

UNIT L-89729 L-8065
S.O. CU9100435

MODEL CB 300-150# Stm. psi
PART NO. 524-1185

L02286

**FORM P-2 MANUFACTURERS' DATA REPORT FOR ALL TYPES OF BOILERS EXCEPT
WATERTUBE AND ELECTRIC**

114468

C25-1978A 11/88

as required by the provisions of the ASME Code rules

1. Manufactured and certified by Cleaver Brooks, 18th & Lehman Sts., Lebanon, PA 17042
(name and address of manufacturer)
2. Manufactured for Sofix Corporation - Chattanooga, Tennessee
(name and address of purchaser)
3. Location of installation Sofix Corporation - Chattanooga, Tennessee
(name and address)
4. Type: Internally Fired Boiler no. L02286 N/A 524-1181 01816 1991
(HRT, etc.) (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 Rules, Section I, 1989 and Addenda to A-89.
(year) (date)

Manufacturers' Partial Data Reports properly identified and signed by Commissioned Inspectors are attached for the following items of this report:

None

(name of part, item number, mfr's. name and identifying stamp)

6. Boiler shells or drums: No. 1 Dia. 78" Length 156" Dia. Length
SA 515-70, .500"
7. Shell plates
(for each shell or drum state: material specification no. & grade, nominal thickness)
8. Longitudinal joint(s) Welded Joint efficiency 100%
(seamless, welded) (as compared to seamless)
9. Heads None
(material specification no.; thickness — flat, dished, ellipsoidal — radius of dish)
10. Girth joint(s) Welded No. of shell courses 2
(seamless, welded)
11. Tubesheet: SA 515-70, .625" Tube Holes: 2.525"
(mat'l. spec., grade thickness) (dia.)
12. Boiler tubes: No. 175 SA 178-A Straight 2-1/2" 156-1/2" .095"
(mat'l. spec., grade) (straight or bent) (dia. (if various, give max. & min.)) (length (if various, give max. & min.)) (gauge (or thickness))
13. Furnace no. 1 Size 34" O.D. Length, each section Total 156-1/4"
(O.D. or W x H)
- type Corrugated SA 285-C .343" Seams: Type Welded
(plain, adamson, ring reinforced, corrugated, combined or stayed) (mat'l. spec., grade, thickness) (seamless, welded)
14. Staybolts: No. None Size N/A Pitch N/A MAWP N/A psi.
(dia. mat'l. spec., grade, size telltale, net area) (hor. and vert.)

15. Stays or braces

Location	Mat'l. Spec. No.	Type	No. & Size	Max. Pitch	Total Net Area	Fig. PFT-32 L/1	Dist. Tubes to Shell	Area to be Stayed	MAWP psi.
(a) F.H. above tubes	SA675-60	Diag	8@1-1/4"	8-3/4	7.8544	1.09	21	599	154
(b) R.H. above tubes	SA675-60	Diag	8@1-1/4"	8-3/4	7.8544	1.09	21	599	154
(c) F.H. below tubes	N/A								
(d) R.H. below tubes	N/A								
(e) Through stays	N/A								
(f) Dome braces	N/A								

16. Other parts: 1. Water Column Assy. 2. N/A 3. N/A
(brief description — i.e., dome, boiler piping, etc.)

1. Threaded pipe - SA 106-B, 1-1/4" & 1/2" Sch 80, M.A.W.P. 150# PSI
2. Other pressure piping installed by contractor.
3.

