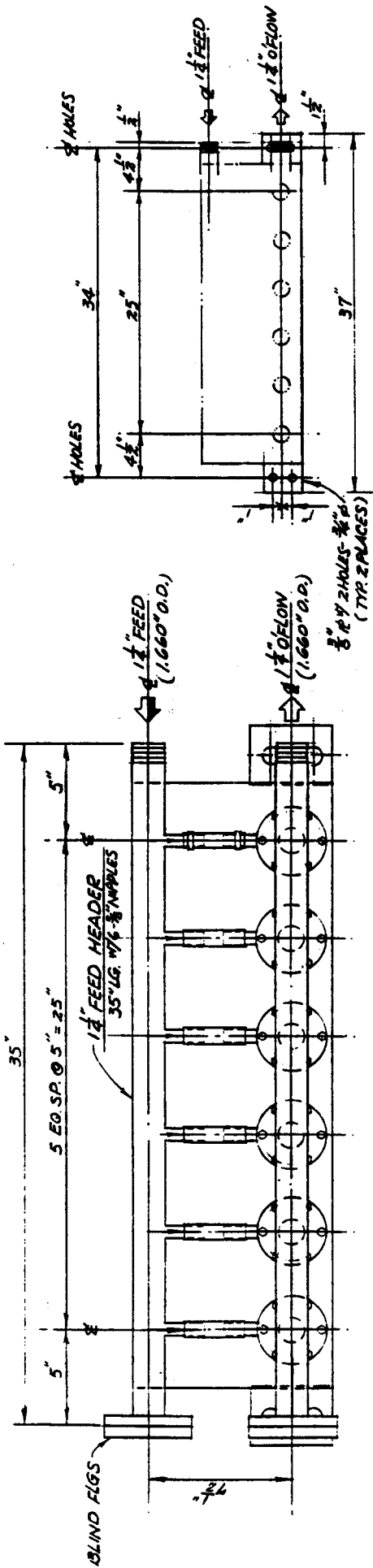
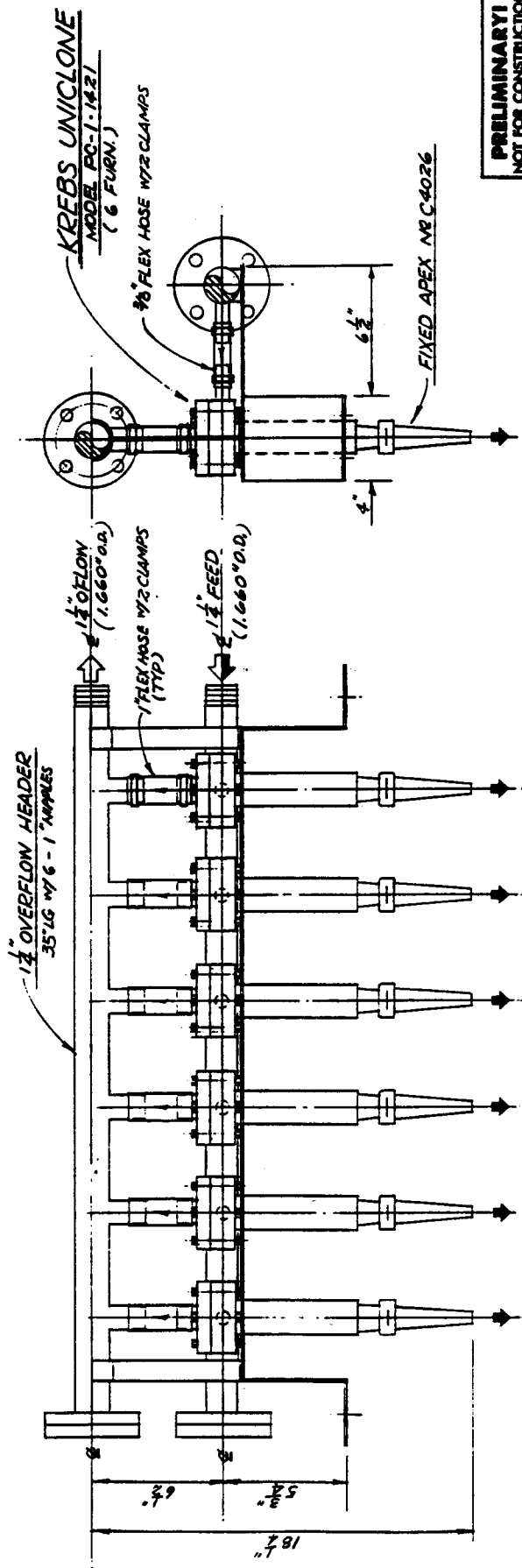




