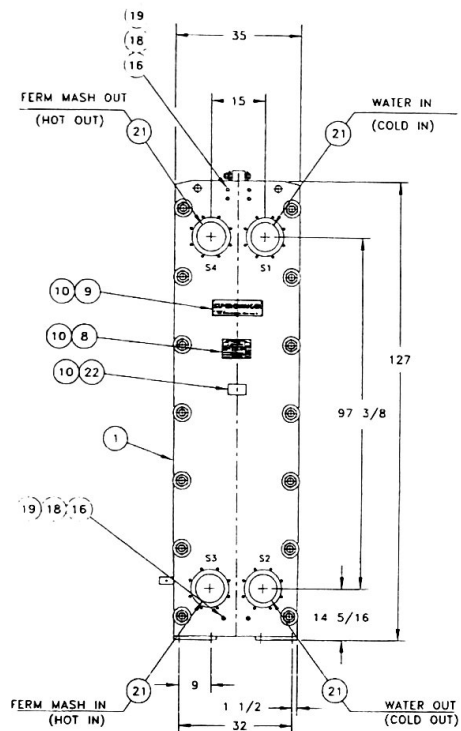
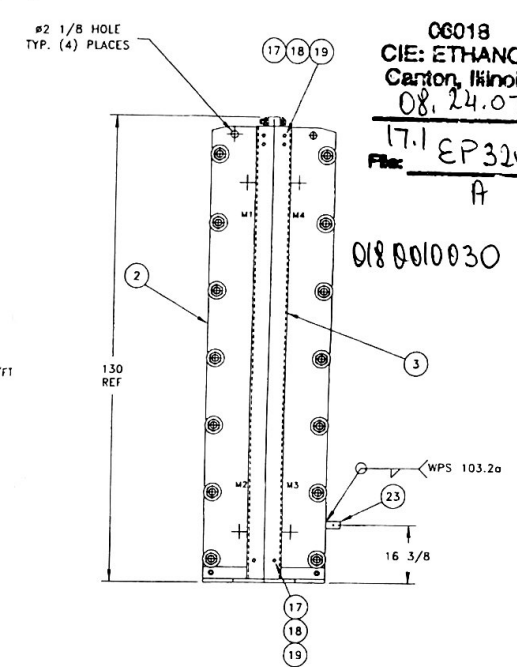
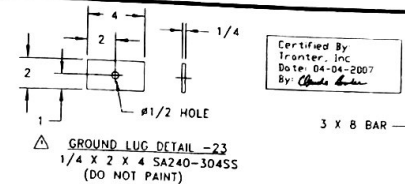
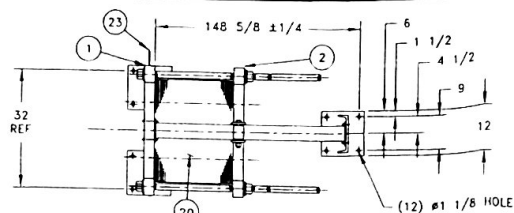


- NO. 8. PLATES ARE TO BE ELECTROPOLISHED.
 NO. 9. PERMANENTLY ATTACH TO FRAME METAL TAG SHOWING COLD IN, COLD OUT, HOT IN, HOT OUT
 NO. 10. DOCUMENT CONTROL REQUIRED. DOCUMENT PACKAGE TO SHIP SEPARATELY CONSISTING OF ASME PRESSURE CALCULATIONS, SEISMIC LOAD CALCULATIONS & CERTIFIED DRAWINGS.
 NO. 11. UNIT DESIGNED FOR SEISMIC LOADING PER BOCA 96 Av=0.05, Ac=0.05 80 MPH WIND LOADING.



PARTS LIST

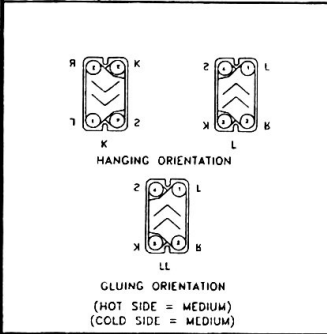
| ITEM NO. | DESCRIPTION | DRAWING NO. | NO. REQ'D. |
|----------|--------------------------------------|------------------|---------------|
| 1 | STATIONARY FRAME ASS'Y. | SA-516-20N | D-206023 |
| 2 | MOVEABLE FRAME ASS'Y. | SA-516-20N | D-203861-1 |
| 3 | GUIDE BAR SUPPORT | | D-206084 |
| 4 | UPPER GUIDE BAR (WORKING LGTH. 145) | | D-203490-3 |
| 5 | LOWER GUIDE BAR (WORKING LGTH 145) | | D-204488-3 |
| 6 | BOLT ASS'Y. (WORKING LGTH 120) | | |
| 7 | 2 DIA CARBON STEEL SA-193-B7 | | D-202779-B |
| 8 | BOLT ASS'Y. (WORKING LGTH. 80) | | |
| 9 | 2 DIA CARBON STEEL SA-193-B7 | | D-202779 |
| 10 | DATA NAMEPLATE | | B-202112 |
| 11 | NAMEPLATE | | B-200734 |
| 12 | METAL TACK FASTENER | | A-203187 |
| 13 | SHROUD SET ("L" DIM: 55 7/8) | | D-203866 |
| 14 | SHROUD, STUD | | A-200830 |
| 15 | SHROUD, NUT | | A-200831 |
| 16 | SHROUD, WASHER | | A-200832 |
| 17 | NOZZLE PROTECTOR (NOT SHOWN) | | D-204774-5 |
| 18 | GUIDE BAR BOLT | | B-203480-B |
| 19 | GUIDE BAR NUT | | B-203480-4 |
| 20 | GUIDE BAR WASHER | | B-203481 |
| 21 | NOZZLE B SIR ("S" FRAME) | SA312-1P316L-WLD | B-6-115687-10 |
| 22 | 3 X 5 X 16 GA 3045S TAG | | 4 |
| 23 | GROUNDING LUG | | 1 |

