

88436

450-02-20352



ENGINEERING DIVISION

Form No. 450-02-20351/352

CENTRIFUGAL PUMP DATA SHEET

A.I.D. NO. 80-701
JOB NO. 15-2-2

Process BDP P. O. No. _____ Req. No. _____
 Unit Main Process Rack (02) Originator JSB Date 12/15/80
 Service Wash Water No. 2 Transfer Revised By _____ Rev. No. _____ Date _____
 Pump Type: Horizontal Vertical
 In-line Turbine Slump
 Pump Mfr. Goulds Pumps, Inc. Size & Type 3996 ST. 1 1/2x2-6 No. Req. 2

OPERATING CONDITIONS
 Liquid Weak Organic Acid Solution
15 GPM at 131 Ft. Hd. Differential
 _____ GPM at _____ Ft. Hd. Differential
 NPSH 37.8 Ft. Available at 15 GPM
 Shut Off. Ft. Head 13.6 P.T. % Cpr. 25 Max. _____
 Disch. Press, PSIA 73.2 Sp. Gr. at P.T. 1.0
 Succ. Press, PSIA 16.8 Viscosity at P.T. CPS 1
 Vapor Press. at P.T. PSIA 0.46

SHAFT SEALING
 Mechanical Seal Type Crane Type 8 0 1/2 R F 5 1 10 1 0 1 (316 SS)
 Rotating Face Material Carbon (Grade 51)
 Stat. Face Material 98% Ceramic
 Other Wetted Parts Nordel / 316 SS
 Packing Type -- Size & No. Rings --
 Lantern Ring Material -- Lube ---
 Stuffing Box Arrangements: Crane Type 24-SL
 C) External Flush Conn. Throat Push.
 Suction Flush Loop. Cyclone Sep.
 Discharge Flush Loop Cooler

CONSTRUCTION
 Case Split: Horizontal, XXXXX
 Support: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX Pipeline
 Vent: XXX No, Size --- Drain: Yes, XX Size 3/8"
 Mech. Seal Flush Tap: size 1/4"

PERFORMANCE (By Vendor)
 Proposal Curve No. GDS-24T2
 Stages 1 Design Eff. 29% HEP 1.71
 For Design Impeller: MASTER COPY
 Max. HEP 5.12 Max. Head-Ft. 136
 Max. Req'd. NPSH-Ft. _____ Min. Continuous GPM _____
 Rotation Facing Coupling End CW
 Water Cooling: NO
 Bearings _____ GPM
 Stuffing Box _____ GPM
 Gland _____ GPM
 Max. Allow WP _____ PSIA at °C _____
 Weights: Pump _____ Base _____
 Motor, XXXXXX

Nozzles	Size	Rating	Facing	Position
Suction	2"	150 lbs.	Flat	In-line
Discharge	1 1/2"	150 lbs.	Flat	In-line

Impeller Type Open
 Diameter: Design 5 1/2" Max. 6 1/16"
 Shaft Sleeve: XXXX No.
 Coupling Type Falk Steelflex
 Thrust XXXX Bearing Lube: XXX Grease d for life
 Seal Bypass Tap: Size 1/4"
 Stuffing Box Drain: Size 1/2"
 a) Flush Gland

MATERIALS

Item	Material	Item	Material
Casing	316 SS	Shaft Sleeve	--
Impeller	316 SS	Wear Rings	--
Shaft	316 SS	Stuffing Box	316 SS
Inner Case Parts	316 SS		

Shop Tests	Req'd.	Witnessed
Running	NO	
NPSH	NO	
Hydrostatic. PSIA	b)	NO
Imp. Dyn. Bal.	NO	

DRIVER

MOTOR Purchased By Vendor
 Item No. _____ Mtd. By Vendor
 HP 5 RPM 3500
 R and H Spec. No. 77-741
 Control Button Mounted at Pump & Panel Board
 Guard for drive - Std. No. 99-056
 Motor to be high efficiency type.

~~MOTOR Purchased By _____
 Item No. _____ Mtd. By _____
 HP _____ RPM _____
 R and H Spec. No. _____
 Control Button Mounted at Pump _____ & Panel Board _____
 Guard for drive - Std. No. 99-056
 Motor to be high efficiency type.~~

Nozzles	Size	ASA Rating	Facing	Position
Inlet				
Exhaust				

*Motor Brake Horsepower Shall Not Exceed 90% of Nameplate Horsepower For Impeller Design At Any Point On The Curve.
 a) Vendor to provide vent tap on flush gland.
 REMARKS: b) Hydrostatically test to manufacturer's standard.
 c) Water flush will be used.



GOULDS PUMPS, INC.

