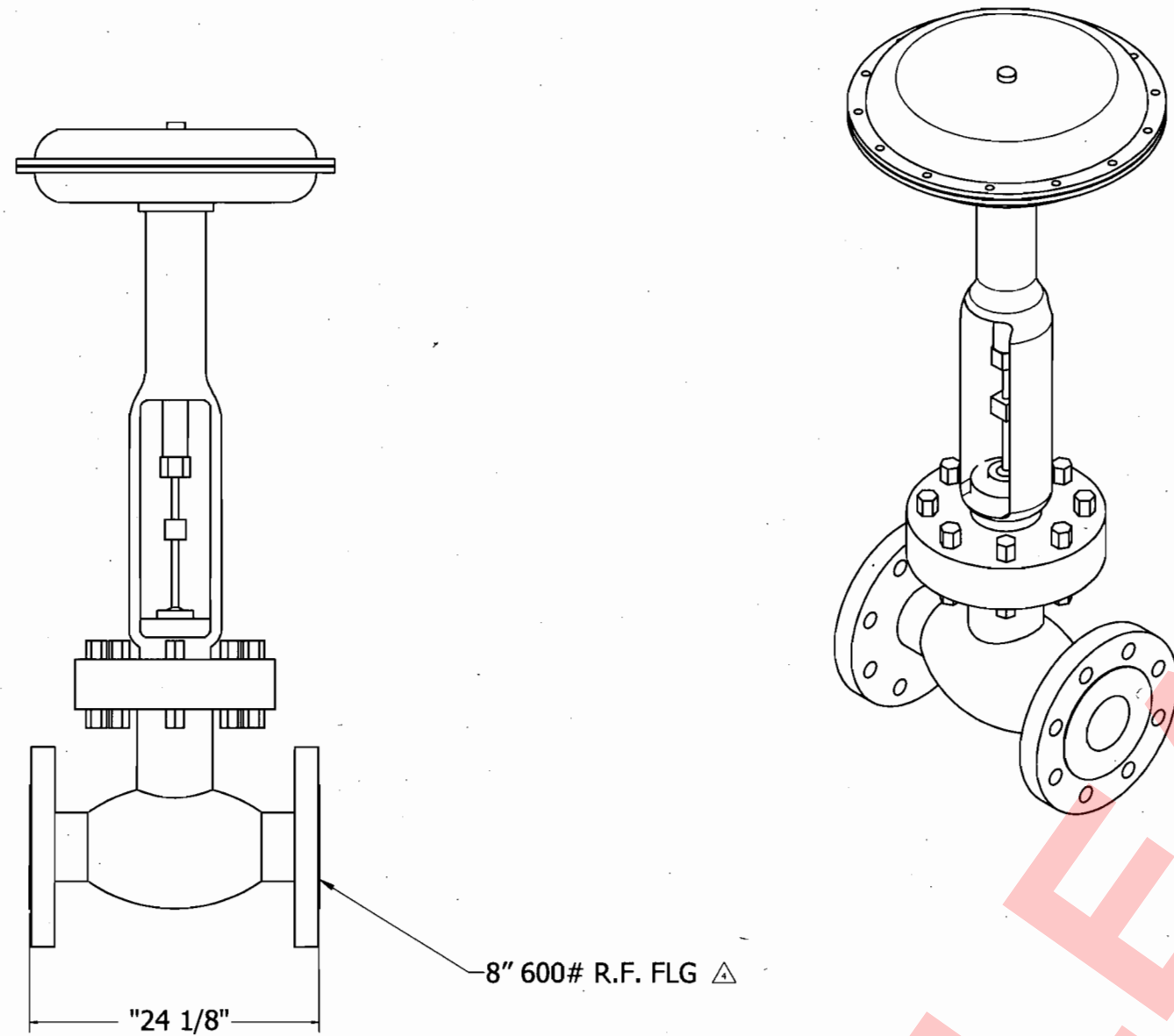
CLEAVER-BROOKS
The power of commitment
TMP 250 6040 2
CAPACITY 3 60 3
VOLTS 460 3 60
PHASE 3 HERTZ 3 WIRE
DRWG. NO. 03682-1-2DD 04

SHT 7 OF 11

Approved

GENERAL NOTES:

1. PIPING TO BE SCH. 40 STEEL.
2. CHINESE AND NORTH KOREAN MATERIAL NOT PERMITTED.



ITEM-12 8" FISHER 585C-EWD PRESSURE REDUCING VALVE, 450 PSI △

REFERRAL TO THE CONTRACT.

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MISSISSIPPI POWER
LIBERTY, MS
03682
DIMENSION DIAGRAM

DRAWN BY: FW
CHECKED BY: NCB
DATE: 25/09/2010
SIZE: D

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TMP	250	6040	2
TYPE	CAPACITY	GALLONS	PAGES
460	3	60	3
VOLTS	PHASE	HERTZ	WIDE

