

SCHEM. ID	DESCRIPTION	DEENERGIZED POSITION	STEP 1 CLOSE FILTER PRESS	STEP 2 PRECOAT	STEP 3 SLURRY FEED	STEP 4 CORE BLOW	STEP 5 FILTRATE BLOWDOWN	STEP 6 OPEN PRESS	STEP 7 DISCHARGE CAKE	STEP 8 CYCLE READY							SCHEM. ID	DESCRIPTION
FP1	PRECOAT INLET	CLOSED		→ ←T1													FP1	PRECOAT INLET
FP2	CORE BLOW RETURN	OPEN															FP2	CORE BLOW RETURN
FP3	SLURRY INLET	CLOSED															FP3	SLURRY INLET
FP4	AIR BLOW BLOCK	OPEN															FP4	AIR BLOW BLOCK
FP5	FILTRATE BLOCK	OPEN		→ ←T3													FP5	FILTRATE BLOCK
FP6	FILTRATE DISCHARGE	OPEN		→ ←T2													FP6	FILTRATE DISCHARGE
FP7	PRECOAT RETURN	CLOSED		→ ←T2													FP7	PRECOAT RETURN
FP-SV1	CORE BLOW AIR	CLOSED			→ T4 ←												FP-SV1	CORE BLOW AIR
FP-SV2	PRESS AIR BLOWDOWN	CLOSED				→ T5 ←											FP-SV2	PRESS AIR BLOWDOWN
M1	HYD. RAM PUMP			INTER. TO MAINTAIN HYD. CLAMPING				PRESSURE									M1	HYD. RAM PUMP
SOL.-Y1	OPEN PRESS																SOL.-Y1	OPEN PRESS
SOL.-Y2	CLOSE PRESS			INTER. TO MAINTAIN HYD. CLAMPING				PRESSURE									SOL.-Y2	CLOSE PRESS
M2	PLATE SHIFTER								REVERSING								M2	PLATE SHIFTER
M3	PRECOAT PUMP			→ ←T1													M3	PRECOAT PUMP
M4	SLURRY FEED PUMP			AUTO VARI-SPEED OVER PSI													M4	SLURRY FEED PUMP
CUST. CONTACT	PRECOAT READY	CUST. LOGIC		→ ←T1													CUST. CONTACT	PRECOAT READY
LLS-402	PRECOAT LOW LEVEL	CLOSE ON RISE		→ ←T1													LLS-402	PRECOAT LOW LEVEL
FS-101	SLURRY PUMP INLET FLOW	CLOSE ON RISE															FS-101	SLURRY PUMP INLET FLOW
CUST. CONTACT	SLURRY FEED PERM.																CUST. CONTACT	SLURRY FEED PERM.
MOV 401	PRECOAT SUPPLY (TANK 400)	CLOSED		→ ←T1													MOV 401	PRECOAT SUPPLY (TANK 400)
SCHEM. ID	DESCRIPTION	DEENERGIZED POSITION	STEP 1 CLOSE FILTER PRESS	STEP 2 PRECOAT	STEP 3 SLURRY FEED	STEP 4 CORE BLOW	STEP 5 FILTRATE BLOWDOWN	STEP 6 OPEN PRESS	STEP 7 DISCHARGE CAKE	STEP 8 CYCLE READY							SCHEM. ID	DESCRIPTION

