

#98847

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

1. Manufactured and owned by Hydro-Chem Processing, Inc., 125 Hickory Springs Ind. Dr., Canton, GA 30
(Name and address of manufacturer)
2. Manufactured for Sand Creek Chemical Ltd., 4150 E. 60th Ave., P.O. Box 69, Commerce, City, CO 80
(Name and address of purchaser)
3. Location of inspection Commerce City, Colorado
(Name and address)
4. Type Horizontal Tank H102-V202 N/A H102-V-3 -874- 1991
(Type of vessel) (Design No.) (CAN) (Drawing No.) (Inst. 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 1989
(Year)
- to 1989 N/A N/A
(Date Code Rec.) (Local Service per UG-120(d))
6. Shell: SA-516-70 1.25 .0625 4' 6" 9' 0"
(Shell thickness) (Corr. Allow. (in.)) (Diam. I.D. (ft. & in.)) (Length (ft. & in.))
7. Seams: Welded Dbl. Butt Full 100% 1150 2.5 Welded Dbl. Butt Full 1
(Type of Seam) (Welding Process) (Welding Code) (Welding Thickness) (Welding Temperature) (Welding Time) (Welding Direction) (Welding Position) (Welding Orientation)
8. Heads: (a) Matl. SA-516-70 (b) Matl. SA-516-70
(Steel, No., Grade)

Location (Top, Bottom, End)	Minimum Thickness	Corrosion Allowance	Crack Allowance	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flare Diameter	Side to Pressure (Concave or Convex)
(a) End A	1.1492	.0625	--	9.666	2:1	--	--	--	Concave
(b) End B	1.1492	.0625	--	9.666	2:1	--	--	--	Concave

If removable, bolts used (specify size & quantity) N/A

(Material, Size, No., Gr., Size, No.)

MAWP 725 40 725 510 1110
psi at max. temp. (Design Pressure) (Test Pressure) (Hydro. Test Pressure) (Other Test Pressure)

10. Nozzles, Inspection and safety valve connections

Purpose (Inlet, Outlet, Drain)	No.	Size (in.)	Matl.	Thk.	Reinforcement Matl.	How Attached	Location
Outlet	1	6"	Stub	SA-106-B	.719"	SA-516-70	Welded Shell Cyl
Inlet	2	6"	Stub	SA-106-B	.432"	SA-516-70	Welded Shell Cyl
Riser	4	6"	Stub	SA-106-B	.432"	SA-516-70	Welded Shell Cyl
Inlet	1	2"	600/WHF	SA-106-B	.344"	Inherent	Welded Shell Cyl

11. Supports: Skirt No 2 N/A Saddles-2 Saddles - Shell Cyl. - W
(Type of Support) (Number of Supports) (Material) (Other Supports) (Attached Supports) (Where and how)

12. Remarks: Manufacturer's Periodic Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report:

(Name of person, date, number, title, name and identifying marks)

Impact Exemption C.S. Per DG-20 (f)

See Attached U-4 Form

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. 15452 expires 10-31-1991.
 Date 6-11-91 Co. name Hydro-Chem Processing, Inc. Signed [Signature]
(Manufacturer)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by Hydro-Chem Processing, Inc. at 125 Hickory Springs Ind. Dr., Canton, GA

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 Georgia and employed by H.S.B.I. & I. Co.

have inspected the component described in this Manufacturer's Data Report on 6/8, 1991, 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 6/11/91



DETAIL "T"
TYP 1 1/2" 2" & 2 1/2"

REV. DWG
Date MAY 13 '91 By

NOTES

1. NUMBER OF VESSELS REQUIRED = ONE
2. VESSEL TO BE DESIGNED AND FABRICATED IN ACCORDANCE WITH ASME CODE SECTION VIII DIV. 1 - 1989 ADDENDA, ASME CODE STAMP AND NATIONAL BOARD REGISTRATION REQUIRED.
3. INSULATION REQUIRED = 3"
4. SURFACE TREATMENT: SANDBLAST OUTSIDE TO COMM. FINISH = NONE
ONE S/C STD PRIMER = NONE
INTERIOR FINISH = NONE
5. OPERATING PRESSURE = 500 PSIG
MAWP = 725 PSIG
DESIGN TEMP = 510 °F
HYDRO TEST AT 1110 PSIG
6. CORROSION ALLOWANCE: INSIDE = .0625 OUTSIDE = NONE
7. PLUG OPENINGS FOR SHIPMENT.
8. CAPACITY = 1330 GAL.
9. BOLT HOLES TO STRADDLE VESSEL CENTER LINES.
10. JOINT EFFICIENCY: 100% SHELL 100% HEAD
11. WT/LBS: SHIPPING = 16010 OPERATING = 21890 HYDRO = 26765
12. RADIOGRAPHIC EXAMINATION: LONG JOINT = FULL GIRTH = FULL
13. STRESS RELIEVING: REQ'D @ 1100°F FOR 1.5 HRS
14. ASME NAME PLATE TO EXTEND 4" FROM SHELL.
15. 4 TO 1 TAPERS REQUIRED ON PIPE STUBS FOR FIELD WELDING, BEFORE WELDING PIPE STUBS INTO SHELL.
16. DAVIT PER HYDRO-CHEM SPEC. HCS-009.3
17. PROVIDE 1/4" NPT TEST / WEEP HOLES AT LOW POINT OF ALL PADS
18. 1/2" NPT TEST / WEEP HOLES AT LOW POINT OF ALL PADS
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▲ INSTALL DEMISTER PAD AFTER STRESS RELIEVING TO AVOID DAMAGE.

* PROJECTION SHOWN IS BEFORE HYDRO TEST. ALLOW 1/2" FOR REMOVAL OF TEST PLATES.

98847

NOTE:
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NOR, SHALL IT BE USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT HAS
BEEN PROVIDED, EXCEPT BY WRITTEN PERMISSION OF HYDRO-CHEM PROCESSING INC.

 Hydro-Chem processing inc.
CANTON, GEORGIA

SCALE: NONE	DRAWN BY: CNL
DATE: 10-24-90	ACAD FILE: H102V3-1
HAWK EAW 3-26-91	

V-202 SYNTHESIS STEAM DRUM

SAND CREEK CHEMICAL
COMMERCE CITY, COLORADO

DRAWING NUMBER:
H102-V-3-1