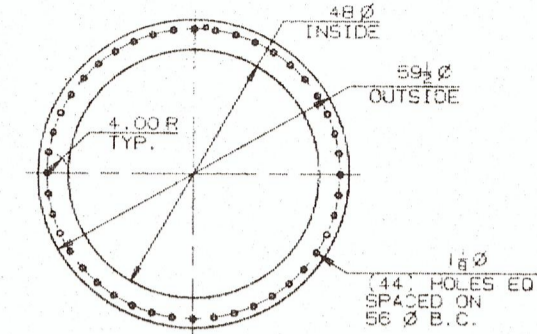


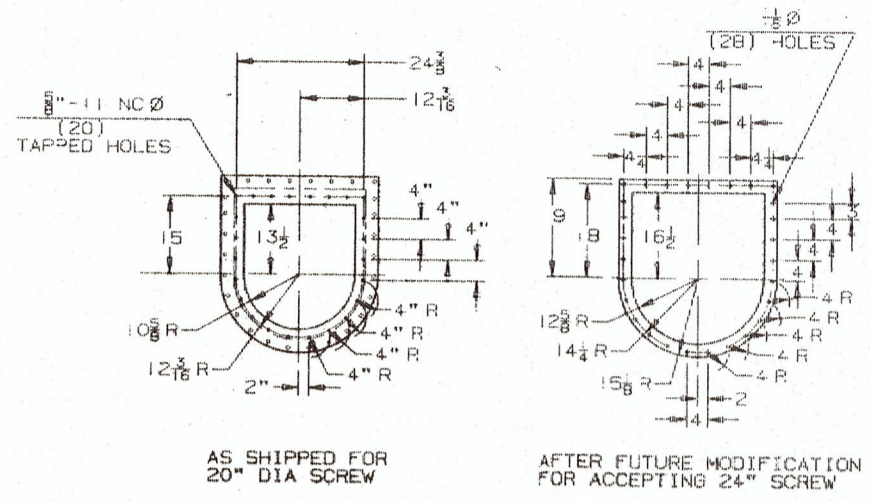
SUB ASSEMBLIES: (58 NUMBERS ARE NOT CONSECUTIVE)

- 1 SHELL-5/8" & 1" THK 304L SS MAIN SHELL W/ 1 1/2" THK 304L SS SHELL UNDER TIRES & GEAR. 12'-0" I.D. x 65'-0" LONG. ALL FLUE SUPPORTS ARE LOCATED IN 1" OR 1 1/2" THICK SHELLS. SIX AIR SAMPLING PORTS, SIX RANDOM "T" SEAM X-RAYS. MACHINED SHIM BAND-MILD STEEL WITH EIGHT RETAINER SEGMENTS PER TIRE SIDE. FLIGHTS-1/4" THK X 3" HIGH, WELDED INTERMITTENTLY ON BOTH SIDES-24 ROWS, 304L SS FLIGHTS. THE DRYER SHELL IS DESIGNED TO WITHSTAND 1" PSIG POS. PRES. AND 6" WC NEG. PRES.
- 2 TIRES-4x40 FORGED & HEAT TREATED TO 300-340 BHN, 16 1/2" O.D., 16" FACE, SLIP FIT ON MACHINED SHIM BANDS. DISCHARGE TIRE TO HAVE TAPERED SIDES.
- 3 TRUNNION ROLLS-4140 FORGED & HEAT TREATED TO 280-320 BHN, 17" FACE, .56" O.D. SPHERICAL ROLLER BEARINGS FOR TRUNNIONS, SKF #55AF 22240, (8) REQUIRED.
- 4 INTAKE BASE WITH "EQUAL LEVEL" OIL RESERVOIR
- 5 DISCHARGE BASE WITH "EQUAL LEVEL" OIL RESERVOIR
- 6 THRUST ROLLS-4" TAPERED FACE X 24" O.D. 4140 FORGED & HT TO 250 MIN BHN, WITH TIMKEN TAPERED ROLLER BEARINGS
- 7 DRIVE-10" FACE PINION, 19 TEETH, 4340 F & HT TO 375-415 BHN, 6 7/8" Ø DRIVE SHAFT, 1045 STEEL WITH (2)-LOCKING COLLARS (NO KEY). SPHERICAL ROLLER BEARINGS FOR DRIVE SHAFT, SKF #55AF 22536 PILLLOW BLOCKS, (2) REQUIRED. STEEL-LEX COUPLING-FALK #1180T 0. PARALLEL SHAFT REDUCER-FALK 445A3, 1175 RPM IN, 39 RPM OUT, 30.24 ACTUAL RATIO. FLEXIDYNE COUPLING-DODGE #19172 W/ SS SHOT 150 HP, 1200 RPM, 447T FRAME, TFCO-XEX, 230-460 V., 3 PHASE, 60 HZ, MOTOR BY AMCCO.
- 8 RING GEAR-4340 FORGED & HEAT TREATED TO 335-375 BHN, 269 TEETH, 1.50 D.P., 20" P.A., 172.667" P.O.D., 9" FACE, ONE PIECE GEAR. BEAR MOUNTING BRACKETS WELDED TO SHELL BY AMCCO IN THE FIELD AFTER SHELL IS SET ONTO ROLLS.