PLAN

ANCHOR BOLT PLAN



SIDE ELEVATION

END ELEVATION

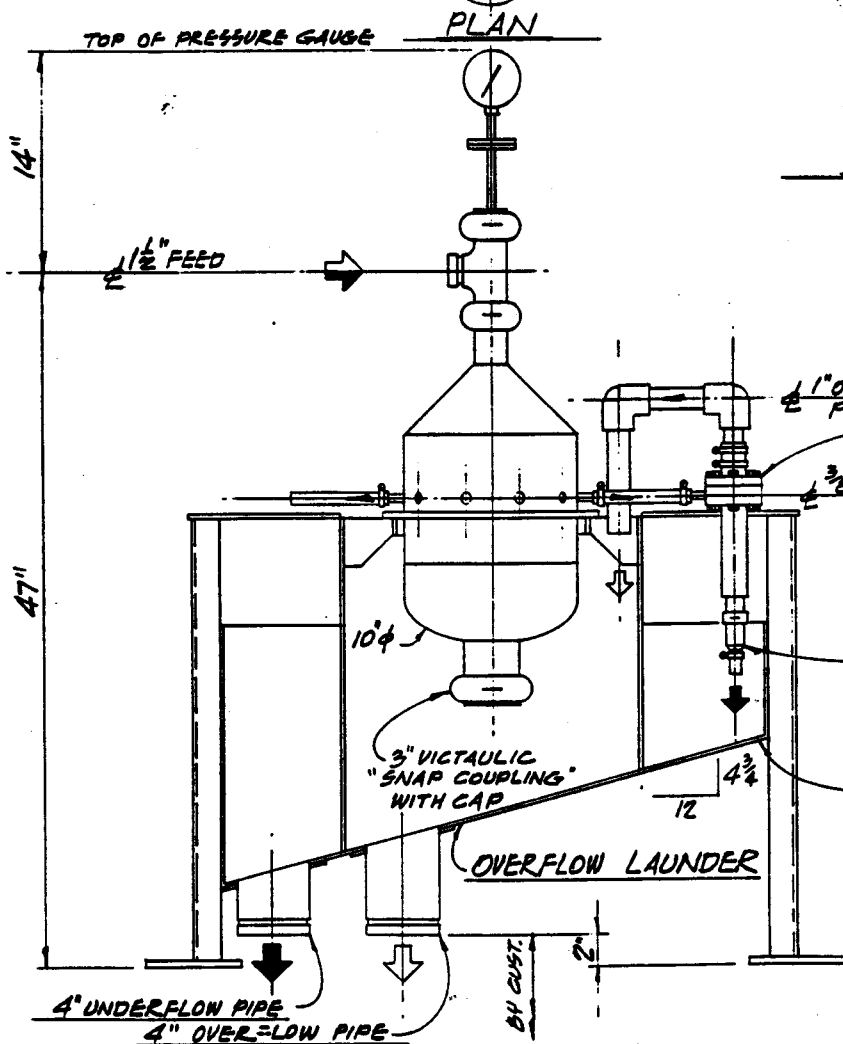
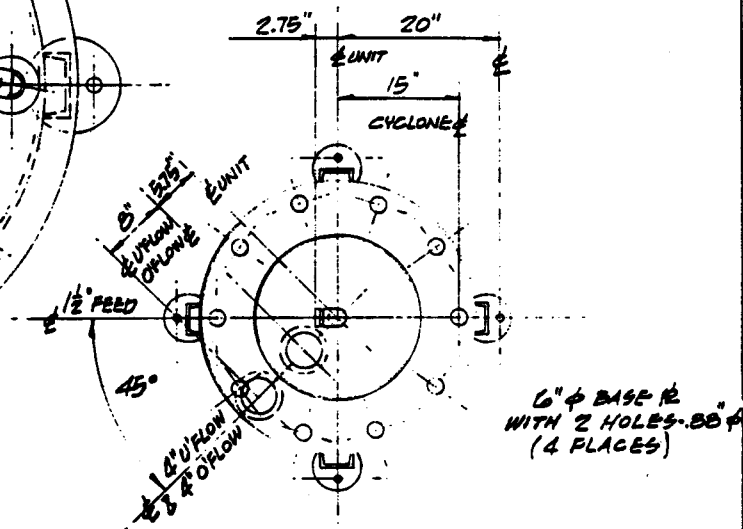
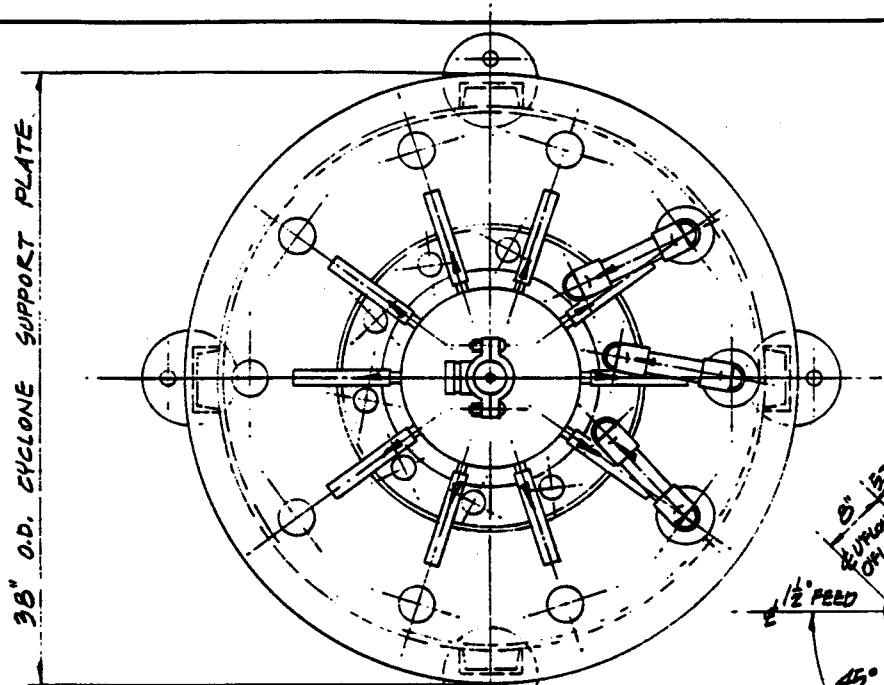
PRELIMINARY
NOT FOR CONSTRUCTION

NOTES:

1. FOR UNICLONE DIMENSIONS SEE DWG. S-1421-M1021.
2. CONNECTING FITTINGS ARE HOSE CONNECTIONS.
3. WEIGHTS: BARE =
SLURRY =

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KREBS ENGINEERS		MEMLO PARK, CALIF. 94025	
1205 CHRYSLER DRIVE		Date: 5-10-84	
Scale: 1/4" = 1'-0"	Drawn By: J.C.	Checked By: J.C.	Approved By: J.C.
GENERAL ARRANGEMENT			
6 MODEL PC-1-1421 KREBS UNICLONE			
IN-LINE MANIFOLD SYSTEM			
DWG. NO. M-1021		TOLERANCE SCHEDULE UNLESS OTHERWISE NOTED:	
		-24" ± 1/16"	
		-24" ± 1/16"	
		-24" ± 1/16"	



ANCHOR BOLT PLAN

KREBS UNICLONE
MODEL PC-1-1421

ADJUSTABLE APEX N° C4134R

UNDERFLOW LAUNDER

PRELIMINARY!
NOT FOR CONSTRUCTION

ELEVATION-SECTION

(SEE A.B. PLAN FOR PIPING & FRAMING ORIENTATION)

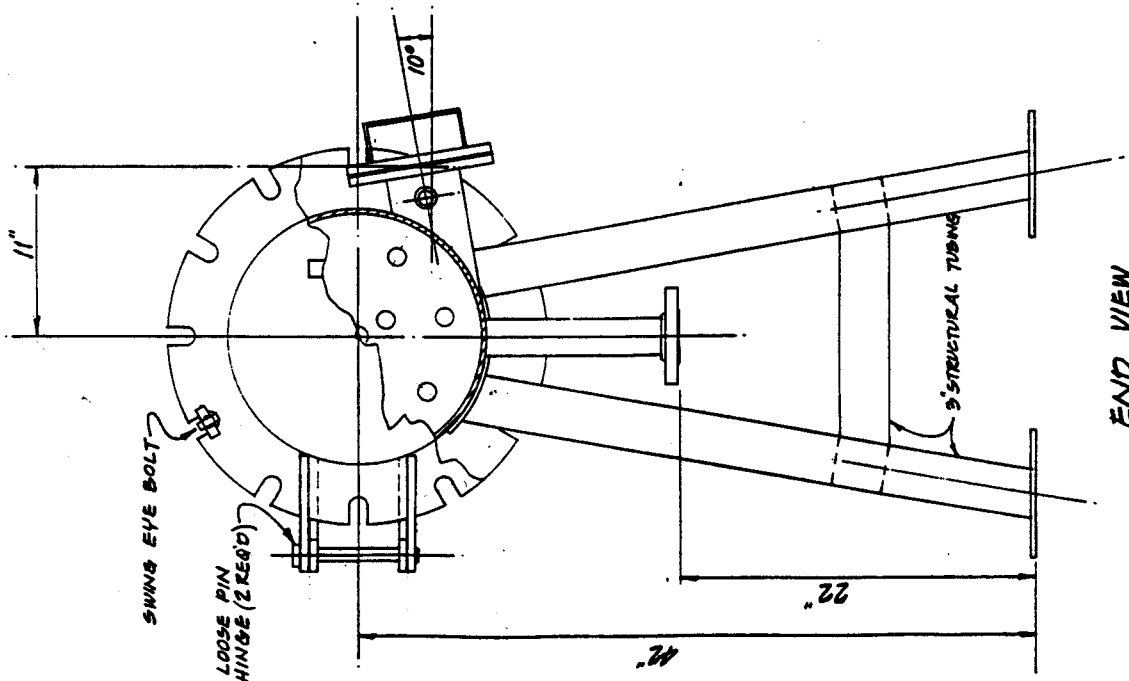
NOTES:

1. FOR CYCLONE DIMENSIONS, SEE DRAWING S1421-M957
2. CONNECTING FITTINGS ARE STANDARD "VICTAULIC," UNLESS OTHERWISE NOTED.
3. WEIGHTS: BARE: OPERATING:
- 4.