SENECA FALLS, NEW YORK 13148

MECHANICAL SEAL CONT. SHEET

PAGE 2 OF 4

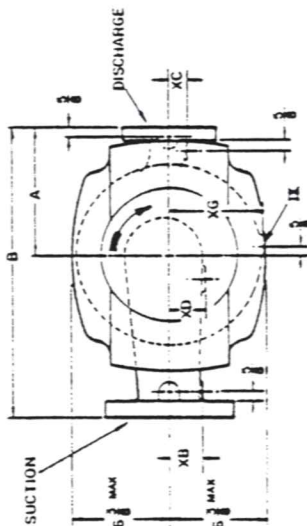
FACTORY ORDER NO. 719851

CUSTOMER'S NAME ROHM & HAAS

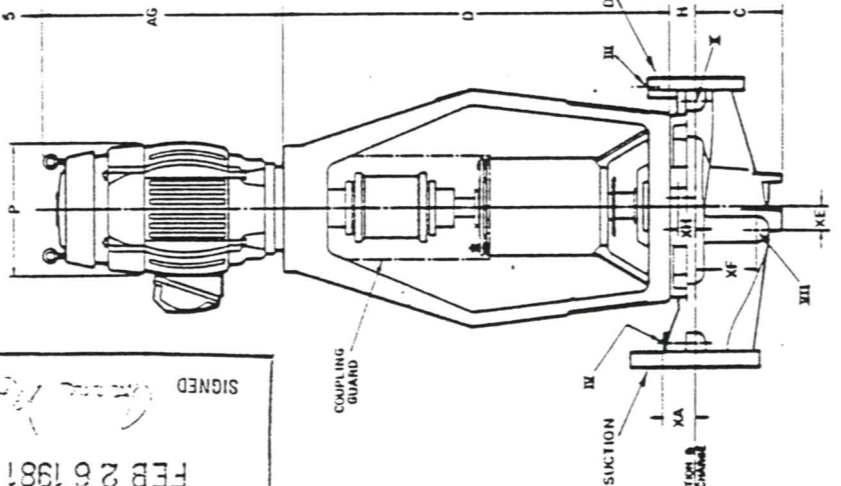
QUANTITY	SEAL MFR. JOHN CRANE	TYPE 8	CODE 028F5110101	SIZE 1 3/8	MFR. REF. DWG. SIM TO DWG CF-SP-36029	STUFFING BOX DWG.			
STATIONARY SEAT CLAMPED <input type="checkbox"/>		DETAILS "O" RING MOUNTED <input checked="" type="checkbox"/>							
ROTARY ORDERED <input checked="" type="checkbox"/>	STOCK <input type="checkbox"/>	STATIONARY SEAT CODE	ORDERED <input checked="" type="checkbox"/>	STOCK <input type="checkbox"/>	SEAL INSTALLATION				
GLAND ORDERED <input type="checkbox"/>	STOCK <input checked="" type="checkbox"/>	PLAIN <input type="checkbox"/>	FLUSH <input checked="" type="checkbox"/>	OTHER		GLAND MATERIAL 316			
P.O. NO. MS27313		SEAL BY PASS YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>							
LIP SEAL MFR.	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	LIP MATERIAL	EXPANSION COLLAR MATERIAL	I.D. AND	O.D.	P.O. NO. (LIP SEAL)			
DESCRIPTION	MDL NO.	SIZE	CODE NUMBER	CLASS.	ITEM	UNIT LIST PRICE	QUAN. SHIPPED	TOTAL LIST PRICE	NET AMOUNT
STANDARD FLUSH GLANDS TO BE MODIFIED FOR A 1/2" NPT TAP & PLUG. THIS TAP IS TO BE USED TO VENT TRAPPED AIR FROM STUFFING BOX ON VERTICALLY MOUNTED PUMPS. TAP TO BE LOCATED IN GLAND WALL OR AVAILABLE BOSS.									
PURCH. ON MS27313 24SL BUSH CODE-V1-1 1 3/8 I.D. X 2" O.D.									

DATA REQUIREMENTS SHEET

						MAILING ADDRESSES	
						Quantity	Type
		Record Only	Approval Before Mfg.	Approval Before Shipping	Date Sent	Date Sent	
1	Dimension Print	1R+1					1 ROHM & HAAS
2	CDS Curve	1R+1					P.O. BOX 584
3	Sectionals (Typical)	1R+1					ENGR DIV.
4	Mech. Seal Dwg.	1R+1					BRISTOL, PA. 19007
5	Seal Piping Dwg.						ATTN: D. MEARS
6	Cooling Piping Dwg.						2 ROHM & HAAS BAYPORT
7	Instruction Manual ::	11					PURCH DEPT NORTH AM.
8	Tech. Manual (special)						P.O. BOX 716
9	Bill of Materials (RPD's)	1R+1					BRISTOL, PA. 19007
10	Motor Prints	1R+1					ATTN: DEL SUPPLEE
11	Motor Instruction Book	11					3
12	Coupling Dwg.						
13	Coupling Instruction Book						
14	Noise level data (sound pressure)						
15	Chem. & Physical Analysis	1R+1	WHERE APPLICABLE				(SPECIAL INSTRUCTIONS)
16	Test Curve	1R+1	WHERE APPLICABLE				SEND A REPRO + MANUAL
17	Test Log	1R+1	WHERE APPLICABLE				TO ADDRESS #1
18	NPSH - Test Point						SEND COPIES TO ADDRESS #2
19	Hydro Test Report COMP	1R+1					
20	Vibration Test Report						
21	Noise Level Test Report						
22	Certificate of Compliance	1R+1					
23	Nozzle Loading						
24							
25	:: FURNISH INST. MANUALS FOR EACH MODEL OF PUMP						
26	(NOT EVERY FO#)						
27							
28							
29							
30							
31							
32							
33							
34							



MINIMUM HEADROOM REQUIRED
TO REMOVE MOTOR



Approved for Construction Process
GOULDS PUMPS, INC.
SENECA FALLS, N. Y.
FEB 26 1981
SIGNED

DIMENSIONS DETERMINED BY PUMP

DISCH SIZE	SUCT CLASS	A	B	C	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	WT
1-1/2	2	6-3/4	15	4-1/2	2-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	190
1-1/2	3	6-3/4	15	5-1/8	2-3/16	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	200
2	3	7-1/2	17	4-7/8	2-1/4	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	205
1-1/2	2	8	17	5-1/16	1-7/16	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	200
1-1/2	3	8	18-7/8	5-1/2	1-11/16	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	210

