

WHY SHOULD I CHOOSE THE STAINLESS STEEL MATERIAL?

Simply because it allows you to save money!

To better understand how to do this, it is important to know the difference between normal steel and stainless steel.

Generally speaking, steel is a ferrous alloy composed mainly of iron and carbon, produced in steelworks.

This material also contains other elements that, depending on the percentages in which they occur, determine its chemical and structural composition. For instance, the **stainless steel is composed of 50% of iron and 12% of chromium**. It is indeed the presence of chromium that provides the material's particular resistance to corrosion, the main advantage of its use.

The stainless steel also has additional presence of **carbon, silicon and manganese**. The relationship between these parts allows the material to be splitted into 4 different types:

- Ferritic stainless steels
- Martensitic stainless steels
- Austeno-ferritic (or duplex) stainless steels
- Austenitic stainless steels.

We have chosen to manufacture its pallet trucks and stackers completely in stainless steel with the aim to ensure to all end-use sectors (pharmaceutical, cleanroom, microelectronics, food, agri-food) high corrosion resistance, good polish and high hygiene coefficient.

In addition, unlike galvanised steel products, they do not have a very high electrical potential and therefore the risk of electrochemical corrosion (resulting from contact with moisture) is also very low.

Specifically, what does AISI304 and AISI316 mean?

Let's start with a technical aspect.

Both belong to the austenitic steel family: what is different one from the other is the presence of Molybdenum.

And what is Molybdenum ?

In very simple terms: it is a chemical element from which corrosion resistance is derived.

So going into detail about the 2 different stainless steel types:

* AISI316: contains a high concentration of Molybdenum, which therefore allows high corrosion resistance, even at quite high temperatures

* AISI304: Compared to 316, it has a lower concentration of Molybdenum, although it still guarantees high performance in terms of resistance to corrosion and therefore rust, perfect washability even with high-pressure water jets and hygiene with the appropriate detergents. It is perfect for use in cold stores with temperatures down to -20°C