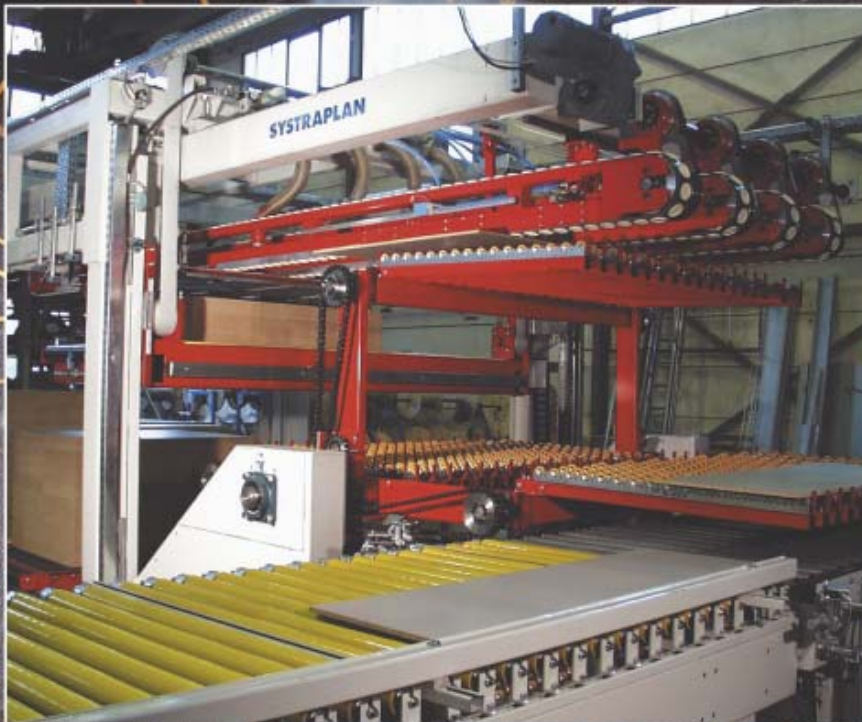


# FEEDING- AND STACKING-SYSTEM



**SYSTRAPLAN**   
Individuelle Materialfluß- und Lagertechnik

*Know-how makes goods move*

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## Feeding- and Stacking System

This system can feed working lines with flat pieces (de-stacking) as well as forming a stack at the end of the working line.

The device consists of lifting platforms (2), which can operate batch-wise so that the upper pieces of a stack (1) are singled from the same level.

Via stationary lift and pushing elements (3) the pieces are accelerated into a combined vertical and horizontal movement and surrendered to the running vacuum belt (4).

By a special system the vacuum in the releasing area is interrupted so that the pieces fall down.

The swords of the rotation elevator (5), which are kept steadily in horizontal position take over the pieces and release them onto the infeed roller conveyor (6) of the working line.

For the sacking system the single steps follow vice versa, i.e. from the outfeed conveyor the pieces are taken over by the rotation elevator lifted to a height of approx. 2,2 m and surrendered to the suction belt system.

The belt system transports the single pieces above the lifting platforms where they are released in a controlled way.

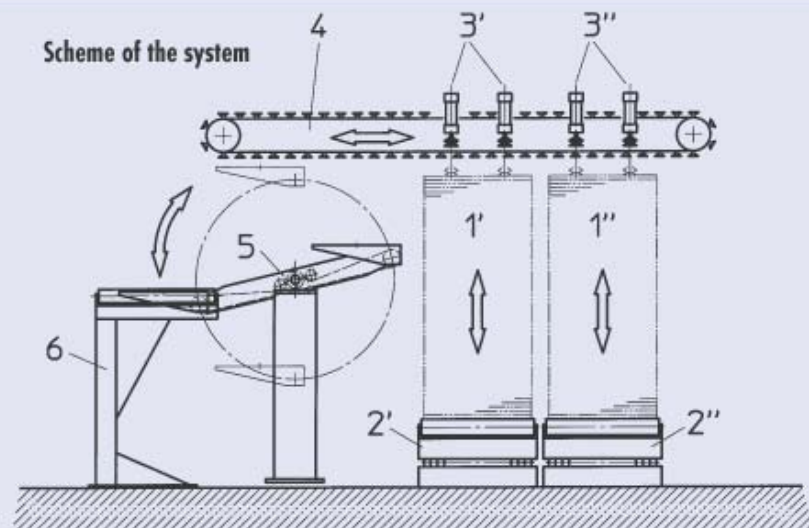
The stack is built with exact vertical edges by the aligning elements in combination with the batch-wise lowering. Stacks with picture layers, i.e. with some parts in line and some parallel can be formed, too.

