



NOTE: AFTER ROTOR HAS BEEN ASSEMBLED AS SHOWN ON THIS DRAWING IT MUST RUN TRUE WITHIN THE FOLLOWING LIMITS:  
 SHAFT: MAXIMUM INDICATOR READING AT ANY POINT ON SHAFT = 0.0010",  
 WITH MAXIMUM INDICATOR READING AT JOURNAL = 0.00025".  
 DISC: MAXIMUM INDICATOR READING AT SIDES OF DISCS  
 ABOUT 1" BELOW STEAM PASSAGE = 0.015".

NOTE 'A' BEARING DIAMETRAL COLD CLEARANCE.  
 MAX. 0.0111 MIN. 0.0095  
 BEARING LIFT CHECK COLD CLEARANCE.  
 MAX. 0.0157 MIN. 0.0134

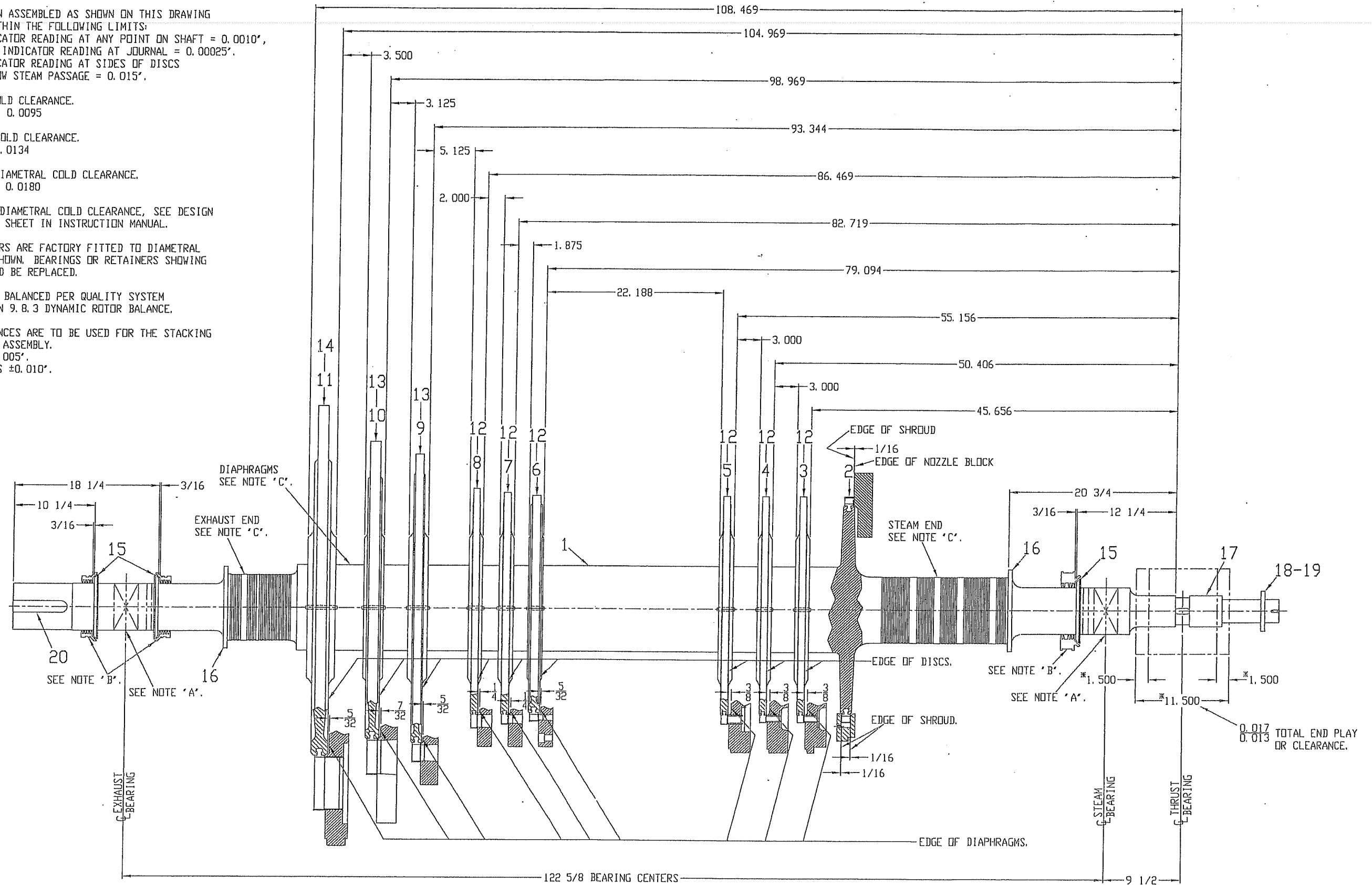
NOTE 'B' OIL RETAINING RING DIAMETRAL COLD CLEARANCE.  
 MAX. 0.0195 MIN. 0.0180

NOTE 'C' FOR PROPER LABRYNTH DIAMETRAL COLD CLEARANCE, SEE DESIGN  
 OPERATING CONDITIONS SHEET IN INSTRUCTION MANUAL.

