STEAM GENERATORS

Advanced Steam Technology that Is Safe, Efficient and Reliable

Case History: The use of steam in the food industry: How to make the most of it?

The use of steam in the food and beverage industry is essential for the production of products, steam is used in heat transfer processes such as cooking areas, pasteurization and in cleaning processes. For the production of this steam, the boiler plays an important role, which is why special care must be taken with its maintenance, as well as care with the water that enters the system. Another point is to get the most out of the boiler by having the maximum efficiency of it.

The measurement of the steam produced is carried out through Vortex type equipment which with the Wet steam measurement function can monitor the quality of the steam which helps to detect if the traps are operating correctly, as well as the insulation system of the pipes.

Monitoring gives the quality of the water entering the boiler.

Treating the water from a steam or hot water boiler is essential to ensure a long service life free of operational problems, major repairs and accidents.

Hard to soft water is water that contains a high level of minerals, particularly magnesium and calcium salts.

· pH represents the acidic or alkaline characteristics of water, so controlling it is essential to prevent corrosion (low pH) and deposit (high pH) problems.

· Hardness. Water hardness mainly quantifies the amount of calcium and magnesium ions present in the water, which favor the formation of deposits and scale that are difficult to remove on the heat transfer surfaces of a boiler.

· Oxygen. The oxygen present in the water promotes the corrosion of the metal components of a boiler. Pressure and temperature increase the rate at which corrosion occurs.

Boiler Efficiency

Efficiency monitoring is important, which allows us to get a clear picture of the conditions of how our boiler is operating and when the system requires maintenance, i.e. increased fuel consumption. Feed water temperature, fuel flow, analytical variables, pressure, temperature, among others, are the points that must be considered.

Combustion efficiency and monitoring of emissions to the atmosphere

The Official Mexican Standard NOM-085-ECOL-1994, Atmospheric Pollution- for stationary sources that use fossil, solid, liquid or gaseous fuels or any of their combinations, which establishes the maximum levels. Therefore, it is necessary to monitor and comply with the standard.

Valves in good condition.

The steam management is carried out by means of pipes and cut-off valves, which it is necessary to have in optimal conditions and avoid leaks, thus having the maximum use of the steam generated.

For all these points mentioned above, Clayton has an After-Sales department which, with its extensive experience and specialized technicians, will give you certainty and compliance with the highest standards of quality in service.