DIMENSIONS DETERMINED BY MOTOR

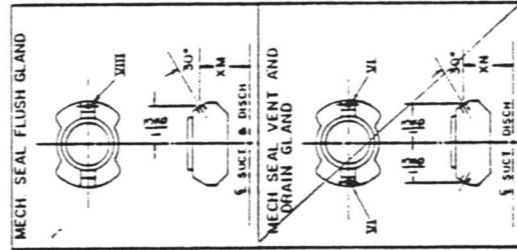
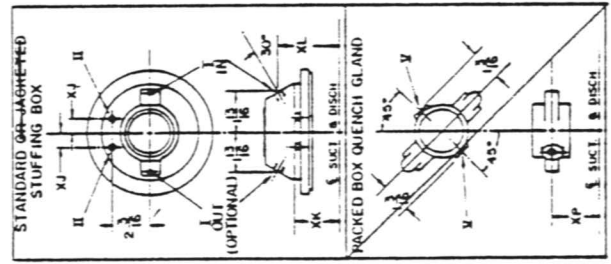
NEMA FRAME	AG	P	WT
143 TC 17-1/2	18-1/8	12	60
143 TC 17-1/2	18-1/8	13	65
182 TC 19-1/4	19-7/8	15	105
182 TC 19-1/4	19-7/8	16	105
184 TC 19-1/4	19-7/8	17	118
213 TC 19-1/4	19-7/8	18	185
254 TC 19-1/4	19-7/8	21	320
256 TC 19-1/4	19-7/8	23	320
284 TC 19-1/4	19-7/8	24	350
286 TC 19-1/4	19-7/8	25	440

FLANGE DIMENSIONS

NOM I.D.	OD	BC	THK	NO OF HOLES	SIZE OF HOLES
1-1/2	5	3-7/8	11/16	4	5/8
2	6	4-3/4	3/4	4	3/4
3	7-1/2	6	15/16	4	3/4
1-1/2	6-1/8	4-1/2	13/16	4	7/8
2	6-1/2	5	7/8	8	3/4
3	8-1/4	6-5/8	1-1/8	8	7/8

OPTIONS FURNISHED WHEN CHECKED

STUFFING BOX COVER	<input checked="" type="checkbox"/> STANDARD
	<input type="checkbox"/> JACKETED
PACKING WITH QUENCH	<input type="checkbox"/> GLAND
MECHANICAL SEAL WITH FLUSH GLAND	<input checked="" type="checkbox"/> STUFFING BOX SEALING
MECHANICAL SEAL WITH VENT AND DRAIN	<input type="checkbox"/> MECHANICAL SEAL WITH PLAIN GLAND
COUPLING GUARD	<input checked="" type="checkbox"/> BY GOULDS
	<input type="checkbox"/> BY OTHERS



SIZE	QTY	PURPOSE	FURNISHED YES	NO
I	1/4	1 LANTERN RING OR MECH SEAL FLUSH	X	
II	1/4	2 STUFFING BOX JACKET CONNECTIONS	X	
III	1/4	1 DISCHARGE GAGE CONNECTION	X	
IV	1/4	1 SUCTION GAGE CONNECTION	X	
V	1/4	2 QUENCH CONN FOR PACKED BOX	X	
VI	1/4	2 VENT AND DRAIN FOR MECH SEAL	X	
VII	1/4	1 CASING DRAIN	X	
VIII	1/4	1 FLUSH CONN FOR MECH SEAL	X	
IX	1/2	1 STUFFING BOX DRAIN	X	
X	1/4	1 SEAL BYPASS CONNECTION	X	

▲ MOTORS MAY BE SUPPLIED WITH "V" DESIGNATION. THIS DESIGNATION DOES NOT AFFECT DIMENSIONS OR MOUNTING.

NOTES:
DRAWING IS NOT TO SCALE
ALL DIMENSIONS ARE IN INCHES
WEIGHTS ARE APPROXIMATE

GOULDS PUMPS INC., SENECA FALLS, N. Y., U.S.A.

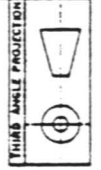
GOULDS SERIAL NO. 719C851-1-2

CUSTOMER: ROHM & HAAS BAYPORT, INC

CUSTOMER PO NO: P15-11049

ITEM NO: 450-02-20351/352

SERVICE: WASH WATER #2 TRANSFER



DATE - 6-76

REV. DATE

GOULDS PUMPS, INC.
SENECA FALLS, NEW YORK 13148

CENTRIFUGAL PUMP CHARACTERISTICS

RPM 3500 CDS 2412

GOULDS SER. NO. 719C851-1-2

CUSTOMER ROHM & HAAS BAYPORT, Inc.

P.O. NO. PL5-11049

ITEM NO. 450-02-20351/352

SERVICE WASH WATER #2 TRANSFER

MODEL 3996 ST 5 1/2" IMP. DIA.

SIZE 1 1/2 X 2-6

IMP. DWG. 76777

PATTERN 56088

EYE AREA 3.14 SQ. IN.

Metres

TOTAL HEAD
Ft
m

160 6 1/16" DIA.

140 5 1/2"

120 5"

100 4 1/2"

80 4"

60 3 1/2"

40

20

0

NP SHR

4'

40

45

50

53

55

55

53

50

45

40

8'

10'

16'

50

45

55

50

45

40

35

30

25

20

15

10

5

0

CERTIFIED PERFORMANCE DATA
GOULDS PUMPS, INC.
SENECA FALLS, N.Y.

