



Das Maskin



SIEMENS

SIMATIC HMI

INTER
SYSTEM

2015-07-20 1:01:51

Überblick

Überblick

Auto
Leeren

Wdg stopp
Leeren

Positionierung

Positionierung
Transportwagen

Auto Positionierung

Auto Positionierung

Auto Transportwagen

TOUCH

Optimized palletizing

Most manufacturers with high product flows handle their products in warehouses and distribution on pallets. This makes palletizing a critical issue.

The equipment has to be easy to set up and easy to adapt to changing conditions. Otherwise, it should be noticed only for functioning, year in and year out, with a minimal need for service, maintenance and repair.

This is as true today as it was 25 years ago, when we decided to create the perfect palletizer – once and for all. Right from the beginning we focused on the international market and in particular on the food industry, because this is where the challenges are greatest.

Today, InterSystem's compact, modular palletizer is a natural part of space-efficient, user friendly and reliable palletizing systems all over the world. So far, we have delivered more than 500 units to clients on three continents. All of them share a view of InterSystem as a reliable partner, offering solutions and support all the way from packaging machine to warehouse, efficient production with short lead times, swift installation and commissioning, and training of the client's staff.

The systems are designed and integrated with our proprietary transport and control systems, which gives the client a single point of contact for future changes and service.



1989



2014

The Perpetual Motion Machine

PERPETUAL: ETERNAL (OFTEN FIGURATIVELY); ENDLESS

25 years in the international arena has given us thousands of ideas and impetus for development and improvement from businesses in many different countries. These experiences are constantly deployed into our products and systems and thus contributing to business benefits for all clients, both old and new.

The very first delivery of a palletizer was for the Norwegian chocolate manufacturer Freia back in 1989, and deliveries to several clients in Germany soon followed. We still use the same modular dimensions and the same basic functions as for the first palletizers.

This concept makes it easy to develop, improve and upgrade the system step by step. The modular design also makes it easier to integrate new and existing machines, and to set up joint empty pallet and full pallet handling – a popular configuration that provides independent line palletizing.

Many of the very first palletizers are still in full operation, and machine number 500 was delivered in 2014 to the dairy group Lactogal in Portugal.

FIVE WAYS TO ETERNAL LIFE FOR YOUR PALLETIZER

- Easy to expand capacity
- Great ability to handle new kinds of packaging
- Intelligent software constantly being developed
- Efficient operator interface
- Easy maintenance and service

The Universal Machine

UNIVERSAL: ADAPTABLE, TOTAL, WITH VERSATILE USABILITY

A modern palletizing system manages the entire process, from the packaging line to the warehouse. This means that the palletizer can be easily adapted and reconfigured for both short and long manufacturing series and handle new packaging materials, new packaging solutions, new requirements and changing flows.

InterSystem's palletizer is designed to handle several different types of packaging. Our solution involves no lifting of products and uses a design that allows for substantial deviations in product dimensions and shape. This way, the palletizer can handle radically different types of packages without any adjustments or switching of tools – and you can change products in an existing system without any manual adjustments.