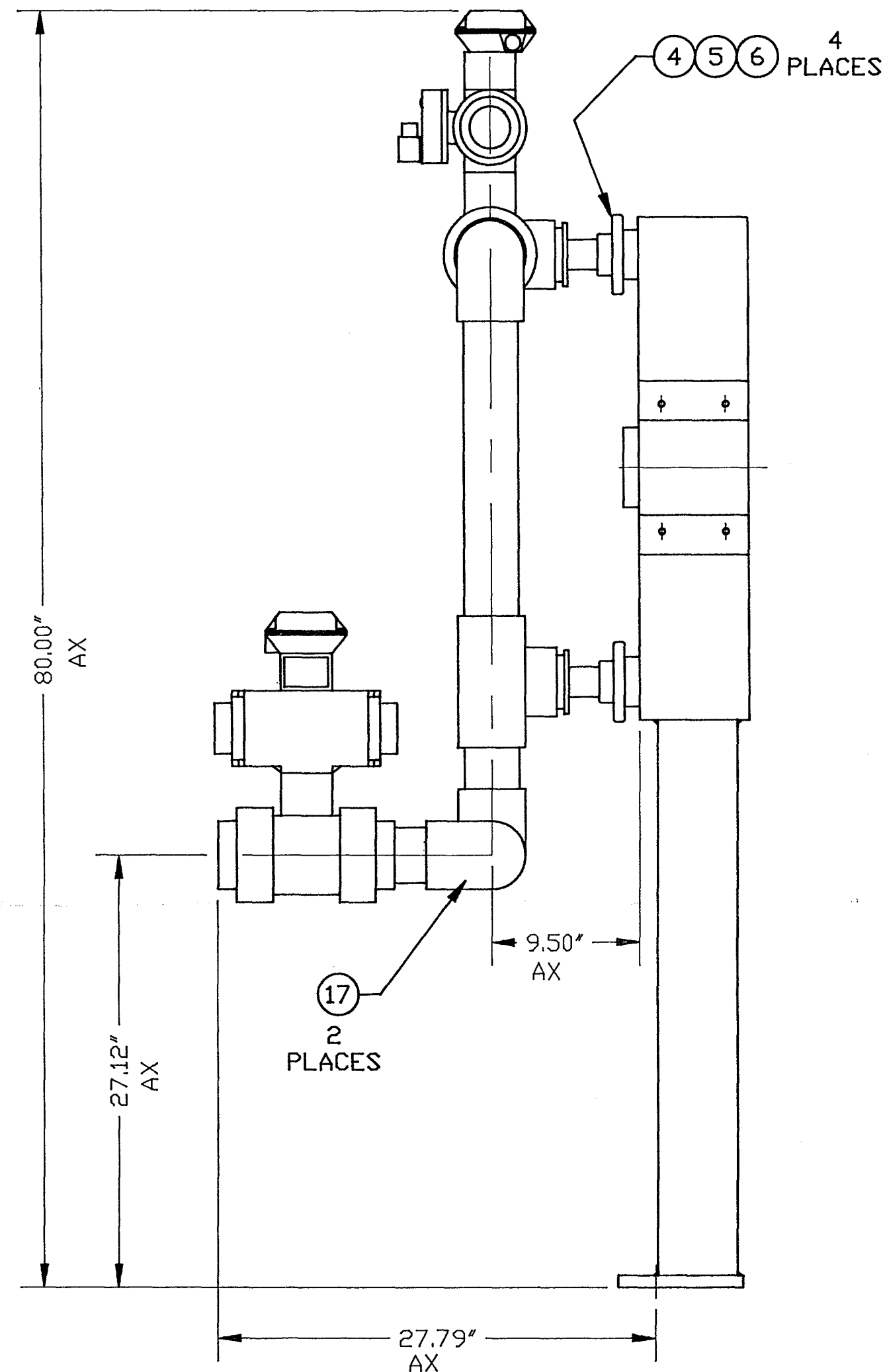
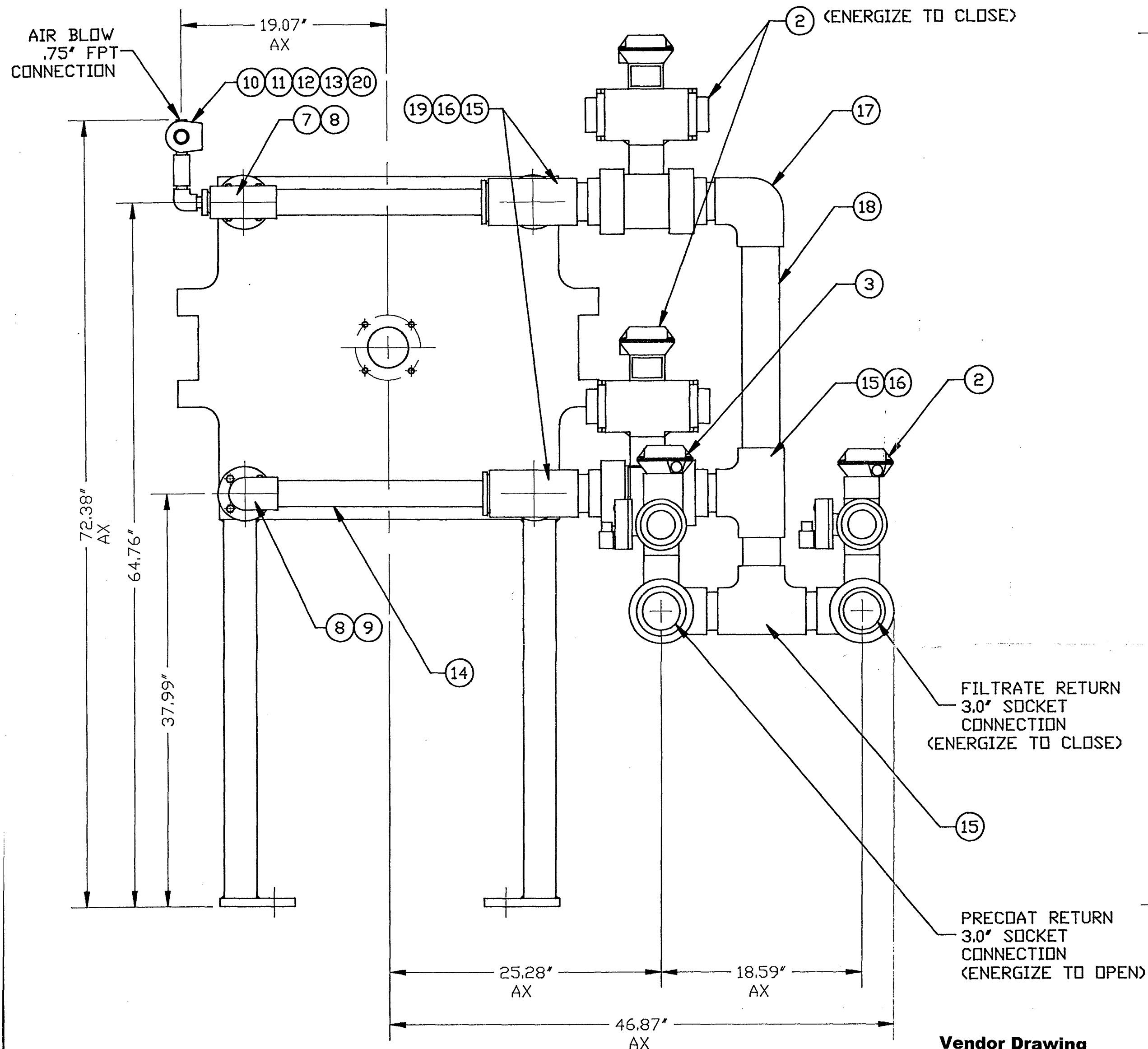
██████ DENOTES OPEN ON

CUST.- NALCO CHEMICAL CORP.
JOB # - 401-591/91
P.O. # - D2755

PROPRIETARY DRAWING
DRAWING MAY NOT BE USED OR
REPRODUCED WITHOUT WRITTEN
AUTHORIZATION OF NETZSCH INC.
JAN 07 1992

REV.	DESCRIPTION	BY	DATE	APP'D.
NETZSCH INC. EXTON, PA. 19341-1393				
TITLE FILTRATION SYS. VALVE FUNCTION CHART				
DRAWN	DJJ	DATE	9/27/91	CHK'D
SCALE	1=1	APP'D.	DATE	7-30-91
SHEET NUMBER	1 of 2	SIZE	DRAWING NUMBER	
ORDER/PROJECT NUMBER	0401059191	D 47018210		
SHT. REV.				

Vendor Drawing
V5321 Sh 36



NOTES:

- ITEM 14 TO BE CUT TO SUIT AT ASSEMBLY
- ITEM 18 TO BE CUT TO SUIT AT ASSEMBLY
- SEE SEPARATE BILLS OF MATERIAL
- ALL CUSTOMER CONNECTIONS TO BE PROPERLY SUPPORTED