OG018
 CIE: ETHANOL
 Canton, Illinois
 08.24.07
 17.1 EP3201
 0180010030

| DIM. | STUDDED PORT ANSI B16.5 BOLT HOLE DIMENSIONS | |
|------|--|----|
| | SIZE | 8" |
| A | 3/4-10 UNC 2B | |
| B | B | |
| C | 1 3/16 | |

| SPECIFICATIONS | | "U" CODE STAMP DATA | |
|-------------------|----------------|--------------------------|--------------------|
| DESIGN PRESSURE: | 150 PSI | M.A.W.P. | 150 PSI AT 300 °F |
| TEST PRESSURE: | 195 PSI | M.D.M.T. | -20 °F, AT 150 PSI |
| DESIGN TEMP.: | 300 °F | MEDIUM: | FERM MASH/WATER |
| NO. OF PLATES: | 159 | FORM: | U-1 NO. REQ'D. 1 |
| SURFACE AREA: | 2638.33 SQ.FT. | LOCATION OF INSTALLATION | |
| WEIGHT: | 14355 LBS | CENTRAL ILLINOIS ETHANOL | |
| PAINT: ROYAL BLUE | | CANTON, IL | |

- NOTES
- FLEXIBILITY IN PIPING IS NECESSARY TO PROVIDE FOR THERMAL EXPANSION. WHERE APPLICABLE, PIPE VIBRATIONS AND FLUID PULSATIONS SHOULD BE ELIMINATED FOR FATIGUE AND CYCLIC TYPE OF APPLICATIONS.
 - FABRICATE PER ASME CODE SECTION VIII, DIV. 1 SPECS., LATEST EDITION AND ADDENDA. "U" STAMP YES NAT'L BD. YES
 - METAL STAMP ON ITEM #22: P.O. NO: 601870722 PROJECT NO. 06018 CENTRAL ILLINOIS ETHANOL CANTON, IL EP-3201-A FERMENTER COOLER
 - CHANNEL VELOCITIES: H/S 1.90 fps C/S 1.64 fps
 - WAPICS PART NO. GF-187-115687-6
 - MAXIMUM FRAME CAPACITY = 199 PLATES (25% EXPANSION).
 - PLATE GAP: H/S 8.0mm CS 8.0mm



| PLATE SEQUENCE | GASKET MATERIAL | PIERCING | GLUING | HANGING |
|----------------|-----------------|----------|----------|---------|
| 1 | EPDM | 1234 | LL Start | K |
| 2, 4 .. | 154, 156 EPDM | 1234 | LL | L |
| 3, 5 .. | 155, 157 EPDM | 1234 | LL | L |
| | 158 EPDM | 1234 | LL | L |
| | 159 EPDM | 0000 | LL End | K |

CERTIFIED PRINT CHECK
 CHK. BY: [Signature]
 DATE: 8/27/07

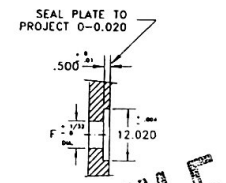


PLATE ASSEMBLY SPECIFICATIONS

| Cty | Gasket Material | Theta/Piercing | Gluing | Hanging |
|-----|-----------------|----------------|----------|---------|
| 1 | EPDM | 1234 | LL Start | K |
| 157 | EPDM | 1234 | LL | L |
| 1 | EPDM | 0000 | LL End | K |

PERFORMANCE (250288)

| SECTION | FLUID NAME | FLOW RATE (LB/HR) | INLET TEMP. °F | OUTLET TEMP. °F | PRESSURE DROP (PSI) | PLATE ARRANGEMENT | PLATE MATERIAL | GASKET MATERIAL | NOZZLE LOCATION | "S" FRAME | "M" FRAME |
|---------|------------|-------------------|----------------|-----------------|---------------------|-------------------|----------------|-----------------|-----------------|-----------|-----------|
| 1 | FERM MASH | 2000901 | 93 | 88 | 8.69 | 79M X 1 | 316 | EPDM | S1 | 8 11/16 | |
| | WATER | 1624012 DB | 83 | 88 | 4.86 | 79M X 1 | 316 | EPDM | S2 | 8 11/16 | |
| | | | | | | | | | S3 | 8 11/16 | |
| | | | | | | | | | S4 | 8 11/16 | |

THE

TRANTER®

TRANTER, Inc., Wichita Falls, Texas

LURGI PSI

MODEL GF-187-A-8-HP-159
 EP-3201-A FERMENTER COOLER

SCALE: 5/0 115687