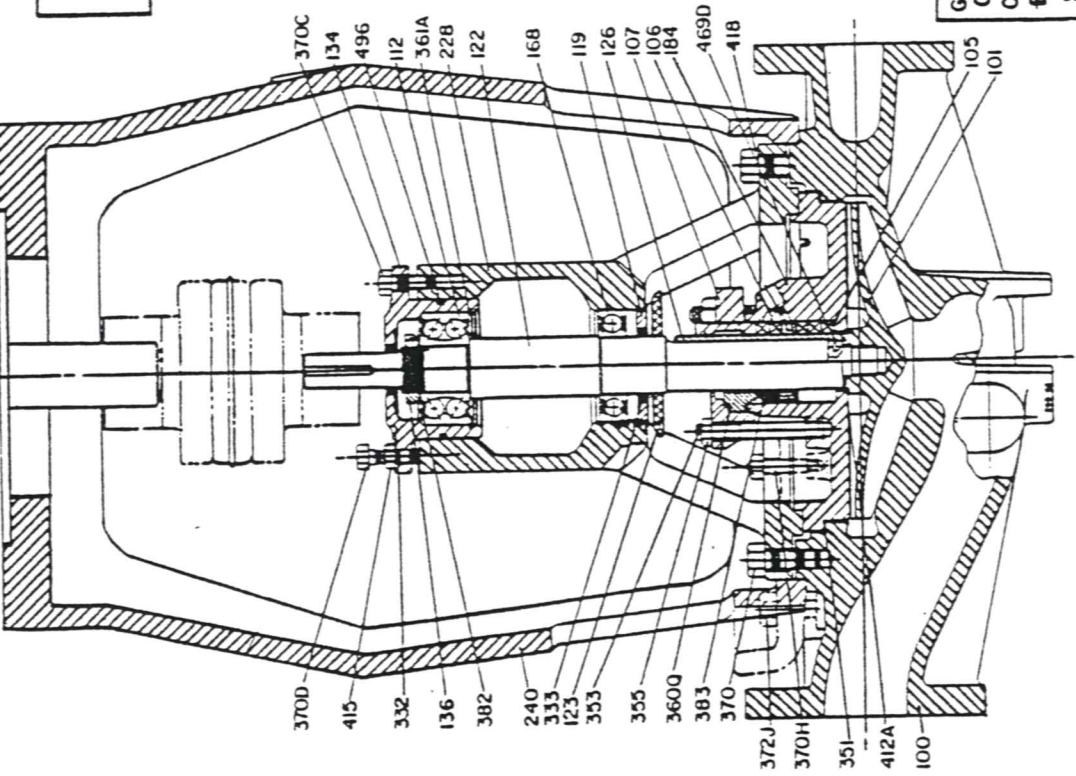
Van A. Johnson

CAPACITY

0 20 40 60 80 100 120 140 160 GPM

0 5 10 15 20 25 30 35 m³/h

MODEL 3996 ST
GREASE FOR LIFE



BILL OF MATERIAL

ITEM NO	REQD PER PUMP	PART NAME	MATERIAL
100	1	CASING	316 SS
101	1	IMPELLER	316 SS
105	1	LANIERN-RING	TEFLON
106	15EF	STUFFING-BOX-PAKING	ASBESTOS
107	1	GLAND, SB	316 SS
112	1	BALL BRG - OTBD	STEEL
119	1	BRG END COVER INBD	STEEL
122	1	SHAFT	316 SS
123	1	DEFLECTOR	NYLON
126	1	SHAFT-SLEEVE	CAST IRON
134	1	BRG HOUSING	STEEL
136	1	BRG LK NUT	STEEL
168	1	BALL BRG INBD	STEEL
184	1	STUFF BOX COVER	316 SS
228	1	FRAME	CAST IRON
240	1	MOTOR SUPPORT	CAST IRON
332	1	GREASE SEAL	STEEL
333	1	GREASE SEAL	STEEL
351	1	GASKET, CASE	ASBESTOS
353	2,4	GLAND STUD	304SS
355	2,4	HEX NUT GLAND STUD	316SS
360Q	91	GASKET, MECH SEAL	ASBESTOS
361A	1	RING RING, BRG HSG	STEEL
370	4,8	H CAP SCREW, FR - CASE	304SS
370C	6	H TAP BOLT, BRG HSG	STEEL
370D	3	H TAP BOLT, IMPLR ADJ	STEEL
370H	2	STUD - COVER TO ADPTR	STEEL
372J	1	MOTOR SPRT TO CASING	STEEL
382	1	BRG LK WASHER	STEEL
383	1	MECH SEAL	C/R/V/E
3839	1	O-RING, IMPLR	TEFLON
415	3	JAM NUT - BRG HSG	STEEL
418	2	H CAP SCREW - FR. JACK	STEEL
469D	1	ROLL PIN, SFT SLV	410SS
496	1	O-RING, BRG HSG	BURIA-N

● MECH SEAL ONLY

GOULDS SERIAL NO. 719851-1-2
 CUSTOMER ROHM & HAAS BAYPORT, INC.
 CUSTOMER P.O. NO. P15-11049
 EQUIP. OR. ITEM NO. 450-02-20351/352
 SERVICE WASH WATER #2 TRANSFER

GOULDS PUMPS, INC.
 250 CALIFORNIA ST. NEW YORK, N.Y. 10007
 APPROVED BY: [Signature]
 DATE: 9-16-76
 MODEL: 3996 "ST"
 SERIAL: 719851 #2

DWG No SP-CF-45708-1
 REV
 STD APP
 DR APP
 DATE 8/29/67
 BY 5-26-67
 SCALE 1:1
 PART DIMENSIONS UNLESS OTHERWISE SPECIFIED
 TYPE -811
 D SHAFT SEAL
 FOR MODEL 3996 "S1"
 GOULDS PUMPS INC.
 SENECA FALLS, N.Y.

