TAKEN FROM MASTER DATA REPORT BY NATIONAL BOARD

# FORM U-1 MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS
## As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

1. Manufactured and certified by GASPAR, INC 1545 WHIPPLE AVE. S.W. CANTON, OHIO 44710 (Name and address of Manufacturer)
2. Manufactured for TATE & LYLE SINGAPORE PTE, LTD 2200 E. ELDORADO STREET DECATUR, IL 62521 (Name and address of Purchaser)
3. Location of Installation UNKNOWN (Name and address)
4. Type: HORIZONTAL (Horiz., vert., or sphere) ORGANICS HEATER (Tank, separator, jkt. vessel, heat exh., etc.) 33350A (Mfg's serial No.)
   ----- (CRN) 33350 REV.3 (Drawing No.) 2097 (Nat'l. Bd. No.) 2005 (Year built)
5. ASME Code, Section VIII, Div. 1 2004 EDITION [Edition and Addenda (date)] ----- (Code Case No.) ----- [Special Service per UG-120(d)]

*Items 6–11 incl. to be completed for single wall vessels, jackets of jacketed vessels, shell of heat exchangers, or chamber of multichamber vessels.*

6. Shell (a) No. of course(s): (1) ONE (b) Overall length (ft & in.): 15' - 7.875"

| Course(s) | | | Material | Thickness | | Long. Joint (Cat. A) | | | Circum. Joint (Cat. A, B, & C) | | | Heat Treatment | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | Diameter, In. | Length (ft & in.) | Spec./Grade or Type | Nom. | Corr. | Type | Full, Spot, None | Eff. | Type | Full, Spot, None | Eff. | Temp. | Time |
| 1 | 18" OD | 15' - 7.875" | SA106-B | .375 | .125 | S | NONE | 100 | 7 | NONE | --- | ---- | ---- |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

7. Heads: (a) ----- (Mat'l Spec. No., Grade or Type) (H.T. — Time & Temp.) (b) ----- (Mat'l Spec. No., Grade or Type) (H.T. — Time & Temp.)

| | Location (Top, Bottom, Ends) | Thickness Min. | Thickness Corr. | Radius Crown | Radius Knuckle | Elliptical Ratio | Conical Apex Angle | Hemispherical Radius | Flat Diameter | Side to Pressure Convex | Side to Pressure Concave | Category A Type | Category A Full, Spot, None | Category A Eff. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (a) | | | | | | | | | | | | | | |
| (b) | | | | | | | | | | | | | | |

If removable, bolts used (describe other fastening) ---- (Mat'l Spec. No., Grade, size, No.)

8. Type of jacket ---- Jacket closure ---- (Describe as ogee & weld, bar, etc.)
   If bar, give dimensions ---- If bolted, describe or sketch.
9. MAWP 123 (internal) 15 (external) psi at max. temp. 350 (internal) 350 (external) °F Min. design metal temp. -20 °F at 123 psi.
10. Impact test NO. CHARPY IMPACT TEST EXEMPT PER UG-20(f) [Indicate *yes* or *no* and the component(s) impact tested] at test temperature of ---- °F.
11. Hydro., pneu., or comb. test press. HYDROSTATIC 160 Proof test ----

*Items 12 and 13 to be completed for tube sections.*

12. Tubesheet: SA516-70* [Stationary (Mat'l Spec. No.)] 19.50" [Dia., In. (subject to press.)] 1.8125" (Nom. thk., In.) .125 (Corr. Allow., In.) WELDED [Attachment (welded or bolted)]
    [Floating (Mat'l Spec. No.)] (Dia., In.) (Nom. thk., In.) (Corr. Allow., In.) (Attachment)
13. Tubes: SB626-N10276 (Mat'l Spec. No., Grade or Type) .750 (O.D., In.) .065 (Nom. thk., In. or gauge) 178 (Number) STRAIGHT [Type (Straight or U)]

*Items 14-18 incl. to be completed for inner chambers of jacketed vessels or channels of heat exchangers.*

14. Shell (a) No. of course(s) TWO (b) Overall length (ft & in.): 2' - 4.0"

| Course(s) | | | Material | Thickness | | Long. Joint (Cat. A) | | | Circum. Joint (Cat. A, B, & C) | | | Heat Treatment | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | Diameter, In. | Length (ft & in.) | Spec./Grade or Type | Nom. | Corr. | Type | Full, Spot, None | Eff. | Type | Full, Spot, None | Eff. | Temp. | Time |
| 1 | 18" OD | 1' - 3.0" | SB575-N10276 | .1875 | 0 | 1 | FULL | 100 | ---- | ----- | --- | ---- | ---- |
| 1 | 18" OD | 1' - 1.0" | SB575-N10276 | .1875 | 0 | 1 | FULL | 100 | ---- | ----- | --- | ---- | ---- |
| | | | | | | | | | | | | | |

