

114450

FORM U-1 MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS
As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

1. Manufactured and certified by FIB Apparatenbouw, Postbus 314, 8901 BC Leeuwarden The Netherlands

(Name and address of Manufacturer)

2. Manufactured for SPS, Korenstraat 57, 7722 RS Dalfsen

(Name and address of Purchaser)

3. Location of Installation

(Name and address)

4. Type: Vertical Conical Dryer 700358-01 - 700358-01-001 rev.C 023 200
(Horiz., vert., or sphere) (Tank separator, jkt. vessel, heat exch., etc.) (Mfg's serial No.) (CRN) (Drawing No.) (Mat'l Spec. No.) (Year built)

5. ASME Code, Section VIII, Div. 1 Edition 1998, Addenda 1999

Edition and Addenda (date)

Code Case No.

Special Service per UG-120 d)

Items 6 - 11 Incl. to be completed for single wall vessels, jackets of jacketed vessels, shell of heat exchangers, or chamber of multi-chamber vessels.

6. Shell (a) No. of course(s): 1 (b) Overall length (ft & in.): 9ft & 3.34"

No.	Course(s)	Diameter, in.	Length (ft & in.)	Material		Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B & C)			Heat Treatment	
				Spec./Grade or Type	Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp	Time	
1		-	9ft & 3.34"	SA-240 Ty 304L	0.098"	0	-	-	-	1	Spot	85	-	-	

7. Heads: (a)

(b)

Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure		Category A	Type	Full, Spot, None	Eff.
	Min.	Corr.	Crown	Knuckle					Convex	Concave				
(a)														
(b)														

If removable, bolts used (describe other fastening)

(Mat'l Spec. No., Grade, Size, No.)

8. Type of jacket

half pipe

Jacket closure

(Describe as gage & weld, bar, etc.)

If bolted describe or sketch.

9. MAWP 75 14.5 psi at max. temp. 300 300 ° F Min. design metal temp. -20.2 ° F at 7.5 psi
(internal) (external) (internal) (external)

10. Impact test

exempted as per UHA-51(d)

(indicate yes or no and the component(s) impact tested)

11. Hydro., ~~hydro.~~ or ~~vacuum~~ test press

97.5

Proof test

Items 12 and 13 to be completed for tube sections.

12. Tubesheet:

Stationary (Mat'l Spec. No.)	Dia., in. (subject to press.)	Nom. thk., in.	Corr. Allow., in.	Attachment (welded or bolted)
Floating (Mat'l Spec. No.)	Dia., in.	Nom. thk., in.	Corr. Allow., in.	Attachment

13. Tubes:

Mat'l Spec. No., Grade or Type	O. D., in.	Nom. thk., in. or gauge	Number	Type (Straight or J)

Items 14 - 18 incl. to be completed for inner chambers of jacketed vessels or channels of heat exchangers.

Shell (a) No. of course(s): 3 (b) Overall length (ft & in.): 12ft & 9.7"

No.	Course(s)	Diameter, in.	Length (ft & in.)	Material		Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B & C)			Heat Treatment	
				Spec./Grade or Type	Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp	Time	
1		116.14"	3ft & 11.3"	SA-240 Ty 304L	0.315	0	1	Full	1.0	1	Full	1.0	-	-	
1		/12"	5ft & 11"	SA-240 Ty 304L	0.315	0	1	Full	1.0	1	Full	1.0	-	-	
1		/12"	2ft & 11.4"	SA-240 Ty 304L	0.315	0	1	Full	1.0	1	Full	1.0	-	-	

15. Heads: (a)

SA-240 Ty 304L -

(b)

Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure		Category A	Type	Full, Spot, None	Eff.
	Min.	Corr.	Crown	Knuckle					Convex	Concave				
(a) Top	0.5"	-	117.1"	11.7"	-	-	-	-	partly	yes	1	Full	1.0	
(b)														

If removable, bolts used (describe other fastening)

(Mat'l Spec. No., Grade, Size, No.)

16. MAWP 44 14.5 psi at max. temp. 300 300 ° F Min. design metal temp. -20.2 ° F at 75 csi.
(internal) (external) (internal) (external)

17. Impact test no (Indicate yes or no and the component(s) impact tested)

18. Hydro., ~~proof~~, or ~~burst~~ test pressure 57.2 Proof test

19. Nozzles, inspection, and safety valve openings:

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Flange Type	Material	Nozzle Thickness	Reinforcement	How Attached	Location			
				Nozzle	Flange	Nom.	Corr.	Material	Nozzle	Flange	(Insp. Oper.)
1N	1	23.62"	SPC'L	SA-240 Ty 304L	See part. data report	0.394"	0	None	16.1(d)	3	100
2N	1	20"	RFWN	SA-240 Ty 304L	SA-182 Ty F304L	0.394"	0	None	16.1(d)	3	
3N	1	3"	RFWN	SA-312 TP304L SMLS	SA-182 Ty F304L	0.212"	0	None	16.1(d)	3	
4N	1	3"	RFWN	SA-312 TP304L SMLS	SA-182 Ty F304L	0.212"	0	None	16.1(d)	3	
5N	1	3"	RFWN	SA-312 TP304L SMLS	SA-182 Ty F304L	0.212"	0	None	16.1(d)	3	
6N	1	10"	RFWN	SA-240 Ty 304L	SA-182 Ty F304L	0.394"	0	None	16.1(d)	3	
7N	1	6"	SPC'L	-	SA-240 Ty 304L	-	0	None	-	16.1(d)	

20. Supports: Skirt no Lugs - Legs - Others 4x brackets Attached welded to shell
(Yes or No.) (No.) (No.) (Describe) (Where attached)

21. Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report
(List the name of part, item number, mfg's. name and identifying number)

2 x Multibolted Closing Device, nozzle 1N and 29N, Zimmerlin GmbH, D1100 28090 and D1100 28091.