The Dream Machine

DREAM: A WISH, SOMETHING YOU HOPE WILL COME TRUE

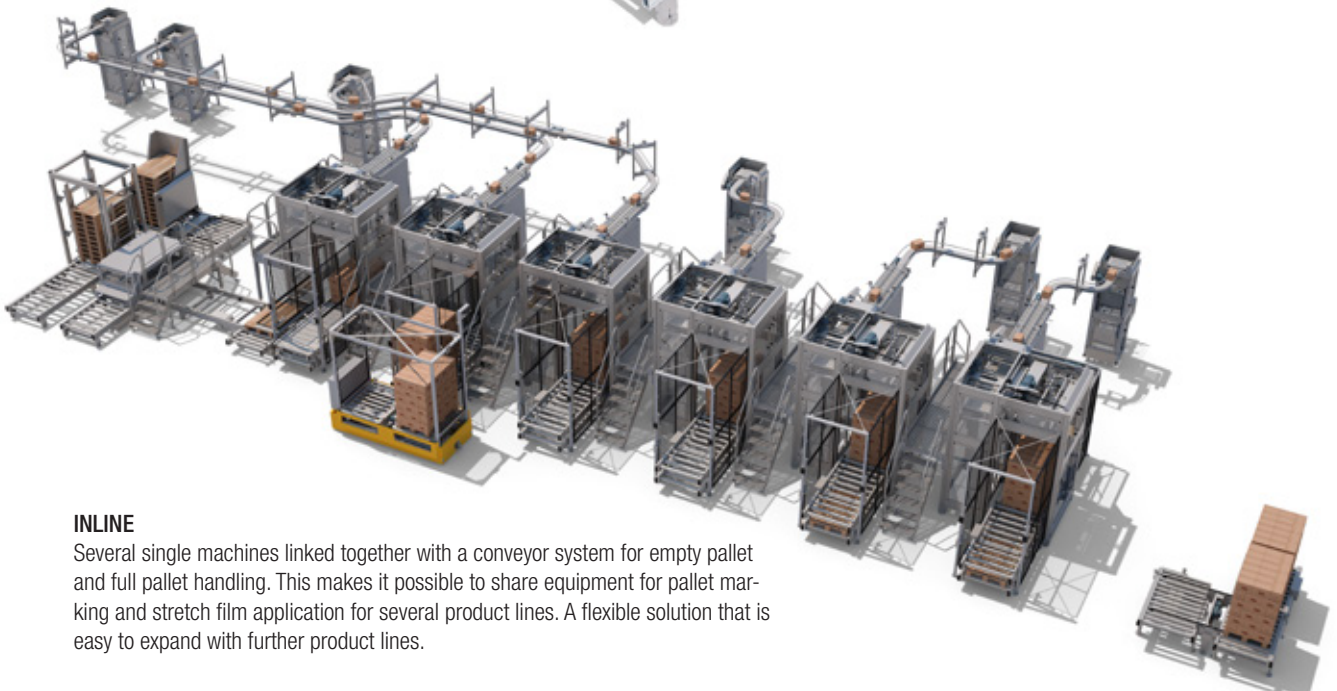
The concept behind the palletizer is smart, flexible and versatile, and it can handle most of the palletizing challenges you may encounter in a business dealing with consumer products.

The palletizer design is based on standardized modular dimensions, which makes palletizers easy to combine into new concepts and solutions. Even if you start with a stand-alone machine, the modular concept makes it possible to modify and supplement it in the future, if you need to switch to multiple lines with an inline or multi concept. Flexibility and space efficiency remain key factors.