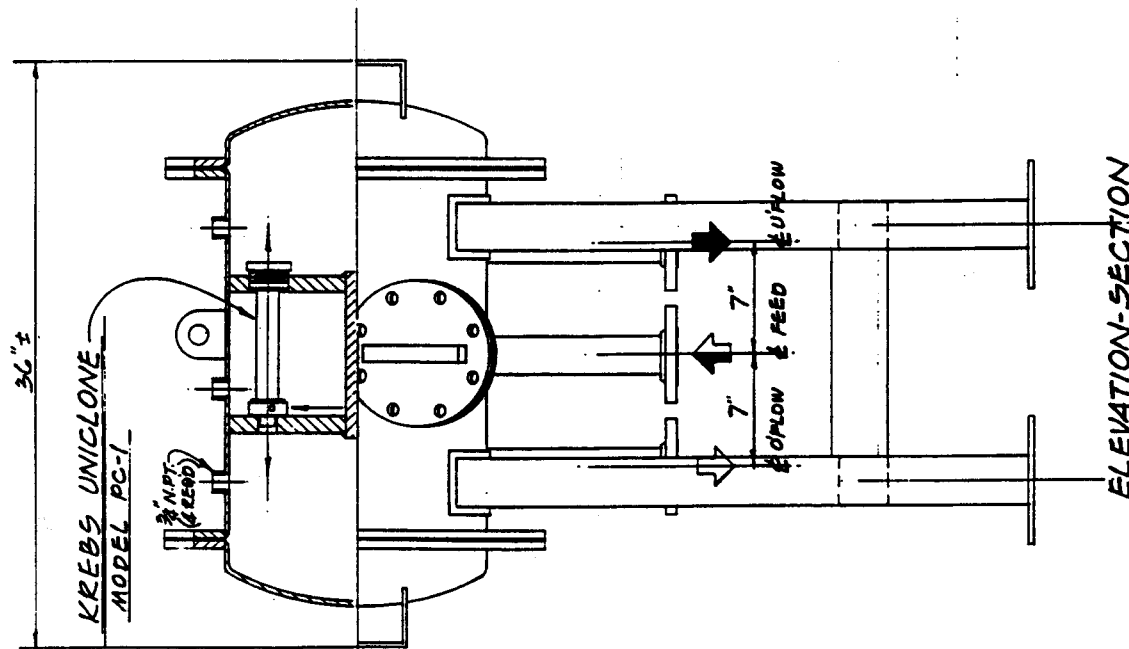
TOLERANCE SCHEDULE: UNLESS OTHERWISE NOTED.		
±.01" ±.005"	±.01" ±.005"	±.01" ±.01"

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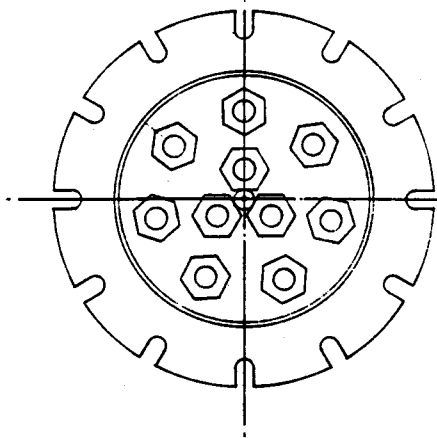
KREBS ENGINEERS			
1205 CHRYSLER DRIVE		MENLO PARK, CALIF. 94025	
Scale: <i>1/2"</i>	Date: 11-12-82	Des. By: SAS	Appr. By: <i>[Signature]</i>
GENERAL ARRANGEMENT 10 MODEL PC-1-1421 KREBS CYCLONES RADIAL MANIFOLD SYSTEM			
Revisions:		DWS. NO. M957	



END VIEW

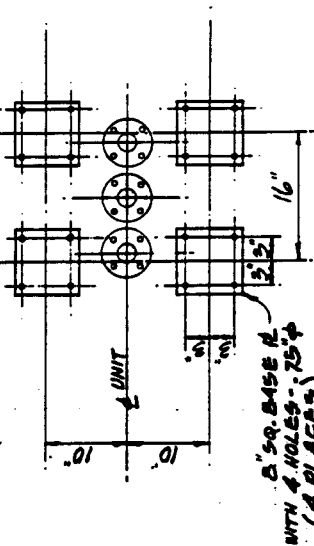


ELEVATION-SECTION



END VIEW

(FLANGED HEAD REMOVED-LESS NOT SHOWN)



ANCHOR BOLT PLAN

NOTES:

1. FEED, OVERFLOW, & UNDERFLOW CONNECTIONS ARE 2" STANDARD ASA, 150#, RAISED FACE STAINLESS STEEL FLANGES.
2. ALL MATERIAL 316L STAINLESS STEEL, EXCEPT MILD STEEL SUPPORT LEGS.

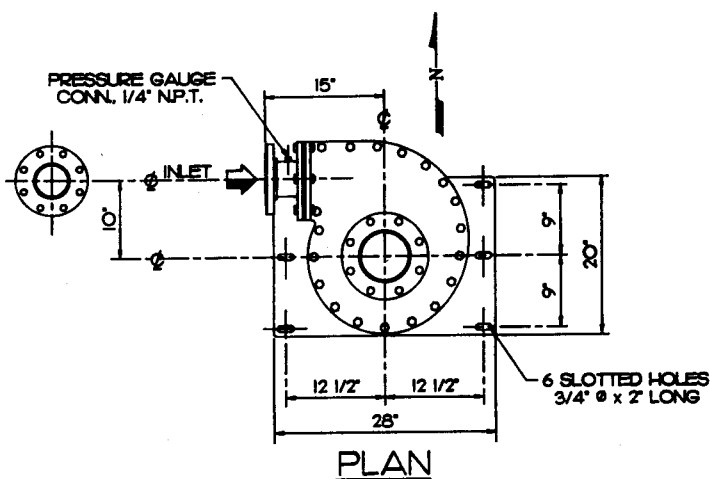
PRELIMINARY!
NOT FOR CONSTRUCTION

USE WITH PARTS LIST PL 2594

KREBS ENGINEERS		1205 CHRYSLER DRIVE		MENLO PARK, CALIF. 94035	
Scale:		Date: 1/9/81		Des. By: SLS	
Model: 10-M892		App'd By:		DWE NO. M892	
GENERAL ARRANGEMENT		WITH 10 PC-1 KREBS UNICLONES			