Head, pos 1, Antonius, 4316010-01.

22. Remarks: See U-4 report for additional nozzle list. Where "ASTM" material has been used, the materials were verified with applicable specification of ASME II, edition 98, addenda 99 and found identical. Vessel is designed for internal and external pressure and vessel support (UG-22(a) (d2)). Impact testing exempted as per UHA-51(d).

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.

29386

Expires

January 8

2001

Date 03-06-01

Name

FIB Apparatenbouw
(Manufacturer)

Signed T. de Boer

T. de Boer
(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 LR Insurance Inc. of Delaware have inspected the pressure vessel described in this Manufacturer's Data Report on 02-23-01, 2001, 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 03-06-01

Signed G.J. Kloosterman

(Authorized Inspector)

Commissions

NE 12194A Pennsylvania 2847
(Nat'l Board incl. endorsement, State, Province and No.)

CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE

We certify that the statements on this report are correct and that the field assembly construction of all parts of this vessel conforms with the requirements of ASME Code, Section VIII, Division 1.

U Certificate of Authorization No.

Expires

Date

Name

(Assembler)

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 Delaware and employed by have compared the statements in this Manufacturer's 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 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 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

Signed

(Authorized Inspector)

Commissions

(Nat'l Board incl. endorsement, State, Province 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

1. Manufactured and certified by **FIB Apparatenbouw, Postbus 314, 8901 BC Leeuwarden The Netherlands**
(Name and address of Manufacturer)

2. Manufactured for **SPS, Korenstraat 57, 7722 RS Dalfsen**
(Name and address of Purchaser)

3. Location of Installation
(Name and address)

4. Type: **Vertical** **Conical dryer** **700358**
(Honz., vert., or sphere) (Tank separator, heat exch., etc) (Fig. serial No.)
700358 **026** **2001**
(CRN) (Drawing No.) (Nat'l. Bd. No.) (Year built)

Data Report						Remarks				
Item Number										
Nozzles:										
Purpose	No.	Size	Flange	Nozzle	Flange	Nom.	Corr.	Material	Nozzle	Flange
8N	1	6"	SPC'L	see partical data report D1100 28090						
9N	1	4"	RFWN	SA312TP304L	SA182F304L	0.237"	0	none	16.1(d)	3
10N	1	2"	RFWN	SA312TP304L	SA182F304L	0.109"	0	none	3	3
11N	1	2"	RFWN	SA312TP304L	SA182F304L	0.109"	0	none	3	3
12N	1	2"	RFWN	SA312TP304L	SA182F304L	0.109"	0	none	3	3
13N	1	2"	RFWN	SA312TP304L	SA182F304L	0.109"	0	none	3	3
14N	1	2"	RFWN	SA312TP304L	SA182F304L	0.109"	0	none	3	3
15N	1	2"	RFWN	SA312TP304L	SA182F304L	0.109"	0	none	3	3
16N	1	2"	SPC'L		SA182F304L			none		16.1(c)
17N	1	1.1/2"	RFSO	SA182F304L	SA182F304L	0.197"	0	none	16.1(c)	16.1(k)
18N	1	12"	PAD		SA240F304L			none		3
23N	1	2"	RFWN	SA312TP304L	SA182F304L	0.218"	0	none	3	3
24N	1	2"	RFWN	SA312TP304L	SA182F304L	0.218"	0	none	3	3
26N	1	6"	RFWN	SA312TP304L	SA182F304L	0.280"	0	none	16.1(c)	3
27N	1	2"	RFWN	SA312TP304L	SA182F304L	0.154"	0	none	16.1(c)	3
28N	1	2"	RFWN	SA312TP304L	SA182F304L	0.154"	0	none	16.1(c)	3
29N	1	19.7"	See partical data report D1100 28091							
30N	3	1"	SOCKET		SA182 304L			none		16.1Y-1)

Nozzle 2N (filterhouse) provided with jacket, material SA240-304L, thickness 0.157", cylindrical length 2ft 10.8", conical apex 30°, type of jacket 9-2 type 1, jacket closures 9-5(c) E=0 85, spot radiographed. Head provided with 2" half-pipe jacket, material SA312-TP304L, thickness 0.11". The design conditions for both jackets are identical to line 9, 10 and 11 of form U-1.

The sightglass is a proprietary item, the design of which has been verified for the design cond...

Certificate of Authorization: Type **U** No. **29386** Expires **January 8, 2003**

Date **03-06-01** Name **FIB Apparatenbouw**

Signed **T. de Boer**
(Manufacturer)

Date **03-06-01** Name **G.J. Kloosterman** Commission

(Authorized Inspector)

NB 12194A Pennsylvania 2847
(Nat'l Board incl. endorsement, state, province and no.)