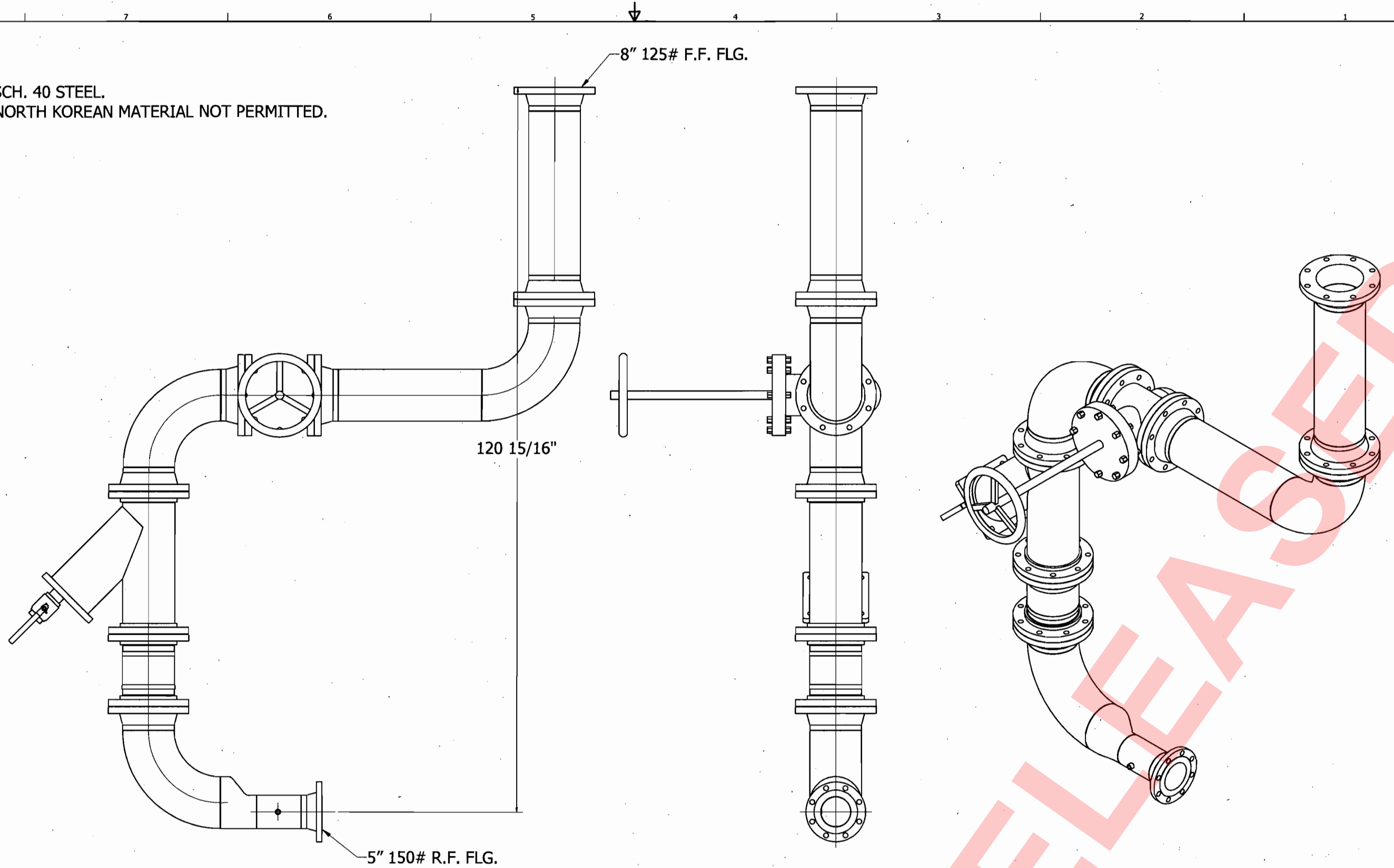
DRWG. NO. 03682-1-2DD 04

SHT 8 OF 11

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APPROVED

GENERAL NOTES:

1. PIPING TO BE SCH. 40 STEEL.
2. CHINESE AND NORTH KOREAN MATERIAL NOT PERMITTED.



ITEM-21 SUCTION PIPING

APRIL 10, 2010

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REVIS/SLNS

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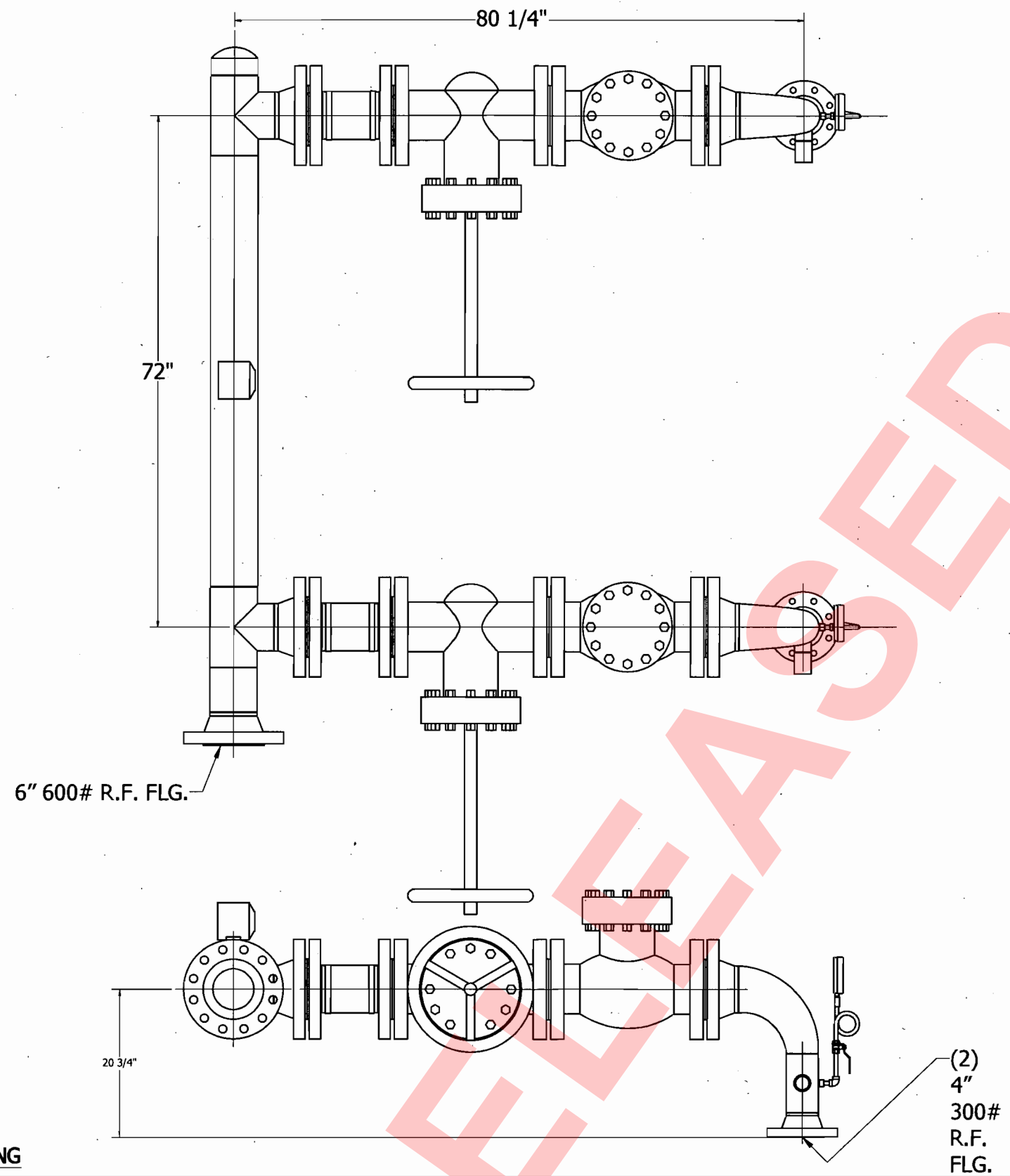
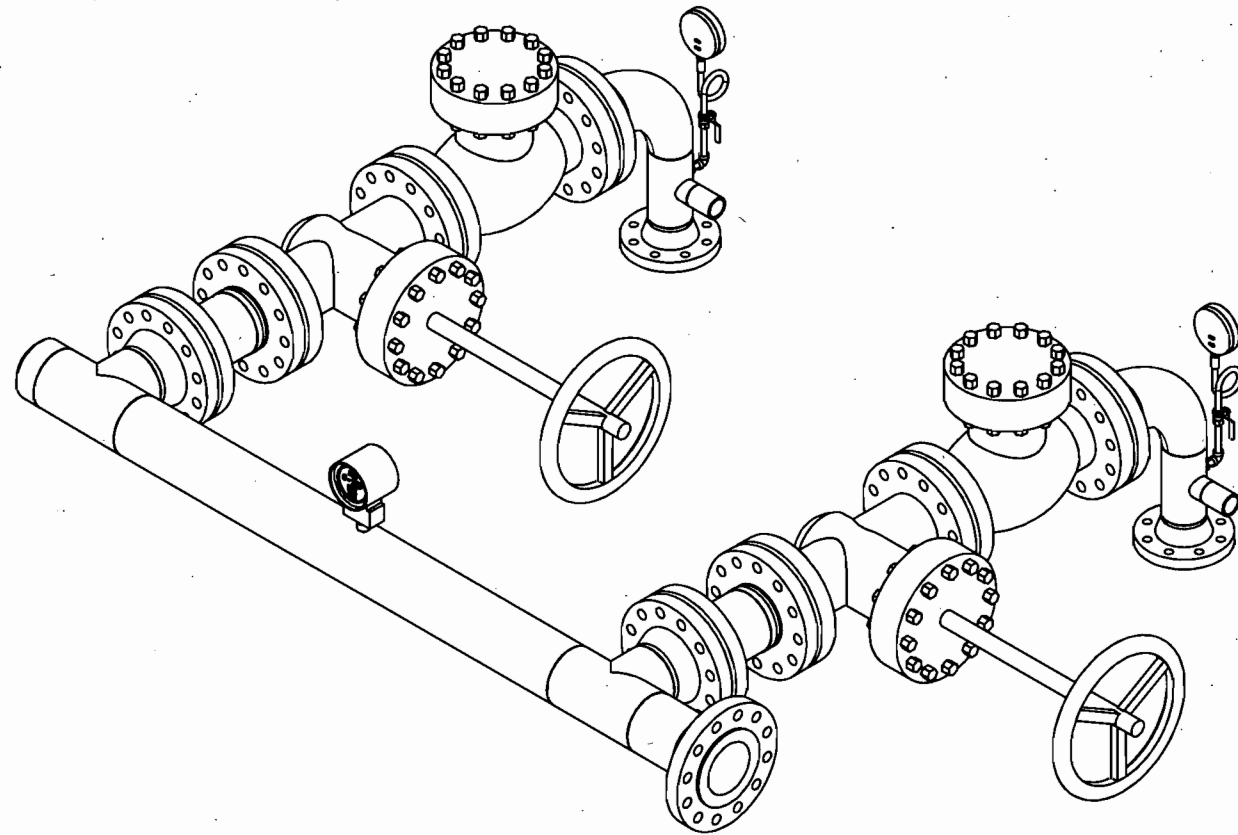