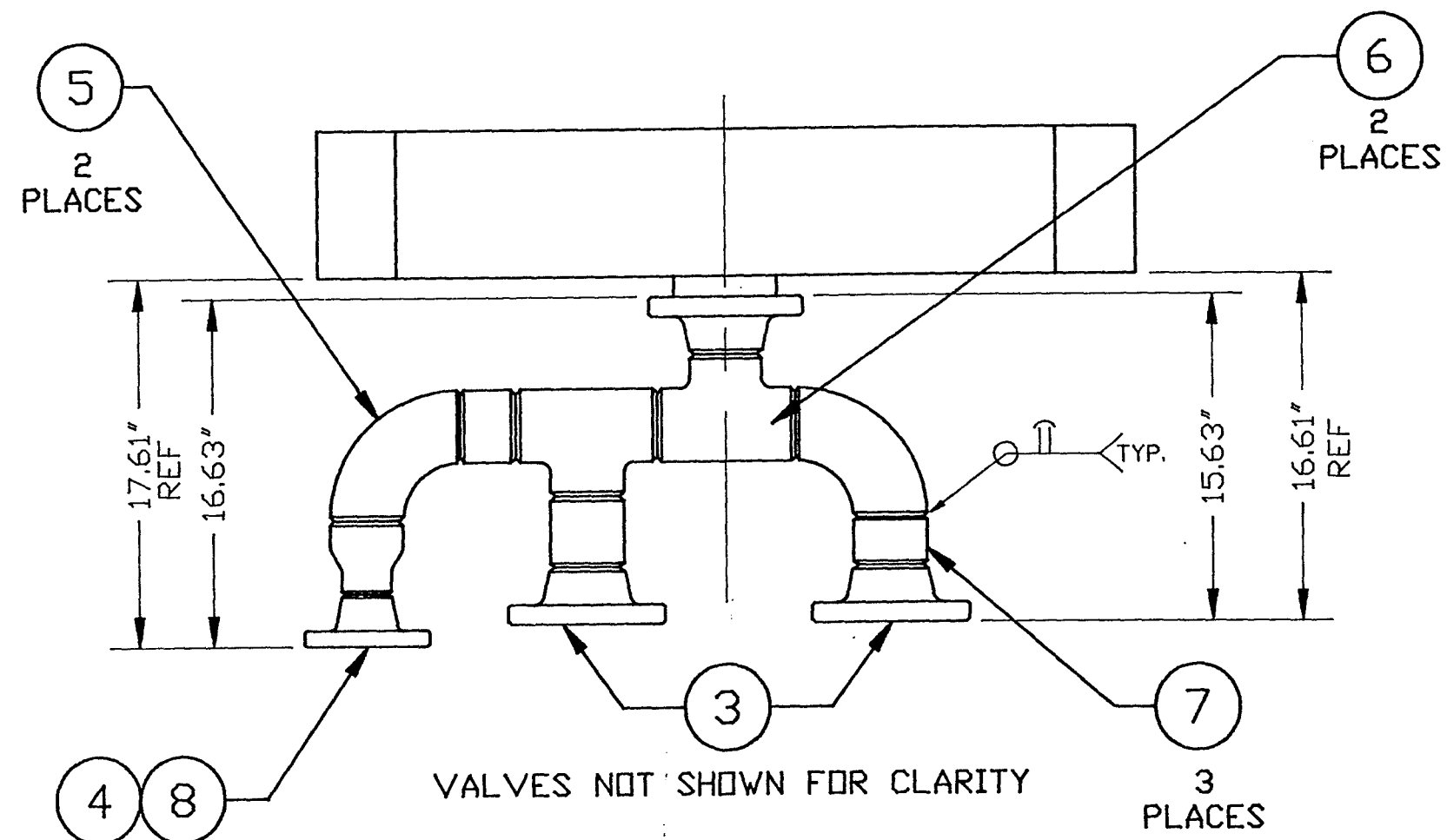
Vendor Drawing
V5321 Sh 38

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JAN 