

#4751
FORM 1-A MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS 75-008C (2)
Alternate Form for Single Chamber Completely Shop-Fabricated Vessels Only B/P402332-A03
As Required by the Provisions of the ASME Code Rules, Section VIII, Division I

1. Manufactured by VOTATOR DIVISION OF CHEMETRON CORPORATION JEFFERSONTOWN, KENTUCKY
(Name and address of Manufacturer)
2. Manufactured for THE M. W. KELLOGG COMPANY HOUSTON, TEXAS 77046
(Name and address of Purchaser)
3. Type Vertical Vessel No. SF-34 (Name & Serial) (Name & State) Natl. Bd. No. 4834 Yr. Built 1976
4. SHELL: Matl. SA-285-GR.C T.S. 55,000 Nom. 800 Thk. 1/2" Remarks allow 063 in. Diam. 4 Ft. 6 in. Length 6 Ft. 6-5/8" OAL
(Kind and Spec. No.) (Fig. or P.B. & Spec. Mat. T.S.)
5. SEAMS: Long Wld. Dbl. Butt H.T. Yes R.T. No Sectioned No Efficiency 70 %
(Welded, Dbl. Single, Lap, Butt) (Yes or No) (Spot or Complete) (Yes or No)
Girth Wld. Dbl. Butt H.T. Yes R.T. No Sectioned No No. of Courses 2
If riveted or brazed describe seams fully under remarks.
6. HEADS: (a) Material SA-285-GR.C T.S. 55,000 (b) Material SA-285-GR.C T.S. 55,000
Location (Top, bottom, ends) Thickness 1/2" Crown Radius 48" Knuckle Radius 3-3/4" Elliptical Ratio 1:1 Conical Apex Angle None Hemisphere Radius None Flat Diameter None Side to Pressure (Convex or Concave)
(a) Top 1/2" 48" 3-3/4" 1:1 None None None None Concave
(b) Bottom 5/8" 48" 3-3/4" 1:1 None None None None Concave
If removable, bolts used (Material, Spec. No., Y.S., Size, Number) Other fastening (Describe or Attach Sketch)
7. Constructed for max. allowable working press. 100 psi at max. temp. 212 °F. Min. temp. (when less than -20°) None °F. Hydrostatic Test Press 150 psi.
8. SAFETY OR RELIEF VALVE OUTLETS: Number 1 Size 2" Flg'd. Location Top Head
9. NOZZLES:
Purpose (Inlet, Outlet, Drain) Number Diam. or Size Type Material Thickness Reinforcement Material How Attached
A & F 2 3" Flanged SA-53-GR.B Sch.40 None Welded
B & C 2 2" Flanged SA-53-GR.B Sch.40 None Welded
10. INSPECTION Manholes, No. 1 Size 54" Location Shell disassembles (bolted)
OPENINGS: Handholes, No. None Size None Location None
Threaded, No. None Size None Location None
11. SUPPORTS: Skirt No Lugs None Legs 3 (3 handling lugs) Other on top hd. Attached legs welded to btm. hd.
(Yes or No) (Number) (Number) (Describe) (Where & How)
12. REMARKS: Paragraph UG-120(d) does not apply (NOT FOR LETHAL SERVICE).

Schenk Filter Unit

M.W. Kellogg P.O. #5127-01-141-101 Job #5127

Note: Shell is 1/2" thick above bolted flange connection and 5/8" thick below flange connection.

(Brief description of purpose of the vessel as Tank, Water Tank, L.P.G., Etc.—State Contents.
1. If postweld heat-treated.
2. List other internal or external pressures with coincident temperature when applicable.

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 I.

