

SOFIX CORP.
FILTER SPECIFICATION SHEET

MODEL..... 24VH42
 Assembly Drawing..... J-43017
 Filter Diameter..... 24 IN.
 Net Filter Area..... 42 SQ. FT.
 Shell Retraction..... LIFTING LUGS
 Cake Removal..... ELECTRIC SLUICE
 Number of Leaves..... 20
 Leaf Spacing..... 2½"
 Cake Capacity..... 5.25 CU. FT.
 Cake Thickness..... 1½"
 Material Liquid Contact Points... S.S. T-304
 Cover Closure..... EYE BOLT & HEX NUTS
 Interior Finish..... MILL STD.
 Gasket (Main Closure)..... VITON
 Design Pressure..... 75 PSIG @ 300°F
 ASME Code Stamped..... YES
 Connections..... 150# ANSI, R.F.
 Manifold..... COMMON INTERNAL
 Gross Volume..... 110 U.S. GALLONS

LEAVES

Construction..... CAPPING CHANNEL - S/S T-304
 Surface Member..... CLOTH BAG
 Center Member..... 4 X 4 X .063 - S/S T-304
 Framestock..... SPUN PLATE - S/S T-304
 Outlet Nozzle..... MACHINED CASTING - S/S T-316L
 Outlet Gasket..... VITON "O"-RING

FORM U-1 MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS

as required by the provisions of the ASME Code rules, Section VIII, Division 1

1. Manufactured and certified by THE DURIRON COMPANY, INC., FILTRATION SYSTEMS DIVISION
9542 HARDPAN ROAD, ANGOLA, NY 14006
(name and address of manufacturer)

2. Manufactured for SOFIX CORP., 101 NORTHGATE COMM. CT'R, CHATTANOOGA, TN 37415
(name and address of purchaser)

3. Location of installation SOFIX CORP., 2800 RIVERPORT RD., CHATTANOOGA, TN 37406
(name and address)

4. Type: VERTICAL 3536-1700 -- J-43017-A 3536 1991
(horiz. or vert., tank) (mfr's. serial no.) (CRN) (drawing no.) (Nat'l. 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 Code, Section VIII, Division 1: 1989
(year)

A-90 -- --
(addenda (Date)) (Code Case no.) (special service per UG-120(d))

Items 6-11 inclusive to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

6. Shell: S/S, SA-240, T-304 .135" 0" 2' - 0" 5' - 2"
(mat'l. (spec. no., grade)) (nom. thickness (in.)) (corr. allow. (in.)) (dia. ID (ft. & in.)) (length (overall) (ft. & in.))

7. Seams: DBL. BUTT WELD -- 70 -- DBL. BUTT WELD -- ONE
(long. (dbl., sngl.)) (RT (spot or full)) (eff. (%)) (HT temp. (°F)) (time) (girth (dbl., sngl.)) (RT (spot, partial, or full)) (no. of courses)

8. Heads: (a) S.S., SA-240, T-304 (b) S.S., SA-240, T-304
(mat'l. (spec. no., grade)) (mat'l. (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	3/16"	0"	24"	1½"	--	--	--	--	CONCAVE
(b)	BOTTOM	3/16"	0"	24"	1½"	--	--	--	--	CONCAVE

If removable, bolts used (describe other fastenings): (a) DBL. BUTT WELD INTEGRAL W/SHELL; (b) F.S., SA-325, 1¼"
(mat'l., spec. no., gr., size, no.)

9. Type of jacket: _____ Proof test: _____

10. Jacket closure: _____ If bar, give dimensions: _____ If bolted, describe or sketch.
(describe as ogee & weld, bar, etc.)

11. MAWP: 75 at max. temp. 300 Min design metal temp.: -20 at 75 Hydro., pneu. or comb. test pressure 128
(psi) (°F) (°F) (psi) (psi)

Items 12 and 13 to be completed for tube sections.

12. Tubesheets: _____
(stationary mat'l. (spec. no., gr.)) (dia. (in.) (subject to pressure)) (nom. thickness (in.)) (corr. allow. (in.)) (attachment (welded, bolted))

_____ (floating mat'l. (spec. no., gr.)) (dia. (in.)) (nom. thickness (in.)) (corr. allow. (in.)) (attachment)

13. Tubes: _____
(mat'l. (spec. no., gr.)) (OD (in.)) (nom. thickness (in. or gauge)) (no.) (type (straight or U))

Items 14-17 inclusive to be completed for inner chambers of jacketed vessels or channels of heat exchangers.