FOUR SETUPS – ENDLESS OPPORTUNITIES

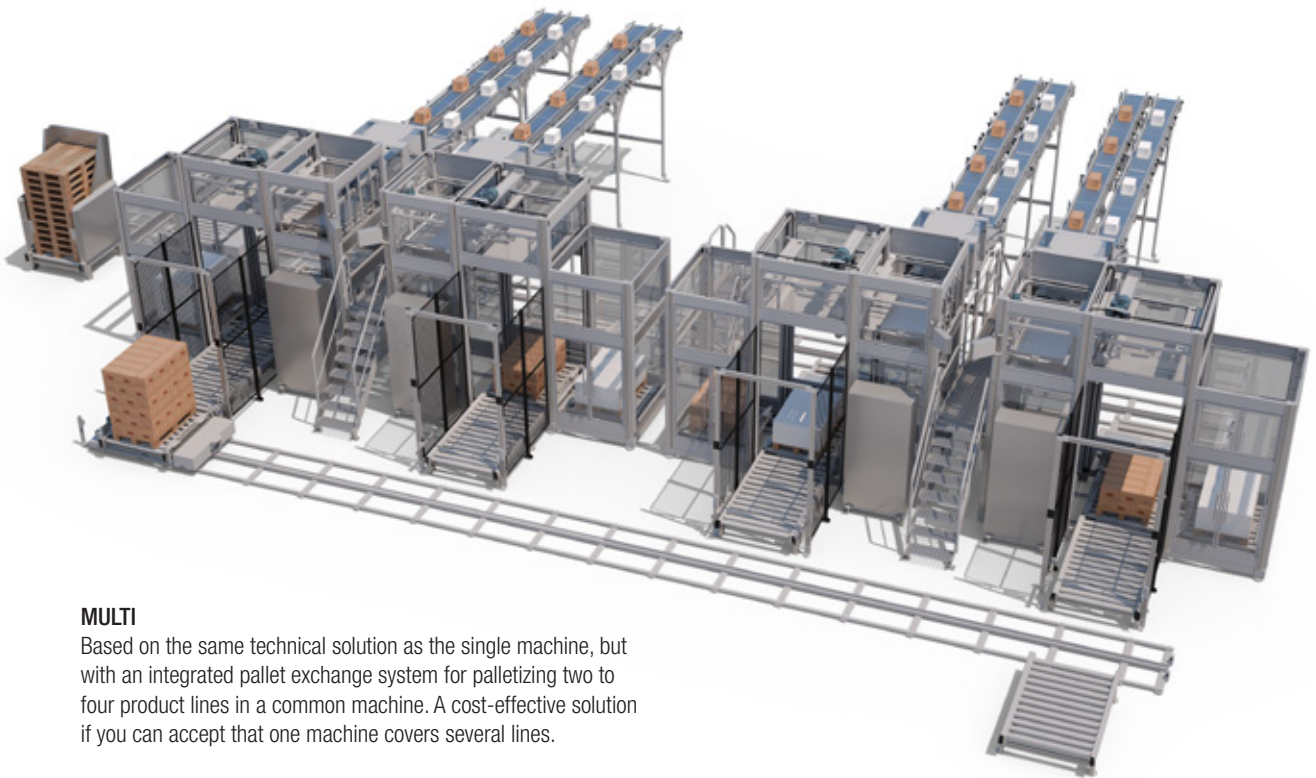
SINGLE

Freestanding machine that often handles a single product flow. Complete unit: pallet magazine, product buffer, load unit and spaces for finished pallets.



