

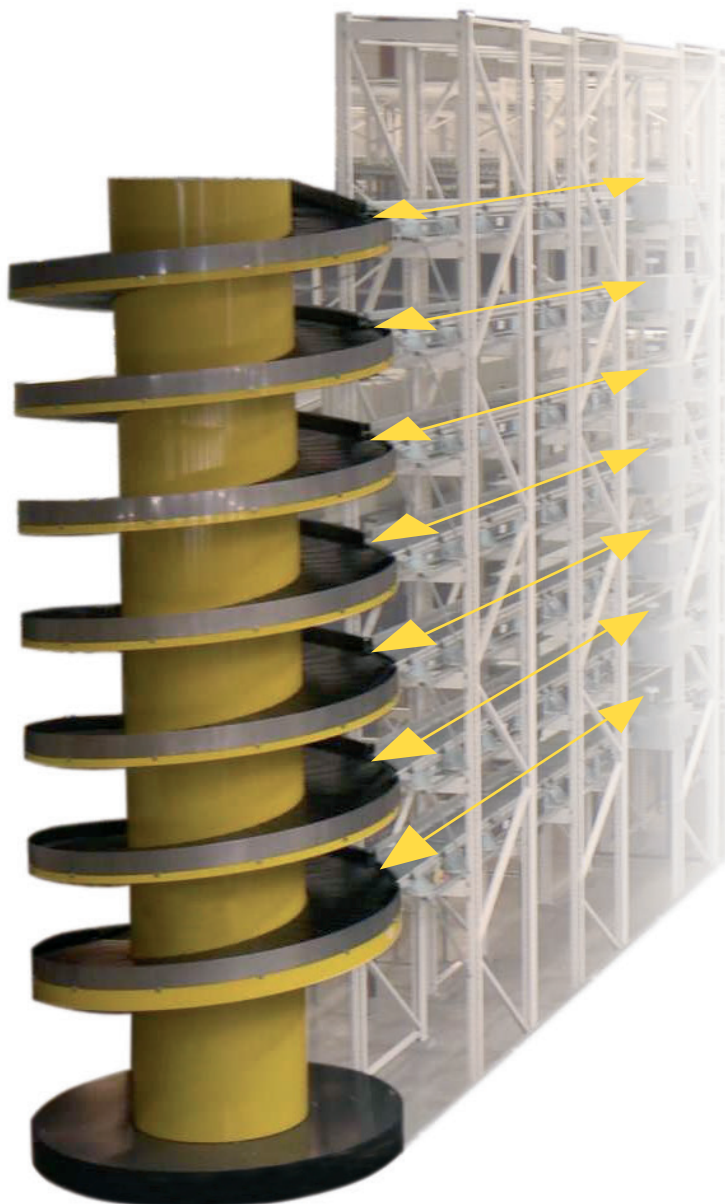
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Concept Design Sheet

# SPIRALVEYOR® ML

For Multi-Level induction and diverting of your flow

- Spiral Elevator
- Spiral Merge
- Spiral Divert
- Vertical sorter
- High speed
- High capacity



The SpiralVeyor® ML concept is a Multi-Level Spiral elevator. It offers you even greater flexibility when designing your lay-out in 3 dimensions. Goods can be entered into the SpiralVeyor® on different levels or be diverted from it. It has been proven to be a very effective solution, especially when combined with order pick modules and order release systems, as well as freeing up valuable floor space by merging/diverting above ground level. AmbaFlex invented the Multi-Level spiral conveyor in 2001 and has installed many of them for numerous clients since then. The inventive solution has been granted several patents.

## Set up:

The SpiralVeyor® ML consists of 3 hardware elements.

- 1) A SpiralVeyor® SV series
- 2) one or more merge units and/or
- 3) one or more diverts.

For this concept, AmbaFlex provides the SpiralVeyor® and optionally the connection conveyors, connection bridges and diverts. The system integrator is responsible for providing the overall traffic control, installation, integration and connecting conveyors.

## Merging:

Merging can take place tangentially or radially. Radially is chosen in case of the irregular introduction of regular shaped items like boxes or tote boxes. Tangentially is chosen when introducing trains/slugs, and/or odd shaped items like SKU's.

## Divert:

Depending on the use, there is a choice of two types of diverts. The radial divert, diverts the products radially from the main stream. The tangential divert leads items in tangential direction from the main stream.

## Connection:

To connect the conveyors to the ML-configuration a connection bridge is most economic. For special cases circular shaped connection conveyors can be applied.

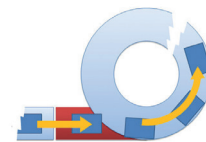
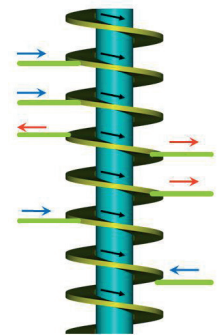
## Configurations:

The SpiralVeyor® ML concept can be applied on all belt width of the SpiralVeyor®. The diverts and infeeds can be positioned in all directions between 90, and even 45 degrees positions, in respect to the windings.

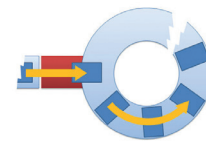
## Performance:

We have experienced good long-term practical performances with speeds up to 180 fpm e.g. 3000 - 4500 items per hour. Elevation of multiple stock levels is possible with just one spiral. For detailed information about the hardware, please see the SpiralVeyor® SV-series Product Data Sheet.

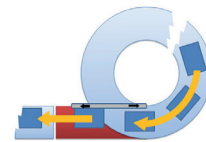
For more information about multi-level concepts, please ask for our extended Concept Design Sheet.



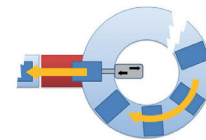
Tangential induction



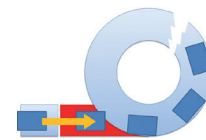
Radial induction



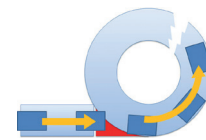
Tangential divert



Radial divert



Connection conveyor



Connection bridge