

FORM U-1A MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS
(Alternative Form for Single Chamber, Completely Shop or Field Fabricated Vessels Only)
As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

1/2

1. Manufactured and certified by Winbco Tank Co. 1200 E. Main St. Ottumwa, IA 52501 USA
(Name and address of Manufacturer)

2. Manufactured for Tate & Lyle 1989 Hayes Ave Fort Dodge, IA 50501 USA
(Name and address of Purchaser)

3. Location of installation Tate & Lyle 1989 Hayes Ave, Fort Dodge, IA 50501 USA
(Name and address)

4. Type Vertical 07210 07210 670 2008
(Horiz. or vert., tank) (Mfr's serial No.) (CRN) (Drawing No.) (Natl. Bd. No.) (Year built)

5. The chemical and physical properties of all parts meet the requirements of material specifications of the ASME BOILER AND PRESSURE VESSEL CODE. The design, construction, and workmanship conform to ASME Rules, Section VIII, Division 1 2004
Year

to 2006 _____ _____
Addenda (Date) Code Case Nos. Special Service per UG-120(d)

6. Shell: SA-240 304 0.1875" 0" 2'-6" 34'-0"
Matl. (Spec. No., Grade) Nom. Thk. (in.) Corr. Allow. (in.) Diam. I.D. (ft. & in.) Length (overall) (ft. & in.)

7. Seams: Type 1 None 70% _____ _____ Type 1 None 70% 4
Long (Welded, Dbl., Sngl., Lap, Butt) R.T. (Spot or Full) Eff. (%) H.T. Temp. (°F) Time (hr) Girth (Welded, Dbl., Sngl., Lap, Butt) R.T. (Spot or Full) Eff. (%) No. of Courses

8. Heads: (a) Matl. SA-240 304 (b) Matl. SA-240 304
(Spec. No., Grade) (Spec. No., Grade)

	Location (Top, Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a)	Top	0.1332"	0"	30" IR	2" IR	N/A	N/A	N/A	N/A	Concave
(b)	Bottom	0.1542"	0"	30" IR	2" IR	N/A	N/A	N/A	N/A	Concave

If removable, bolts used (describe other fastenings) N/A
(Matl. Spec. No., Gr., Size, No.)

9. MAWP 80 15 psi at max. temp. 320 320 °F.
(internal) (external) (internal) (external)

Min. design metal temp. -20 °F at 80 psi. Hydro., pneu., or comb. test pressure Hydro. @ 112 psi.

10. Nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain)	No.	Diam. or Size	Type	Matl.	Nom. Thk.	Reinforcement Matl.	How Attached	Location
VAPOR OUTLET (B)	1	6" NPS	Cl. 150 LJ	SA-312 TP304	0.28"	N/A	UW-16.1(e)	N/A
RELIEF NOZZLE (R)	1	4" NPS	Cl. 150 LJ	SA-312 TP304	0.237"	SA-240 304	UW-16.1(h)	N/A
thermowell coupling	2	1.5" NPS	N/A	SA-182 F304	0.3"	N/A	UW-16.1(e)	N/A
pressure pad flange	2	Studding Outlet 2" NPS	N/A	SA-240 304	2"	N/A	UW-16.1(e)	N/A

11. Supports: Skirt Yes Lugs N/A Legs N/A Other N/A Attached F&D Head #2 - Welded
(Yes or no) (No.) (No.) (Describe) (Where and how)

12. Remarks: Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report: None
(Name of part, item number, Mfr.'s name and identifying stamp)

CERTIFICATE OF SHOP/FIELD 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. 3593 expires January 25, 2011
 Date 2-12-06 Name Winbco Tank Co Signed [Signature]
(Manufacturer) (Representative)

CERTIFICATE OF SHOP/FIELD INSPECTION

Vessel constructed by Winbco Tank Co. at 1200 E. Main St. Ottumwa, IA 52501 USA
 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 Iowa and employed by HSBCT have inspected the component described in this Manufacturer's Data Report on 2-12-2006, 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 2-12-08 Signed [Signature] Commissions 13411A, IA1588
(Authorized Inspector) (Natl. Board (incl. endorsements), State, Prov. and No.)

FORM U-4 MANUFACTURER'S DATA REPORT SUPPLEMENTARY SHEET
As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

2/2

1. Manufactured and certified by: Winbco Tank Co. 1200 E. Main St. Ottumwa, IA 52501 USA
(Name and address of Manufacturer)

2. Manufactured for: Tate & Lyle 1989 Haves Ave Fort Dodge, IA 50501 USA
(Name and address of Purchaser)

3. Location of installation: Tate & Lyle 1989 Haves Ave, Fort Dodge, IA 50501 USA
(Name and address)

4. Type: Vertical Tank 07210
(Horiz., vert, or sphere) (Tank, separator, jkt, vessel, heat exh, ect.)) (Mfr.'s serial No.)

 07210 670 2008
(CRN) (Drawing No.) (Nat'l Board No.) (Year built)

Additional Nozzles:

Purpose (Inlet, Outlet, Drain, etc)	No.	Diameter or Size	Type	Material	Nozzle Thickness	Reinforcement Material	How Attached	Location
LIQUID FEED (A)	1	4" NPS	Cl. 150 LJ	SA-312 TP304	0.237"	N/A	UW-16.1(e)	N/A
PACKING ACCESS (M1)	1	19.25" ID	Cl. 150 SO	SA-240 304	0.375"	SA-240 304	UW-16.1(h)	Cylinder #1
STEAM INLET (G)	1	6" NPS	Cl. 150 LJ	SA-312 TP304	0.28"	SA-240 304	UW-16.1(h)	N/A
level pad flange	2	Studding Outlet 3" NPS	N/A	SA-240 304	2.25"	N/A	UW-16.1(e)	N/A
PACKING ACCESS (M2)	1	19.25" ID	Cl. 150 SO	SA-240 304	0.375"	SA-240 304	UW-16.1(h)	Cylinder #3
LIQUID OUTLET (C)	1	6" NPS	N/A	SA-312 TP304	0.28"	N/A	UW-16.1(e)	N/A

Additional Replacement Parts:

Vessel exempt from impact test per UHA-51(g).

Vessel hydrotested in the horizontal position.

Vessel has (3) external stiffening rings.

Certificate of Authorization: Type: U No. 3593 Expires January 25, 2011

Date 2-12-08 Name Winbco Tank Co Signed *Neil Clark*
(Manufacturer) (Representative)

Date 2-12-08 Name *Adam M. R. S.C.* Commission NB# 13411A, 1A1588
(Authorized Inspector) (Nat'l Board Incl. Endorsement, State, Province and No.)