CRANE PACKING COMPANY
 6400 W OAKTOWN ST
 MOHNTON GROVE ILL

PRIORITY IS PROPERTY OF CRANE PACKING CO SUBJECT TO RETURN UPON DEMAND TITLE TO SAME NEVER SOLD OR TRANSFERRED FOR ANY REASON ALL RIGHTS TO INVENTION RESERVED

ITEM	QTY	PART NUMBER	MATERIAL CODE	PART NAME	QTY	MATERIAL	REPLACE PARTS
1	D	1375 325	9101	MATING RING	1	CERAMIC	X
2		0000 224	9560	O-RING	1	CRANELAST **	X
3	A89	1375 020	9051	PRIMARY RING	1	CARBON	X
4	A	0000 220	9561	O-RING	1	CRANELAST **	X
5	C91	1375 022	0550	RETAINER	1	316 SS	
6		2077		SCREW	12	316 SS	X
7	A91	1375 032	0550	DISC	1	316 SS	
8	A9	1375 119	0550	SNAP RING	1	316 SS	
9		8-32x1/4 LG.		SET SCREW	4	316 SS	X
10	A24	1375 011	7510	PRIM. RING	1	GL FILLED CHEMLON	X
11		3035		SPRING	3	316 SS	X
12	A24	1375 012	0550	RETAINER	1	316 SS	
13		10-24x1/4 LG.		SET SCREW	1	316 SS	X
14		BY CUST.		SLEEVE			
15		BY CUST.		GASKET			
16		BY CUST.		GLAND PLATE			

SEAL SUPPLIED WITH CRANELAST, KEEP OIL FROM CONTACTING ELASTOMERIC PARTS, FOR INSTALLATION USE PROPYLENE GLYCOL, GLYCERINE OR DISTILLED WATER.

OPERATING CONDITIONS:
 LIQUID WEAK ORGANIC ACID SOLUTION
 SP GR 1.0
 TEMP 25°C
 PRESS SUCT
 SPEED: 3500 R P M.
 PRESS DISCH.

UNIT REF.
 CUST PO # P15-11049
 PROJ # ROHM & HASS,
 ITEM #
 EQUIP #
 PUMP SERIAL # 719C851-1-2
 PUMP MODEL 3996 "S1"
 PUMP STUFFING BOX #
 SHOP ORDER # 719851

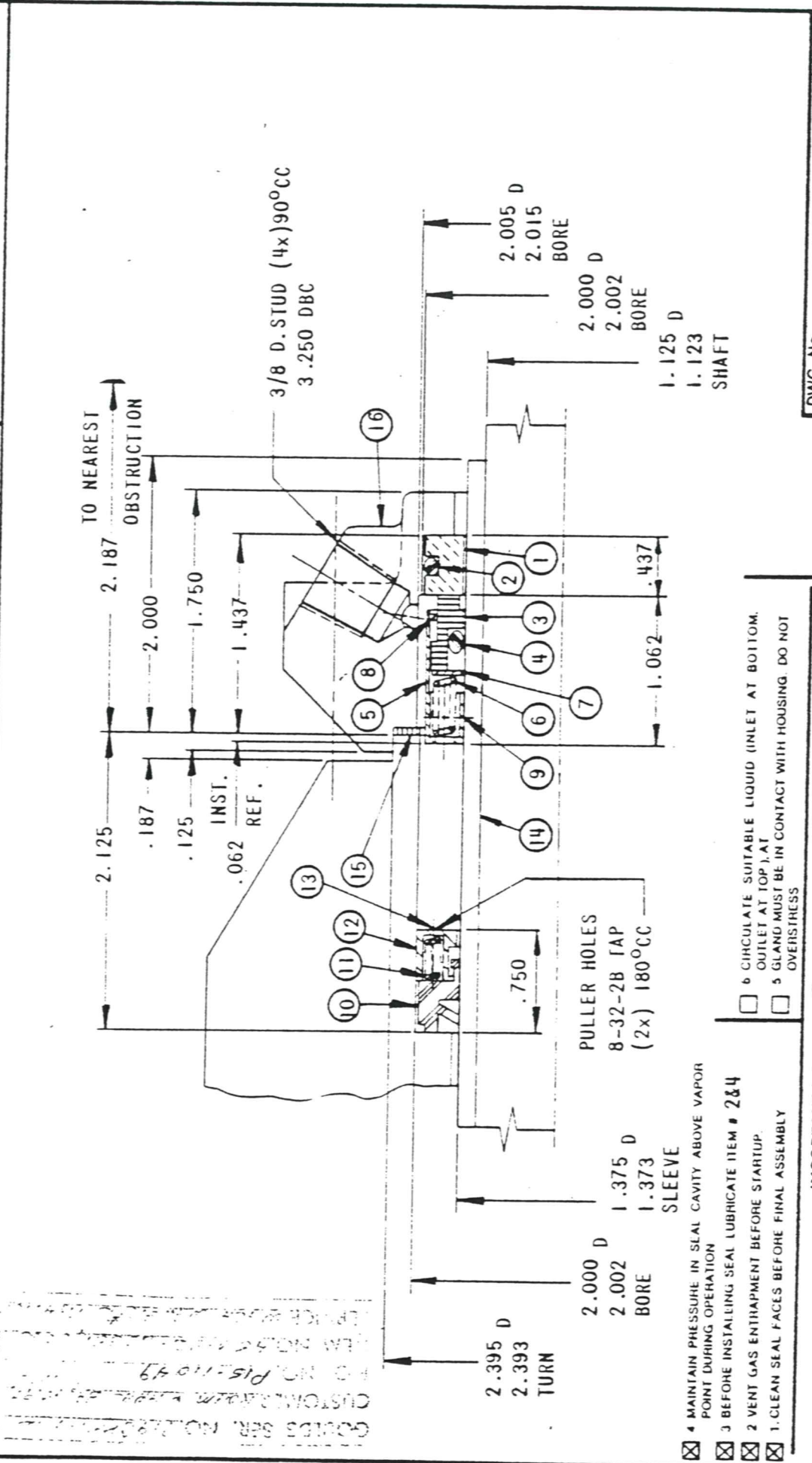
B/P REF DWG. CF-SP-36029 REV. C DID. 3/21/77 BY C. P. CO.