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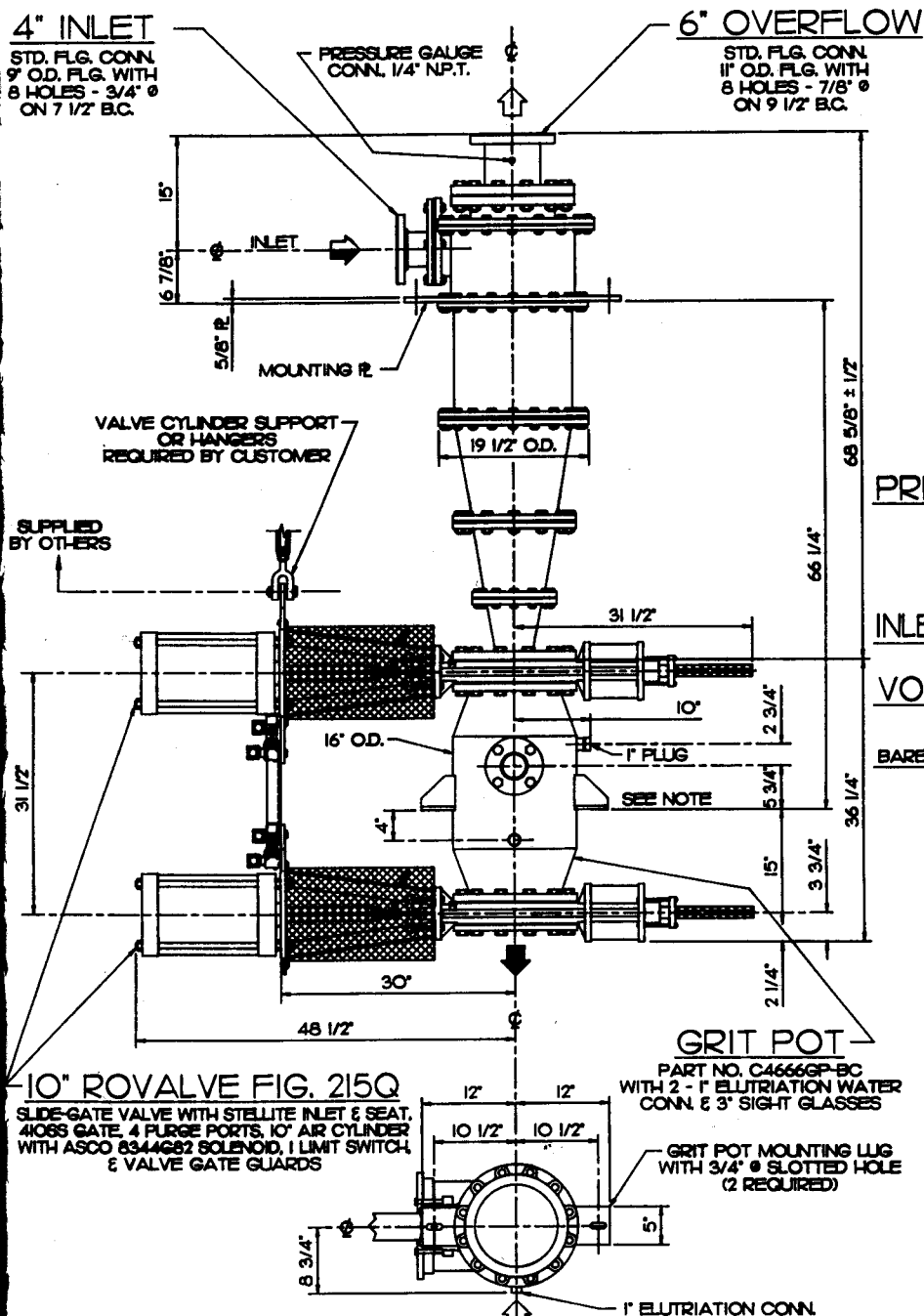
TOLERANCE SCHEDULE UNLESS OTHERWISE NOTED:	
- .01" - .03"	+ .00" - .03"
- .04" - .05"	+ .00" - .05"
- .06" - .08"	+ .00" - .08"
- .09" - .12"	+ .00" - .12"



KREBS CLEANER

MODEL P15H-GP-1549

USE WITH PARTS LIST PL2755-BC-1



NOTE: WHEN INSTALLING CLEANER, INSERT SHIMS UNDER GRIT POT MOUNTING LUGS AS NECESSARY TO ENSURE POSITIVE SUPPORT AT THIS LEVEL.

PRESSURE GAUGE & FITTINGS

FURNISHED _____

NOT FURNISHED _____

INLET HEAD LINER PART NO. 152R-RH SIZE 11"

VORTEX FINDER PART NO. 205N-NH SIZE 5.25"

BARE WEIGHT SHIPPING WEIGHT

10" ROVALVE FIG. 215Q
SLIDE-GATE VALVE WITH STELLITE INLET & SEAT,
410SS GATE, 4 PURGE PORTS, 10" AIR CYLINDER
WITH ASCO 8344682 SOLENOID, 1 LIMIT SWITCH
& VALVE GATE GUARDS

GRIT POT
PART NO. C4666GP-BC
WITH 2 - 1" ELUTRIATION WATER
CONN. & 3" SIGHT GLASSES

LOWER VALVE & SIGHT GLASSES REMOVED FOR CLARITY

TOLERANCE SCHEDULE: UNLESS OTHERWISE NOTED.		
-0.005" to +0.005"	+0.005" to +0.010"	+0.010" to +0.015"

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3	11-8-94	ALTER VALVE & ADD DIMENSIONS.
2	10-4-94	ADD VALVE NOMENCLATURE.
1	9-8-94	ROTATE GRIT POT MNTG. LUGS & LOWER ELUTRIATION WATER CONN. 90°.
REVISION DESCRIPTION		
NO.	DATE	REVISION DESCRIPTION
REVISION STATUS		
Dwn. By: JRB		
Date: 11-15-94	Scale: —	Dwn. By: Date: 7-20-94
Apprd. By: [Signature]		Apprd. By: [Signature] M.O.
1205 CHRYSLER DR. MENLO PARK, CA 94025		
GENERAL ARRANGEMENT KREBS CYCLONE - MODEL P15H-GP-1549 WITH C4666GP-BC GRIT POT WITH 3" SIGHT GLASSES		
B.M. 00-0001	C	© KREBS ENGINEERS 1994 DWG. NO. SI549-BC-1