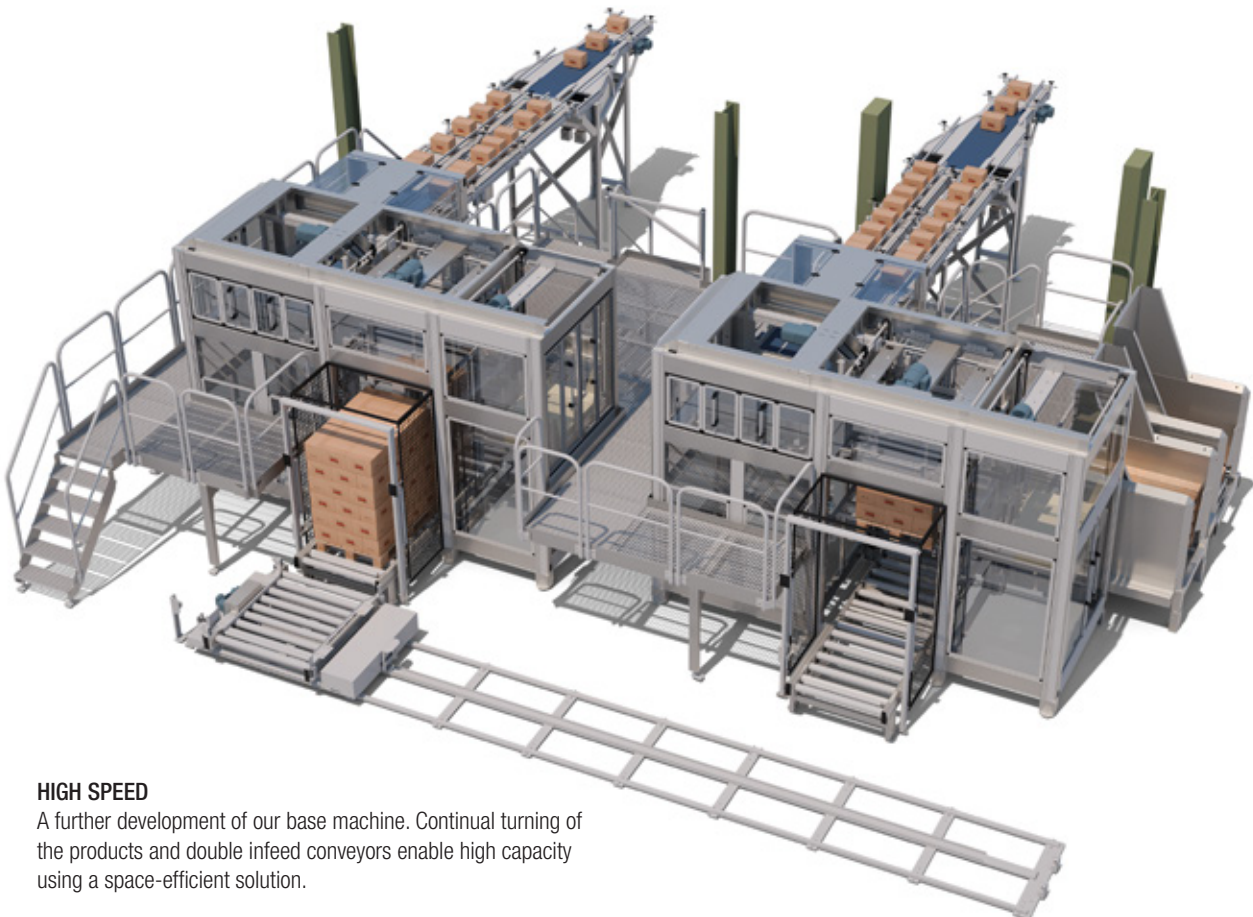
INLINE

Several single machines linked together with a conveyor system for empty pallet and full pallet handling. This makes it possible to share equipment for pallet marking and stretch film application for several product lines. A flexible solution that is easy to expand with further product lines.



MULTI

Based on the same technical solution as the single machine, but with an integrated pallet exchange system for palletizing two to four product lines in a common machine. A cost-effective solution if you can accept that one machine covers several lines.



HIGH SPEED

A further development of our base machine. Continual turning of the products and double infeed conveyors enable high capacity using a space-efficient solution.



The Money Machine

MONEY: DOUGH, BREAD (SLANG), A MEDIUM OF EXCHANGE AND A MEASURE OF VALUE

Time is money, and shorter lead times are usually the most direct route to increased profitability. The modular design of InterSystem's palletizers enables us to quickly and easily develop custom solutions for your unique needs, thanks to standardized, proven modules.

The design makes the palletizer space-efficient and easy to service, maintain and repair. It is also easy to make necessary adjustments to re-optimize the facility when circumstances change.

Thanks to a proprietary transport system for light goods and pallet handling, we can also offer a complete delivery with a common control system, which facilitates service and future additions.

Another important aspect of profitability is operator ease of use. The operator panel provides an easy user interface to the advanced control and programming system, allowing for quick and easy adaptations and changes of operation to new conditions. Thanks to a transparent protective enclosure and opening doors, the palletizer is easy to monitor and service.

TEN SIMPLE WAYS TO EARN MONEY WITH INTERSYSTEM

- Low operating and maintenance costs
- Visible technology facilitates troubleshooting
- Easy access for required procedures, the machine frame is also the protective enclosure
- Proven components from recognized suppliers
- Easy-to-learn system for new staff
- One supplier for the entire system, facilitates service/change management
- Limited requirements when attaching to floor
- Space efficient
- Easy to adapt to new conditions
- Modular, easy to adapt for tight layouts

The Safety Machine

SAFETY: INNER PEACE, COMFORT, WELL-BEING, SECURITY, A GOOD NIGHT'S SLEEP

Unplanned downtime can cause significant costs in the form of lost production, repairs and, at worst, injuries to staff. A service deal minimizes the risk for unpleasant surprises, and even if something does go wrong, you can be sure to get quick and effective service, thereby limiting the effects of an outage.

