

STATIONARY ENGINEERS JOB DESCRIPTION

Stationary Engineers are Engineers and boiler operators that control stationary engines, boilers, or other mechanical equipment, that provide utilities for buildings, or for industrial purposes.

DUTIES OF A STATIONARY ENGINEER:

Stationary Engineers, and Boiler Operators typically do the following:

Operate engines, boilers, and auxiliary equipment.

Read gauges, meters, and charts to track boiler operations.

Monitor boiler water, chemical, and fuel levels.

Activate valves to change the amount of water, air, and fuel in boilers.

Fire coal furnaces or feed boilers, using gas feeds or oil pumps.

Inspect equipment to ensure that it is operating efficiently.

Check safety devices routinely.

Record data and keep logs of operation, maintenance, and safety activity.

Most large office buildings, malls, warehouses, and other commercial facilities have extensive heating, ventilation, and air-conditioning systems that maintain comfortable temperatures all year long. Industrial plants often have additional facilities to provide electrical power, steam, or other services. Stationary Engineers, and boiler operators control and maintain these systems, which include boilers, air-conditioning and refrigeration equipment, turbines, generators, pumps, and compressors.

Stationary Engineers and boiler operators start up, regulate, repair, and shut down equipment.

They monitor meters, gauges, and computerized controls to ensure that equipment operates safely and within established limits. They use sophisticated electrical and electronic test equipment when servicing, troubleshooting, repairing, and monitoring heating, cooling, and ventilation systems.

Stationary Engineers and boiler operators also regularly perform routine maintenance. They may do a complete overhaul or replace defective valves, gaskets, or bearings. In addition, stationary engineers and boiler operators lubricate moving parts, replace filters, and remove soot and corrosion that can make a boiler less efficient.

The work of stationary engineers is varied and complex. We are responsible for the operation, maintenance, renovation and repair of boiler systems and all other mechanical systems in a facility. Stationary engineers are employed in schools, hospitals, hotels, apartment buildings, shopping malls, airports, power plants, industrial and manufacturing plants, breweries, co-generation plants, petro-chemical plants, office and commercial buildings, government facilities and other workplaces. In operating and repairing these facilities, stationary engineers perform work on boilers and steam systems; heating, ventilating and air conditioning systems; building automation systems; diesel engines, turbines, generators; pumps, piping and compressed gas systems; refrigeration and electrical systems and numerous other physical plant functions. We are called stationary engineers because the equipment we operate is similar to equipment operated by locomotive or marine engineers except it is not in a vehicle that moves.

Stationary engineers start up, regulate, repair and shut down equipment. We ensure that equipment operates safely and economically and within established limits by monitoring attached meters, gauges, and computerized controls. We manually control equipment and make the necessary adjustments. We use hand and power tools to perform repairs and maintenance ranging from a complete overhaul to replacing defective valves, gaskets, or bearings. We also record relevant events and facts concerning operation and maintenance in an equipment log. On steam boilers, for example, we observe, control, and record steam pressure, temperature, water level, power output, and fuel consumption. Stationary engineers can often detect potential mechanical problems by observing and listening to the pitch of the machinery. We routinely check safety devices, identifying and correcting any trouble that develops.

Stationary engineers also perform routine maintenance, such as repairing and replacing pumps, motors and other operating equipment, lubricating moving parts, replacing filters, and removing soot and corrosion that can reduce operating efficiency. We also test and chemically treat hydronic systems to prevent corrosion and harmful deposits.

A stationary engineer may be in charge of operation, maintenance and repair of all mechanical systems in a building, industrial power plant or engine room.