REVISION 2

PL 2755-BC-1-54237

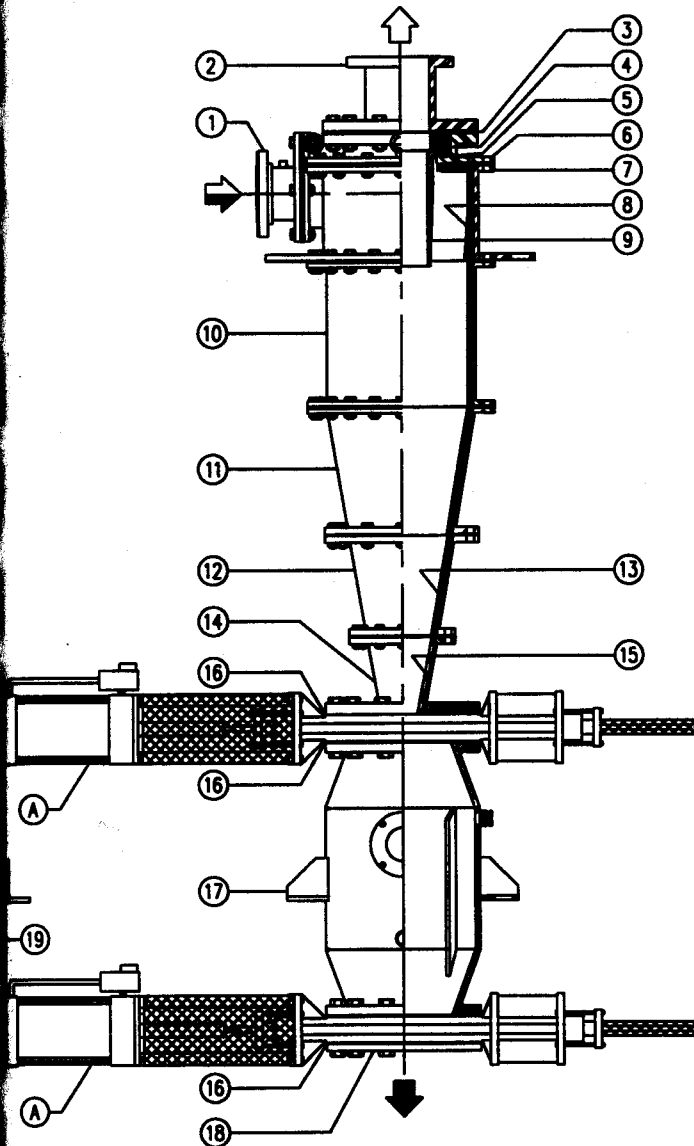
KREBS CLEANER PARTS LIST

Model P15H-GP-1549 With No. C4666-ST-BC Grit Pot

BELOIT CORPORATION

CUSTOMER PO NO: 45602-H / SERIAL NO: 54237 - 54241

PL 2755-BC-1-54237 Revised To Date: October 20, 1994



PART NUMBER	DESCRIPTION
1. W152F-SS-4F	Inlet Flange Adapter Spool Piece, 4" Size Stainless Steel.
2. C2411-SS	Overflow Flange Adapter Spool Piece, 6" Size, Stainless Steel.
3. W155G-RN	Gasket, Neoprene.
4. W155FSR-RG	Spacer Ring, Gum Rubber.
5. 205G-7-RN	Gasket, Neoprene.
6. W153ST-RH	Top Cover Plate, Nitrile Lined Steel.
7. C2467-ST-MF	Inlet Head Section, Steel.
8. 152R-RH-11	Inlet Head Liner, 11 Sq. In. Nozzle Orifice Sizes, Nitrile.
9. 205-NH-5.25	Vortex Finder 5.25" Size, Nihard, Sizes Available: 4", 4.5", 5.25" & 6".
10. W154ST-RH	Cylinder Section, Nitrile Lined Steel.
11. W194-10ST-RH	Cone Section, Nitrile Lined Steel.
12. C4713-ST	Cone Section, Steel.
13. 94-6R-RH	Cone Liner, Nitrile.
14. C4708-ST	Cone Section, Steel.
15. 64N-NH	Cone Liner, Nihard.
16. C5017G-RN	Gasket, 3 Required, Neoprene.
17. C4666-ST-BC	Grit Pot, With 3" Sight Glasses & Rotation Breakers, Steel.
18. C4653-ST	Lower Retainer Plate, Steel.
19. SUPPORT ASSY.	Valve Support Assembly, Steel.

STANDARD LINER MATERIAL

Nitrile & Nihard.

Other Material Available Upon Request.

Krebs Automatic Purge System Consisting Of The Following Items:

- 10" Rovalve Fig. 215Q O-Port Slide Gate Valves (Serial No: 8022802 For All Valves), Stellite Hardfaced Inlet And Seat, 410 SS Induction Hardened Gate, 4 Purge Ports, Stellite Clad Gate Guides, 10" Bore Atlas Model "AL" Heavy Duty Air Cylinder, Asco 8344G82 4 Way Solenoid Valve, And (1) MLS-1 Limit Switch To Indicate Closed Position.
- HN368-HP51-HP58: Timer System Incorporating A 0-5 Hour Adjustable Entrance Timer & A 2-60 Second Adjustable Dump Timer; Supply Includes Splash Proof Enclosure Box With On/ Off Switch.
- 2 Each 8344G-82 Two Position, Four-Way Solenoid Valves; 1 Phase, 60 Cycle, 115 Volt.
- Combination Air Filter/Air Regulator With .5" N.P.T. Connection.
- 1 Set Neoprene Air Hose & Fittings.

Material Symbols Are:	CD: 87% Alumina	CK: RT Silicon Carbide	G: Coal	PK: Kynar PVDF	RE: Butyl	RE: Nitrile	RE: Chlorobutyl	RE: Urethane II	SS: Stainless Steel
AL: Aluminum	CE: Reaction Bonded Silicon Carbide	CM: Monofrax	IC: Inconel	PI: Nylon	RC: Royal Cast	RE: High Temperature Urethane	RP: Hypalon	RE: Ultra High Temp. Urethane	SSB: Boril Coated SS
AR: Air Plate	CG: Silicon Carbide Composite	CS: Silicon Carbide	ML: Monel	PP: Polypropylene	RD: Compressed Non-Asbestos	RE: Compound 9150	RQ: Food Grade Rubber	RY: Urethane II (95)	SDB: Boril Coated SD
AT: Alloy 20	CH: Reaction Bonded Silicon Carbide	CS: Cast Steel	NH: Nihard	PT: Teflon	RF: EPDM	RJ: White Nitrile	RT: Urethane II (Food Grade)	RZ: Urethane V	ST: Carbon Steel
BPC: Blue Pole Crepe	CI: Reaction Bonded Silicon Carbide	CK: Reaction Bonded Silicon Carbide	NR: Nirox	PA: Plastic	RF: Food Grade Neoprene	RK: Urethane HT	SA: Alloy (Name)	SD: Stainless Duplex	T: Titanium
CA: 99.5% Alumina	CI: Reaction Bonded Silicon Carbide	CZ: Sintered Alpha Silicon Carbide	PC: CPVC	PV: PVC	RE: Vitrethane	RL: White Urethane(95)	SE: Stainless Duplex	SC: CD4MCU	X: Special Feb.
CB: 96% Alumina	CI: Cast Iron		PF: FRP	Compound 6063	RG: Gum Rubber	RM: Neoprene	RV: Viton		XZ: Corrosion Resistant Urethane

PLEASE SPECIFY PART NUMBER AND CYCLONE SERIAL NUMBER WHEN ORDERING PARTS.



