STANDARD FORM

For Reporting Results of Low-Pressure Steam-Heating Boiler Tests

RESULTS

Of a Test on a Low-Pressure Boiler

DATE OF TEST .....
CONDUCTED AT .....
DIRECTOR OF TEST .....(signature)
MANUFACTURER OF BOILER .....
OWNER OF BOILER .....
SIZE OF BOILER .....
TYPE OF BOILER .....

GENERAL PARTICULARS OF BOILER AND FUEL

BOILER

Type .....
Made by .....
Length of Grate (or Diameter) .....in.
Width of Grate .....in.
Fuel Capacity (Greatest Possible Volume) .....cu. ft.
Maximum Fuel Depth (Greatest Possible Depth of Fuel) .....in.
Fuel Capacity Normal .....cu. ft.
Fuel Depth Normal .....in.
Average Distance from Top of Normal Fuel Charge to Crown Sheet .....in.
Total Furnace Volume, Grate to Crown Sheet and Bridge Wall .....cu. ft.
Total Combustion Space Beyond Bridge Wall .....cu. ft.
Water Capacity (To Water Line) .....lb.
Height of Water Line .....in.
Steam Connections Used { Number ..... / Size .....in.
Kind of Insulation .....
Thickness of Insulation .....in.
Detailed Description of Boiler .....

SMOKE PIPE AND CHIMNEY

Area of Smoke Pipe .....sq. in.
Length of Smoke Pipe (Boiler to Chimney) .....in.
Number and Kind of Bends in Smoke Pipe .....
Chimney, Height above Grate .....ft.
Chimney, Area at Bottom .....sq. ft.
Chimney, Area at Top .....sq. ft.

FUEL

Name .....
Size .....

PROXIMATE ANALYSIS		As Fired	Moisture Free
Moisture	per cent		
Volatile Matter	per cent		
Fixed Carbon	per cent		
Ash	per cent		

ULTIMATE ANALYSIS		As Fired	Moisture Free
Carbon	per cent		
Hydrogen	per cent		
Oxygen	per cent		
Nitrogen	per cent		
Sulphur	per cent		
Ash	per cent		

These forms may be obtained on request at the office of the Secretary of the AMERICAN SOCIETY OF HEATING AND VENTILATING ENGINEERS, 29 West 39th Street, New York City, at nominal cost.

HEAT VALUE (GROSS)

B.t.u. per lb. as fired .....
B.t.u. per lb. moisture free .....
B.t.u. per lb. moisture and ash free .....

CHARACTER OF FUEL

(State whether coking or free-burning, clinker troubles, etc.)

METHOD OF FIRING

PRINCIPAL RESULTS OF TEST

Heat recovered at the boiler outlet per hour .....1000 B.t.u.
Maker's rating (sq. ft. radiation × 240) .....1000 B.t.u. per hr.
Percentage of maker's rating developed .....per cent
Mean interval between charging fuel .....hours
Mean interval between attention of any kind to the fire, including charging .....hours
Overall thermal efficiency .....per cent

DETAILED RESULTS OF TEST

(For full particulars of boiler and fuel see "general particulars" ante)

GENERAL INFORMATION

1. Date of Test .....
2. Number of Test .....
3. Location of Boiler .....
4. Maker of Boiler and Type .....
5. Owner of Plant .....
6. Test Conducted by .....
7. Duration of Test .....hr.
8. Manufacturer's Rating of Boiler .....sq. ft. radiation[1]
9. Grate Area[2] .....sq. ft.
10. Barometric Pressure .....in. of mercury

FUEL

11. Heat value, as fired .....B.t.u. per lb.
12. Number of Times Fuel Charged during Test .....
13. Intervals between Charging, hrs. Longest ..... Shortest ..... Average .....
14. Intervals between Attention of any Kind to the Fire, including firing, hr. Longest ..... Shortest ..... Average .....
15. Average Fired per Charge[3] .....lb.
16. Depth on Grate at Start of Test (After Firing) .....in.
17. Depth on Grate at Finish of Test .....in.
18. Weight as Fired during Test[3] .....lb.
19. Weight as Fired per Hour[3] .....lb.
20. Moisture in Fuel .....per cent
21. Weight Fired per Hour less Moisture:[3]
$$\frac{100 - \text{item } 20}{100} \times \text{item } 19 \text{ .....lb.}$$

ASH AND REFUSE

22. Weight of Ash and Refuse Removed from Grate .....lb.
23. Weight of Ash and Refuse Removed from Ashpit .....lb.
24. Total Weight of Ash and Refuse Removed[4] (item 22 + item 23) .....lb.

[1] One sq. ft. radiation to be assumed equal to 240 B.t.u. per hr.
[2] If the grate have an unusual shape, method of computing area must be stated under "Remarks."
[3] When the New Fire Method is used the equivalent fuel charged shall be given throughout. The method of obtaining this is shown at the end of this table.
[4] To include ash content of residual fire when New Fire Method is used.