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	DIMENSION DIAGRAM SHT 9 OF 11	DATE: 25/09/2010 SIZE: D	
DRWG. NO. O3682-1-2DD		04	

Approved

GENERAL NOTES:

1. PIPING TO BE SCH. 40 STEEL.
2. CHINESE AND NORTH KOREAN MATERIAL NOT PERMITTED.



ITEM-22 DISCHARGE PIPING

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REVISIONS

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MISSISSIPPI POWER
LIBERTY, MS
03682
DIMENSION DIAGRAM
SHT 10 OF 11

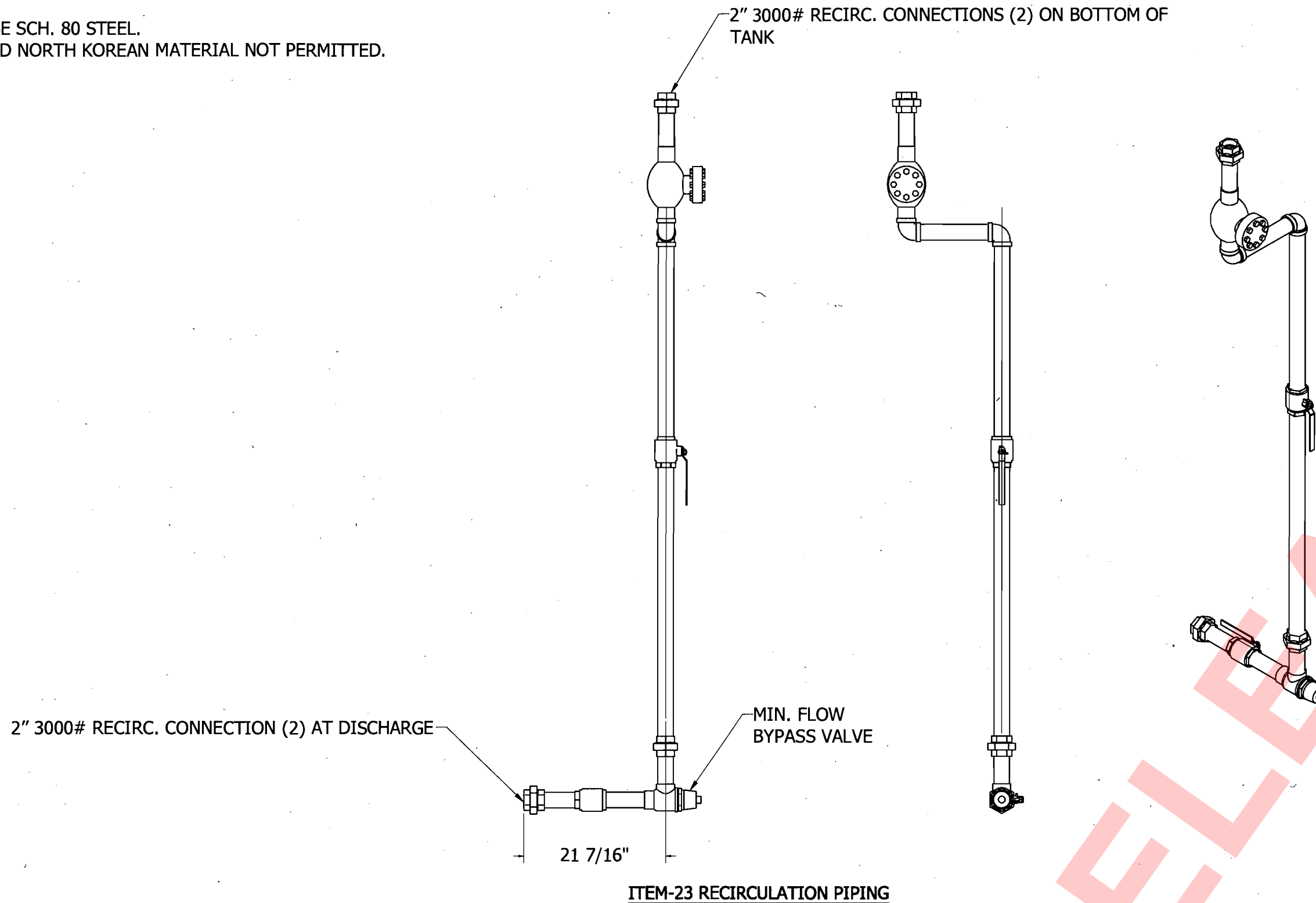
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DATE: 25/09/2010
SIZE: D

CLEAVER-BROOKS
The power of commitment
TMP 250 6040 2
TYPE 460 CAPACITY 3 PHASE 60 HERTZ 3
DRWG. NO. 03682-1-2DD 04

Approved

GENERAL NOTES:

1. PIPING TO BE SCH. 80 STEEL.
2. CHINESE AND NORTH KOREAN MATERIAL NOT PERMITTED.



ITEM-23 RECIRCULATION PIPING

HERTAL TO THE COMPANY.

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REVISED

SEE SHEET 1 FOR REVISION INFO.



