

#103141

- 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.): 4' 0"

7. Heads: (a) SA-516 Gr70 None (b) _____
(Mat'l Spec. No., Grade or Type) H.T. - Time & Temp (Mat'l Spec. No., Grade or Type) H.T. - Time & Temp

If removable, bolts used (describe other fastening) SA-193,B7 (26) 1"D
(Mat'l Spec. No., Grade, size, No.)

8. Type of jacket _____ Jacket closure _____
(Describe as ogee & we'd, bar, etc.)
If bar, give dimensions _____ If bolted, describe or sketch _____

9. MAWP 150 psi at max. temp. 212 °F Min. design metal temp. -7 °F at 150 psi.
(internal) (external) (internal) (external)
10. Impact test No, exempt per UCS-66(a) at test temperature of _____ °F
(Indicate yes or no and the component(s) impact tested)

- | | | |
|--|---------|------------|
| 11. Hydro., proof , bursting test press. | 195 psi | 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. lth., in. | Corr. Allow., in. | Attachment (welded or bolted) |
| Floating (Mat'l Spec. No.) | Dia., in. | Nom. lth., in. | Corr. Allow., in. | Attachment |

- | | | | | |
|------------|--------------------------------------|------------------|--------------------------------|-----------------------------|
| 13. Tubes: | | | | |
| | <u>Mall Spec. No., Grade or Type</u> | <u>O.D., in.</u> | <u>Nom. thk., in. or gauge</u> | <u>Type (Straight or U)</u> |

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

14. Shell (a) No. of course(s): 1 (b) Overall length (ft & in.): 4' 0"

15. Heads: (a) SA-516 Gr70 None
(Mat'l Spec. No., Grade or Type) H.T. - Time & Temp

(b) _____
(Mat'l Spec. No., Grade or Type) H.T. - Time & Temp

If removable, bolts used (describe other fastening) SA-193.B7 (26) 1"D. (Mat'l Spec. No., Grade, Size, No.)

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16. MAWP 150 psi at max. temp. 212 °F Min. design metal temp. -7 °F at 150 psi.
(internal) (external) (internal) (external)

17. Impact test No, exempt per UCS-66(a) at test temperature of _____ °F
(Indicate yes or no and the component(s) impact tested)

18. Hydro., ~~pressure~~, ~~hydrostatic~~ test press. 195 psi Proof test _____

19. Nozzles, inspection, and safety valve openings:

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Flange Type	Material		Nozzle Thickness		Reinforcement Material	How Attached		Location (Insp. Open.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
Inlet	1	4" 150#	RFWN	SA-106 Gr B	SA-105	Sch.80	-	SA-516.70	Welded	Welded	
Outlet	1	2" 150#	RFSO	SA-106 Gr B	SA-105	Sch.80	-	None	Welded	Welded	
Inlet	1	3" 150#	RFSO	SA-106 Gr B	SA-105	Sch.40	-	None	Welded	Welded	
Outlet	1	3" 150#	RFSO	SA-106 Gr B	SA-105	Sch.40	-	SA-516.70	Welded	Welded	
Drain	1	1"	NPT	SA-106 Gr B	-	Sch.40	-	None	Welded	-	
Vent	1	1" 150#	RFSO	SA-106 Gr B	SA-105	Sch.40	-	None	Welded	Welded	

20. Supports: Skirt _____ Lugs _____ Legs _____ Others _____ Gussets _____ Attached _____ Welded to Mtg. Flange _____
(Yes or No) (No.) (No.) (Describe) (Where and How)

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)

22. Remarks: Hydro-tested per UG-99(b). *No seams in outer spiral shell. Hoop load transferred by braces. Weld efficiency of 55%.

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. 1793 Expires 3/30/2002
Date 10/25/2001 Name ALFA LAVAL INC. Signed James J. Rignman
(Manufacturer) (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 PA and employed by Commercial Union Insurance Company of Boston, MA have inspected the pressure vessel described in this Manufacturer's Data Report on 10/16/2001, 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 10/25/01 Signed Patrick L. Rose Commissions 11189A PA2604
(Authorized Inspector) (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 _____ Signed _____
(Assembler) (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 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.