(mat'l. spec., grade, size, material thickness, MAWP)

FORM P-2 (back)

17. Openings (a) Steam 1 @ 6" 300# Flange (no., size and type) (b) Safety valve 2 @ 3" NPT (no., size and type)

(c) Blowoff 2 @ 1-1/2" NPT Bottom CL (no., size, type and location) (d) Feed 2 @ 2" NPT (R & L Side) (no., size, type and location)

(e) Manholes: No. 1 Size 12" x 16" Location Shell

(f) Handholes: No. 6 Size 3-1/4" x 4-1/2" Location Shell

18. Fusible plug (if used) N/A (no., diam., location, mfrs. stamp)

19. Boiler supports: No. 4 Type Legs Attachment Welded
(saddies, legs, lugs) (bolted or welded)

20. MAWP 150 psi Based on PG-27 Heating surface 1500 sq ft
(code par. and/or formula) (total)

21. Shop hydrostatic test 225 psig.

CERTIFICATE OF COMPLIANCE

We certify the statements in this data report to be correct.

Certificate of Authorization no. 10905 to use the (A) or (S) S Symbol expires January 15, 19 92.

Date 6/11/91 Name Cleaver Brooks Signed Sylvia Moore
(manufacturer) (authorized representative)

CERTIFICATE OF SHOP INSPECTION

Boiler made by Cleaver Brooks at Lebanon, PA

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and the state or province of Pennsylvania and employed by The Hartford Steam Boiler I & I Co.

of Hartford, CT have inspected parts of this boiler referred to as data items 1-8, 10-13, 15, 17-21 and have examined Manufacturers' Partial Data Reports for items None

and state that, to the best of my knowledge and belief, the manufacturer has constructed this boiler 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 boiler described in this 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 13 June 91 Signed [Signature] Commissions NB 6315 PA 2457
(Authorized Inspector) (Nat'l. Bd. (incl. endorsements) state, prov. and no.)

CERTIFICATE OF COMPLIANCE

We certify that the field assembly of all parts of this boiler conforms with the requirements of Section I of the ASME BOILER AND PRESSURE VESSEL CODE.

Certificate of Authorization no. _____ to use the (A) or (S) _____ symbol expires _____, 19 _____.

Date _____ Name _____ Signed _____
(assembler) (authorized 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 boiler and state that the 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 and/or the assembler has constructed and assembled this boiler in accordance with the applicable sections of the ASME BOILER AND PRESSURE VESSEL CODE. The described boiler 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 boiler described in this 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 _____ Commissions _____
(Authorized Inspector) (Nat'l. Bd. (incl. endorsements) state, prov. and no.)

UNIT L-89729
S.O. CU9100430

MODEL Adapter
PART NO. 1-479

FORM P-4 MANUFACTURERS' PARTIAL DATA REPORT
as required by the provisions of the ASME Code rules

C25-1982A 11/88

1. Manufactured and certified by Cleaver Brooks, 18th & Lehman Sts., Lebanon, PA 17042
(name and address of manufacturer)

2. Manufactured for Sofix Corporation - Chattanooga, Tennessee
(name and address of purchaser)

3. Identification of part(s)

Name of Part	Quantity	Line No.	Mfr's. Serial Nos.	Manufacturer's Drawing No.	CRN	Nat'l. Bd. No.	Year Built
Adapter	(1)	10-a	L02314	1-479	N/A	N/A	1991

4. The chemical and physical properties of all parts meet the requirements of material specifications of the ASME BOILER AND PRESSURE VESSEL CODE. The construction and workmanship conform to ASME Code, Section I 1989 (year) and addenda to A-89 (date)

6. (a) Drums: None

[illegible][illegible]

*Indicate if (1) seamless; (2) fusion welded.

**Indicate if (1) flat; (2) dished; (3) ellipsoidal; (4) hemispherical.

6. (b) Boiler tubes: None

g. (c) Headers no.: None
(box or sinuous or round; mat'l. spec. no.; thickness)

Diameter	Thickness	Mat'l. Spec. No., Grade

Heads or ends _____ (shape; mat'l. spec. no.; thickness)
Hydro. test _____ (psi)

6. (d) Staybolts: None
(mat'l. spec. no.; diameter; size telltale; net area)

Pitch _____ in. Net area _____ in.² MAWP _____ psi
(supported by one bolt)

6. (e) Mud drum: None Heads or ends Hydro. test
(for sect. header boilers, state size; shape mat'l. spec. no.; thickness) (shape; mat'l. spec. no.; thickness) (psi)

7. (a) Waterwall headers: None

Heads or Ends

7. (b) Waterwall tubes: None

[illegible]

8. (a) Economizer headers: None**FORM P-4 (back)**8. (b) Economizer tubes: None

No.	Size and Shape	Material Spec. No.	Thickness in.	Heads or Ends		Material Spec. No.	Hydro. Test, psi.	Diameter in.	Thickness in.	Material Spec. No.
				Shape	Thickness in.					