15. Heads: (a) SA105 w/ 3/8"THK FACER (SB575-N10276) (Mat'l Spec. No., Grade or Type) (H.T. — Time & Temp.) (b) SA105 w/ 3/8"THK FACER (SB575-N10276) (Mat'l Spec. No., Grade or Type) (H.T. — Time & Temp.)

| | Location (Top, Bottom, Ends) | Thickness Min. | Thickness Corr. | Radius Crown | Radius Knuckle | Elliptical Ratio | Conical Apex Angle | Hemispherical Radius | Flat Diameter | Side to Pressure Convex | Side to Pressure Concave | Category A Type | Category A Full, Spot, None | Category A Eff. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (a) | ENDS | 1.56 | 0 | ---- | ---- | --- | ---- | ---- | 25" | ---- | ---- | ---- | ---- | --- |
| (b) | ENDS | 1.56 | 0 | ---- | ---- | --- | ---- | ---- | 25" | ---- | ---- | ---- | ---- | --- |

If removable, bolts used (describe other fastening) (32) 1-1/8" STUDS SA193-B7 (64) 1-1/8" NUTS SA194-2H (Mat'l Spec. No., Grade, size, No.)

Original heads have been replaced with stainless steel—repairs were not registered with National Board

## FORM U-1 (Back)

16. MAWP 123 (internal) 15 (external) psi at max. temp. 350 (internal) 350 (external) °F. Min. design metal temp. -20 °F at 123 psi.

17. Impact test NO, CHARPY IMPACT TEST EXEMPT PER UG-20(f), UNF-65, UCS-66(a). at test temperature of ---- °F.
(Indicate yes or no and the component(s) impact tested)

18. Hydro., pneu., or comb. test press. HYDROSTATIC 160 Proof test ----

19. Nozzles, inspection, and safety valve openings:

| Purpose (inlet, Outlet, Drain, etc.) | No. | Diameter or Size | Flange Type | Material | | Nozzle Thickness | | Reinforcement Material | How Attached | | Location (Insp.Open) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Nozzle | Flange | Nom. | Corr. | | Nozzle | Flange | |
| INLET/OUTLET | 2 | 2" | 150#LJ | SB619-N10276 | SA105 | .154 | 0 | ---- | (c) | ---- | ---- |
| OUTLET | 1 | 2" | 150#SO | SA106-B | SA105 | .218 | .125 | ---- | (c) | (k) | ---- |
| INLET | 1 | 8" | 150#SO | SA106-B | SA105 | .322 | .125 | ---- | (c) | (k) | ---- |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

20. Supports: Skirt NO (Yes or No) Lugs 2 (No.) Legs 2 (No.) Others ---- (Describe) Attached SHELL/WELDED (Where and how)

21. Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report:
(List the name of part, item number, mfg's. name and identifying number)

22. Remarks: UG-46(a).
ITEM 12: *TUBESHEETS HAVE A 3/8"THK x 21-1/2"DIA. FACER (SB575-N10276).
3/8"THK FACERS MEET THE REQUIREMENTS OF UCL-23(a).
ITEM 14: AREA OF LONG. SEAM WELD BENEATH THE BODY FLANGES WAS 100% ULTRASONIC INSPECTED PER UW-53.

### CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME Code for Pressure Vessels, Section VIII, Division 1.

U Certificate of Authorization No. 16862 Expires JULY 25 2008

Date 10-6-05 Name GASPAR, INC. (Manufacturer) Signed Wesley Morgan (Representative)

### CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of Ohio and employed by OneBeacon American Insurance Company of Boston, Mass. have inspected the pressure vessel described in this Manufacturer's Data Report on 10-06-2005, and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with ASME Code, Section VIII, Division 1. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 10-06-2005 Signed (Authorized Inspector) Commissions NB-9838A OHIO COMM. PA-2646 (Nat'l Board incl. endorsement, State, Province and No.)

### CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE

We certify that the statements on this report are correct and that the field assembly construction of all parts of this vessel conforms with the requirements of ASME Code, Section VIII, Division 1.

U Certificate of Authorization No. _____ Expires _____

Date _____ Name _____ (Assembler) Signed _____ (Representative)

### CERTIFICATE OF FIELD ASSEMBLY INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of _____ and employed by _____ of _____ have compared the statements in this Manufacturer's Data Report with the described pressure vessel and state that parts referred to as data items _____, not included in the certificate of shop inspection, have been inspected by me and to the best of my knowledge and belief, the Manufacturer has constructed and assembled this pressure vessel in accordance with ASME Code, Section VIII, Division 1. The described vessel was inspected and subjected to a hydrostatic test of _____ psi. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date _____ Signed _____ (Authorized Inspector) Commissions _____ (Nat'l Board incl. endorsement, State, Province and No.)