According to customer demands an infeed and outfeed system for cover boards or pallets can be integrated.



### Advantages of the SYSTRAPLAN – Feeding- and Stacking System

- Depending on the dimensions of the boards and system up to 50 cycles/min.
- Picture layers can be handled also.
- Continuous and smooth operating sequence without return stroke.
- Layout solutions for feeding or stacking in length or cross direction.
- Pitless and space saving system.
- Staggered stacking to stabilize the stacking picture is possible.



#### Technical Data:

- 50 cycles/min., i.e. 100/150 p/min. in case of pictures with 2 or 3 parts in line
- stacking height up to 1.800 mm
- possible sizes: Length: 250 - 3.600 mm / Width: 150 - 1.200 mm / Thickness: 8 - 40 mm



## Feeding- and Stacking System

The stack roller conveyors on the lifting platforms are equipped with positioning devices for the feeding of stacks or baseboards for automatic positioning.

The vacuum belt system is adjustable in the width to be able to respond to the individual part dimensions, stacking pictures or grooves in the surface.

The surface has to be absorbent.

The separation of the boards is accomplished in two different variations in accordance to the part dimensions, contours and stacking pictures.

When working with single stacks the system can achieve considerably high cycle performances. The system works with single stacks in a continuous mode. Doing this, the parts are pushed from behind over a mangle roller onto the vacuum belt.

Stacking pictures with parts lying next to another in one layer are worked in fixed-cycle operation.

By doing this, the lifting platform lifts the stack under the standing vacuum belt. The top layer is sucked up. After this the lifting platform lowers a little bit. The transport of the layer with the vacuum belt is done in fixed sections.

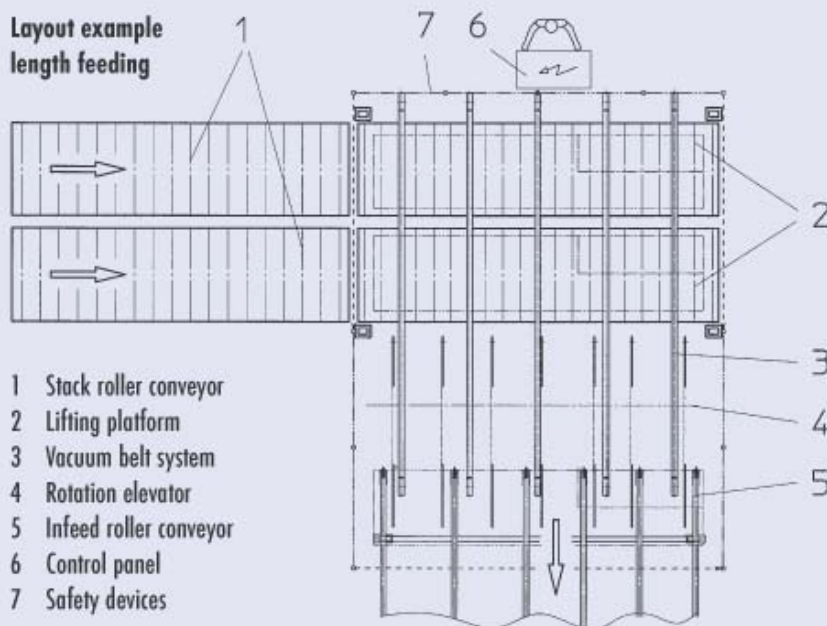
The possible cycle performance depends on the maximum width of the parts, which have to be processed with the system.