Our service technicians are the best in the industry – they focus solely on servicing, installing and upgrading our own products.

INTERSERVICE BASIC

Routine service and maintenance

InterService Basic is the starting point for all contract services and means that we prevent sudden downtime through preventive maintenance with an emphasis on safety. At your site, we verify that all functions in your facility are reliable and that the risk for accidents and injuries is minimal. You also get priority if an acute need arises for service or repairs, and pay a more favorable price for spare parts.

In addition to InterService Basic, you can choose between the following options:

INTERSERVICE OPTIMIZE

Fine-tuning of existing equipment.

Optimize capacity and increase availability of your facility through retrofitting or program optimization.

INTERSERVICE UPGRADE

Overhauls and new technologies.

Increase productivity and profitability of your facility with the help of new technology. An upgrade can adapt existing machinery to meet future requirements.

INTERSERVICE TRAINING

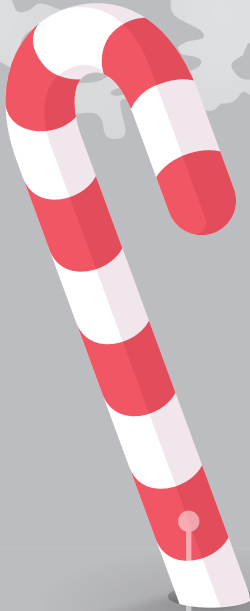
Ensures high competence levels.

Together with you, we review the need for competence enhancement and then plan the training of operators, maintenance staff, electricians and programmers.



The Time Machine

TIME MACHINE: VEHICLE USED FOR TRAVELLING BETWEEN DIFFERENT POINTS IN TIME, POPULAR IN SCIENCE FICTION



FREIA A/S, NORWAY, 1989

The very first Das Maskin unit. Long and faithful service in multiple layouts.

DISCOVERY, BIRMINGHAM, 2010

Freshly made fajitas from Santa Maria's own bakery. Yummy on a conveyor belt with three of our palletizers at the heart of the system.

