

FORM P-3 MANUFACTURER'S DATA REPORT FOR WATER-TUBE BOILERS, SUPERHEATERS, WATERWALLS, AND ECONOMIZERS

As Required by the Provisions of the ASME Code Rules

1. Manufactured by COMBUSTION ENGINEERING, INC. - SAGINAW DIVISION - SAGINAW, MICHIGAN
(Name and address of manufacturer)

2. Manufactured for HEMIJSKA INDUSTRIJA PANCEVO (HIP) - PETROCHEMICAL COMPLEX - PANCEVO, YUGOSLAVIA
(Name and address of purchaser)

3. Identification 31-A-16 - TYPE-A Boiler No. 88573-2 Year Built 1974
(Type of boiler, superheater, waterwall, economizer) (Mfrs. Serial No.) (State and State No.) (Natl. Board No.)

4. 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 Dated 1971
(I or IV)

Remarks: Manufacturers' Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of this report: 42" Upper Drum, 5a, C-E Chattanooga, E-89460-1 & 2.
(Name of Part-Item number, manufacturer's name, and identifying stamp)

We certify the statement in this data report to be correct. COMBUSTION ENGINEERING, INC.
Date December 2, 19 74 Signed SAGINAW DIVISION By Charles R. Seiter
(Manufacturer) (Representative) C.R. Seiter

Certificate of Authorization Expires December 31, 19 74

CERTIFICATE OF SHOP INSPECTION

BOILER MADE BY COMBUSTION ENGINEERING, INC. at SAGINAW DIVISION - SAGINAW, MICHIGAN

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of HARTFORD and employed by HARTFORD STM.BLR.INS.P. & INS.CO of HARTFORD, CONNECTICUT

have inspected parts of this boiler referred to as data items 5a, 5b, 6b, 7a, 7b, 9a (except 9a hydro test) 10, 11 and have examined manufacturer's partial data reports for items 5a

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 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 May 2 19 75
Clarence H. Sikorski Inspector Commissions Michigan 8082-335
Nat'l Board or State and No.

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

Date _____ 19 _____ Signed _____ (Assembler) By _____ (Representative)

Our Certificate of Authorization to use the _____ Symbol expires _____ 19 _____
(A) or (S)

CERTIFICATE OF FIELD ASSEMBLY INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of _____ and employed by _____ of _____

have compared the statements in this manufacturer's data report with the described boiler and state that the parts referred to as data items (9a hydro test) 12, 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 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 _____ 19 _____
Inspector _____ Commissions _____ Nat'l Board or State and No. _____

Form P-3 (back)

5(a) Drums

| No. | Nominal diameter, in. | Length | | Shell plates | | | | Tube sheets | | Tube hole ligament efficiency | |
|-----|-----------------------|--------|-------|--------------|--------------------|-----------|---------------|-------------|---------------|-------------------------------|-----------------|
| | | Ft | In. | Brand | Material spec. no. | Thickness | Inside radius | Thickness | Inside radius | Longitudinal | Circumferential |
| 1 | 18 | 33 | 5 | Seamless | SA-106-C | 1.625 Min | - | 1.625 Min | - | .492 | .246 |
| 2 | 18 | 33 | 5 | Seamless | SA-106-C | 1.625 Min | - | 1.625 Min | - | .492 | .246 |
| 3 | 42 | 36 | 0 1/2 | PVQ | SA-515-70 | 2.312 | 22.166 | 4.625 | 21 | .492 | .246 |
| 4 | | | | | | | | | | | |
| 5 | | | | | | | | | | | |

| No. | Longitudinal joints | | Circum. joints | | Brand | Material spec. no. | Heads | | * HANDHOLES | | | Hydrostatic test, lb |
|-----|---------------------|------------|----------------|------------|-------|--------------------|-----------|---------|----------------|--------------|------------|----------------------|
| | No. & type * | Efficiency | No. & type | Efficiency | | | Thickness | Type ** | Radius of dish | Manholes No. | Size | |
| 1 | 0-1 | - | 1-2 | 100 | PVQ | SA-515-70 | 3.50 | 3.50 | 1 | - | *2-4" Dia. | 2475 |
| 2 | 0-1 | - | - | - | PVQ | SA-515-70 | 3.50 | 3.50 | 1 | - | *2-4" Dia. | 2475 |
| 3 | 2-2 | 100 | 2-2 | 100 | PVQ | SA-515-70 | 3" | 3" | Semi 3 | - | 2-16" Dia. | 2475 |
| 4 | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | |

*Indicate if (1) Seamless; (2) Fusion welded; (3) Forge welded; (4) Riveted.