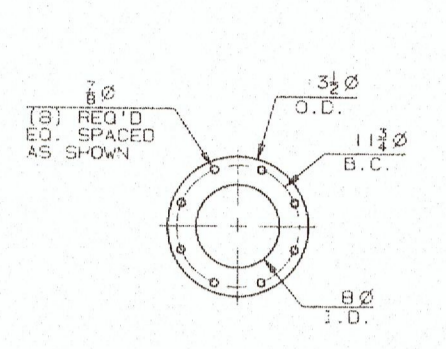
- 9 INTAKE HOPPER-1/4" THK 304L SS W/ (1) ACCESS DOOR. THE FEED SCREW & HANGER BEARINGS (INCLUDING HANGERS) WILL BE SUPPLIED BY AMCCO. THE CONVEYOR FLANGE WILL BE DRILLED TO ACCEPT HOUSINGS FOR BOTH 20" Ø AND 24" Ø TROUGH. THE INNER PORTION OF THE FLANGE WILL HAVE TO BE TRIMMED AWAY WHEN INSTALLING THE 24" Ø SCREW. THE HOPPER WILL INCLUDE A LINER THAT ADAPTS IT FOR USE WITH A 20" Ø SCREW. THE LINER WOULD BE REMOVED WHEN INSTALLING THE 24" Ø SCREW.
- 10 DISCHARGE HOOD-1/4" THK 304L SS W/ LEVEL FLANGED GAS INLET & FLANGED PRODUCT OUTLET, (1) ACCESS DOOR, AND SPRING-LOADED ROCCON DISC SEAL.
- 11 FEED CONVEYOR ASSEMBLY-BY OTHERS
- 13 FLUES-4" SCH. 40 PIPE (1 PC), SA-312 316L SS W/ SA-479 END PLUGS, 96 REQ'D. FLUES-3" SCH. 40 PIPE (1 PC), SA-312 316L SS W/ SA-479 END PLUGS, 72 REQ'D. FLUES-3" SCH. 10 PIPE (1 PC), SA-312 316L SS W/ SA-479 END PLUGS, 48 REQ'D.
- 14 REAR FLUE SUPPORT HEAD-1/2" THK, 304L SS. SPECIAL FLUE GLANDS-316 SS MACHINED GLANDS WITH (2) RINGS OF TEFLON IMPREGNATED PACKING, (2) REQUIRED.
- 15 175 PSI DESIGN PRESSURE 1995 ASME SECTION VIII, DIV. 1, STEAM CHAMBER W/ FABRICATED HANGERS & GRAFOIL GASKETS, 304L SS INNER HEAD W/ 304L STAYBOLTS, 304L SS INNER AND OUTER CYLINDERS, 304L SS SCOOPS, PIPING AND DAM PLATE. A NATIONAL BOARD NUMBER WILL BE ASSIGNED. ROTARY JOINT, 10"-1200 ELSNAFROY JOHNSON JOINT 5/8" PIPE M=8"-150# P=6"-150# ASME NAMEPLATE INFORMATION FOR PRESSURE VESSEL: MAX. WORKING PRESSURE: 175 PSIG MAX. ALLOWABLE TEMP.: 400° F M.O.M.T.: 32° F MAX. TEST PRESSURE: 253 PSIG NO RADIOGRAPHY. NO HEAT TREATMENT CORROSION ALLOWANCE ON ASME PRESSURE VESSEL COMPONENTS: STAINLESS STEEL: .063" MIN CARBON STEEL: .125" MIN.