NOTE: BEARINGS AND RETAINERS ARE FACTORY FITTED TO DIAMETRAL  
 COLD CLEARANCES AS SHOWN. BEARINGS OR RETAINERS SHOWING  
 EXCESSIVE WEAR SHOULD BE REPLACED.

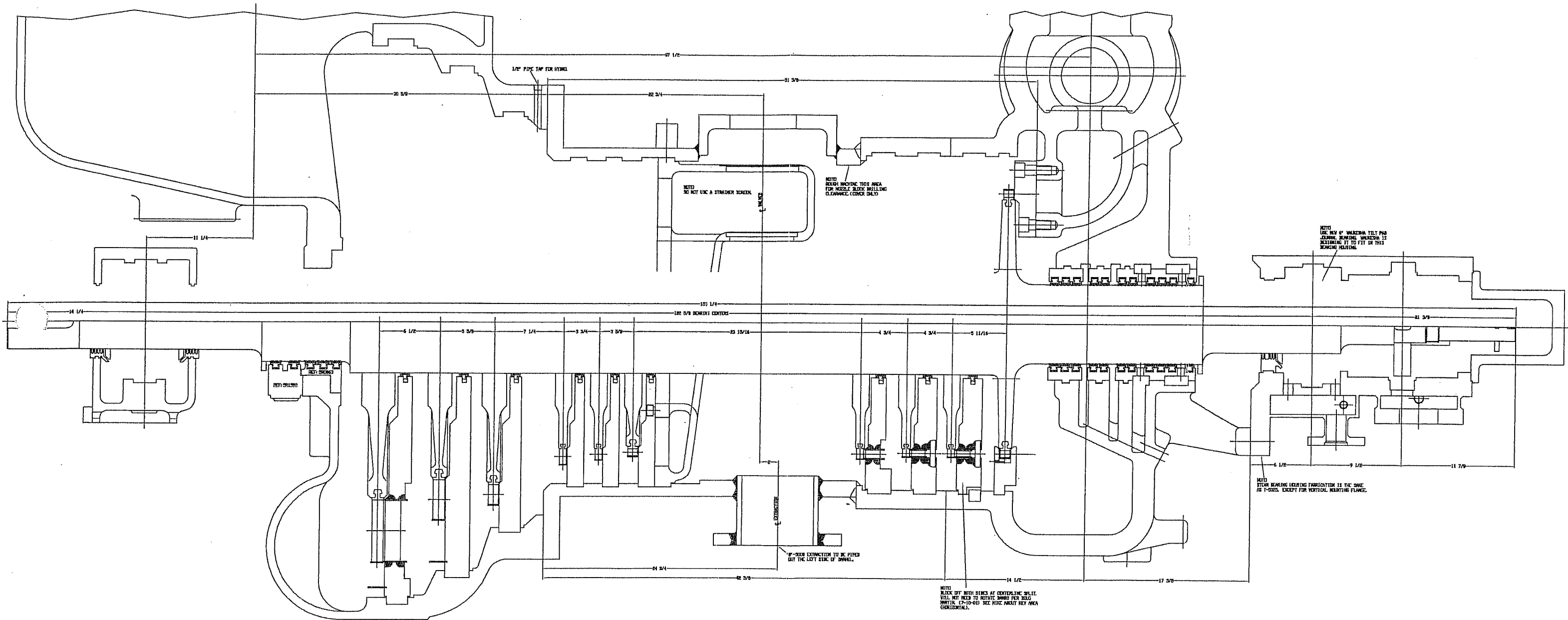
NOTE: ROTOR ASSEMBLY TO BE BALANCED PER QUALITY SYSTEM  
 OPERATING INSTRUCTION 9. B. 3 DYNAMIC ROTOR BALANCE.

NOTE: THE FOLLOWING TOLERANCES ARE TO BE USED FOR THE STACKING  
 OF WHEELS ON A ROTOR ASSEMBLY.  
 FIRST STAGE WHEEL ±0.005".  
 ALL SUBSEQUENT WHEELS ±0.010".