07 1992

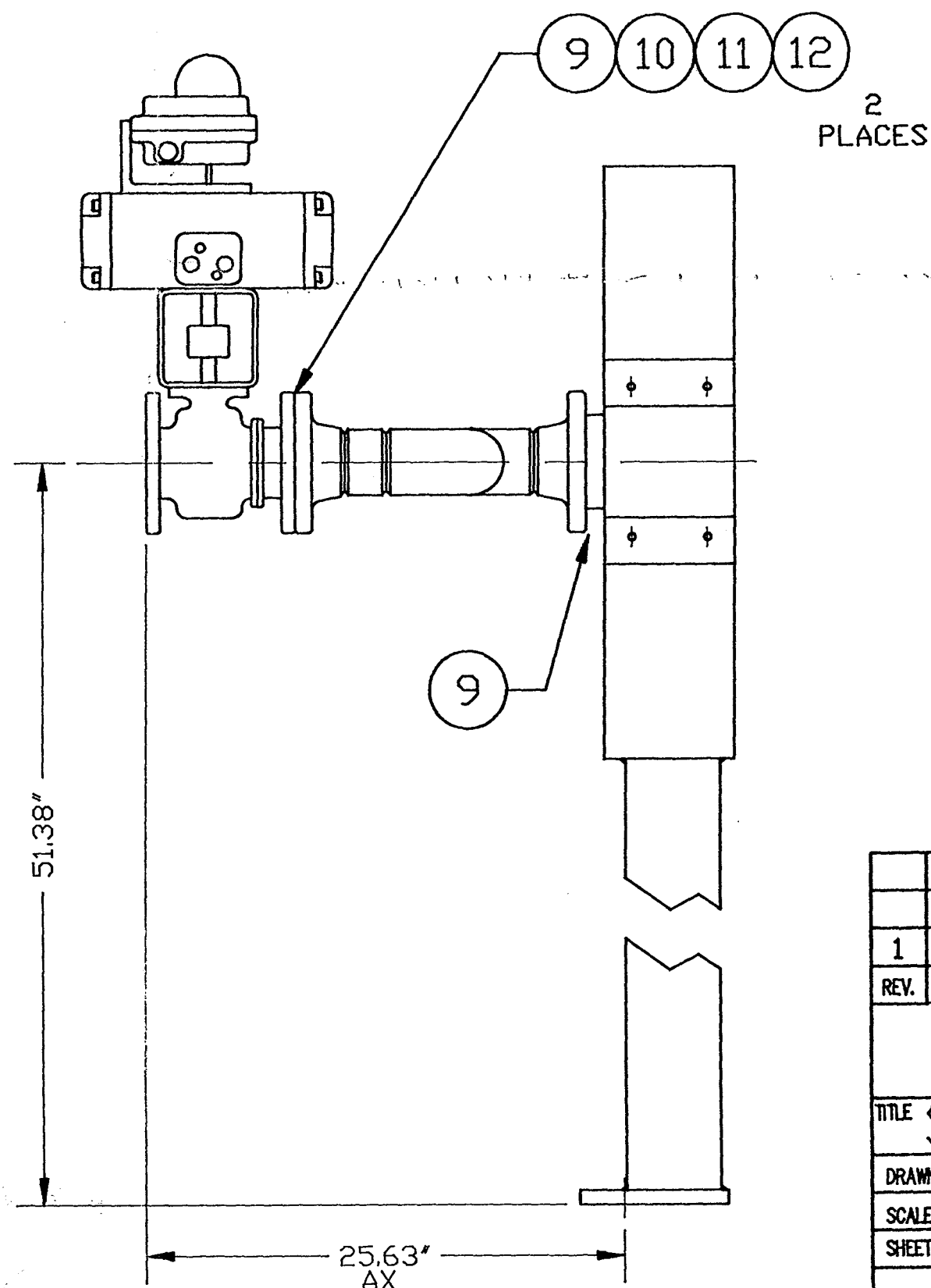
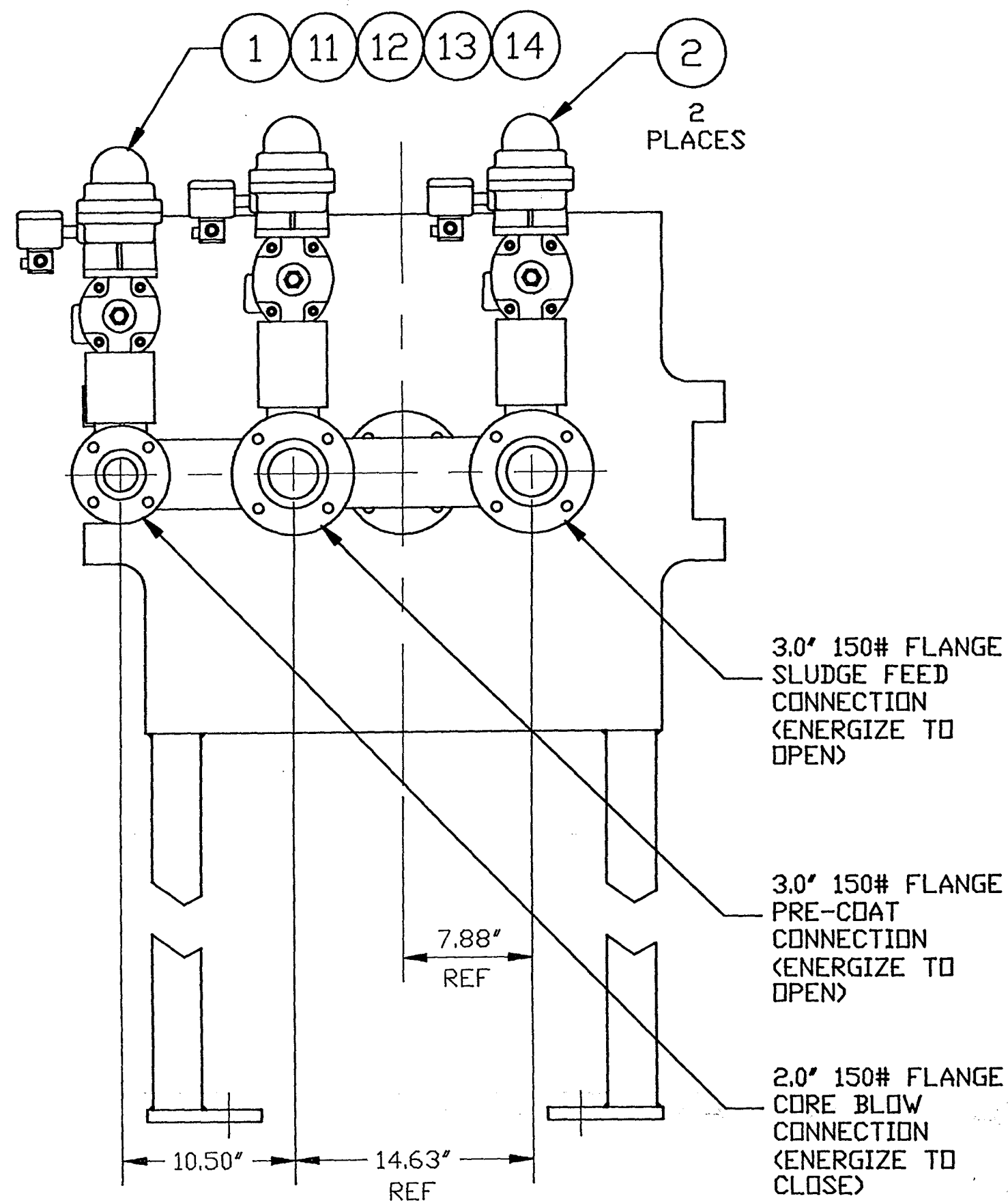
P/N 695994