9. (a) Superheater headers: None9. (b) Superheater tubes: None

10. (a) Other parts: (1) Adapter (2) N/A (3) N/A 10. (b) Tubes for other parts: None

1	W.N. Flange	SA105	6"	300#		Fitting	Pipe	SA53-B	Sch 40	6"
2	W.N. Flange	SA105	4"	300#						
3	Concentric Reducer	SA234	6"x4"							

11. Openings (1) Steam None (2) Safety Valve None
(no., size, and type of nozzles or outlets) (no., size, and type of nozzles or outlets)(3) Blowoff None (4) Feed None
(no., size, and type of nozzles or outlets) (no., size, type and location of connection)

12.

		Maximum Allowable Working Pressure	Code Par. and/or Formula on Which AWP is Based	Shop Hydro. Test psi	Heating Surface sq. ft.
a	Boiler	None			
b	Waterwall	None			
c	Economizer	None			
d	Superheater	None			
e	Other parts	150	PG 27.2.2	225	N/A

Heating surface to be stamped on drum heads. This heating surface not to be used for determining minimum safety valve capacity.

13.

Field Hydro. Test psi
N/A

14. Remarks: None**CERTIFICATE OF COMPLIANCE**

We certify the statements in this Manufacturers' Partial Data Report to be correct and that all details of material, construction and workmanship of this boiler part conform to the ASME BOILER AND PRESSURE VESSEL CODE.

Certificate of Authorization no. 10905 to use the (PP) or (S) (S) symbol expires January 15, 19 92.Date 6/14/91 Name Cleaver Brooks Signed Sylvia Moore
(manufacturer) (authorized representative)**CERTIFICATE OF SHOP 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 Pennsylvania and employed by The Hartford Steam Boiler I & I Co.of Hartford, CT have inspected the part of a boiler described in this Manufacturers' Partial Data Report on June 12, 19 91, and state that to the best of my knowledge and belief, the manufacturer has constructed this part 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 part described in this Manufacturers' Partial 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 14 June 91 Signed [Signature] Commissions PA 2457
(Authorized Inspector) (Nat'l. Bd. (incl. endorsements) state, prov. and no.)

UNIT L-89729
 S.O. CU9100435

 MODEL Adapter
 PART NO. 1-695
FORM P-4 MANUFACTURERS' PARTIAL DATA REPORT
 as required by the provisions of the ASME Code rules

C25-1982A 11/88

 1. Manufactured and certified by Cleaver Brooks, 18th & Lehman Sts., Lebanon, PA 17042
 (name and address of manufacturer)

 2. Manufactured for Sofix Corporation - Chattanooga, Tennessee
 (name and address of purchaser)

3. Identification of part(s)

Name of Part	Quantity	Line No.	Mfr's. Serial Nos.	Manufacturer's Drawing No.	CRN	Nat'l. Bd. No.	Year Built
Adapter	(1)	10-a	L02304	1-695	N/A	N/A	1991

 4. The chemical and physical properties of all parts meet the requirements of material specifications of the ASME BOILER AND PRESSURE VESSEL CODE. The construction and workmanship conform to ASME Code, Section I 1989 and addenda to A-89
 (year) (date)
6. (a) Drums: None

No.	Inside Diameter, in.	Inside Length ft. in.	Shell Plates			Tubesheets		Tube Hole Ligament Efficiency	
			Mat'l. Spec. No., Grade	Thickness in.	Inside Radius in.	Thickness in.	Inside Radius in.	Longitudinal	Circumferential
1									
2									
3									
4									

No.	Longitudinal Joints		Circum. Joints		Heads					Hydrostatic Test, psi
	No. & Type*	Efficiency	No. & Type	Efficiency	Mat'l. Spec. No., Grade	Thickness, in.	Type**	Radius of Dish	Manholes No. Size	
1										
2										
3										
4										

*Indicate if (1) seamless; (2) fusion welded.

