

## Do You Maintain a Boiler Log?

Click on the thumbnail to download the log.

Thumbnail of a HIGH PRESSURE Power Boiler Log form. The form is titled "HIGH PRESSURE Power Boiler Log" and contains a grid for recording boiler operating conditions. The grid has columns for "DATE", "TIME", "PRESSURE", "TEMPERATURE", "WATER LEVEL", "FUEL RATE", "AIR FLOW", "OIL FLOW", "GAS FLOW", "ELECTRICITY", "WATER", "STEAM", "CONDENSATE", "EXHAUST", "FAN", "PUMP", "VALVE", "OTHER". The form also includes a section for "OPERATOR'S SIGNATURE" and "DATE".

Thumbnail of a HEATING BOILER LOG form. The form is titled "HEATING BOILER LOG" and contains a grid for recording boiler operating conditions. The grid has columns for "DATE", "TIME", "PRESSURE", "TEMPERATURE", "WATER LEVEL", "FUEL RATE", "AIR FLOW", "OIL FLOW", "GAS FLOW", "ELECTRICITY", "WATER", "STEAM", "CONDENSATE", "EXHAUST", "FAN", "PUMP", "VALVE", "OTHER". The form also includes a section for "OPERATOR'S SIGNATURE" and "DATE".

A boiler log provides a written record of the boiler operating conditions on a given day and at a given time. The log can be used for both hot water and low and high pressure steam boilers. The purpose is akin to that of a patient's hospital chart. The log provides a clear historical record of the boiler's conditions, which enables the boiler operator or service technician to evaluate and correct problems before they become serious.

The following paragraph is from Engineering Bulletin No. 70 entitled "Boiler Log Program," published by the Hartford Steam Boiler Inspection and Insurance Company.

"Not every accident is preventable. The results of accident investigations show, however, that by far the great majority of accidents to boilers are preventable. The number of such accidents can be effectively reduced through the proper application of operating and maintenance logs."

The need to regularly check water level controls and the waterside of the pressure vessel cannot be overemphasized. Most instances of major boiler damages are the result of operating with low water or the use of untreated or incorrectly treated feed water.

Here's an example of how a boiler log can also help increase uptime and reduce fuel costs. After taking readings for one week you notice that the boiler stack temperature has been climbing. By reviewing your log sheets, you also determine that the gas pressure has increased a couple of inches of water column per day. Looking at the two pieces of information, you might conclude that the problem lies with faulty gas pressure regulator producing possible sooting causing a reduction in heat transfer.

The boiler log sheet allows you to make an intelligent, informed decision, based upon historical data. Not a guess based upon spur of the moment reaction.