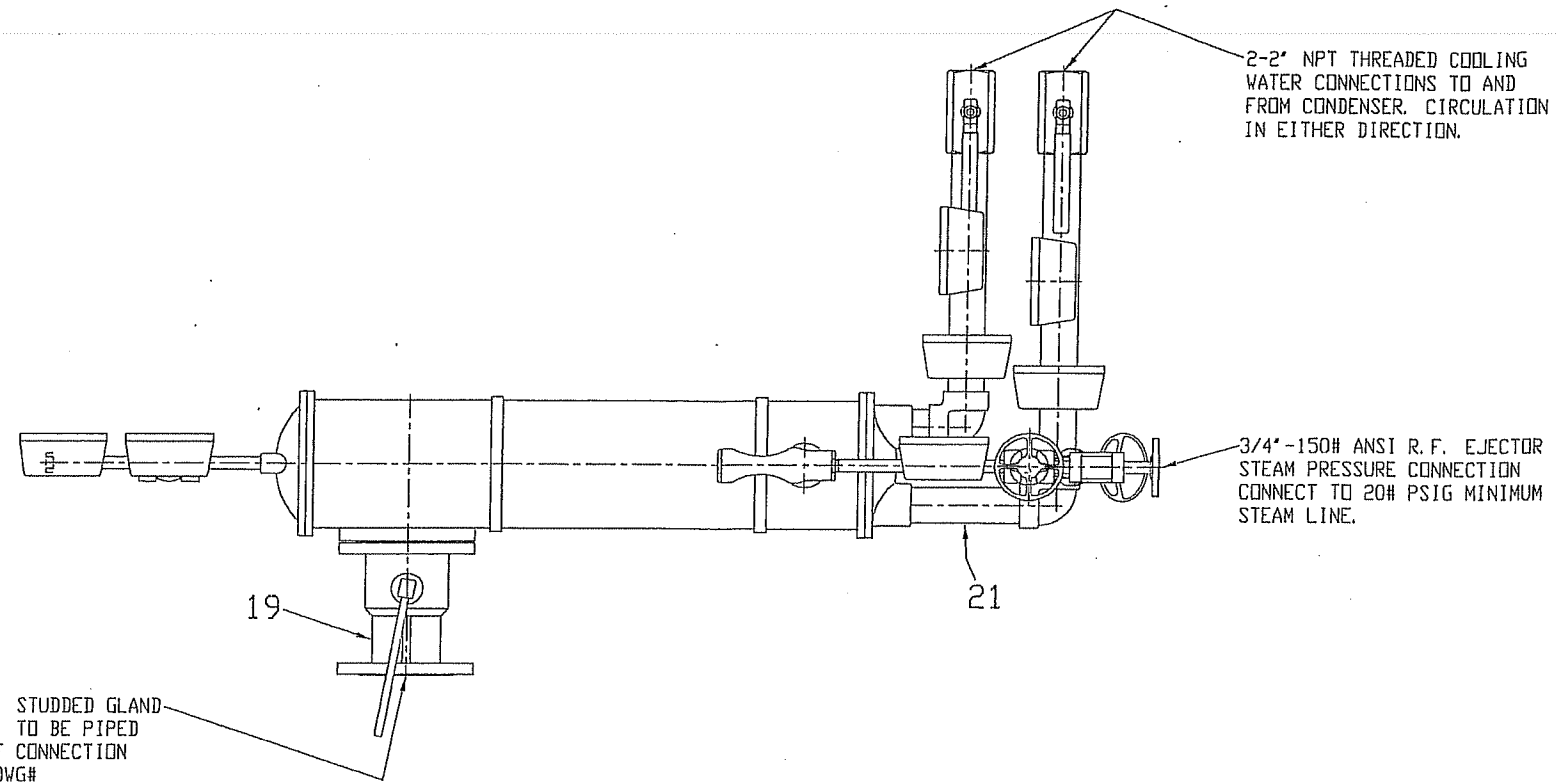


\* APPROXIMATELY 3/32" IS REQUIRED TO BE MACHINED OFF EACH  
 FILLER RING TO OBTAIN DIMENSIONS SHOWN. THESE ARE THEORETICAL  
 DIMENSIONS. ACTUAL DIMENSIONS TO BE DETERMINED ON ASSEMBLY  
 AND RECORDED ON SPECIFICATION SHEET.