SPANGLER CANDY, OHIO, 2012

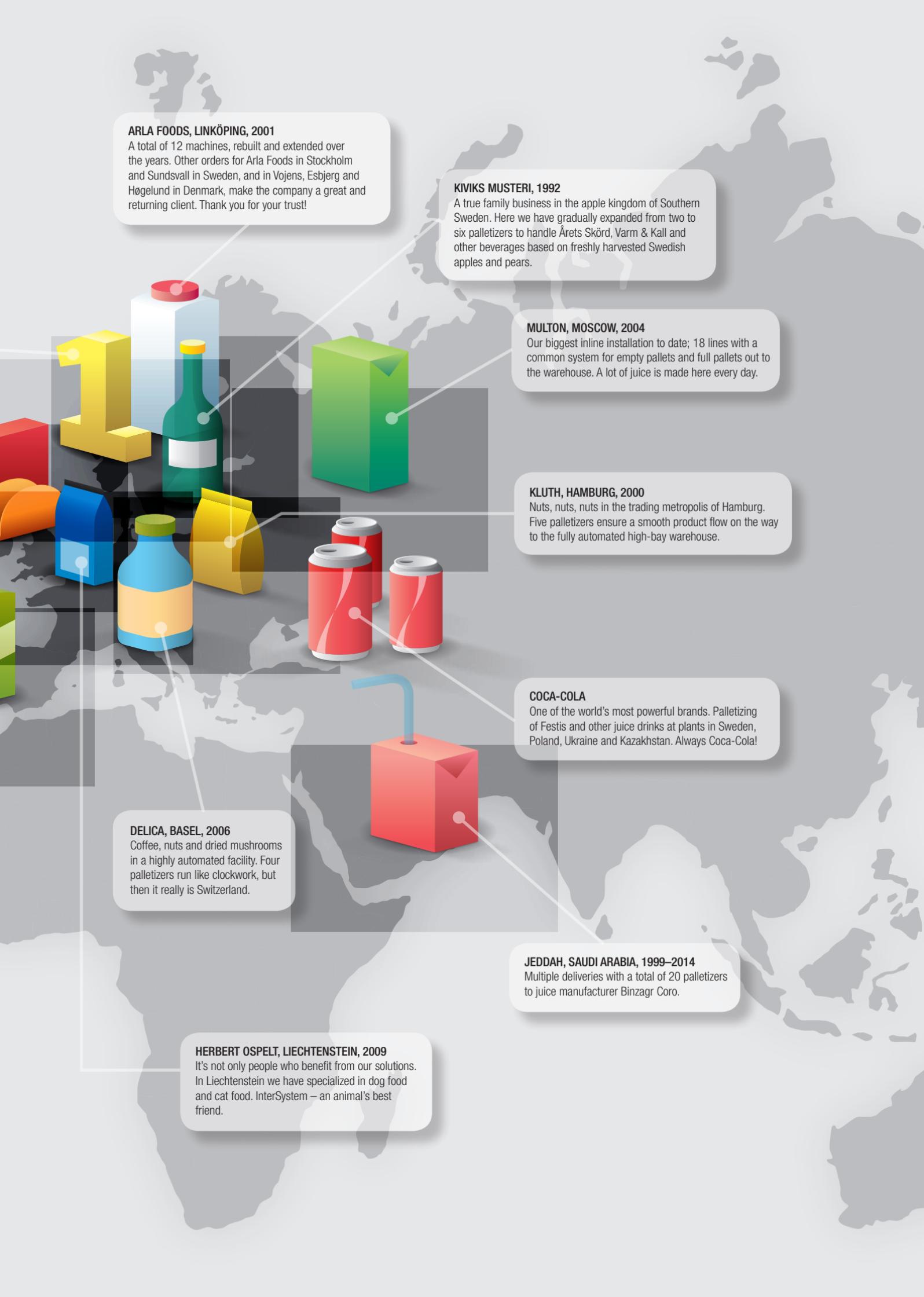
Four multi palletizers in an advanced set-up. Lollipops and candy canes galore.

LACTOGAL, PORTUGAL, 2010–2014

Our first High Speed palletizer. In 2014 it was time for our 500th machine. Not bad for a technology company from Ängelholm, Sweden.

Since the start in 1989, we have supplied and installed more than 500 palletizers. We have solved client-specific problems in many different industries across three continents. Many of our clients become return clients and we have followed them internationally in step with their success. Always with the same motto: Optimized palletizing.





ARLA FOODS, LINKÖPING, 2001

A total of 12 machines, rebuilt and extended over the years. Other orders for Arla Foods in Stockholm and Sundsvall in Sweden, and in Vojens, Esbjerg and Høgelund in Denmark, make the company a great and returning client. Thank you for your trust!

KIVIKS MUSTERI, 1992

A true family business in the apple kingdom of Southern Sweden. Here we have gradually expanded from two to six palletizers to handle Årets Skörd, Varm & Kall and other beverages based on freshly harvested Swedish apples and pears.

MULTON, MOSCOW, 2004

Our biggest inline installation to date; 18 lines with a common system for empty pallets and full pallets out to the warehouse. A lot of juice is made here every day.

KLUTH, HAMBURG, 2000

Nuts, nuts, nuts in the trading metropolis of Hamburg. Five palletizers ensure a smooth product flow on the way to the fully automated high-bay warehouse.

COCA-COLA

One of the world's most powerful brands. Palletizing of Festis and other juice drinks at plants in Sweden, Poland, Ukraine and Kazakhstan. Always Coca-Cola!

DELICA, BASEL, 2006

Coffee, nuts and dried mushrooms in a highly automated facility. Four palletizers run like clockwork, but then it really is Switzerland.

HERBERT OSPALT, LIECHTENSTEIN, 2009

It's not only people who benefit from our solutions. In Liechtenstein we have specialized in dog food and cat food. InterSystem – an animal's best friend.