1	CHANGED PER ENG. REQUEST	TH	09/20/91	BHP
REV.	DESCRIPTION	BY	DATE	APP'D.
NETZSCH INCORPORATED EXTON, PA. 19341-1393				
TITLE FILTRATE MANIFOLD 800mm 3.0" W/AIR BLOW & FILTRATE BLOCK				
DRAWN TH DATE 01/12/91		CHK'D		DATE
SCALE .125=1		APP'D BHP		DATE 07/31/91
SHEET NUMBER of		SIZE		DRAWING NUMBER
ORDER/PROJECT NUMBER		C		41070611
				SHT REV



NOTES:

1. ITEM 7 TO BE CUT TO LENGTH AT ASSEMBLY
2. SEE SEPERATE BILLS OF MATERIAL
3. CUSTOMER TO SUPPORT PIPING & VALVES

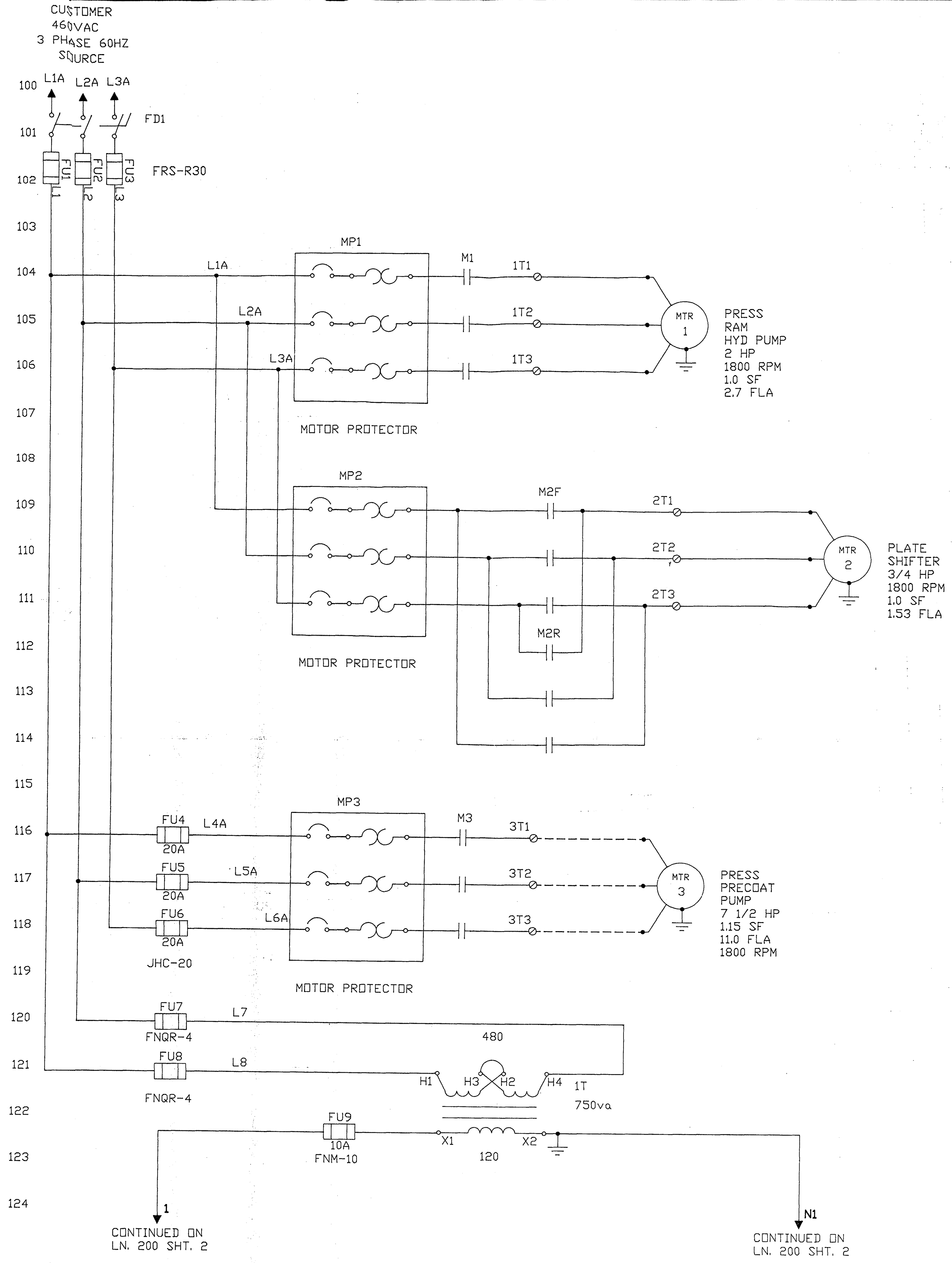


JAN 07 1992

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AUTHORIZATION OF NETZSCH, INC.

P/N 695993 Vendor Drawing
V5321 Sh 39

1	REVISE PER ENG. REQUEST	TH	09/23/91	BHP
REV.	DESCRIPTION	BY	DATE	APP'D.
 NETZSCH INC. EXTON, PA. 19341-1393				
TITLE SLUDGE FEED ASSEMBLY 800mm				
DRAWN TH DATE 07/19/91		CHK'D DATE		
SCALE .125=1		APP'D BHP		DATE 07/31/91
SHEET NUMBER of		SIZE DRAWING NUMBER		
ORDER/PROJECT NUMBER		C 41070711		
		SHT REV		



LEGEND

- FILTER PRESS CONTROL PANEL
- △ PRESS TERMINAL BOX -- FLOATING END OVERHEAD BEAM.
- △ PRESS TERMINAL BOX -- FIXED END OVERHEAD BEAM.
- △ PRESS TERMINAL BOX -- HEAD PLATE.
- △ FEED PUMP CONTROL PANEL
- CUSTOMER EQUIPMENT
- WIRING BY NETZSCH INCORPORATED
- - - WIRING BY CUSTOMER

Vendor Drawing
V5321 Sh 41

CUST.- NALCO CHEMICAL CORP.
JOB # - 401-591/91
P.O. # - D2755

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JAN 07 1992

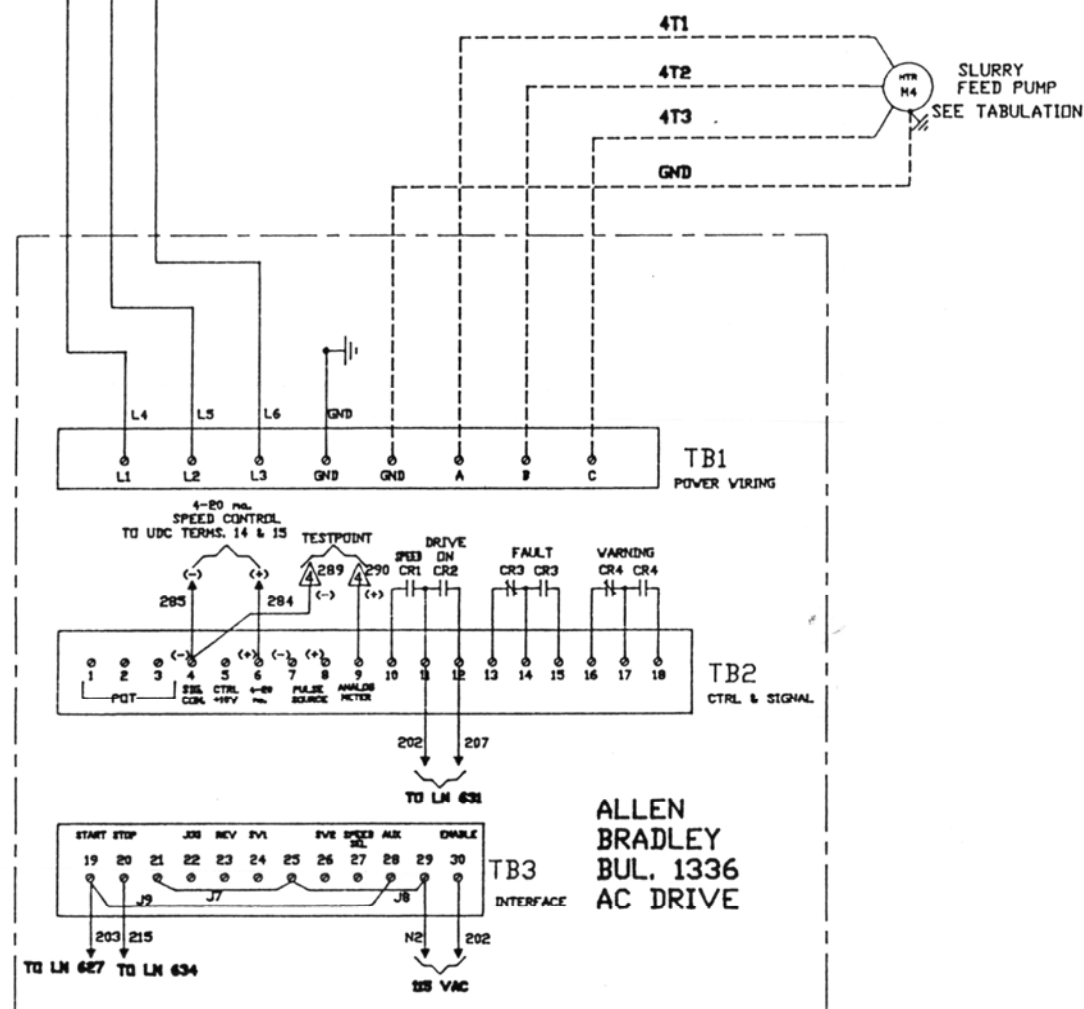
1	REV'D. TO CURRENT DESIGN LEVEL	DJJ	10/9/91	Don
REV.	DESCRIPTION	BY	DATE	APP'D.
NETZSCH INC. EXTON, PA. 19341-1393				
TITLE FILTRATION SYSTEM ELECTRICAL SCHEMATIC DIAGRAMS				
DRAWN	DJJ	DATE	8/15/91	CHK'D DCM
SCALE	1.0=1.0	APP'D	W.RUMMEL	DATE 9-27-91
SHEET NUMBER	1 of 7	SIZE		DRAWING NUMBER
ORDER/PROJECT NUMBER	0401059191			D 47017211
				SHT. REV