1205 CHRYSLER DRIVE • MENLO PARK, CALIFORNIA 94025-9928 • TEL: (415) 325-0751

TELEX: WUI 348403 or RCA 278769

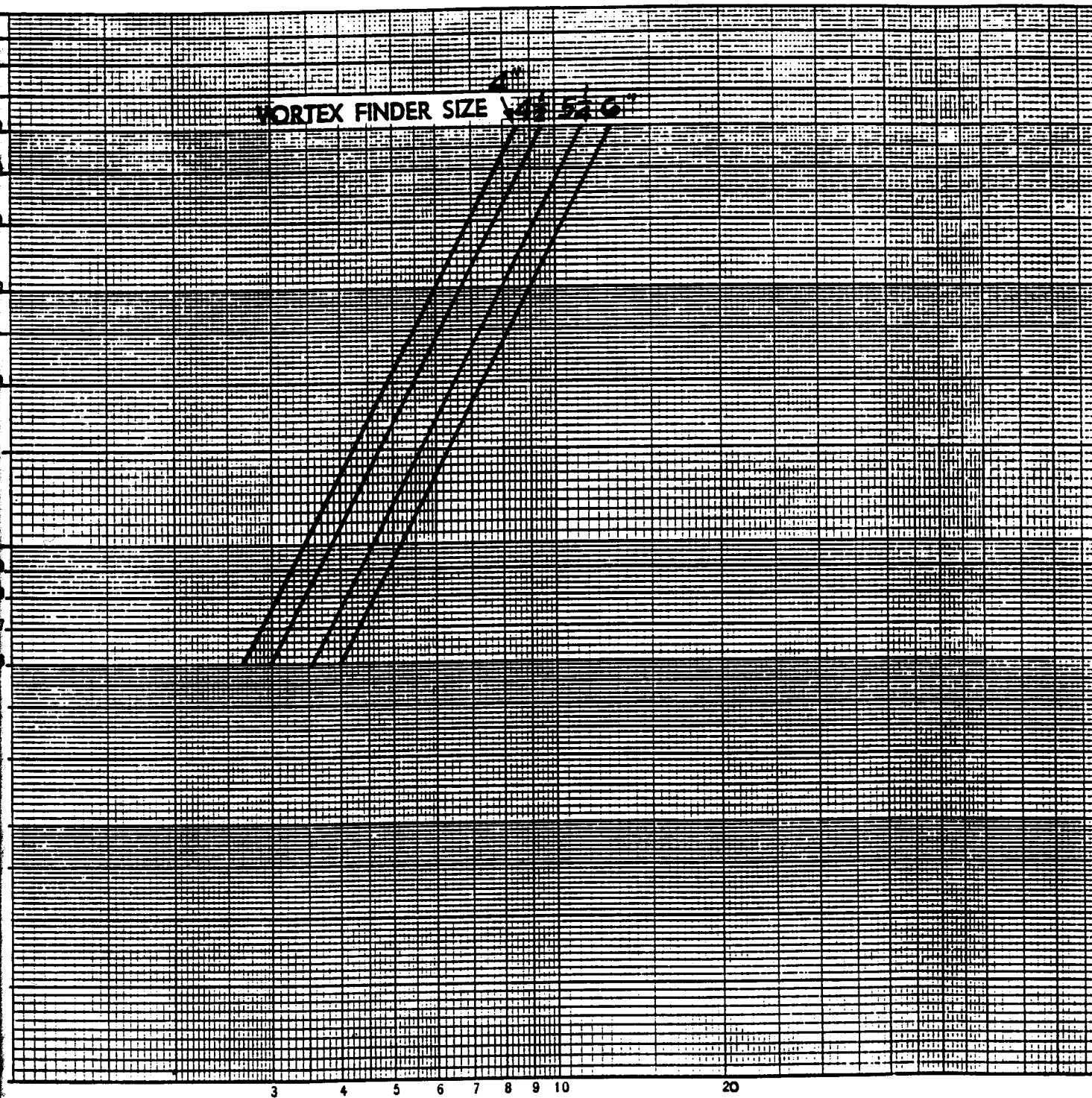
FAX: (415) 326-7048

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54237 BCW

KREBS CLEANER
MODEL P15

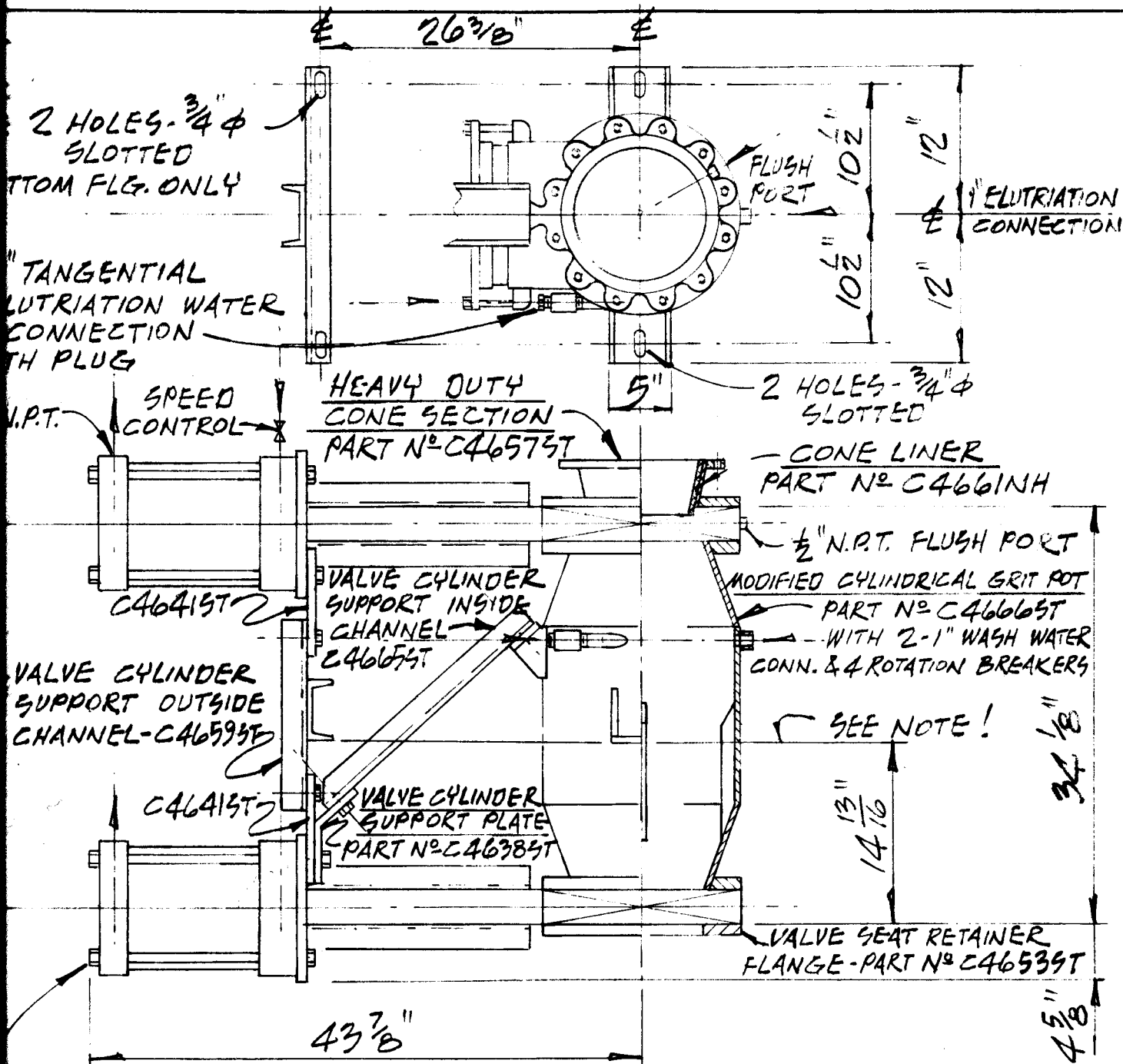
CAPACITY CURVE
NO. P15-110-467



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CAPACITY IS BASED ON WATER AT AMBIENT TEMPERATURE AND APEX DIAMETER EQUAL TO ONE HALF THE VORTEX FINDER DIAMETER, AND MAY VARY AT DIFFERENT RATIOS.

KREBS ENGINEERS
1206 CHRYSLER DRIVE • MENLO PARK, CALIF. 94025

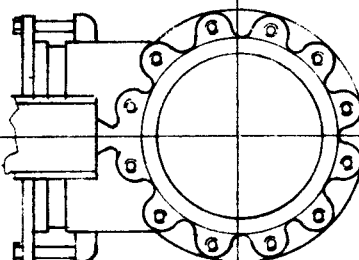


10" FABRI-VALVE FIG 45DP2
WAFFER VALVE WITH 10" AIR
CYLINDER & LIMIT SWITCH
TOP & BOTTOM

NOTE!

WHEN INSTALLING CLEANER, INSERT
SHIMS UNDER GRIT POT MOUNTING LUGS
AS NECESSARY TO ENSURE POSITIVE
SUPPORT AT THIS LEVEL!