	PROJECTION
<b>TURBINE ROTOR ASSEMBLY</b>	



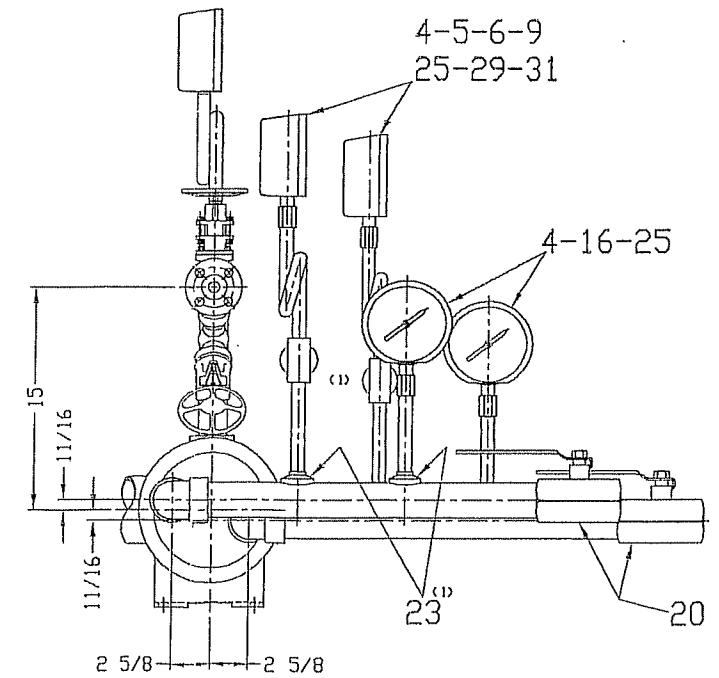
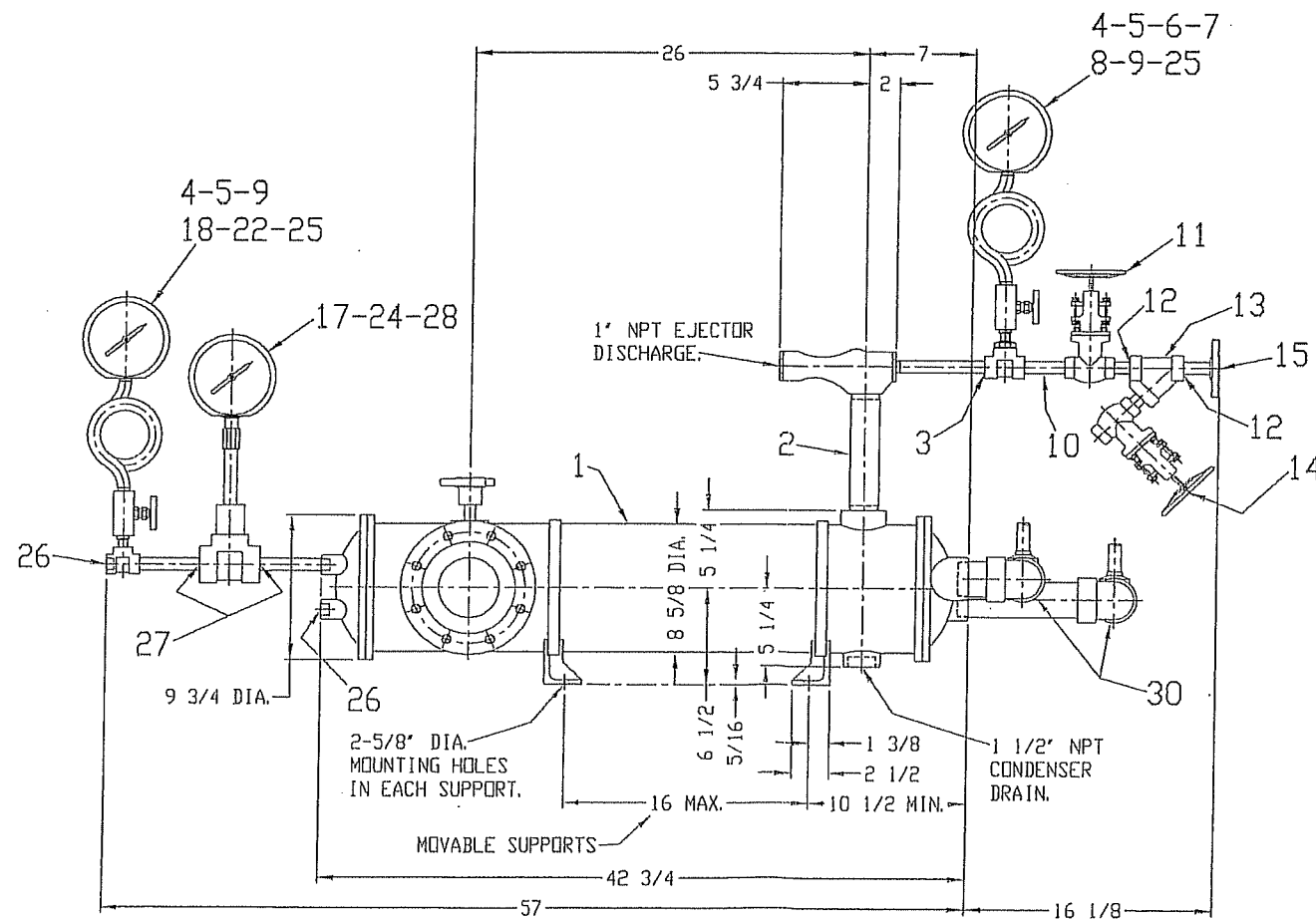
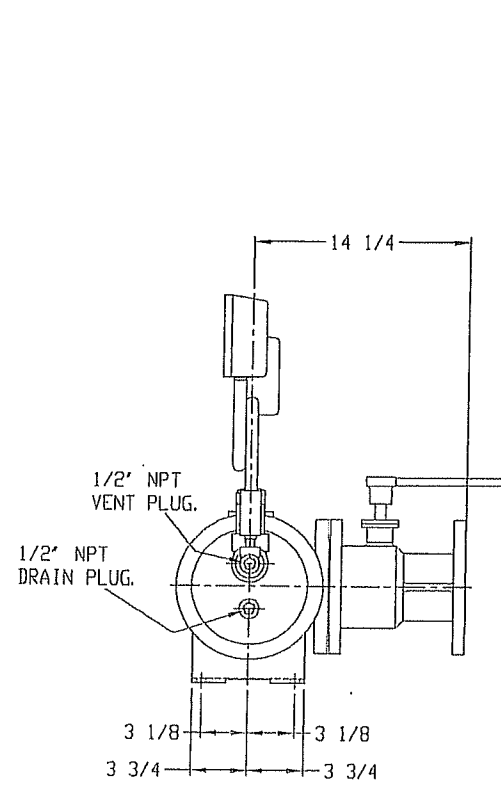
STEAM PATH