**Indicate if (1) Flat; (2) Dished; (3) Ellipsoidal; (4) Hemispherical.

5(b) Boiler Tubes

| Diameter | Thickness | Material specification no. |
|----------|-----------|----------------------------|
| 2" | .150 | SA-178-A |
| | | |
| | | |
| | | |
| | | |

5(c) Headers No. _____

(Box or sinuous; Mat. spec. no.; Thickness)

Heads or Ends _____ Hydro. Test, Lb _____
(Shape; Mat. spec. no.; Thickness)

5(d) Staybolts _____

(Mat. spec. no.; Diameter; Size telltale; Net area)

Pitch _____ Net Area _____ Max. S.W.P. _____
(Supported by one bolt)

5(e) Mud Drum _____

(For sect. header boilers. State Size; Shape; Mat. spec. no.; Thickness)

Heads or Ends _____ Hydro. Test, Lb _____
(Shape; Mat. spec. no.; Thickness)

6(a) Waterwall Headers

| No. | Size and shape | Material spec. no. | Thickness | Shape | Heads or Ends | | Hydro. test, lb | 6(b) Waterwall Tubes | | | |
|-----|----------------|--------------------|-----------|-------|---------------|--------------------|-----------------|----------------------|-----------|--------------------|--|
| | | | | | Thickness | Material spec. no. | | Diameter | Thickness | Material spec. no. | |
| | | | | | | | 2475 | 2 1/8" | .180 | SA-178-A | |
| | | | | | | | 2475 | 2" | .150 | SA-178-A | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

7(a) Economizer Headers

| | | | | | | | | | | |
|---|-----------|----------|----------|------|----------|-----------|------|--------|------|----------|
| 2 | 6 3/8" OD | SA-106-B | .864 Nom | Flat | 1.12 Nom | SA-515-70 | 2550 | 1 1/2" | .150 | SA-178-A |
| | | | | | | | | | | |
| | | | | | | | | | | |

7(b) Economizer Tubes

8(a) Superheater Headers

| | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

8(b) Superheater Tubes

9(a) Other Parts (1) Feed Piping (2) _____ (3) _____ 9(b) Tubes for Other Parts

| | | | | | | | | | | |
|---|----|----------|--------|--|--|--|--|--|--|--|
| 1 | 4" | SA-106-B | Sch 80 | | | | | | | |
| 2 | | | | | | | | | | |
| 3 | | | | | | | | | | |

10 Openings (1) Steam 1 - 6" 1500# Flanged
(No., size, and type of nozzles or outlets)(2) Safety Valve 2 - 2" 2500# Flanged
(No., size, and type of nozzles or outlets)(3) Blowoff 2 - 1 1/2" 6000# Female S.W.
(No., size, and type of nozzles or outlets)(4) Feed 1-4" 1500# Flg (Upper Dr Shell Pl.)
(No., size, type, and location of connections)

| | Maximum Allowable Working Pressure | Code Par. and/or Formula on which AWP is Based | Shop hydro. test | Heating Surface |
|----------------|------------------------------------|--|------------------|-----------------|
| a. Boiler | 1650 | PG-27 | 2475 | 9600 |
| b. Waterwall | 1650 | PG-27 | 2475 | 1243 |
| c. Economizer | 1700 | PG-27 | 2550 | 4750 |
| d. Superheater | | | | |
| e. Other parts | | | | |

Heating surface to be stamped on drum heads.

This heating surface not to be used for determining minimum safety valve capacity.

| 12 | Field hydro. test |
|----|-------------------|
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