WARNING:
Changes, modifications or alterations are strictly prohibited.
Changes to this drawing and subsequent modification of equipment could result in damage to the equipment and/or serious personal injury.

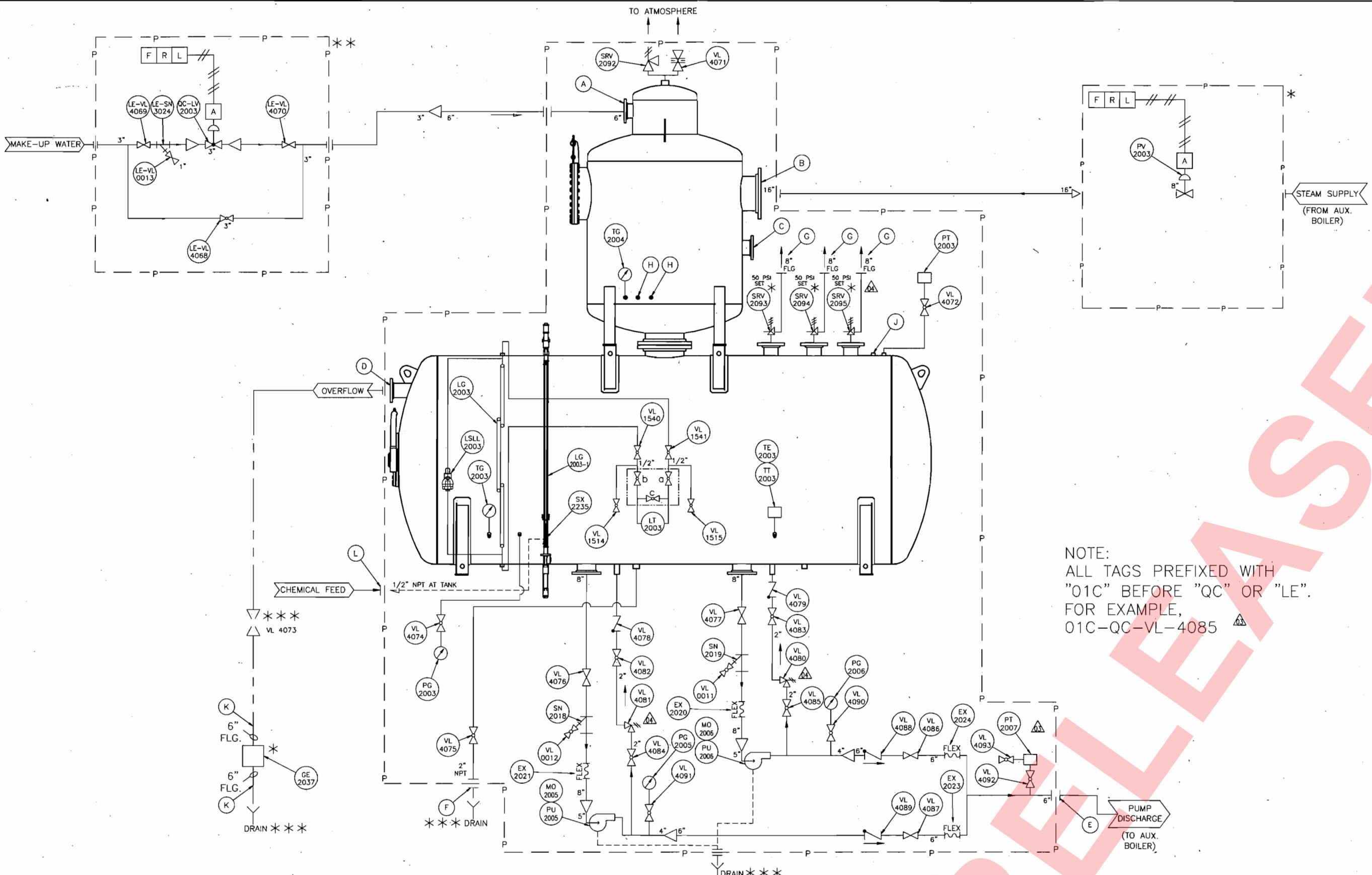
03682-1-2DD	MISSISSIPPI POWER	LIBERTY, MS	03682
	DIMENSION DIAGRAM		
SHT 11 OF 11			

DRAWN BY:	FWV
CHECKED BY:	NCB
DATE:	25/09/2010
SIZE:	D

CLEAVER-BROOKS <i>The power of commitment</i>			
TMP	250	6040	2
TYPE		GALLONS	RANGS
CAPACITY	3	60	3
SIZE		INCHES	WAYS
DRWG. NO.	03682-1-2DD		04

Approved

7 | 6 | 5 | 4 | 3 | 2 | 1



NOTE:
ALL TAGS PREFIXED WITH
"01C" BEFORE "QC" OR "LE".
FOR EXAMPLE,
01C-QC-VL-4085

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<p>REVISIONS</p> <p>03/05/2011 FW CUSTOMER TAG #'S UPDATED AGAIN</p> <p>04/11/2011 FW MANUFACTURER/MODEL NUMBER UPDATES ADDED RELIEF VALVE AUTO RECIRC. VALVE SYMBOL CHANGED</p>	<p>*** BY CUSTOMER ASSEMBLY SHIPPED LOOSE ITEM SHIPPED LOOSE</p> <p>--- WIRING --- MECHANICAL CONNECTION</p> <p>--- PIPING BY CLEAVER BROOKS</p> <p>-P-P-P- PACKAGE BATTERY LIMITS</p>
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CAUTION

DIMENSIONS SHOWN ARE APPROXIMATE AND SHOULD NOT BE USED IN RESTRICTIVE LAYOUTS OR TO PREFABRICATE ASSEMBLIES UNLESS CLEAVER-BROOKS HAS BEEN CONSULTED. IT IS STRONGLY RECOMMENDED THAT THE CUSTOMER REQUEST AS-BUILT CERTIFIED DRAWINGS FOR THESE CASES.