SEAL ASSY NO. A81-1375-231
 BUSH. ASSY NO. A24-1375-010
 MATING RING ASSY NO.

PART OF ASSEMBLY VI-1/
 SPECIAL PART
 CODE 028F511010(316)

DWG No SP-CF-45708-1

DWG No.	CF-SP-45708	REV				
<p>PRINT IS PROPERTY OF CRANE PACKING CO. SUBJECT TO RETURN UPON DEMAND TITLE TO SAME NEVER SOLD OR TRANSFERRED FOR ANY REASON. ALL RIGHTS TO INVENTION RESERVED.</p>						
 <p>CRANE PACKING COMPANY 6400 W OAKTON ST. MORTON GROVE ILL.</p>						
STD APP	DR APP	CHK RE	APP	DATE	SCALE 1:1	
JAP	JAP	JAP	JAP	3-7-81	2/25/81	
<p>TYPE-8-1T 1.375 D. SHAFT SEAL FOR MODEL 3196 "ST" GOULDS PUMPS, INC. SENECA FALLS, N.Y.</p>						
<p>FOR BILL OF MATL SEE # SP-CF-45708</p>						



- 4 MAINTAIN PRESSURE IN SEAL CAVITY ABOVE VAPOR POINT DURING OPERATION
- 3 BEFORE INSTALLING SEAL LUBRICATE ITEM # 2&4
- 2 VENT GAS ENTRAPMENT BEFORE STARTUP.
- 1. CLEAN SEAL FACES BEFORE FINAL ASSEMBLY
- 6 CIRCULATE SUITABLE LIQUID (INLET AT BOTTOM, OUTLET AT TOP) AT OVERSTRESS
- 5 GLAND MUST BE IN CONTACT WITH HOUSING. DO NOT OVERSTRESS

IMPORTANT NOTES: IF REQUIRED

DWG. No. CF-SP-45708

RELIANCE

ELECTRIC COMPANY
MOTOR DIVISION, CLEVELAND, OHIO 44117, U.S.A.

DATA TRANSMITTAL AND CERTIFICATION

REFER TO THIS NUMBER IN ALL CORRESPONDENCE

SOLD TO:	CUSTOMER ORDER NO. M18168	DATE 02/12/81	REQ. NO. S.O. NO. 3YEB16743
	GOULDS-ENG PRODUCTS DIV 240 FALL SENECA FALLS N Y 13148		
SHIP TO:	SAME AS "SOLD TO" UNLESS SHOWN GOULDS PUMPS INC 240 FALL ST SENECA FALLS, N.Y.		

- DATA PROVIDED WITH THIS TRANSMITTAL AND CERTIFICATION IS:
- FOR CUSTOMER APPROVAL BY DATE: _____
Return of approval prints by the above date is required to assure scheduled shipment, delay in return and/or revision of approval prints may require shipment reschedule. Return approved D/S to data source.
 - FINAL, APPROVED FOR CONSTRUCTION OR INSTALLATION.
 - PRELIMINARY; ENGINEERING IS COMPLETED.
 - REVISED, SUPERSEDES DATA PREVIOUSLY ISSUED.
 - SEE REMARKS.

DATA SOURCE: TRANSMITTAL AND CERTIFICATION ISSUED BY: E. J. [Signature] DATE APR 29 81 CK BY G. R. Kilbourn DATE APR 29 81

ASHTABULA PLANT
4200 BENEFIT ROAD
ASHTABULA, OHIO 44004

DATE PRINTED: 03/23/81

MOTOR OR GEN. DATA	ITEM 3-3	USED FOR CENTR. PUMP	USERS PLANT				MOTOR OR GEN. D/S: 602531-924.
	QTY. 2	FRAME 184TC	S HP	SERV. FA 1.15	TYPE PB	R.P.M. 3500	C BOX D/S
DOLER DATA	PH/HZ/VOLTS-WINDING SEE BELOW	DUTY CONT	ENCLOSURE TEFC-XT	AMB./INSL. 40 F	PWR. CODE	MOTOR OR GEN. C/D:	
	BEARINGS BALL	MOUNTING & METHOD OF DRIVE W-6 /CPLD	RAILS OR BASE	MODEL NUMBER	REDUCER OR AUX. D/S:		
BRAKE DATA	ROTAT FROM OPP. DR. END CW	D-C FIELD EXCITATION	DOUBLE SHAFT EXTEN.		BRAKE OR AUX. D/S:		
	REDUCER STYLE	CLASS	FRAME	RATIO	OUTPUT RPM	ASSEMBLY	BLOWER MOTOR PH/HZ/VOLTS/HP
	BRAKE TYPE	SIZE	RATING FT/LB	DUTY	P.O.		