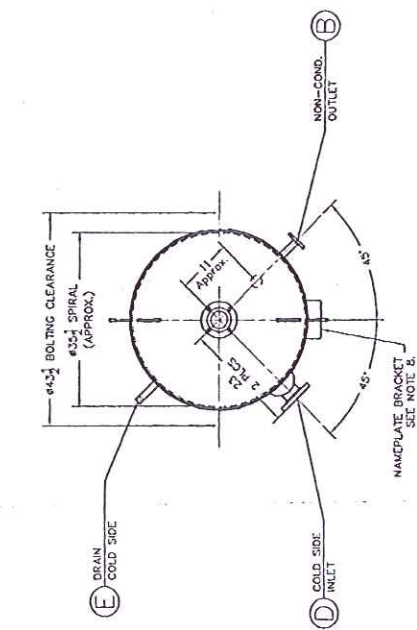
Date _____ Signed _____ Commissions _____
(Authorized Inspector) (Nat'l Board incl. endorsement, State, Province and No.)

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NATIONAL BOARD NO.		17082	
	Certified by: Alfa Laval Inc. 300 Chestnut Street Lykens, PA 17043		
	MAX. ALLOW. WORKING PRESS.	150	PSI AT
MIN. DESIGN METAL TEMP.	-7	PSI AT	150
MFG. NO.	24521	YEAR	2001
		SURF. AC.	380
SHELL MATERIAL		SA-516-70	THK. 1.67"
HEAD MATERIAL		SA-516-70	THK. .25"

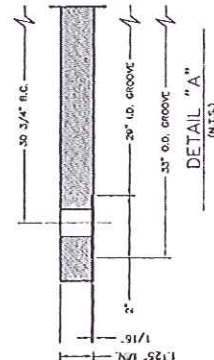
P.O. LPW 443851

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Technical drawing of a vertical condenser assembly. The drawing shows a cylindrical vessel with various ports and structural details. Key components and dimensions are labeled as follows:

- NOZZLE REINFORCEMENT PAD:** 6 5/8 DIA. x 1 THK w/ 7/16 DIA. WEDHOLE. TYP.
- COLD SIDE OUTLET:** Indicated by a circled 'D' at the top left.
- UNIT LIFT LUG w/ 2 1/2 DIA. HOLE. TYP.**
- NAME PLATE:** Located on the front of the vessel.
- BAR IN FIRST VAPOR CHANNEL TO FORM 4" CONDENSATE DAM**
- CONDENSATE OUTLET:** Indicated by a circled 'C' at the top right.
- SUPPORT GUSSETS (4 EQUALLY SPACED AT 90°)**
- 1 1/8" THK. x 34 1/2" O.D., F.F. FLANGE WITH (20) 7/8" DIA. HOLES EQUALLY SPACED ON A 30"**
- 4" x 3" CONCENTRIC REDUCER:** Indicated by a circled 'A' at the bottom right.
- VAPOR INLET:** Indicated by a circled 'A' at the bottom right.
- SEE DETAIL "A"**
- Dimensions:**
 - Overall height: 60
 - Top section height: 15
 - Section below top: 12
 - Section below that: 12
 - Bottom section height: 12
 - Horizontal distance from left edge to centerline: 45
 - Horizontal distance from centerline to right edge: 5

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CERTIFIED PRINT
APPROVED FOR FAUCIGATION OR OTHER USE
BY: Jim Ritzyman DATE: 11/1/88

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WARNING!!!

WHEN COVER IS REMOVED FOR INSPECTION OF ONE PASSAGE, BE SURE THERE IS NO PRESSURE IN THE OPPOSITE CHAMBER. IF PRESSURE IS TO BE APPLIED FOR TESTING WITH ONE COVER REMOVED, THE UNCOVERED SPINAL MUST BE RETAINED BY SUITABLE HOLD DOWN BAGS TO PREVENT PARTIAL TELESCOPING UNDER PRESSURE.

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