WARNING

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WARNING

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<p>03682-1-2-PI</p> <p>SIZE D</p>	<p>MISSISSIPPI POWER LIBERTY, MS</p> <p>DIMENSIONAL DIAGRAM</p> <p>DEAERATOR SHT 01 OF 03</p>	<p>SCALE N.T.S.</p> <p>DATE 09/29/2010</p> <p>DRAWN FWV</p> <p>CHECKED BY NCB</p>	<p>CleaverBrooks</p> <p>TMP 4-60 CAPACITY 250 GALLONS 3 PRESSURE 60 PSI 3</p> <p>PLUMBS 2 WELDS 3</p> <p>DRWG. NO. 03682-1-2-PI 04</p>
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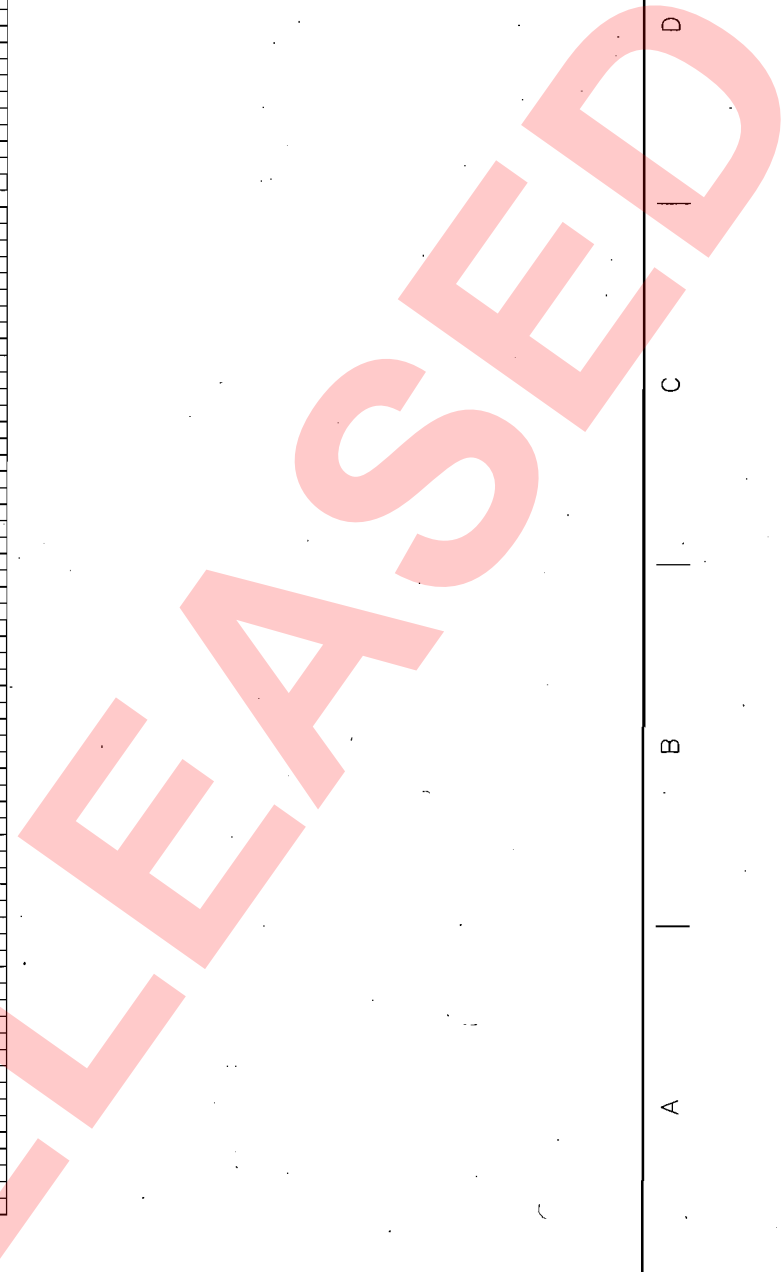
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MECHANICAL BILL OF MATERIAL

