

STEAM GENERATORS Advanced

Steam

Technology

that Is Safe,

and Reliable

Efficient

The Effects of Humidity Levels in the Pharmaceutical Industry

Controlling the amount of fluid in medications is crucial, because there are several substances that are in the form of hydrates and have absorbed water. This makes it necessary to determine and control them by various methods, such as Clayton steam generators that are used to have adequate humidity control.

The effects on industry vary depending on the level of humidity in the environment. If this is too low, it alters the expected effects on the solvents used during productions. On the other hand, higher levels result in a high absorption of moisture by the drugs, which affects the efficacy and potency of the active ingredients, thus leading to degradation and, in the worst case, becoming toxic products.

In cases where the relative humidity is equal to or greater than 60%, the chances of proliferation of bacteria, viruses, mold and mites increase. As you will notice, relative humidity significantly affects pharmaceutical products, both in their quality, shelf life and performance, for this reason, it is recommended that it be at 50% to avoid it, which is possible with steam generators, which also contribute to ecological protection.

However, once the drugs are made, they go through a final filter: quality control analyses. Here several tests are carried out to determine the amount of moisture contained, so that it is not so high and its shelf life is guaranteed and the operation foreseen in its design is obtained. In Mexico, companies in the sector are obliged to comply with regulations that mention the maximum level of humidity allowed, depending on the nature of the product.

Clayton Steam Generators and their potential for the sector

The steam they generate is ideal for humidity control, and recent models work automatically, allowing specific levels of relative humidity to be maintained. They





serve the same purpose as boilers, however, their operation is simpler and more efficient and they are recommended for all types of applications, such as pharmaceuticals. They operate with ducted systems with air conditioning and ventilation, so if they already exist in the plant, they are a good option.

They feature a compact and portable design, unlike a boiler and are offered in various capacities. Their dimensions make them ideal for space-constrained enclosures where good humidity control is required and can be located at different points.