CUSTOMER
460VAC
3 PHASE 60HZ

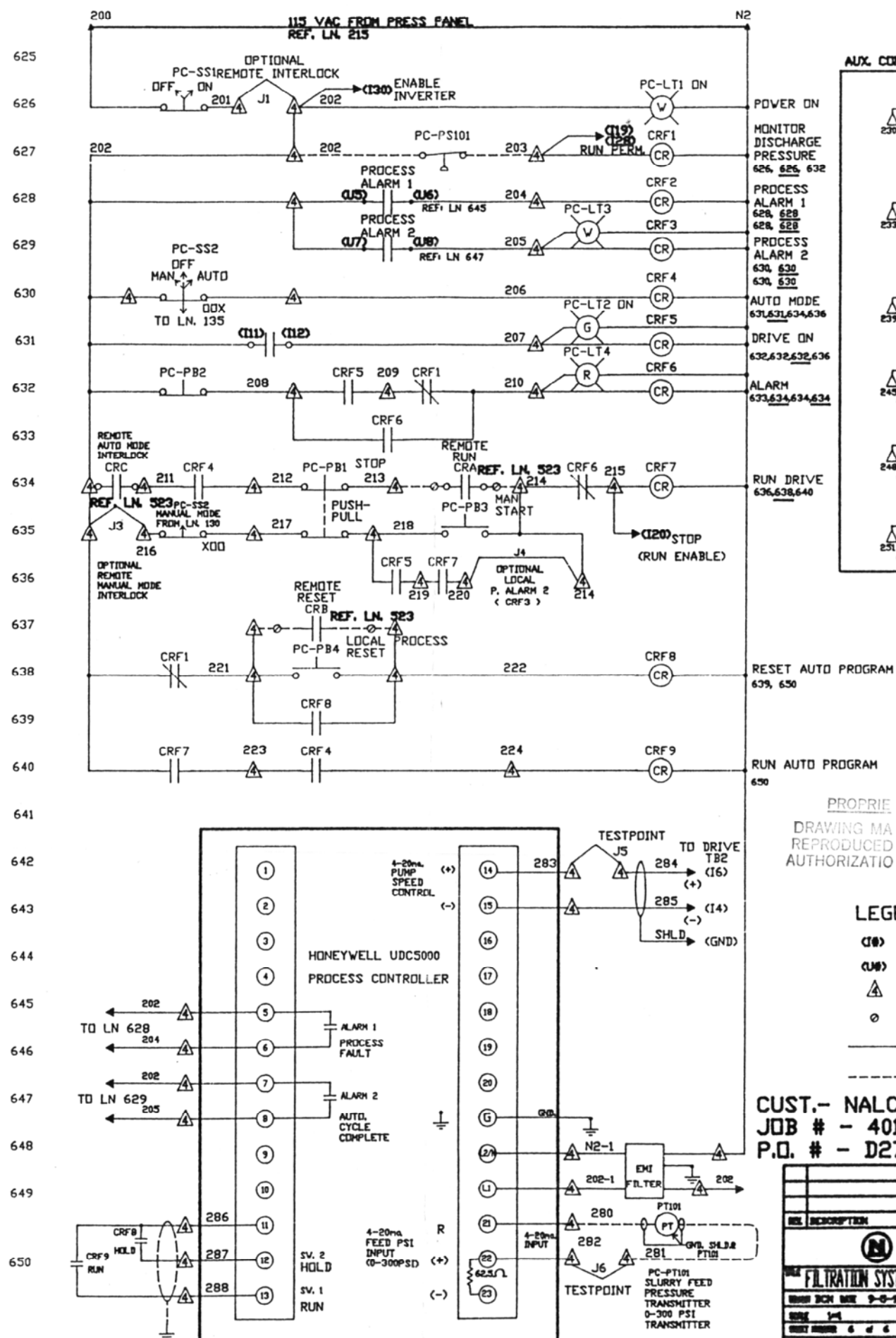
FEED PUMP LOAD & FUSING TABULATION

MOTOR TABULATION CHART												
HP	3	5	7.5	10	15	20	25	30				
F.A.	4.8	7.6	11.4	15.2	22.8	34.4	43.0					
F.U.	FU3	FU1	FU2	FU3	FU4	FU5	FU6	FU7				