The number of single parts can be very high, since the system takes several parts with one cycle.

### Advantages of the SYSTRAPLAN – Feeding- and Stacking System

- High performance
- Ideal for the subsequent integration in existing working lines
- Change of stacks without interrupting the production line
- Careful handling
- Automatic adjustment for new sizes and stacking pictures within a few seconds
- Automatic pallet- or baseboard handling is possible

Layout example  
length feeding



- 1 Stack roller conveyor
- 2 Lifting platform
- 3 Vacuum belt system
- 4 Rotation elevator
- 5 Infeed roller conveyor
- 6 Control panel
- 7 Safety devices

## Feeding- and Stacking System

There are alternative layout solutions to feed or to stack the parts in length or cross directions without turning (see layout examples).

The feeding and stacking of several parts at the same time is possible, so that the feeding and stacking of the complete width for surface lines can be realized.

By using bellows-type vacuum cups it is possible to process stacks with height tolerances.

Considerable tolerances in stack heights can be optionally detected by a special system and then be balanced by the lifting platform.

Examples of applications for the feeding and stacking system:

- Edge banding lines
- Drilling machines
- Surface lines

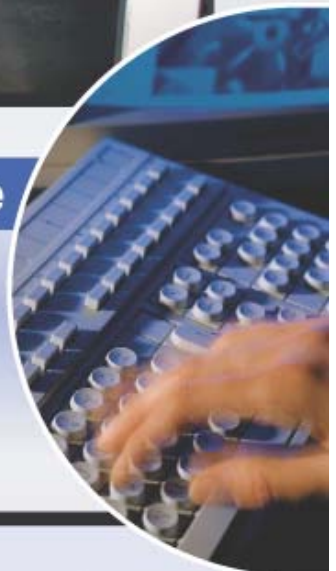
As a competitive and flexible company we are swiftly responding to specific customer demands.



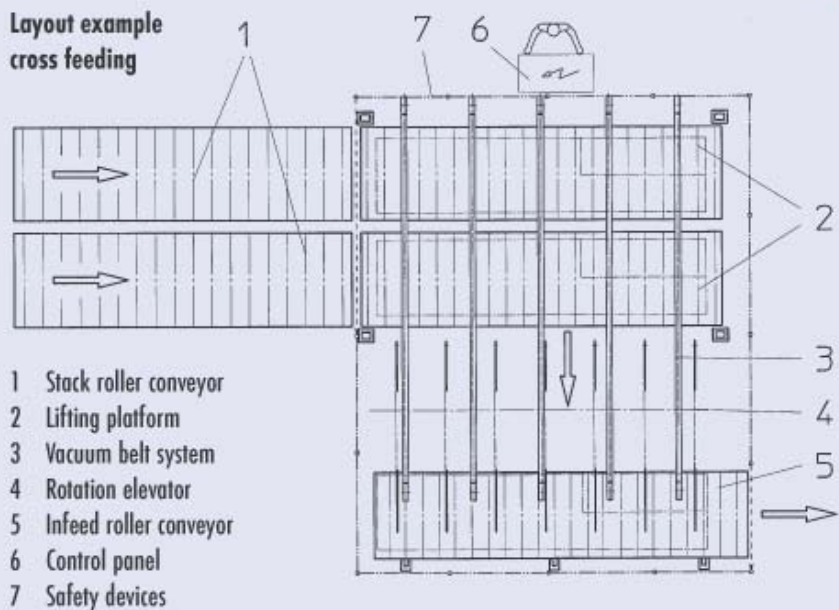
For further information: [www.systraplan.de](http://www.systraplan.de)

We also serve following industries:

- Wood based board industry
- Building board industry
- Sheet metal processing industry
- Rubber processing industry
- Plastic board industry
- Flat glass industry



Layout example  
cross feeding



- 1 Stack roller conveyor
- 2 Lifting platform
- 3 Vacuum belt system
- 4 Rotation elevator
- 5 Infeed roller conveyor
- 6 Control panel
- 7 Safety devices