4"-150# ANSI R. F. STUDED GLAND VAPOR CONNECTION. TO BE PIPED TO GLAND LEAK-OFF CONNECTION ON OUTLINE DWG#

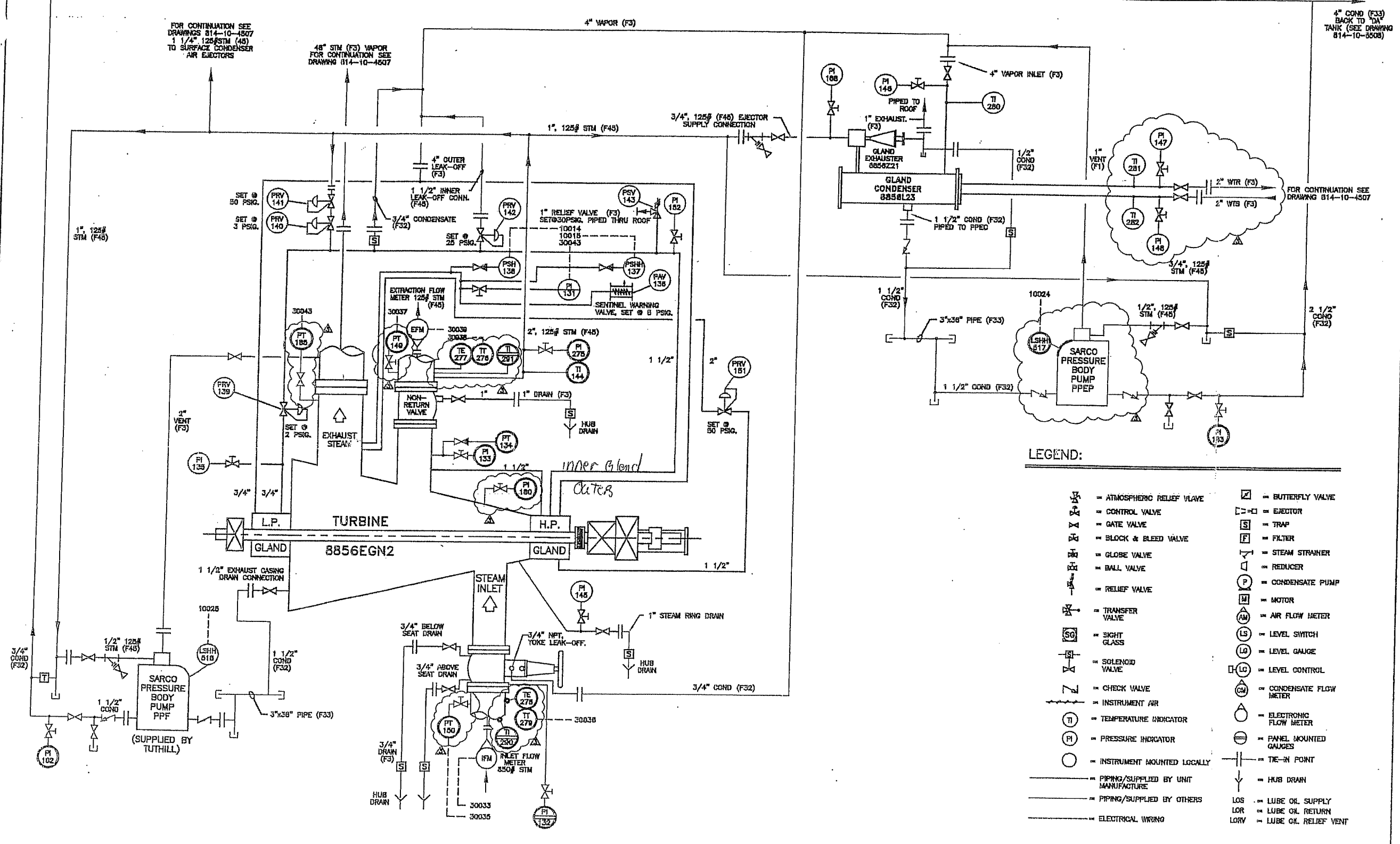
2-2" NPT THREADED COOLING WATER CONNECTIONS TO AND FROM CONDENSER. CIRCULATION IN EITHER DIRECTION.