Date MAR 23 1976 Signed VOTATOR DIV. OF CHEMETRON CORP. By A.J. Passafiume
(Manufacturer)

Certificate of Authorization Expires MARCH 30, 1979

CERTIFICATE OF SHOP INSPECTION

VESSEL MADE BY VOTATOR DIV. OF CHEMETRON at JEFFERSONTOWN, KENTUCKY

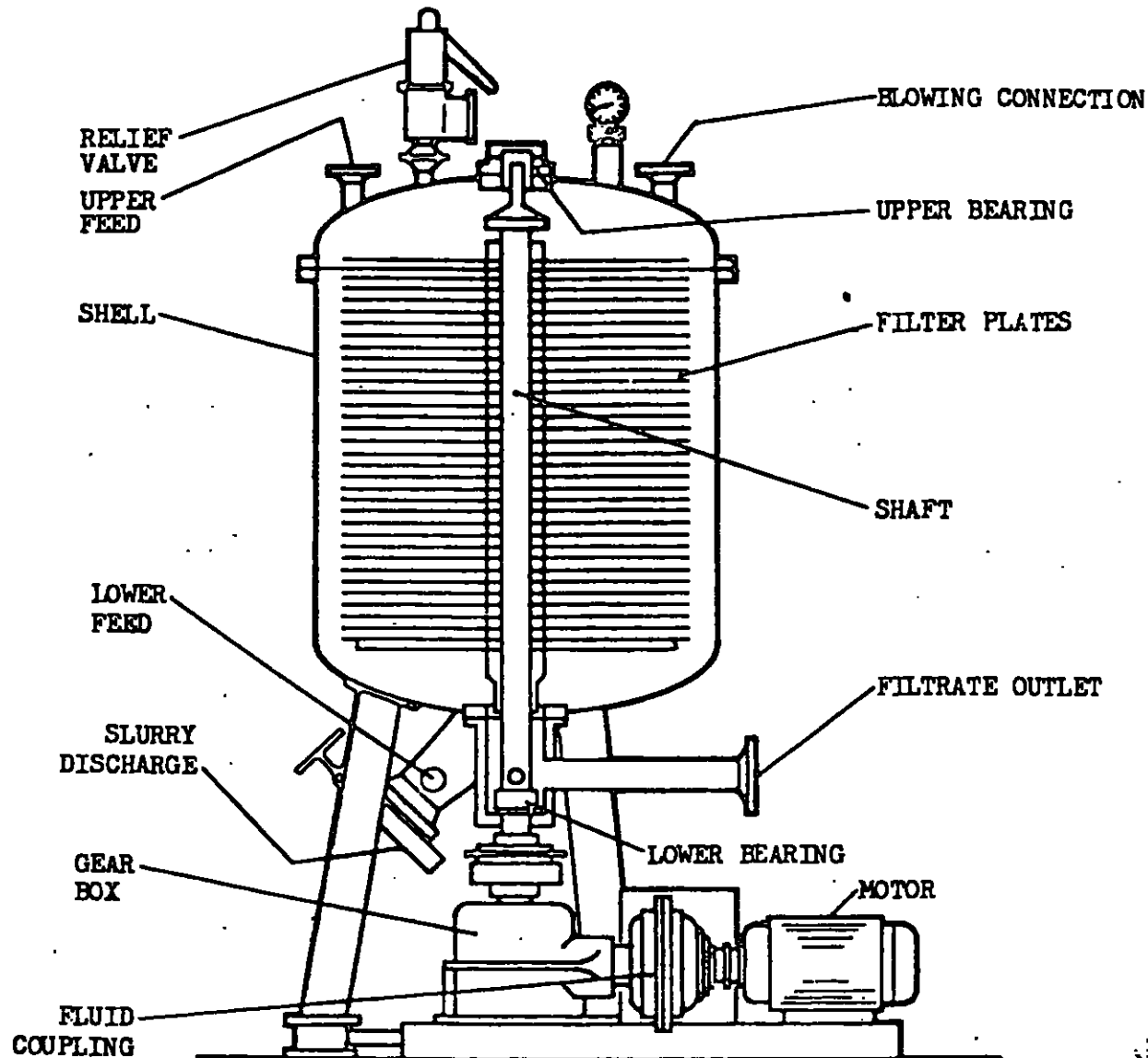
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province KENTUCKY and employed by HARTFORD STEAM BOILER INSP. & INS. COMPANY of HARTFORD, CONN. have inspected the pressure vessel described in this manufacturer's data report on MAR 23 1976 1976 and state that to the best of my knowledge and belief, the manufacturer has constructed this pressure vessel in accordance with the applicable sections of the ASME Boiler and Pressure Vessel Code.