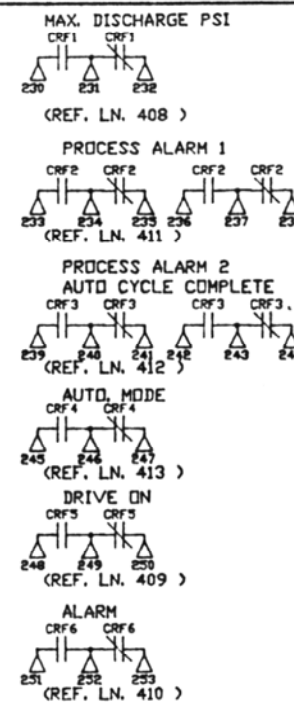
SEE
TABULATION



ALLEN
BRADLEY
BUL. 1336
AC DRIVE



AUX. CONTACTS FOR CUSTOMER INTERFACE

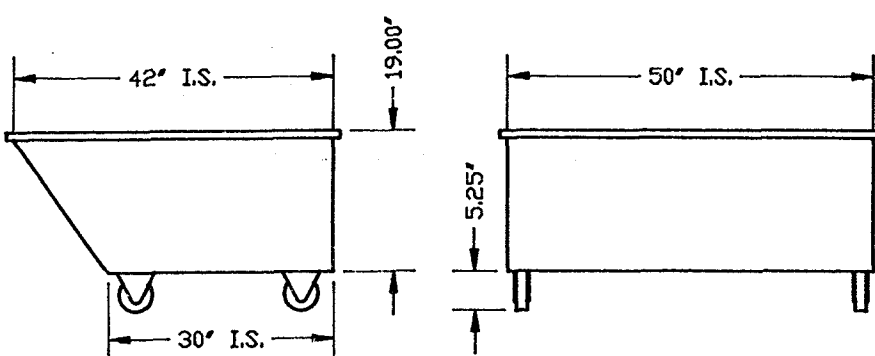
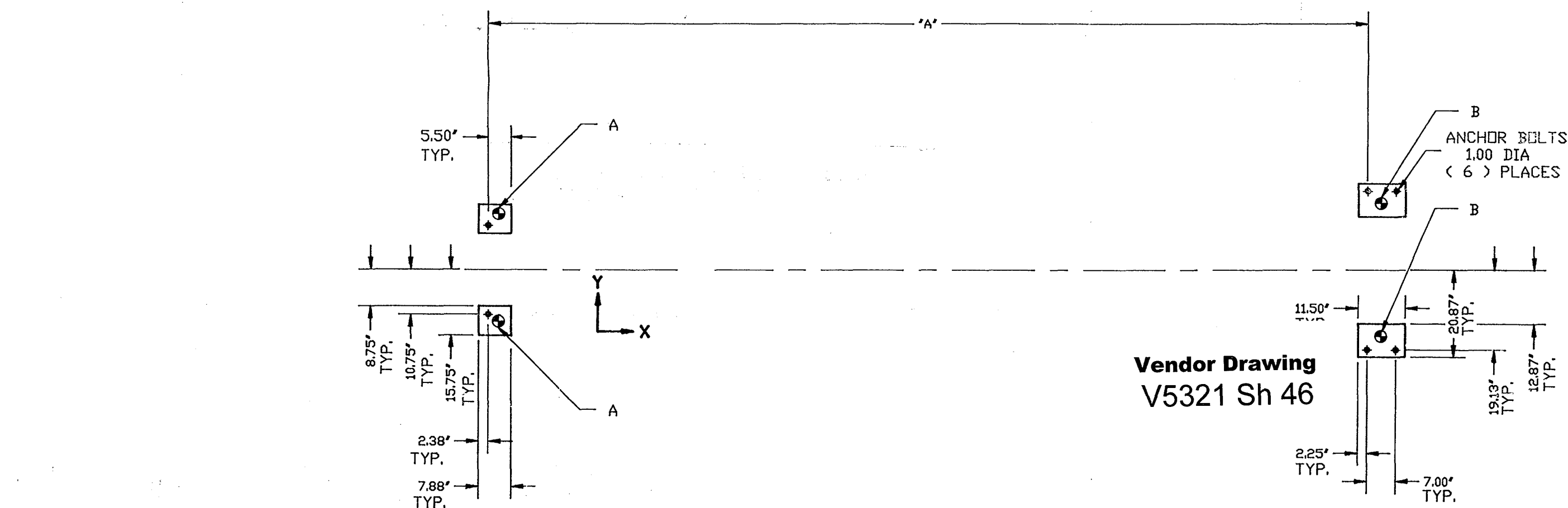
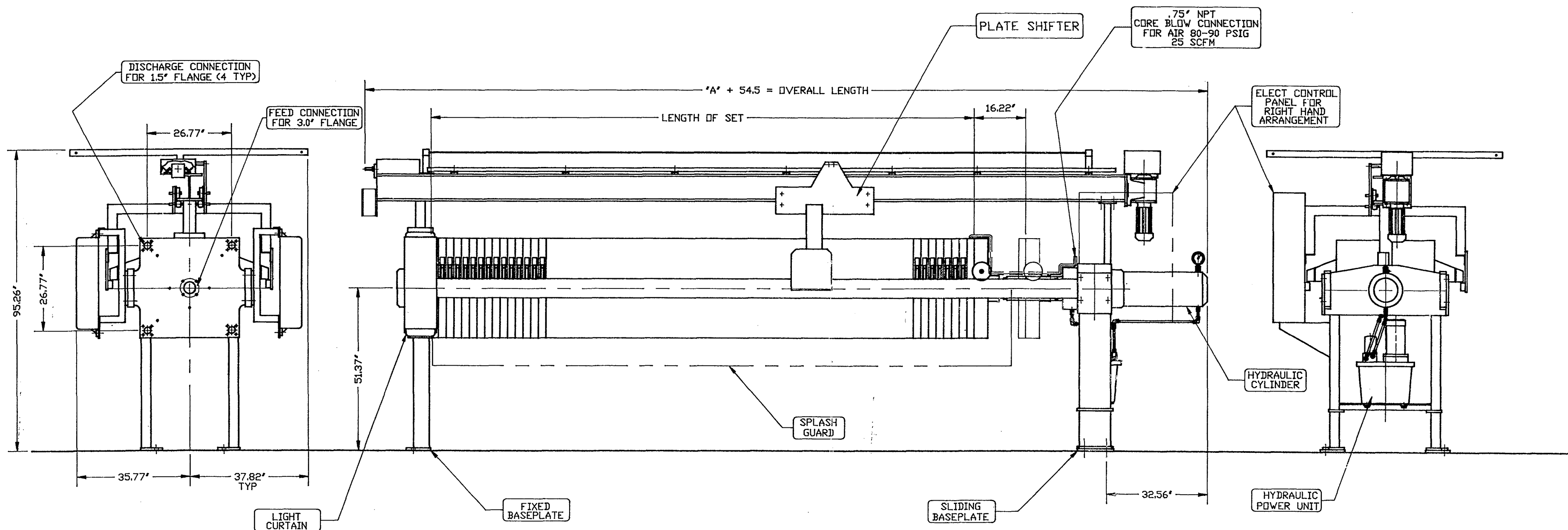


PROPRIETARY
DRAWING MAY BE
REPRODUCED
WITHOUT
AUTHORIZATION
**Vendor Drawing
V5321 Sh 44**

- LEGEND**
- (C) DRIVE TERMINAL
 - (U) CONTROLLER TERMINAL
 - (P) PUMP CONTROL TERMINAL
 - (F) FILTER PRESS CTRL. PNL.
 - (N) NIL WIRING
 - (---) CUSTOMER WIRING

CUST.- NALCO CHEMICAL CORP.
JOB # - 401-591/91
P.O. # - D2755

REV. DESCRIPTION		BY	CHK	APP.
1	NETZSCH INC.			
2	EXTD. PA. 19341-1393			
3	FILTRATION SYSTEM ELECTRICAL SCHEMATIC DIAGRAMS			
4	DATE: 1-1-81			
5	REV: 1-1-81			
6	REV: 1-1-81			
7	REV: 1-1-81			
8	REV: 1-1-81			
9	REV: 1-1-81			
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97	REV: 1-1-81			
98	REV: 1-1-81			
99	REV: 1-1-81			
100	REV: 1-1-81			



DIMENSION 'A' = 176.5' (LENGTH OF SET + 41')

NOTES: LOADS ARE WORST CASE AT EACH LOCATION

LOADS		
	VERT FORCE	MOMENT
A	3000 #	1040 ft# Y AXIS
B	3500 #	0

MODEL NUMBER 800I / 38 / 55

MOTORS HP

CLOSURE: 2.0 HP

PLATE SHIFTER: 0.75 HP.

POWERSUPPLY: 460VOLT, 3 PHASE, 60HZ

INITIAL NO. OF CHAMBERS: 38

MAXIMUM NO. OF CHAMBERS 55

LENGTH OF SET 94.7' AS SHIPPED

LENGTH OF SET 135.5' MAXIMUM

CAPACITY: 20.1 CU.FT.

EXPANDABLE TO: 29.2 CU.FT.

CAKE THICKNESS: 30 MM. (1.18 IN.)

PRESS WEIGHT: EMTY 11,000

FULL 13,000

CUSTOMER: NALCO CHEMICAL CO.