3/4"-150# ANSI R. F. EJECTOR STEAM PRESSURE CONNECTION CONNECT TO 20# PSIG MINIMUM STEAM LINE.



NOTE:  
CONDENSER MUST BE MOUNTED WITH EJECTOR ON TOP AS SHOWN.  
CONDENSER MUST BE MOUNTED BELOW GLAND LEAK-OFF CONNECTION ON TURBINE.  
APPROXIMATE EMPTY WEIGHT - 295 lbs.

EXCEPT AS NOTED ALL DIMENSIONS ARE IN INCHES.  TOLERANCES PER ISO1 UNLESS OTHERWISE SPECIFIED	DRAWN	DATE	TUTHILL Energy Systems	PROJECTION FIRST ANGLE
	AJS	19 NOV 01		
	CHECKED	DATE		
	JAH	29 NOV 01		
APPROVED	DATE	GLAND LEAK-OFF CONDENSER & AIR EJECTOR ASSEMBLY		SHEET 1 OF 1
JAH	29 NOV 01			
Scale:	1" = 1'-0"			



FOR CONTINUATION SEE DRAWINGS 814-10-4507  
1 1/4\"/>

4\"/>

4\"/>

FOR CONTINUATION SEE DRAWING 814-10-4507

**LEGEND:**

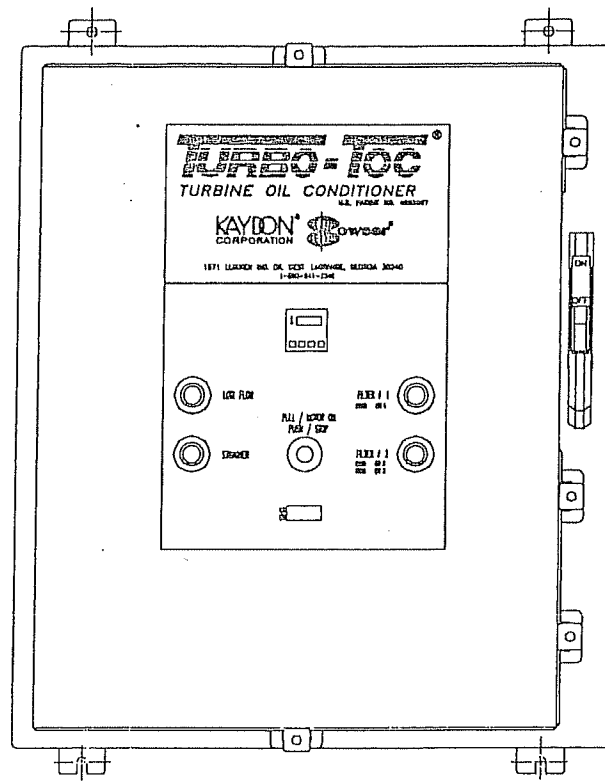
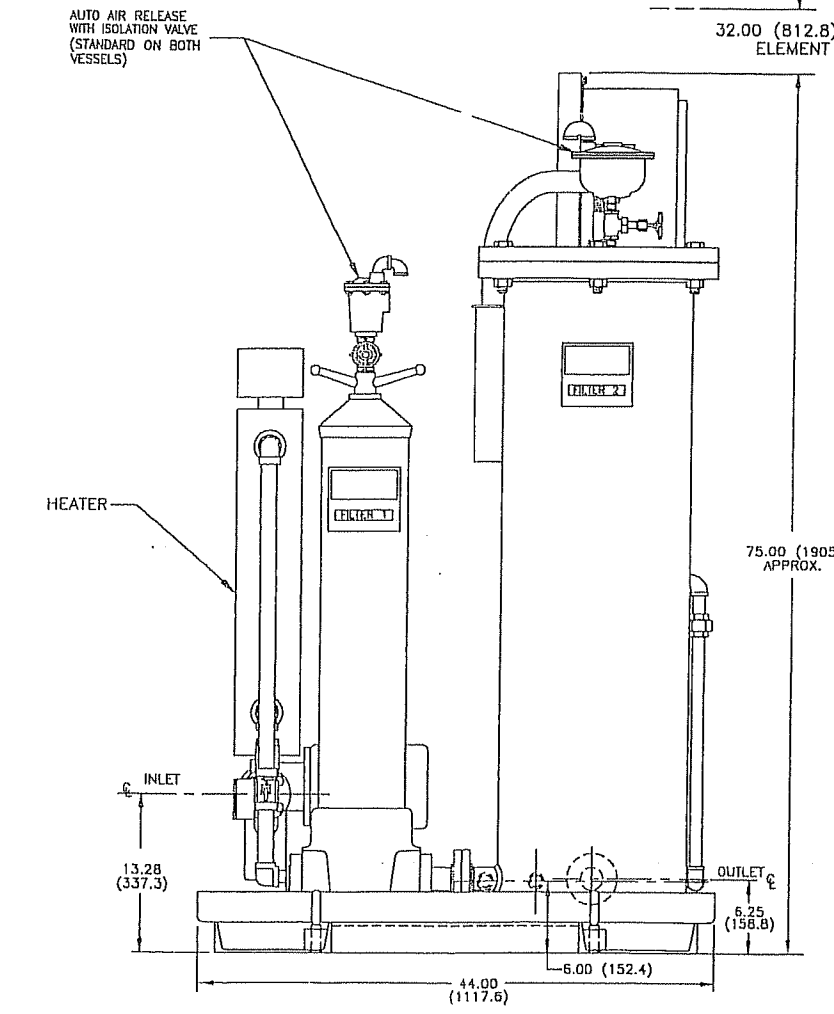
