

Case Study

# Reducing sanitation time in frozen fruit and vegetable processing



**Habasit provides the most successful belt solutions for the processing and conveying of fruits and vegetables. In close cooperation with a specialist for deep-frozen fruits and vegetables, major cost savings and improvements of the production process have been achieved.**

**Cost reduction:** 35-40% less cleaning time by using hygienically optimized belt types.

**Quality improvement:** By narrowing the gap between cleats and skirt board product damages and product losses have been reduced considerably.





## Situation

The specialized enterprise processes a variety of fruits and vegetables (e.g. cherries), which are frozen, sorted and conveyed to the packaging unit. An existing conveying unit (45° inclined belt and 5 m high) with an older modular belt should be improved with regard to hygiene and product damages.

## The Habasit solution / system solution

In cooperation with the plant manufacturer the unit was optimized with regard to

- Gap between flight minimized to 2 mm
- Elimination of sagging of belt with spring tension, requiring only a minimal adjustment to retrofit the unit
- Free access to reverse side for cleaning
- Use of hygienically optimized belt type with open hinges and cavity free reverse side (M5010)

## Results achieved

It was hoped to achieve with belt type M5010 major savings with regard to cleaning times. As an older belt type was still in use simultaneously, it was possible to compare the cleaning times over an extended period of time. The savings amount to 35-40%! In addition product damages could be reduced remarkably due to the smaller gap. Based on these results a second unit was built immediately. In the meantime HabasitLINK® M5010 has become a standard at this company, and seven belts of this type are now in use. In addition, very satisfactory results have been achieved with regard to resistance against detergents (e.g. sodium hypochlorite) and discoloration.

## Detailed application data

HabasitLINK® type	M5010 F05 PP white
Belt length	17 m
Belt width	600 mm
Conveying height	5 m
Temperature	5°C
Speed	25 m/ min
Slope	45°
Flights	H=50 mm, spacing 150 mm
Sprocket	S 12, dp ø 197 mm
Utilized tensile force	approx. 7 %
Slider bed material	UHMW-PE
Capacity	6 tons / hour
Installation	May 1999

## Customer testimonial:

### «A major contribution to the optimization of our production processes»

Habasit's competent advice and high quality conveyor belts resulted in a major contribution to the optimization of the production processes for our company. Innovative hygiene solutions reduced the cleaning time by 35-40%. Thanks to the new conveyor solutions product damages have been reduced as well.  
Technical Manager

## Facts & Figures

HabasitLINK® type	M5010 F05 PP white	Old belt type
Cleaning time	30 min.	50 min.
Savings	35-40%	—
Belt discoloration (cherries)	none	slightly
Resistance against detergents	very good	good



Habasit – We are where you are

Headquarters  
Habasit AG  
Römerstrasse 1  
CH-4153 Reinach, Switzerland  
Phone +41 61 715 15 15  
Fax +41 61 715 15 55  
E-mail info@habasit.com  
www.habasit.com

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