0	RELEASE TO MFG.	TH	09/23/91	BHP
REV.	DESCRIPTION	BY	DATE	APP'D.
NETZSCH INCORPORATED EXTON, PA. 19341-1393				
TITLE GENERAL LAYOUT - 800mm FILTER PRESS				
DRAWN TH DATE 07/11/91		CHK'D DATE		
SCALE .03846=1		APP'D BHP DATE 08/01/91		
SHEET NUMBER of		SIZE DRAWING NUMBER		
ORDER/PROJECT NUMBER		C 41069110		
0401059191		SHT REV		

HOPPER DETAIL
2 SUPPLIED WITH PRESS

JAN 07 1992

PROPRIETARY DRAWING
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QUANTITY- 1
DESIGN DATA:

CAPACITY- 115 GPM
MATERIAL- SLUDGE
DISCHARGE PRESSURE- 225 PSI
OPERATING SPEED- 525 RPM

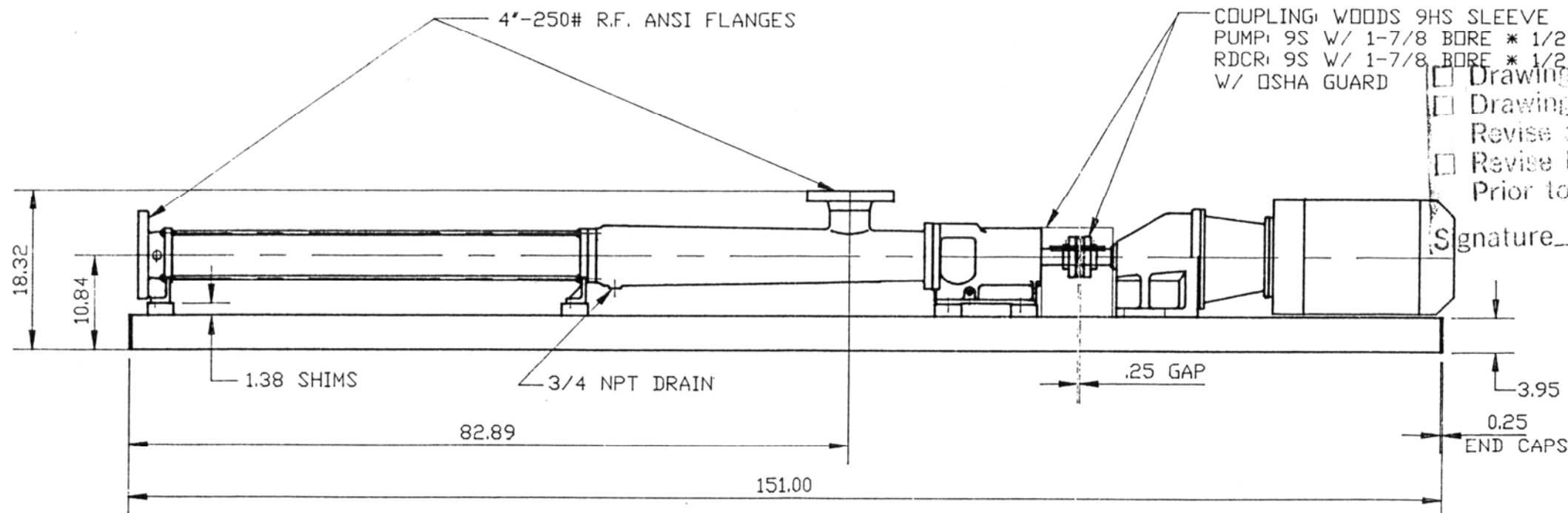
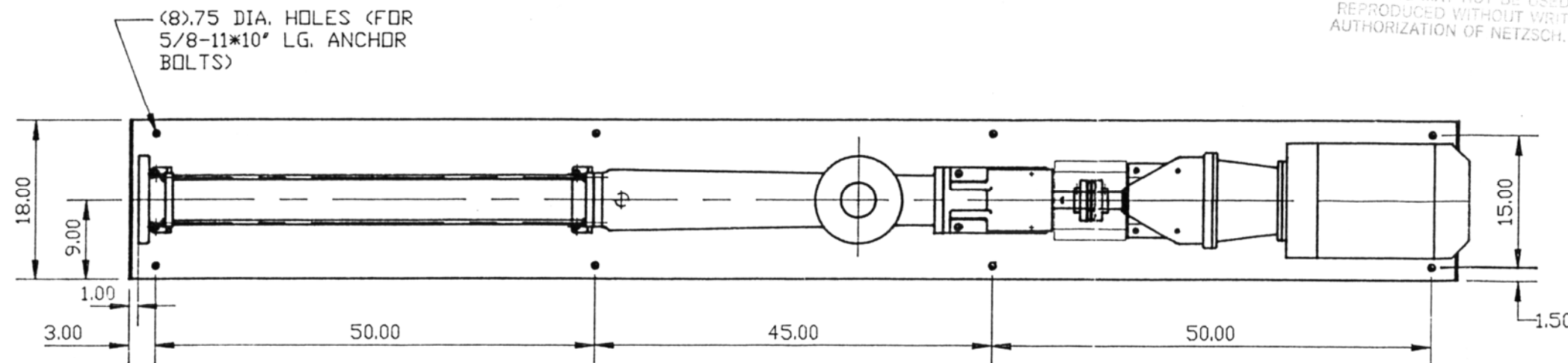
MATERIALS OF CONSTRUCTION:

PUMP BODY- 316 SS
INTERNALS- 316 SS
ROTOR- 316 SS HCP
STATOR- BUNA-N
JOINTS- DOUBLE SEAL GEAR
SHAFT SEAL- TEFLON/KEVLAR

MOTOR DATA:

TYPE- AC
MFR- RELIANCE or EQUAL
1750 RPM 20 HP 1.15 SF
3 PHASE 60 HERTZ 230/460 VOLTS
CLASS F INSULATION FRAME 256TC
ENCLOSURE- TEFC-XEXT

NOTES:



☐ Drawing Approved, Proceed with Fabrication
☐ Drawing Approved, noted, Proceed with Fabrication
Revise and Resubmit for info only
☐ Revise Drawing, noted, Resubmit for Approval
Prior to proceeding with Fabr

Vendor Drawing
V5321 Sh 47

Signature

JOB# 401-591-91

NOTES:

- 1) DO NOT SCALE FORMAT DRAWING.
- 2) TOLERANCE ± 0.25 "
- 3) ALL DIMENSIONS ARE IN INCHES.
- 4) BASEPLATE FABRICATION- STRUCTURAL STEEL
- 5) APPROX. GROSS WEIGHT NOT TO EXCEED LBS.

PROPRIETARY DRAWING
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AUG 01 1991

PLOT SCALE: 1/16=1

A REL TO SALES		JMAC7/29/91		347
REV.	DESCRIPTION	BY	DATE	APPD.
NETZSCH INCORPORATED EXTON, PA. 19341-1393				
TITLE 4NE60A PRESS FEED PUMP SYSTEM				
DRAWN JMAC DATE 7/29/91		CHKD	DATE	
ENGR	ORDER NUMBER	APPD	DATE 7/30/91	SHT REV
PROJECT NALCO		B 4107201A		