CUSTOMER TAG #	DESCRIPTION	SIZE	MANUFACTURER/MODEL	
PUMPS	QC-PU-2005/QC-MO-2005 QC-PU-2006/QC-MO-2006	FEEDWATER PUMP/MOTOR FEEDWATER PUMP/MOTOR	4" 300#RF FLG. x 5" 150#RF FLG. 4" 300#RF FLG. x 5" 150#RF FLG.	GOULDS 3355 4 X 5-10A GOULDS 3355 4 X 5-10A
SUCTION	QC-VL-4076 QC-VL-4077 QC-SN-2018 QC-SN-2019 QC-VL-0012 QC-VL-0011 QC-EX-2021 QC-EX-2020	HAND VALVE PUMP SUCTION HAND VALVE PUMP SUCTION STRAINER PUMP SUCTION STRAINER PUMP SUCTION HAND VALVE PUMP SUCTION BLOWDOWN HAND VALVE PUMP SUCTION BLOWDOWN PUMP CONNECTOR PUMP CONNECTOR	8" 150#RF FLG. 8" 150#RF FLG. 8" 150#RF FLG. 8" 150#RF FLG. 2" NPT 2" NPT 8" 150#FF FLG. 8" 150#FF FLG.	NIBCO 8" F619 NIBCO 8" F619 MUELLER 8" 758 W/3/64" PERF/MTR CERT MUELLER 8" 758 W/3/64" PERF/MTR CERT WORCESTER 2" 4446PM-SE WORCESTER 2" 4446PM-SE TWIN CITY HOSE TCHS-800-FLG TWIN CITY HOSE TCHS-800-FLG
DISCHARGE	QC-VL-4087 QC-VL-4086 QC-VL-4089 QC-VL-4088 QC-PG-2006 QC-PG-2005 QC-PT-2007 QC-VL-4092 QC-VL-4093 QC-VL-4091 QC-VL-4090 QC-EX-2024 QC-EX-2023	HAND VALVE PUMP DISCHARGE HAND VALVE PUMP DISCHARGE CHECK VALVE PUMP DISCHARGE CHECK VALVE PUMP DISCHARGE PRESSURE GAUGE DISCHARGE PRESSURE GAUGE DISCHARGE DISCHARGE MANIFOLD PRESSURE TRANSMITTER HAND VALVE DISCHARGE MANIFOLD PRESSURE TRANSMITTER ISOLATION HAND VALVE DISCHARGE MANIFOLD PRESSURE TRANSMITTER VENT PRESSURE GAUGE DISCHARGE ISOLATION PRESSURE GAUGE DISCHARGE ISOLATION PUMP CONNECTOR PUMP CONNECTOR	6" 600#RF FLG. 6" 600#RF FLG. 6" 600#RF FLG. 6" 600#RF FLG. 1/4" NPT 1/4" NPT 1/4" NPT 1/2" NPT 1/2" NPT 2" NPT 2" NPT 6" 600#RF FLG. 6" 600#RF FLG.	KITZ 6" 600SCLS KITZ 6" 600SCLS KINKA 6" X4610RBYA KINKA 6" X4610RBYA USG 1981L 4 1/2" 1/4" LM, 0-300#/KG-CM2 USG 1981L 4 1/2" 1/4" LM, 0-300#/KG-CM2 ROSEMOUNT 2051 INTEGRAL WITH ROSEMOUNT 2051 MANIFOLD INTEGRAL WITH ROSEMOUNT 2051 MANIFOLD WORCESTER 2" 4446PM-SE WORCESTER 2" 4446PM-SE TWIN CITY HOSE TCHS-600-6RFSOF-12 TWIN CITY HOSE TCHS-600-6RFSOF-12
RECIRC.	QC-VL-4084 QC-VL-4085 QC-VL-4082 QC-VL-4083 QC-VL-4081 QC-VL-4080 QC-VL-4078 QC-VL-4079	HAND VALVE PUMP RECIRCULATION HAND VALVE PUMP RECIRCULATION HAND VALVE PUMP RECIRCULATION HAND VALVE PUMP RECIRCULATION FULFLO AUTO RECIRCULATION VALVE FULFLO AUTO RECIRCULATION VALVE CHECK VALVE RECIRCULATION CHECK VALVE RECIRCULATION	2" NPS. 2" NPS. 2" NPS. 2" NPS. 2" NPS. 2" NPS. 2" NPS. 2" NPS.	SVF 2" NB4466SSSE SVF 2" NB4466SSSE SVF 2" NB4466SSSE SVF 2" NB4466SSSE FULFLO 2" VB-BR-SS/ZS FULFLO 2" VB-BR-SS/ZS KITZ 2" W600SCO KITZ 2" W600SCO
MUV	QC-LV-2003 LE-VL-4069 LE-VL-4070 LE-VL-4068 LE-SN-3024 LE-VL-0013	MAKE-UP WATER CONTROL VALVE HAND VALVE MUV W/3 VALVE BY-PASS HAND VALVE MUV W/3 VALVE BY-PASS HAND VALVE MUV W/3 VALVE BY-PASS STRAINER W/MUV 3 VALVE BY-PASS HAND VALVE MUV STRAINER BLOW-OFF	3" 150#RF FLG. 3" 125#FF FLG. 3" 125#FF FLG. 3" 125#FF FLG. 3" 125#FF FLG. 1" NPT.	FISHER # 657-ET-DVC6030/HC NIBCO 3" F619 NIBCO 3" F619 NIBCO 3" F718-B MUELLER 3" 758 W/3/64" PERF APOLLO 1" 70-108-01
PRV	QC-PV-2003	STEAM PRESSURE REDUCING VALVE	8" 300#RF FLG.	8 INCH FISHER TYPE 585-C-EWD-DVC6020HC-377
DRAIN	QC-VL-4075	HAND VALVE DRAIN	2" NPT	VOGT 2" 353
TANK-PRESSURE TRANSMITTER	QC-PT-2003 QC-VL-4072	TANK PRESSURE TRANSMITTER HAND VALVE TANK PRESSURE TRANSMITTER ISOLATION	1/4" NPT. 1/2" NPT.	ROSEMOUNT 3051S2TG3A2A11A1AKBM5Q4Q8 APOLLO 70-103-01
TANK - LEVEL TRANSMITTER	QC-LT-2003 QC-VL-1540 QC-VL-1541 QC-VL-1514 QC-VL-1515	DIFFERENTIAL PRESSURE TRANSMITTER HAND VALVE LEVEL TRANSMITTER ISOLATION HAND VALVE LEVEL TRANSMITTER ISOLATION HAND VALVE LEVEL TRANSMITTER DRAIN HAND VALVE LEVEL TRANSMITTER DRAIN	1/4" NPT. 1/2" NPT. 1/2" NPT. 1/2" NPT. 1/2" NPT.	ROSEMOUNT 3051S2CD2A2A11A1AKBM5Q4Q8 WORCESTER 1/2" 4446PM-SE WORCESTER 1/2" 4446PM-SE WORCESTER 1/2" 4446PM-SE WORCESTER 1/2" 4446PM-SE
TANK - TEMPERATURE TRANSMITTER	QC-TT-2003 QC-TE-2003	TANK TEMPERATURE TRANSMITTER TANK TEMPERATURE TRANSMITTER ELEMENT	1/4" NPT. 1/4" NPT.	ROSEMOUNT 3051S2CD2A2A11A1AKBM5Q4Q8 ROSEMOUNT 644HAK6XAJ6M5Q4
GEMS	QC-LG-2003-1	MAGNETIC LEVEL INDICATOR	3/4" NPT.	JERGUSON #S22188-72
GAUGE GLASS	QC-LG-2003	SIGHT GLASS LEVEL INDICATOR	1/2" NPT.	JERGUSON 68R20; Visible area 78-3/4"
LWCO	QC-LSLL-2003	LOW WATER CUT-OFF SWITCH	1" NPT.	MERCOLD 102-WT-7810-C-60
RELIEF VALVES	QC-SRV-2093 QC-SRV-2094 QC-SRV-2095	SAFETY RELIEF VALVE SAFETY RELIEF VALVE SAFETY RELIEF VALVE	6" 250#FF FLG x 8" 125#RF FLG. 6" 250#FF FLG x 8" 125#RF FLG. 6" 250#FF FLG x 8" 125#RF FLG.	KUNKLE 6252KRP KUNKLE 6252KQP KUNKLE 6252KQP
CHEM. FEED	QC-SX-2235	CHEMICAL FEED QUILL	1/2" NPT.	CLEAVER-BROOKS 057-01223-000
PRESSURE GAUGE	QC-PG-2003 QC-VL-4074	PRESSURE GAUGE TANK HAND VALVE PRESSURE GAUGE ISOLATION	1/4" NPT 1/4" NPT	US GAUGE #1903 WORCESTER 1/4" 4446PM-SE
THERMOMETER	QC-TG-2003 QC-TG-2004	THERMOMETER TANK THERMOMETER COLUMN	1/4" NPT 1/4" NPT	ASHCROFT C600A-03-C37-B01-L03 (10' LINE LENGTH) ASHCROFT C600A-03-C37-B01-L07 (20' LINE LENGTH)
VENT VALVES	QC-VL-4071 QC-SRV-2092	MANUAL VENT VALVE AUTO VENT VALVE	3" NPT. 1/2" NPT.	NIBCO 3" T-111 W/11/16" DRILLED DISC NICHOLSON A33HC (HIGH CAPACITY)
OVERFLOW DRAINER	QC-GE-2037 QC-VL-4073	OVERFLOW DRAINER BY CUSTOMER	6" 150#RF FLG.	WARREN CONTROLS 313