DATA FOR CONTROL	D-C MOTOR ARMATURE CURRENT: _____ AMPS	A-C MOTOR INFORMATION FOR SELECTION OF STARTER HEATERS:
	FIELD CHARACTERISTICS PER CURVE: _____	CODE: <u>J</u> LOCKED AMPS: _____
	F ₁ -F ₂ : _____ MAX. AMPS _____ RPM	F.L. CURRENT: <u>12/6</u> AMPS.
	F ₁₁ -F ₂₂ : _____ MAX. AMPS _____ RPM	
	F ₃ -F ₄ : _____ MAX. AMPS _____ RPM	

SPCL. IN-STAL-LATION FEAT. AND MISC. DATA

ADDITIONAL MOTOR OR GEN DATA:
 PHASE: 3 HERTZ: 60 VOLTS: 230/ 460
 LD LOC - STD
 FR CONST RB

SPECIAL MARKS:
719851

GOULDS SER. NO. 7190851-1-2
 CUSTOMER ROHM & HAAS BAYPORT, INC.
 P.O. NO. P15-11049
 ITEM NO. 450-02-20351/352
 SERVICE WASH WATER #2 TRANSFER

SPECIAL FEATURES:
 ENERGY EFFICIENT-XE
 90 C-RISE AT 1.15 S.F.
 WITH DRIP CVR
 NORMAL THRUST
 NEMA NOM EFF 87.5

CERTIFIED DRAWINGS & DATA:
 DATE: MOD.NO: 1 CERT D/S TO CUST ✓
 DATE: MOD.NO: ATTN JOANNE MOLL
 DATE: MOD.NO: 1 CC OF ALL PAPERWORK to 24201

GOULDS PUMPS, INC.
 SENECA FALLS NEW YORK 13148

DUNS 222-5100

PAGE 1 OF 3
 FACTORY ORDER 719851
 INVOICE NO.

CUSTOMER'S ORDER NO. AND DATE: P15-11049 11-24-80 TA
 G.P. ORDER NUMBER: 719851

5-28-81 6-5-81
 DATE SHIPPED

00040-9466
 ROHM & HAAS BAYPORT, INC.
 P.O. BOX 1330
 LA PORTE, TEXAS 77571

PART B/M TERRITORY
 COMP. B/M
 ON ASSEMBLY
 TERMS: NET 30 DAYS

DESTINATION & ROUTING LATER

SHIP TO

F.O.B. SENECA FALLS, N.Y. #2 SHOP

ORDER RECEIVED FROM:

MARK P15-11049 ; REQ # E15-2-11049-1

VIA COLLECT PREPAY/ADD

SHIP WITH H719851 719852-854
 H719855-857 719858-861
 H719862 & 863 719864-875
 APPROX. SCHEDULED SHIPPING DATE: 6-19-81
 NO PARTIAL (IF CHECKED)

BRANCH ORDER NO. MAP-02898
 DATE ORDER REC'D. IN ORDER DEPT. 2-2-81 DMC
 DATE ENTERED 2-5-81

QTY. ORD.	P.O. ITEM NO.	SERIAL NO.	UNIT LIST PRICE	QTY. SHIPPED	TOTAL LIST PRICE	NET AMOUNT
2	450-02-205517552	719C851-1-2				

EQUIP. NO.		SERVICE WASH WATER #2 TRANSFER	
MODEL NO.	SIZE	ROT.	CONST.
3996ST	1½X2-6	RH	316SS
G.P.M.	T.N.H.	LIQUID	
15	131	WEAK ORGANIC ACID SOL'N	
TEMP.	SP. GR.	EFF.	
25C	1.0	40%	
IMPELLER	5½	DIA. DRAWING	PATT.
		76781	56206
IMPELLER		DIA. DRAWING	
MOTOR		FRAME	
RELIANCE	5	3500	184TC
MOTOR ENCLOSURE		DWG	
TEFC/XE 1.15/F PER MTR SPEC		CODE	
MOTOR BY		DATA	
FACTORY		ON FILE	

- WITH FOLLOWING ADDITIONS, MODIFICATIONS AND/OR REQUIREMENTS.
1. FALK COUPLING
 2. CPLG. GUARD
 3. SHAFT SLEEVE LESS
 4. STAINLESS SHAFT 316SS
 5. MECHANICAL SEAL PG #2
 6. 3/8" CASING DRAIN
 7. FURNISH W/MONTHLY PROGRESS REPORTS
 8. GREASE FOR LIFE BERGS
 9. MOTOR SUPPORT

ACKNOWLEDGMENT

We thank you for your order which we have entered exactly as shown. Please check specification and if incorrect notify us immediately using our factory order number from the upper right hand corner. Your order has been accepted subject to our verification of price and subject to the terms and conditions on back hereof.

GOULDS PUMPS, INC.
 ENGINEERED PRODUCTS DIVISION
 SENECA FALLS, N.Y. 13148

FURNISH ONLY WHEN ORDERED	TESTS	WIT.	NON-WIT.	STANDARD ENGRG. DATA
	PERFORMANCE			
	NPSH			
	NOISE			
	VIBRATION			
<input checked="" type="checkbox"/> HYDROSTATIC	<input checked="" type="checkbox"/> COMP	<input checked="" type="checkbox"/> PSIG	<input checked="" type="checkbox"/> QPC	<input checked="" type="checkbox"/> 550

WE HEREBY CERTIFY THAT THESE GOODS WERE PRODUCED IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF SECTIONS 6, 7, & 12 OF THE FAIR LABOR STANDARDS ACT, AS AMENDED AND OF REGULATIONS AND ORDERS OF THE U.S. DEPT. OF LABOR ISSUED UNDER SEC. 14 THEREOF AND THE PRICES CHARGED ARE WITHIN APPLICABLE FEDERAL CEILING PRICE REGULATION AND ORDERS.