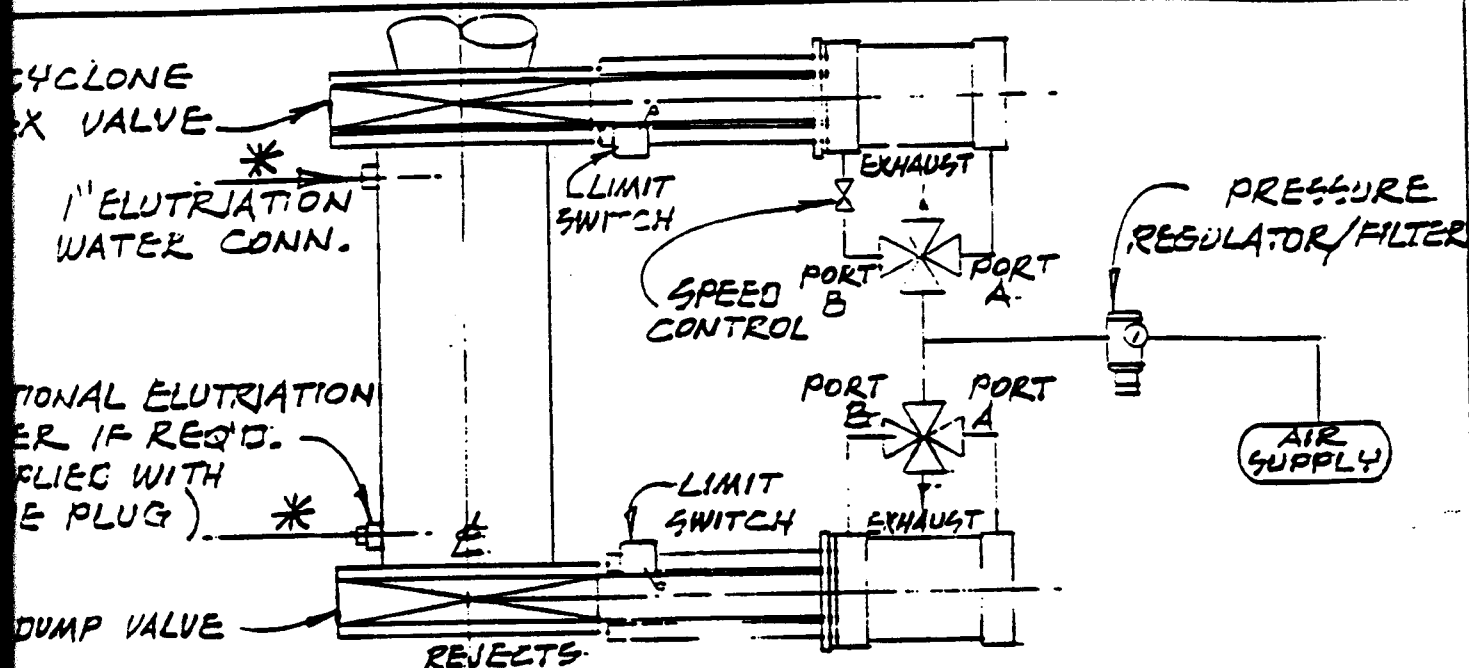
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MODIFIED
HEAVY WALL
GRIT POT

SK1030
REFERENCE: SK924, SK1023

KREBS ENGINEERS			
1205 CHRYSLER DR.		MENLO PARK, CALIF. 94025	
Scale: <i>1/2"</i>	Date: <i>10-11-83</i>	Dwn. By: <i>SAS</i>	Appd. By: <i>JRG GAS</i>
<i>MODIFIED CYLINDRICAL GRIT POT ASSEMBLY N^o C4666GP</i>			
Revisions: <i>9-8-84</i>		DWG. NO. <i>SK 986</i>	
<i>REVISED TO DATE-SAS</i>			



INSTRUCTIONS FOR SETTING VALVES

1. THE SPEED CONTROL IS PRESET AT OUR FACTORY, AND SHOULD NOT REQUIRE SETTING.
2. IF ANY RESETTING IS REQUIRED AT SITE, PROCEED AS FOLLOWS:
 - i) THE CYCLONE APEX VALVE SHOULD CLOSE QUICKLY AND OPEN VERY SLOWLY, OTHERWISE A SURGE OF AIR WILL BE INTRODUCED INTO THE PULP STREAM.
 - ii) THE DUMP VALVE SHOULD OPEN & CLOSE QUICKLY.
 - iii) THE LIMIT SWITCHES ARE WIRED SO THAT THE DUMP VALVE COMMENCES TO OPEN IMMEDIATELY AFTER THE CYCLONE APEX VALVE CLOSURES. LIKEWISE, THE CYCLONE APEX VALVE SHOULD COMMENCE TO OPEN JUST AS THE DUMP VALVE CLOSURES.

MAIN REQUIREMENTS ARE:

- a.) THAT BOTH VALVES SHOULD NOT BE OPEN (OR PARTIALLY OPEN) AT THE SAME TIME, SINCE THIS ALLOWS DIRECT LOSS OF PULP FROM THE CLEANER.
- b.) THAT BOTH VALVES NOT BE CLOSED AT THE SAME TIME FOR ANY APPRECIABLE PERIOD, SINCE THIS RESULTS IN PRESSURIZING OF THE GRIT POT WITH HIGH PRESSURE ELUTRIATION WATER. A MOMENTARY PERIOD WITH BOTH VALVES CLOSED IS SATISFACTORY.
- iv) NORMAL AIR SUPPLY PRESSURE: 80-100 PSIG NOT TO EXCEED 100 PSIG!
- v) NORMAL ELUTRIATION WATER PRESSURE: 50 TO 70 PSIG NOT TO EXCEED 100 PSIG!