NOTE:
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REVISIONS SEE SHEET 1 FOR REVISION INFO. *** BY CUSTOMER ** ASSEMBLY SHIPPED LOOSE * ITEM SHIPPED LOOSE _____ PIPING BY CLEAVER BROOKS -P- PACKAGE BATTERY LIMITS	CAUTION DIMENSIONS SHOWN ARE APPROXIMATE AND SHOULD NOT BE USED IN RESTRICTIVE LAYOUTS OR TO PREFABRICATE ASSEMBLIES UNLESS CLEAVER-BROOKS HAS BEEN CONSULTED. IT IS STRONGLY RECOMMENDED THAT THE CUSTOMER REQUEST AS-BUILT CERTIFIED DRAWINGS FOR THESE CASES.	WARNING LIFTING LUGS PROVIDED ON THE VESSEL SHALL ONLY BE USED TO LIFT THE VESSEL WHEN IT IS DRY.	WARNING CHANGES, MODIFICATIONS OR ALTERATIONS ARE STRICTLY PROHIBITED. CHANGES TO THIS DRAWING AND SUBSEQUENT MODIFICATION OF EQUIPMENT COULD RESULT IN DAMAGE TO THE EQUIPMENT AND/OR SERIOUS PERSONAL INJURY.	MISSISSIPPI POWER LIBERTY, MS DIMENSIONAL DIAGRAM DEAERATOR SHT 02 OF 03	SCALE: N.T.S. DATE: 09/29/2010 DRAWN: FVV CHECKED BY: NCB	CleaverBrooks TWP 250 6040 2 460 3 60 3 VOLTS PHASE HERTZ WIRE DRWG. NO. 03682-1-2-PI 04
	03682-1-2-PI					

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