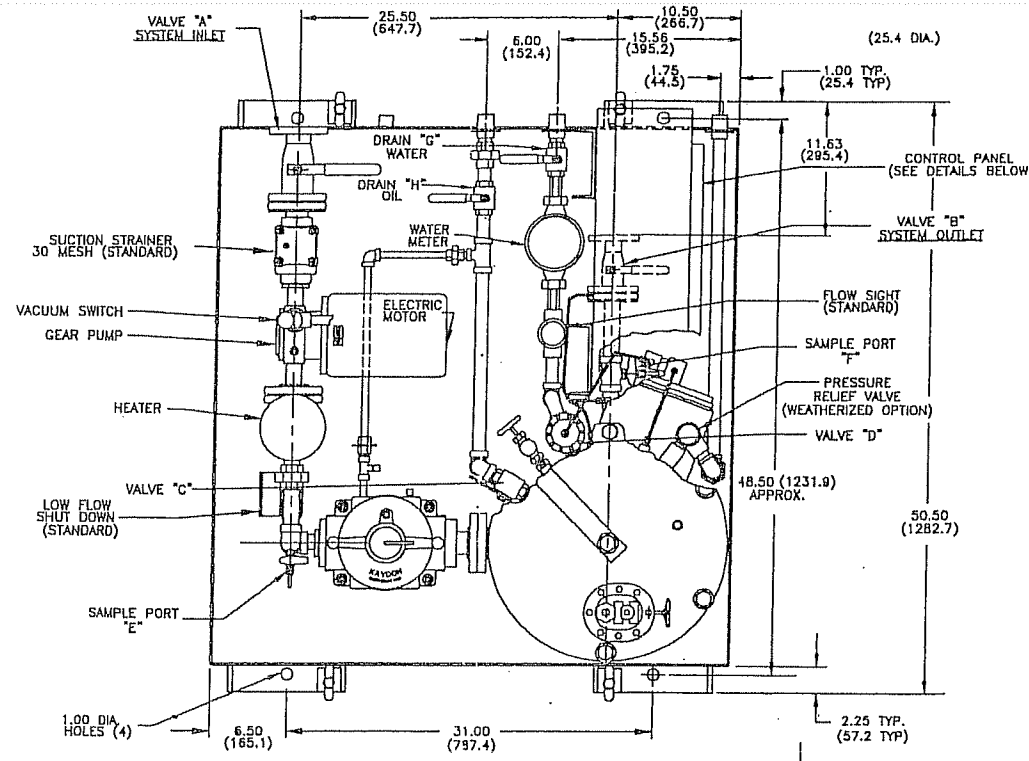
- = ATMOSPHERIC RELIEF VALVE
- = CONTROL VALVE
- = GATE VALVE
- = BLOCK & BLEED VALVE
- = GLOBE VALVE
- = BALL VALVE
- = RELIEF VALVE
- = TRANSFER VALVE
- = SIGHT GLASS
- = SOLENOID VALVE
- = CHECK VALVE
- = INSTRUMENT AIR
- = TEMPERATURE INDICATOR
- = PRESSURE INDICATOR
- = INSTRUMENT MOUNTED LOCALLY
- = PIPING/SUPPLIED BY UNIT MANUFACTURE
- = PIPING/SUPPLIED BY OTHERS
- = ELECTRICAL WIRING
- = BUTTERFLY VALVE
- = EJECTOR
- = TRAP
- = FILTER
- = STEAM STRAINER
- = REDUCER
- = CONDENSATE PUMP
- = MOTOR
- = AIR FLOW METER
- = LEVEL SWITCH
- = LEVEL GAUGE
- = LEVEL CONTROL
- = CONDENSATE FLOW METER
- = ELECTRONIC FLOW METER
- = PANEL MOUNTED GAUGES
- = TIE-IN POINT
- = HUB DRAIN
- = LUBE OIL SUPPLY
- = LUBE OIL RETURN
- = LUBE OIL RELIEF VENT