**Indicate if (1) flat; (2) dished; (3) ellipsoidal; (4) hemispherical.

6. (b) Boiler tubes: None
 6. (c) Headers no.: None
 (box or sinuous or round; mat'l. spec. no.; thickness)

 Heads or ends Hydro. test (psi)
 (shape; mat'l. spec. no.; thickness)

 6. (d) Staybolts: None
 (mat'l. spec. no.; diameter; size telltale; net area)

 Pitch in. Net area in.² MAWP psi
 (supported by one bolt)
6. (e) Mud drum: None

(for sect. header boilers, state size; shape mat'l. spec. no.; thickness)

 Heads or ends Hydro. test (psi)
 (shape; mat'l. spec. no.; thickness)
7. (a) Waterwall headers: None

No.	Size and Shape	Material Spec. No.	Thickness in.	Heads or Ends			Hydro. Test, psi	Diameter in.	Thickness in.	Material Spec. No.
				Shape	Thickness in.	Material Spec. No.				

7. (b) Waterwall tubes: None

8. (a) Economizer headers: None**FORM P-4 (back)**8. (b) Economizer tubes: None

				Heads or Ends						
No.	Size and Shape	Material Spec. No.	Thickness in.	Shape	Thickness in.	Material Spec. No.	Hydro. Test, psi.	Diameter in.	Thickness in.	Material Spec. No.

9. (a) Superheater headers: None9. (b) Superheater tubes: None

10. (a) Other parts: (1) Adapter (2) N/A (3) N/A10. (b) Tubes for other parts: None

1	W.N. Flange	SA105	4"	300#	Fitting	Pipe	SA53-B	Sch 40	6"
2	W.N. Flange	SA105	6"	300#	Couplet		SA105	1" NPT	3000#
3	Concentric Reducer	SA234	6"x4"						

11. Openings (1) Steam None (2) Safety Valve None
(no., size, and type of nozzles or outlets)(3) Blowoff None (4) Feed None
(no., size, and type of nozzles or outlets) (no., size, type and location of connection)

12.

		Maximum Allowable Working Pressure	Code Par. and/or Formula on Which AWP is Based	Shop Hydro. Test psi	Heating Surface sq. ft.
a	Boiler	None			
b	Waterwall	None			
c	Economizer	None			
d	Superheater	None			
e	Other parts	150	PG 27.2.2	225	N/A

Heating surface to be stamped on drum heads. This heating surface not to be used for determining minimum safety valve capacity.

13.

Field Hydro. Test psi
N/A

14. Remarks: None**CERTIFICATE OF COMPLIANCE**

We certify the statements in this Manufacturers' Partial Data Report to be correct and that all details of material, construction and workmanship of this boiler part conform to the ASME BOILER AND PRESSURE VESSEL CODE.

Certificate of Authorization no. 10905 to use the (PP) or (S) (S) symbol expires January 15, 19 92.

Date 6/13/91 Name Cleaver Brooks Signed Sylvia Moore
(manufacturer) (authorized representative)

CERTIFICATE OF SHOP 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 Pennsylvania and employed by The Hartford Steam Boiler I & I Co.

of Hartford, CT have inspected the part of a boiler described in this Manufacturers' Partial Data Report on June 10, 19 91, and state that to the best of my knowledge and belief, the manufacturer has constructed this part 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 part described in this Manufacturers' Partial 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 14 June 91 Signed [Signature] Commissions PA 2457
(Authorized Inspector) (Nat'l. Bd. (incl. endorsements) state, prov. and no.)