



## High-Pressure Steam Engineer 3<sup>rd</sup> Class and 2<sup>nd</sup> Class Watch/Shift Duties: Do's and Don'ts

High-pressure steam plants can be dangerous to an unqualified person and all the people that work in the HP steam plant, but a qualified individual makes a high-pressure steam plant safe for everyone and themselves. Here are some basic tenets that a 3<sup>rd</sup> Class High-Pressure Steam Engineer should understand and acknowledge.

Always use a qualified boiler works to make pressure part repairs

Don't leave the boiler untended

Always use properly rated fittings and valves

Never add water to boiler when water level cannot be determined

Never operate a boiler with an unstable combustion envelop

Always know proper operating pressures and temperatures of boilers, machinery, and auxiliary equipment

Ensure boiler and feedwater are tested regularly

Never operate an overheated boiler

Never circumvent the boiler start-up sequence controller

Automatically operated boilers must have human supervisory oversight

Always watch the water level gauge glass when bottom blowing a boiler

Never add water to an overheated boiler, and shut the boiler off, then allow to cool

Always maintain automatic controls in perfect condition

Never operate a boiler with seized safety valves or over-pressurization devices

Never operate a boiler above its' MAWP

Always keep gauges readable and in working condition

Always have your boiler inspected annually by internal means then operationally

Always test your low water cut off annually by the slow evaporation method

Routinely examine auxiliary machinery and vessels on watch

Always acquaint yourself with the operating conditions before taking the shift or watch

Always record unusual conditions on shift or watch and print legibly

Never keep flammables in the vicinity of boiler or hot surfaces

Never permit horse-play or allow pranks to occur and never play games in high-pressure plant

Always keep work spaces clean and clear to allow ease of access in emergencies and eliminate trip hazards

Always report unusual conditions to your supervisor immediately

Never close or open valves unless authorized by procedure or supervisor

Always follow your licensed Chief's instructions for the high pressure steam operations