**FOR CONSTRUCTION**  
REVISION #1 - ISSUED 01/29/02

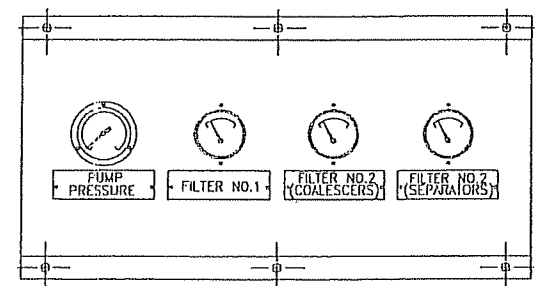
REVISION		DATE	BY	CHKD	APP'D	SCALE
1	ISSUED FOR CONSTRUCTION	01/29/02	PHILIPS	PHILIPS	PHILIPS	
2	ISSUED FOR 100% REVIEW					
3	ISSUED FOR 70% REVIEW					

NO.	DESCRIPTION	DATE	BY	CHKD	APP'D
1	DESIGN				
2	CONSTRUCTION				



CONTROL PANEL DOOR



INDICATOR GAUGE PANEL

WEATHERIZATION OPTION	
SYMBOL	DESCRIPTION
W	WEATHERIZED FOR OUTDOOR USE

HEATER OPTION	
SYMBOL	DESCRIPTION
D	HEAVY DUTY HEATER OPTION

MODEL

KL10H D W

NOTES:

- CONSTANT OIL FLOW RATE: APPROX. 9.5 GPM AT 25 PSI.
- VESSEL DESIGN PRESSURE: 150 PSIG AT 250° F.  
VESSEL HYDROSTATIC TEST PRESSURE: 225 PSIG.
- INLET & OUTLET FLANGE BOLT HOLES STRADDLE HORIZONTAL & VERTICAL CENTERLINES.
- VESSELS EQUIPPED WITH 40 PSID INTERNAL ELEMENT RELIEF VALVES-STANDARD.
- |    |  |
|----|--|
| A. | REPLACEMENT ELEMENT NO. K4000 QUANTITY 1                                   |
| B. | REPLACEMENT ELEMENTS COALESCER K2000 QUANTITY 2 SEPARATOR K3000 QUANTITY 1 |
- VALVE / PORT DESIGNATION:  
 A = INLET PORT VALVE, 1-1/2" 150# R.F. FLANGES, NORMALLY OPEN  
 B = OUTLET PORT VALVE, 1" 150# R.F. FLANGES, NORMALLY OPEN  
 C = VESSEL OIL DRAIN VALVE, 3/4", NORMALLY CLOSED  
 D = AUTOMATIC WATER DRAIN VALVE  
 E = FLUID SAMPLE PORT, 1/4", SEE NOTE 7  
 F = FLUID SAMPLE PORT, 1/4", SEE NOTE 7  
 G = EXTERNAL WATER DRAIN LINE & SKID ISOLATION VALVE, 3/4" NPT, NORMALLY OPEN  
 H = EXTERNAL OIL DRAIN LINE & SKID ISOLATION VALVE, 3/4" NPT, NORMALLY CLOSED
- FLUID SAMPLE PORTS PROVIDED - STANDARD  
ALLOWS FLUID SAMPLES TO BE TAKEN UPSTREAM & DOWN STREAM OF FILTER SYSTEM.
- APPROX. WEIGHT (DRY): 1575 LBS.  
APPROX. FLUID VOLUME: 57 GALLONS

REV.	E.C.N.	DESCRIPTION	BY	DATE
P	G7280	SEE ECN	HRJ	4/27/01
O	G6028	SEE ECN	HRJ	7/8/97
N	G5304	ADDED PRV OPTION	HART	5-30-95
M	G4962	ADDED LIFTING LUGS	HART	3-31-95
L	G4988	MOVED INLET	TOW	11-30-94
K	G4988	ADDED DUAL DIMENSIONS	MH	6-8-94
J	G4922	SEE ECN	MH	4-18-94
I	L3160	SEE ECN	MK	7-20-92
H	L3125	SEE ECN	MK	5-26-91
G	L2872	SEE ECN	MK	3-6-91
F	L2744	SEE ECN	MK	8-22-90

TOLERANCE UNLESS SPECIFIED		DIMENSIONS ARE IN INCHES	
2 PLACE	3 PLACE	ANGLES	FRACTIONS
±	±	±	±

**KAYDON CORPORATION**

1871 LAMAR BLVD. DE SOTO, MISSISSIPPI 39540-1700

DRAWN	HART	DATE	6-8-94	TITLE	TURBINE OIL CONDITIONER
CHECKED		DATE	5-21-01	MODEL NO.	KL10H
APPROVED		DATE	5-23-01		
TEST USED ON		SCALE	1/8" = 1"		

RELEASED ON	E.C.N. L2229	DRAWING NO.	SD910009	REV.	P
DATE	3-17-88				