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

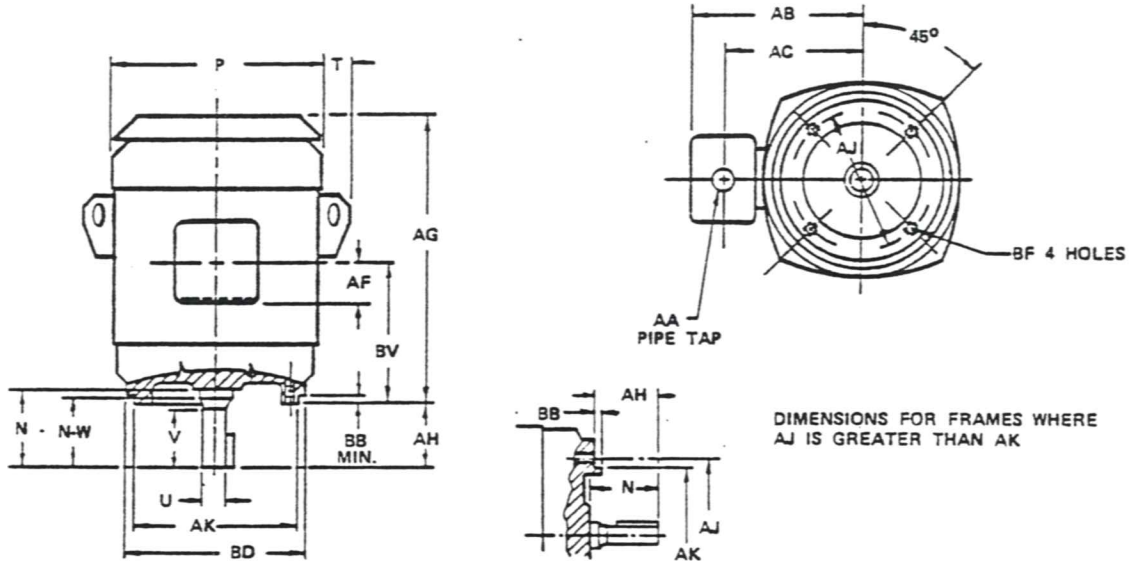
ENCLOSURE: TOTALLY ENCLOSED

COOLING: FAN COOLED

MOUNTING: FOOTLESS, NEMA "C" FACE
VERTICAL SHAFT DOWN

CONSTRUCTION: CAST IRON

FRAMES 180TC THRU 210TC



DIMENSIONS FOR FRAMES WHERE
AJ IS GREATER THAN AK

DIMENSIONS ARE IN INCHES. SEE SHEET 2 FOR DIMENSIONS IN MILLIMETERS

FRAME SIZE	AG		BV		AH	N	N-W	P	T	U	V	AJ	AK	BB	BD	CONDUIT BOX				BF	TAP DEPTH (MIN)	B.E. SQ	KEY LGTH	WT. LBS
	STD	LG	STD	LG												AA	AB	AC	AF					
182TC-L182TC	14.81	16.31	5.89	6.62	2.62	2.94	2.75	9.50	1.44	1.1250	2.50	7.25	8.500	.25	9.00	3/4	17.25	5.75	1.94	1/2-13	.75	.250	1.75	70
184TC-L184TC	15.81	17.31	6.38	7.12	2.82	2.94	2.75	9.50	1.44	1.1250	2.50	7.25	8.500	.25	9.00	3/4	17.25	5.75	1.94	1/2-13	.75	.250	1.75	89
213TC	18.31		7.25		3.12	3.56	3.38	10.50	1.44	1.3750	3.12	7.25	8.500	.25	9.00	1	9.12	7.12	2.50	1/2-13	.75	.312	2.38	120
215TC-L215TC	20.56	21.44	8.00	8.44	3.12	3.56	3.38	10.50	1.44	1.3750	3.12	7.25	8.500	.25	9.00	1	9.12	7.12	2.50	1/2-13	.75	.312	2.38	141

(1)

- (1) SPECIAL DIMENSIONS APPLYING TO THIS ORDER ON THIS LINE.
- (2) "U" VARIES +.0000, -.0005.
- (3) "AK" VARIES +.000, -.003.
FACE RUNOUT AND ECCENTRICITY .004 MAX. T.I.R.
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED,
CONSULT FACTORY.
- (4) FRAMES PREFIXED BY "L"

GOULDS SER. NO. 719C851-1-2
 CUSTOMER ROHM & HAAS BAYPORT, INC.
 P.O. NO. P15-11049
 ITEM NO. 450-02-20351/352
 SERVICE WASH WATER & TRANSFER.

FRAME- _____ TYPE- _____ CERTIFIED FOR- _____
 ORDER- _____ ITEM- _____ HP- _____ RPM- _____ PH- _____ HZ- _____ VOLTS- _____
 RELIANCE SALES ORDER- _____ APPROVED BY- _____ DATE- _____

RELIANCE ELECTRIC
 CLEVELAND, OHIO 44117 U.S.A.

DR. BY R.L. BROWN
 CK. BY [Signature]
 APP. BY [Signature]
 DATE 6-22-77

DIMENSION SHEET 602531-924
 SHEET 1 OF 2
 ISSUE DATE SEPTEMBER 25, 1979