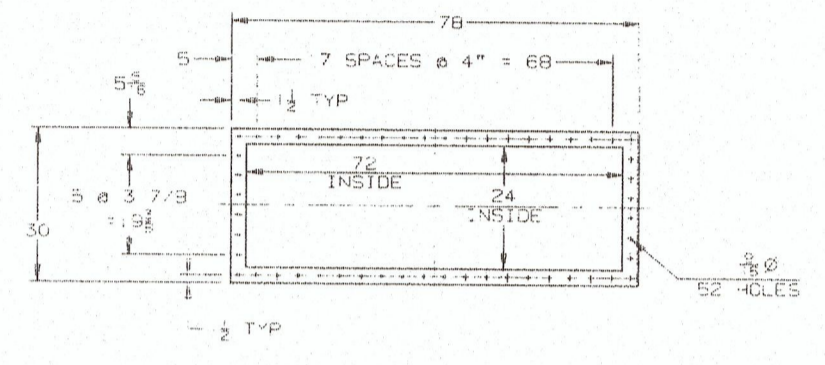
VIEW "A-A"  
GAS OUTLET FLANGE  
3/4" THICK 304L SS  
NTS



VIEW "B-B"  
PRODUCT INLET FLANGE  
1" THICK 304L SS  
NTS

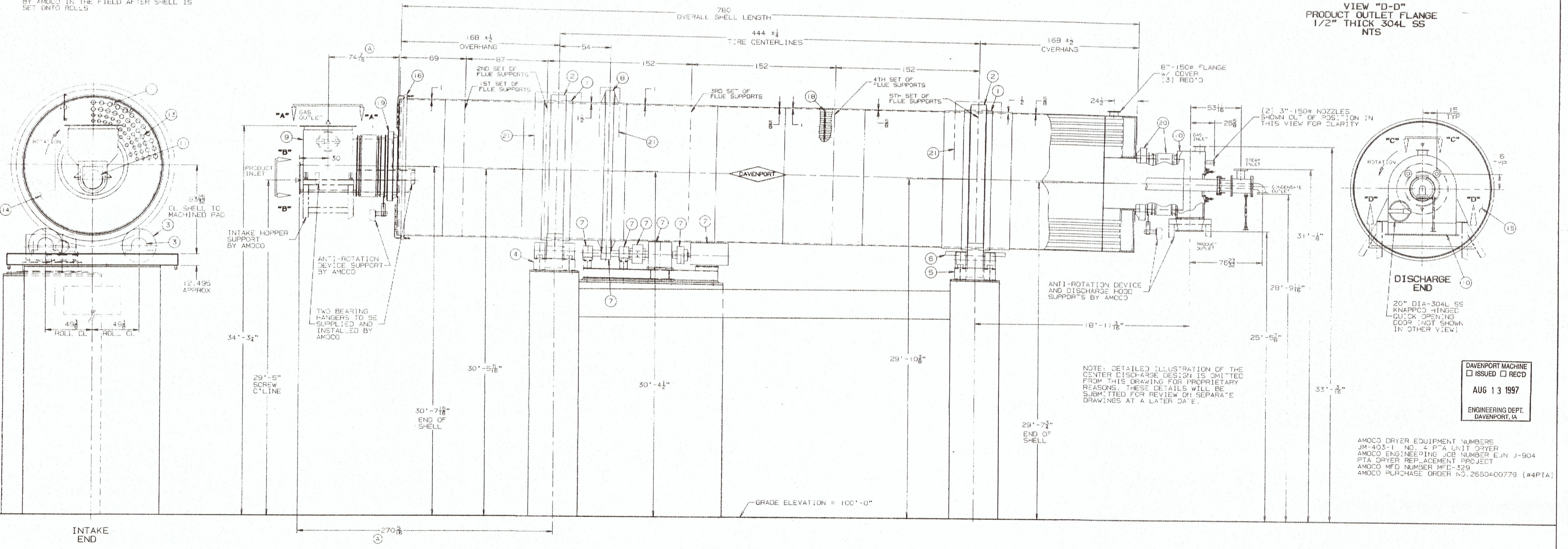


VIEW "C-C"  
GAS INLET FLANGE  
1/2" THICK 304L SS  
NTS



VIEW "D-D"  
PRODUCT OUTLET FLANGE  
1/2" THICK 304L SS  
NTS

- NOTES:
1. DRIVE COUPLING GUARDS (DESIGNED FOR OSHA COMPLIANCE) ARE FURNISHED, BUT NOT SHOWN. FULL COVERAGE GUARDS FOR TIRES, ROLLS, AND GEARS ARE FURNISHED, BUT NOT SHOWN.
  2. ALL FLUE SUPPORT SEGMENTS WILL BE OFFSET 10" AXIALLY FROM THEIR ADJACENT SEGMENTS.
  3. ALL 304L SS TO HAVE .030% MAX CARBON CONTENT. ALL 304L SS FILLER TO HAVE .025% MAX CARBON CONTENT.
  4. TOTAL CLEAN SHELL ASSEMBLY WEIGHT EMPTY = 290,000 LBS. WITH TUBES AND STEAM CHAMBER FULL OF WATER = 360,500 LBS.
  5. HEAT TRANSFER AREA = 4275 SQUARE FEET
  6. CARBON STEEL TO BE CLEANED AND PAINTED PER DAVENPORT SPEC. #PNTRSTD-04



NOTE:  
DUCTING, PIPING, INSULATION, TRANSITION PIECES, ELECTRICAL EQUIPMENT, FOUNDATIONS AND ANYTHING NOT SHOWN OR DESCRIBED HEREIN IS OUTSIDE OF DAVENPORT MACHINE'S SCOPE OF SUPPLY.

**DAVENPORT ROTARY STEAM TUBE DRYER**  
2'-0" I.D. x 65'-0" LONG - 3/16" PITCH/FT  
COUNTER FLOW - 2.85 R.P.M. APPROX. SHELL SPEED  
304L SS CONSTRUCTION SHELL AND INTERNALS  
PRODUCT: PURIFIED TEREPHTHALIC ACID

- REVISION C: GAS OUTLET FLANGE WAS 50 I.D., 60 O.D. WITH (40) 15/16" Ø HOLES ON 56 3/4 B.C., CUSTOMER REQUEST, BY GM, 8-13-97
