

AERIAL ELEVATION AND/OR DESCENT SPIRALS (SPI-R)

Fully customisable elevation and descent solutions



- Adaptable in height, width, and interface angle
- Suitable for a wide variety of products
- Tracks can be set up for elevation or descent
- Possibility multiple channels
- Aerial installation (even at the ceiling level)
- Industries:
 - Food
 - Pharmacy
 - Cosmetics
 - Drugstore
 - Automobile
 - Electronics

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What are they?

Elevation or descent spirals (SPI-R) are devices designed to transport products between two points located at different heights. Spiral transport can happen in an upward or downward direction.

Transport is made as a continuous flow, unit by unit, and products are handled without pressure or piling-up during their transfer between different heights.

By design, spirals **are a very efficient way to lift or lower products in terms of the ratio between achieved slope and utilised plant surface**, which makes them optimal for most production environments. SPI-R devices are **fully customisable and designed to be installed at height, suspended** from some elevated structure, when available space requires it.

What is offered by the SPI?

SPI-R devices are especially suitable for production lines where products must be picked up and delivered at different heights, with short distances between product-in and product-out points. In these situations, it is difficult to use other elevation or descent devices (long ramps, for example) due to the lack of available space, and the spiral is a reliable and safe solution.

They are also appropriate to enable transported products to overcome barriers or obstacles caused by structural elements of the plant or other existing conveyor or production lines.

SPI-R solutions are fully customisable in terms of height, as well as the arrangement and orientation of their product-in and product-out interfaces, and in the slope of the transport ramp.

The wide variety of widths and heights of the conveyor tracks used by the SPI range make them a very good solution to handle almost any kind of product: boxes, bags, flowpacks, bottles, tubes, doypacks, industrial components, etc...

Products are transported without pressure and this makes SPI-R devices suitable for fragile or delicate products.

What features do they have?

SPI-R devices comprise a number of turns, the diameter, inclination, separation and quantity of which depend on the slope to be overcome by the products, their physical characteristics, the space available in the plant, as well as the quantity of products to be transported and their speed.

Products move on a continuous track that can integrate the input and output conveyors, reducing the number of transfers of the line.

The width of this chain, as well as any possible accessories it may include to ensure stability of the transported product, are defined based on the characteristics of the product.

SPI-R solutions can be customised to include, without any discontinuity and requiring no transfers, the input and output product conveyors, which can themselves be of any length.

SPI-R devices can be implemented as single elevation or descent devices, or joined together with other Inprosy® products, and they can also be part of a broader solution for transport and product management on production lines.

The control of SPI-R devices can be integrated with that of the manufacturing line, meaning its operating parameters are fully coordinated with it.

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Technical details:

- Independent product-in and product-out speeds (up to 60 m/min).
- Range of track shapes and sizes, up to 300 mm wide.
- One or more separate product channels.
- Possibility to simultaneous descent channels with ascent channels.
- Free configuration of the layout and orientation of the input and output areas.
- Maximum size of products to handle dependant on stability and weight.
- Adaptable side guiding mechanism.
- Pressure-free product transport.
- Height installation.
- Control software fully integrated with manufacturing line.
- Made from stainless steel.
- Diameter: from 800 mm to 2000 mm.
- Lubrication: recommended.
- Power required: from 0.33 kW to 4.5 kW.
- CE-marked.