

Stretch Tubular Coil

Stretch hood type tubular coil is the optimum solution for palletization problems. It combines the advantages of normal shrink-wrap as regards pallet seal and protection against the weather (water and dust) with the practical use of the stretch product. The cold stretch system comes from the synergy between the flexibility and convenience of the mechanical encasing system and the superior elastic properties offered by stretch tubular coil. Stretch tubular coil was devised as a result of careful study into the problems associated with palletization and is an innovative solution both for its superior quality and its low running costs. The special blend of various types of polyethylene and the exclusive method of extrusion gives the tubular coil its elastic strength, which extends in both directions: crosswise and lengthwise. After the stretch machine has unwound the tubular coil, it expands the edges of the bellows to allow the fingers to stretch the tubular coil more than 30% its original size depending on the pallet size. Thanks to optical reading of the pallet height, the exact amount of tubular coil needed to cover the whole pallet is stored on the fingers during the winding phase onto the fingers themselves.

The cutting and sealing phase follows, forming the hood defined in this way. At this stage, the system of fingers drops down so the hood is able to cover the full height of the pallet and encase it down to its base. The hood completes its gripping action within 3 seconds of being released, as it tends to return to its original size thanks to its elasticity. It keeps its strength practically without any change over time, without slackening or yielding, and lasts for as long as the tubular coil itself, depending therefore on the amount of additives used. The resulting pallet can be subjected to handling and stacking without any problem linked to its stability. Supplementary additives also enable the stretch hood to protect the packed product from the hazardous effects of UV light for a period of up to 12 months. These features, together with the possibility to obtain an anti-fog and antistatic product, make long-term, open-air storage possible in total safety. Various colours and customised printing are also available.

The Advantages of Stretch Tubular coil compared to heat shrink-wrap hoods and the use of stretch film.

General issues:

-Stretch tubular coil is the most innovative product available on the packing market because:

- It protects the environment. It doesn't cause combustion fumes and is made of 100% recyclable PE
- It provides excellent pallet seal. The material's intrinsic elastic grip not only guarantees superior transversal seal but also vertical pallet seal, not offered by systems using stretch film
- It is an aid for safety in the workplace. It eliminates the risk of fire and explosion linked to the use of heat shrink-wrap

- It safeguards pallet protection. Stretch tubular coil offers the possibility of achieving hoods anchored to the bottom of the pallet, guaranteeing total protection against dust, rain and humidity, which pallets wrapped with stretch film are subject to.

-Advantages compared to heat shrink-wrap hoods:

Heat shrink-wrap hoods need:

- Heat-shrink oven: a source of heat using comburent gas which can prove legally hazardous according to law 626 and costly due to its consumption of gas and for the control of fumes
- Heat-shrink material: the specifications vary according to the type of pallet and shrink-wrapping. The size of these tubular coils is always larger than the pallet sizes. It must be very thick if the pallet itself lacks good intrinsic stability and you need to increase its resistance to tearing.
- Maintenance: high running costs and continuous adjustment in order to optimise machine performance. Stretch tubular coil can be used with an automatic stretch machine, exploiting the benefits of its greater elasticity and grip in addition to its increased strength and resistance to tears. In this way, it is only possible to completely encase a pallet with mechanical movements with a high-strength hood. Stretch tubular coil is also enhanced with additives for protection against UV for long periods of exposure. The comparison of the weights of heat-shrink hood and stretch hood shows that there are obvious savings in the weight of material: combined with the benefits of not needing a heat source in the production line, it makes this system even more cost-effective.

-Advantages compared to the use of stretch film:

- Protection: allows total protection against rain and dust without the need for top sheets
- Perfect seal: guarantees superior pallet seal thanks to its transversal elastic grip. Furthermore, it doesn't squash the product due to excessive corner pressure.
- Appearance: the shape of pallets looks more uniform with a smoother and softer outer surface making it easier to read any logos or other information written on the packed product, easier to handle, manoeuvre and stack pallets without causing tears.