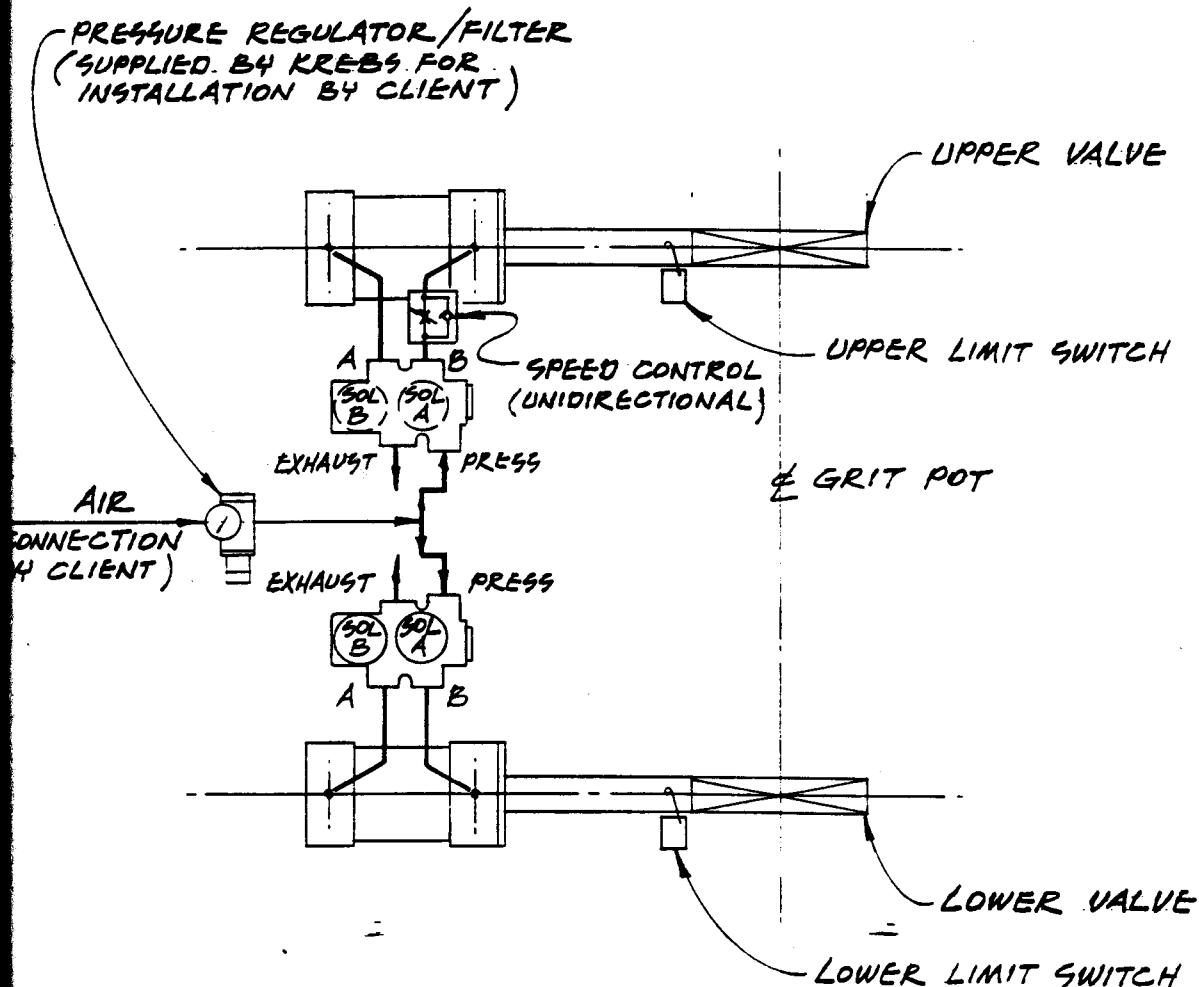
REFERENCE: 5K1023 & 5K1030

KREBS ENGINEERS			
1208 CHRYSLER DR. MENLO PARK, CALIF. 94025			
Scale: NONE	Date: 1/18/83	Des. By: SAG	Appr. By: RS
CYLINDRICAL GRIT POT			
AUTOMATIC REJECTS-DISCHARGE			
VALVE SETTING INSTRUCTIONS			
Replaces 5-6-84 & 5-6-85		Dwg. No. 5K 924	
REVISED TO DATE			

PIPING SUPPLIED BY CUSTOMER!

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ARRANGEMENT SUPPLIED FOR OPERATION WITH
LIMIT SWITCHES, SPEED CONTROL, & TWO 4-WAY
DUAL SOLENOID VALVES. (AIR CONNECTION BETWEEN
GRIT POT VALVES & SOLENOID VALVES SUPPLIED
PREASSEMBLED BY KREBS.)



NOTE!

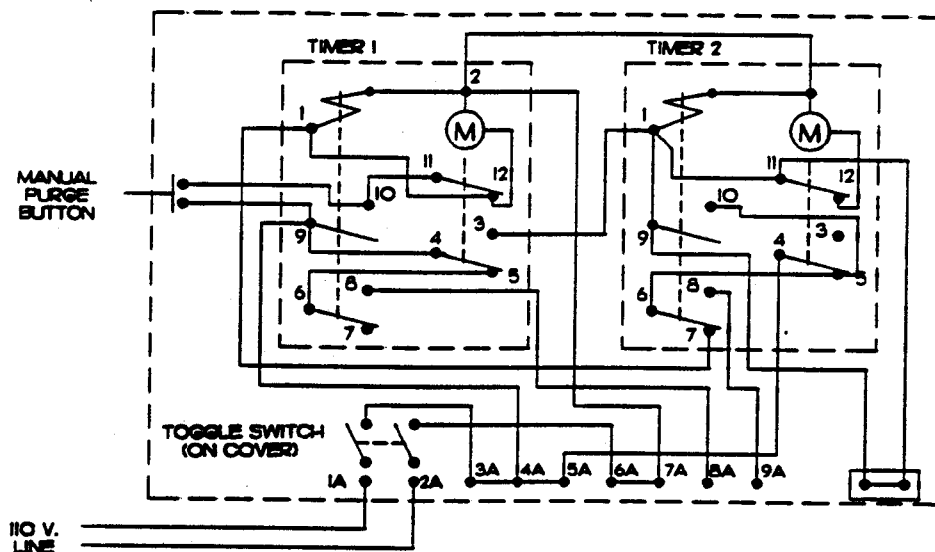
REFERENCE LETTERS SHOWN REFLECT IDENTIFICATION
LETTERS ON PORTS OF ASCO SOLENOID VALVE BODY

REFERENCE: SK 1030

KREBS ENGINEERS			
1205 CHRYSLER DR. MENLO PARK, CAL 94025			
Scale: <i>1/2"</i>	Date: <i>7-30-84</i>	Des. By: <i>SAS</i>	Appr. By: <i>RS</i>
PIPING DIAGRAM FOR AUTO REJECTS WITH TWO 4-WAY DUAL SOLENOIDS, LIMIT SWITCHES & SPEED CONTROL			
Revised: <i>1-28-88</i>		DWG. NO. <i>SK1023</i>	
REV TO DATE - NAG			

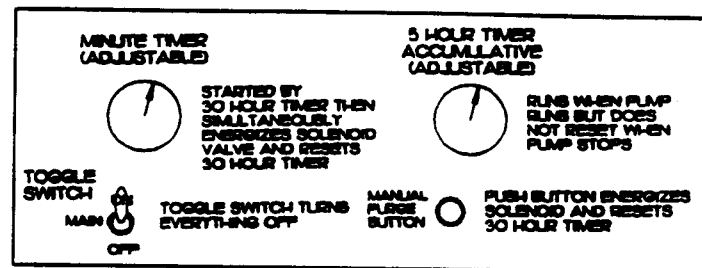
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REPEAT ON-OFF TIMED OPERATION
FOR VALVES WITH LIMIT SWITCHES)

NOTES



GENERAL

1. Timers supplied by Krebs pre-wired & mounted in a weather proof cabinet.
Leads to power supply & solenoid to be supplied by others.
2. The terminal blocks are located on the inside of back cover of cabinet.

INSTALLATION

1. Timer No.1 (shortest range) is plugged into left hand case & Timer No.2 (longer range) into right hand case.
2. Connect the 110 volt power line to terminals 1A and 2A.
3. Connect leads from Solenoid & Limit Switches to terminals 6A, 8A, & 9A as shown on Dwg. SK1030.

OPERATION

1. Set Internal Timer and Purge Timer for the cycle times required.
2. When ON-OFF Switch is closed, Purge Timer (shortest range) is started. The upper valve is closed by its closing solenoid valve. When the upper valve strikes its limit switch, this energizes the lower valve opening solenoid which opens the lower valve purging the grit pot. The Purge Timer times out and resets. Then the Interval Timer starts. The lower valve closing solenoid is energized and the lower valve closes. When the lower valve strikes its limit switch, this energizes the upper valve opening solenoid which opens the upper valve allowing grit to enter the grit pot. This complete cycle is repeated each time the Internal Timer times out.
3. Manual Purge by pressing the manual purge button. The purge cycle is started and the cycle as described in step (2) is completed.

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KREBS ENGINEERS		1205 CHRYSLER DR. MENLO PARK, CA. 94025	
Scale: NONE	Date: 7-24-89	Des. by: CCW	Appr. by: JAM
KREBS CYCLONE AND CLEANER VALVE PROGRAMING & TIMING SYSTEM WIRING DIAGRAM			
Revision:		DWG. NO. SK1233	