14. Shell: _____
(mat'l. (spec. no., gr.)) (nom. thickness (in.)) (corr. allow. (in.)) (dia. ID (ft. & in.)) (length (overall) (ft. & in.))

15. Seams: _____
(long (dbl., sngl.)) (RT (spot or full)) (eff. (%)) (HT temp. (°F)) (time) (girth (dbl., sngl.)) (RT (spot, partial, or full)) (no. of courses)

16. Heads: (a) _____ (b) _____
(mat'l. (spec. no., grade)) (mat'l. (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)										
(b)										

If removable, bolts used (describe other fastenings): _____
(mat'l., spec. no., gr., size, no.)

17. MAWP: _____ at max. temp. _____ Min design metal temp.: _____ at _____ Hydro., pneu. or comb. test pressure _____
(psi) (°F) (°F) (psi) (psi)

18. Nozzles, inspection and safety valve openings:

Purpose (inlet, outlet, drain, etc.)	Number	Dia. or Size	Type	Mat'l.	Nom. Thickness	Reinforcement Material	How Attached	Location
DRAIN	1	3" 150#	ANSI	SA-312, T-304	SCH. 40	--	FUSION WELDED	BOTTOM HEAD
INLET	1	1 1/2"	"	"	"	--	"	"
OUTLET	1	1 1/2"	"	"	"	--	"	"
SLUICER	1	3 1/2"	PIPE	"	"	--	"	TOP HEAD
VENT	1	1 1/2" 150#	ANSI	"	"	--	"	"
WASH	1	1 1/2"	"	"	"	--	"	"

19. Supports: Skirt NO Lugs -- Legs 3 Other -- Attached BOTTOM HEAD - WELDED
(yes or no) (no.) (no.) (describe) (where and how)

20. Remarks: Manufacturers' Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report: _____
(name of part, item number, mfr's. name and identifying stamp)

HORIZONTAL LEAF PRESSURE FILTER - CONTENTS: UNKNOWN

THIS VESSEL TO BE PROTECTED BY A PRESSURE RELIEF DEVICE PER ASME CODE, SECTION VIII, DIV.1, PARAGRAPH UG-125 THROUGH UG-136.

NO IMPACT TESTING REQ'D PER UHA51(a).

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. 1700 expires MARCH 31 19 93

Date 7/22/91 Name THE DURIRON CO., INC, FSD
(manufacturer)

Signed Robert S. Schora
(representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by THE DURIRON CO., INC., FILTRATION SYSTEMS DIV. at ANGOLA, NY 14006

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and the state or province of NY, PA & OH and employed by LUMBERMENS MUTUAL CASUALTY CO.

of LONG GROVE, IL have inspected the pressure vessel described in this Manufacturers' Data Report on 7/22, 19 91, 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 the Manufacturers' 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 7/22/91 Signed J. A. Thomas.
(Authorized Inspector)

Commissions Ohio Commissioned NB7710 PA2534 NY2705
(Nat'l. Bd. (incl. endorsements) state, prov. and no.)

CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE

We certify that the field assembly construction of all parts of this vessel conforms with the requirements of Section VIII, Division 1 of the ASME BOILER AND PRESSURE VESSEL CODE.

"U" Certificate of Authorization no. _____ expires _____, 19 _____.

Date _____ Name _____
(assembler that certified and constructed field assembly)

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 the state or province of _____ and employed by _____

of _____ have compared the statements in this Manufacturers' 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 that 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 the Manufacturers' 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. Bd. (incl. endorsements) state, prov. and no.)



NAT'L. BD. 3536

CERTIFIED BY

THE DURIRON CO., INC.

FILTRATION SYSTEMS DIV.

W SHELL MAWP 75 P.S.I. AT 300 °F.

MDMT -20 MIN. °F. AT 75 P.S.I.

JACKET MAWP P.S.I. AT °F.

MDMT MIN. °F. AT P.S.I.

S/N 3536 -1700 S.O. - E 02296 19 91

YEAR BUILT