- REVISION B: EXTENDED 3" NOZZLES-25 5/8 WAS 19 5/8 BY RL8-5/8/97
- REVISION A: 74 7/16 WAS 90 7/16, 270 5/16 WAS 286 5/16, BY REE, 3-14-97

NOTE: DETAILED ILLUSTRATION OF THE CENTER DISCHARGE DESIGN IS OMITTED FROM THIS DRAWING FOR PROPRIETARY REASONS. THESE DETAILS WILL BE SUBMITTED FOR REVIEW ON SEPARATE DRAWINGS AT A LATER DATE.

DAVENPORT MACHINE  
□ ISSUED □ RECD  
AUG 13 1997  
ENGINEERING DEPT.  
DAVENPORT, IA

AMCCO DRYER EQUIPMENT NUMBERS  
JM-403-1 NO. 4 PTA UNIT DRYER  
AMCCO ENGINEERING JOB NUMBER EUN J-904  
PTA DRYER REPLACEMENT PROJECT  
AMCCO MFD NUMBER MFD-329  
AMCCO PURCHASE ORDER NO. 2650+00779 (#4PTA)

<p>NOTE: THIS DOCUMENT DRAWING OR SKETCH EMBODIES A CONFIDENTIAL PROPRIETARY DESIGN PROPERTY OF DAVENPORT MACHINE AND IS SUBMITTED UNDER A CONFIDENTIAL RELATIONSHIP FOR A SPECIFIC PURPOSE. THE RECIPIENT BY ACCEPTANCE ASSUMES CUSTODY THEREOF AND AGREES NOT TO DISCLOSE OR REPRODUCE IN WHOLE OR IN PART WITHOUT WRITTEN CONSENT OF DAVENPORT MACHINE.</p>	<p>TOLERANCES UNLESS OTHERWISE SPECIFIED</p> <p>FRACTIONS ± 1/64" XX ± .01" XXX ± .005" ANGLES ± 1/4°</p>	<p>DAVENPORT MACHINE A DIVISION OF MOORE STATES CORPORATION 629 WEST RIVER DRIVE DAVENPORT, IOWA U.S.A. 52808-3339</p>
	<p>SCALE 1/4" = 1'</p> <p>DATE 1-14-97</p> <p>DRAWN R. BATEMAN CHECKED R. ENGEMAN</p>	

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