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 MAR 23 1976 1976 Commission N. B. # 5854
Inspector's Signature [Signature] Nat'l Board, State, or Province and No.

FIGURE 1
MODEL ZHF-S

47751



TO The M. W. Kellogg Company
(HEREINAFTER CALLED BUYER)
1300 Three Greenway Plaza East
Houston, Texas 77046

ATTENTION: J. H. Troell
Mr. J. C. Dobyanski REPLY TO
YOUR REFERENCE
Inq. #5127-01-L41-101
Votator Division
Suite A144
6001 Gulf Freeway
Houston, Tx. 77023

VOTATOR DIVISION (HEREINAFTER CALLED SELLER) PROPOSES TO FURNISH TO BUYER THE EQUIPMENT AND SERVICES DESCRIBED HEREIN, SUBJECT TO THE TERMS AND CONDITIONS SET FORTH BELOW AND ON THE REVERSE SIDE HEREOF AND IN ANY EXHIBITS ATTACHED HERETO.

SPECIFICATIONS: Two (2) Votator/Schenk Centrifugal Discharge Filters, Model ZHF-S40, similar to Print No. 402332-A01.

Filter Area: 452 ft.² (each)

Scavenger Plate Area: None

Materials of Construction:

Filter Plates: 304L ✓

Shaft Assembly: 304L ✓

Filter Mesh: 316 ✓

Main Body Flange-O-Ring: Butyl Rubber ✓

Shaft (Lip) Seals: Butyl Rubber ✓

Upper Bearing Seals: Butyl Rubber ✓

Lower Bearing Seals: Butyl Rubber ✓

Spacer Seals: Asbestos ✓ *Compressed Asbestos Fibre (CAF)*

Filter Vessel: Carbon Steel ✓

Legs: Carbon Steel ✓

Flanges: Carbon Steel ✓

Stress Relief: Carbon steel vessel will be stress relieved. ✓

Filter Details:

Design Pressure: 100 psig ✓

Design Temperature: 212°F ✓

No. of Filter Plates: 39 (37?) ✓

No. of Scavenger Plates: None

Plate Spacing: 1-3/16 in.

Cake Capacity:
Total 44 ft.³
Effective 35 ft.³

Diameter of Plates: 46-3/4 in.

Filter Mesh Opening: 100 Micron PZ ✓

Diameter of Filter Vessel: 54 in.

Height of Vessel: 12-2/3 ft.

SPECIFICATIONS CONTINUED ON SHEET NO. 3.

47751

DATE June 11, 1975

YOUR REFERENCE 5127-01-L41-101

Filter Details (continued):

Net weight - empty: 5400 lbs. (approx.)
Vessel Volume: 572 gals. (approx.)
Overall Clearance to remove shaft: 18 ft. (approx.)

Filter Connections: (unless noted - 150lb. ANSI Flanges)

Slurry/Cake Discharge: 8"
Product Inlet "Top": 3"
Product Outlet "Bottom": 3"
Vent: 2"
Compressed Gas: 2"
Filtrate Outlet/Backflush: 3"
Pressure gage (Tank): 1"
Main Vessel Flange: Lower dished head. Flange drilled & bolted per ASME Code.
Pressure gage (outlet): 1"
Relief valve: 2"
Inspection Port (optional): 6" — ?
Lifting Lugs: 3
Seal Lube: (3) $\frac{1}{4}$ " N.P.T. ✓

Drive Specifications:

Motor: 50HP, TEFC enclosure, 230/460 volts, ✓
3 phase, 60 Hertz, 1800 RPM
Gearbox: Right angle, 6 to 1 ratio, spiral bevel
gears, Mfg. - Falk or equivalent.
Fluid Coupling: American Standard or equivalent.

Code:

All pressure elements of the above unit are fabricated, inspected and stamped to comply with the latest ASME Boiler & Pressure Vessel Code, Section VIII, U.P.V.

ACCEPTED _____ DATE _____

VOTATOR DIVISION

Jay H. Trull

BY _____

BY T. H. M. Hall