# Learn how to choose a steam hose for industrial purposes

Steam hoses meet demanding tasks, such as withstanding extreme pressure. They are made specifically for handling saturated steam with dissolved liquid and have many applications within **industrial** processes.

In what **manufacturing** processes can you use steam hoses? How can you choose the perfect steam hose for a specific work? Do not stop reading if these are the questions you have in mind. You will know what you need.

## What types of steam hose are in industrial processes?

In 2017, the international standards ISO 6134 classified two main types of steam hose and their characteristics.

The principal function of both is the transport of hot water vapour safely for the user, but both have some differences, and I am going to tell you them below.

### Low-pressure steam hoses

In the ISO classification, they are Type 1 hoses and withstand temperatures up to 164°C. Therefore, they are useful in**industrial**procedures such as cleaning and assembly systems that require handling saturated steam up to 100 psi pressure with minimal heat loss.

### High-pressure steam hoses

They are also known as Type 2 hoses and can withstand higher temperatures, but up to 210° C. They are useful in processes that require a saturated steam pressure up to 250 psi with low heatloss.

However, both types of hoses fall into two classes. So, the class is also something you should consider depending on the **manufacturing** process.

### Class A: Oil resistant

Low and high-pressure hoses can be oil-resistant, meaning they suffer little degradation when exposed to oil. These hoses are at chemical plants, refineries or processing factories.

### Class B: Not resistant to oil

Indeed, as the name indicates, these hoses have not been designed to withstand oil degradation. As a result, they are more prone to damage from this class of fluids and high temperature but generally have a longer life than class A if used correctly.

They are used in moistening and **heating**applications but should not use them in practices involving hydrocarbons, cleaners and lubricants. That is because the cover can swell, making its exterior brittle and making it easier to tear and exposed to moisture.

You could also find some of these hoses with a marked symbol. This symbol indicates its electrical properties.

* The M symbol means it is an electrically bonded hose.
* The Ω symbol indicates it is an electrically conductive hose.

## How to select the perfect steam hose for your manufacturing application?

As you may have guessed, each type and class of hose has a specific application in the industry for a reason. For example, some applications demand high temperatures, while others use materials that require higher resistance and carry out the processes safely; it is a must to choose the correct components, including the corresponding hose.

Selecting the correct steam hose is mandatory; working with steam is dangerous, so you should pay attention to the following points to choose the ideal one:

* Consider the length and diameter of the hose you need for the application.
* Take into account the type of steam (high or low-temperature, high-pressure or low-pressure).
* Be sure to select the hose that will withstand temperature and has **heating** capacity.
* Know the pressure in the application and use a hose that can handle it.
* Look for a brand known for its resistance to heat, water, steam, and other fluids (such as oil).

In short, know your working conditions well and look for a suitable hose for the frequency of use, temperature and pressure you need.

Choosing the correct hose for a specific **manufacturing** process will not only save you from an accident (which is quite a lot if you are wondering), it will also increase the component's life and make the process you are running much more efficient.

## What can you use a steam hose for in a manufacturing factory?

Steam is a source of heat or propulsion in the industry. So, it would be best to make a correct choice to achieve proper steam transmission depending on the application. So, let's look at the most common **industrial**applications.

### Heating.

Refineries and some plants use steam as a heat source for sterilization because it increases the flow in cleaning tanks, reactors, and other supplies.

So, the hose must provide easy steam deployment and flexibility to achieve this; otherwise, the process becomes more challenging to manage.

### Cleaning

The steam is not just for the sanitation process in the **industrial**plants. Steam hoses are also helpful for cleaning certain surfaces, such as the walls of a boiler.

You can eliminate the residues with the correct pressure, thanks to the high temperatures. Not forgetting steam sanitizes surfaces at a low cost.

### Humidification

Low-pressure steam at its minimum temperature is useful for interior temperature regulation. In addition, HVAC systems use steam hoses to transfer **heating** and condition airflow in cold climate regions.

### Moisturization

Some processes require moisture and heat supply. For example, the paper industries use steam hoses as a fundamental part of their processes.

Moisture is necessary for papermaking to improve sheet strength and prevent wear. On the other hand, in the pellet mill industry, steam provides water to the feed materials.

### Atomization and motive fluid

Atomization mechanically separates fluids using steam. Then, thanks to the special hose, it is injected for the fluids' decomposition into droplets, allowing efficient combustion, as in the case of an oil burner.

On the other hand, it can also be used as a motive fluid to optimize the movement of other ones. In this case, you must use a hose resistant to **heating**and high pressure since the steam circulates at high speed and force. Also, distillation towers use motive fluid when separating and purifying vapour streams.

These are the main applications of this type of hose in the industrial area, but to select the correct one, you must consider the working conditions you handle.

This way, you ensure that it is the best decision and avoid any accident or injury from having the wrong steam hose.