JEDDAH, SAUDI ARABIA, 1999–2014

Multiple deliveries with a total of 20 palletizers to juice manufacturer Binzagr Coro.

Technical data

TYPE	128K	128L
Pallet format, mm	1200x800, 600x800 (2x), 600x400 (4x)	1200x800, 600x800 (2x), 600x400 (4x)
Product units, max/min	20-25	25-35
Product length, max mm	800	1200
Product width, max mm	600	600
Product height max mm	340	340
Pallet height, max mm	2200	2200
Machine footprint, m ²	4.6	4.8
Media consumption at max capacity (power/air)	ca 1.3 kwh/650 NL/h	ca 1.3 kwh/650 NL/h
High-feed option	X	X
Low-feed option	X	X
Turning units		
Pneumatic arm (90° turn, 15-20 products/min)	X	X
Turning plate (90°/180°/270° turn, 12-15 products/min)	X	X
Continuous (90° turn, 20-30 products/min)	X	X
Options		
Sheet dispenser	X	X
Tempered glass	X	X
Pallet lift	X	X
Operator panel on arm	X	X
In stainless steel	X	X
InterCreate (operator interface for creating custom pallet patterns)	X	X

AUTOMATION – COMPONENT SELECTION

PLC	Siemens
Operator panel	Siemens
Frequency converter	Schneider-Electric
Pneumatics	Festo
Engines	SEW
Safety PLC	Sick
Photocells	Sick
Inductive sensors	Sick
External communication	Profinet
	Standard I/O
	Profibus

Other brands or means of communication available as an option



121K	121L	128L-MULTI	121L-MULTI	128L-HC	121L-HC
1200x1000, 1200x800, 600x800 (2x), 600x400 (4x)	1200x1000, 1200x800, 600x800 (2x), 600x400 (4x)	1200x800, 600x800 (2x), 600x400 (4x)	1200x1000, 1200x800, 600x800 (2x), 600x400 (4x)	1200x800, 600x800 (2x), 600x400 (4x)	1200x1000, 1200x800, 600x800 (2x), 600x400 (4x)
20-25	25-35	15-20	15-20	40-60	40-60
1000	1200	1200	1200	1200	1200
600	600	600	600	600	600
340	340	340	340	340	340
2200	2200	1800	1800	2200	2200
6	6.1	7.9	9	8.6	9
ca 1.3 kwh/650 NL/h	ca 1.3 kwh/650 NL/h	ca 1.3 kwh/650 NL/h	ca 1.3 kwh/650 NL/h	ca 3.9 kwh/1200 NL/h	ca 3.9 kwh/1200 NL/h
X	X	X	X	X	X
X	X				
X	X	X	X	X	X
X	X	X	X		
X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X
X	X			Standard	Standard
X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X		

IMPULZ 50/80

Flexible conveyor systems in aluminum/steel

Roller conveyor 50

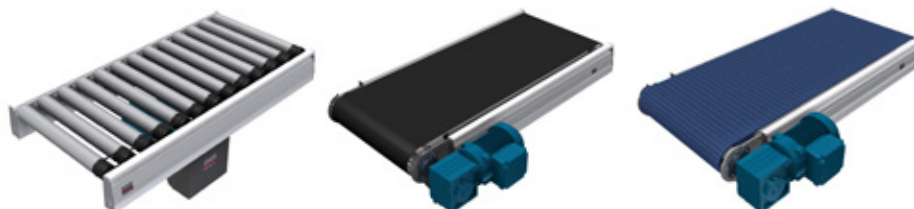
Belt conveyor 50

Module belt conveyor 50

EL: 320/420/520/620 mm

TL: 600-10000 mm

P: 50/75/100 mm



Vertical conveyor 50

Continuous alternatively reversing operation

Capacity: max 30/min

Product size: max 600x600 mm



Slat belt conveyor 50

CW: 62/83/140/220 mm



Roller conveyor 80

EL: 950/1150 mm

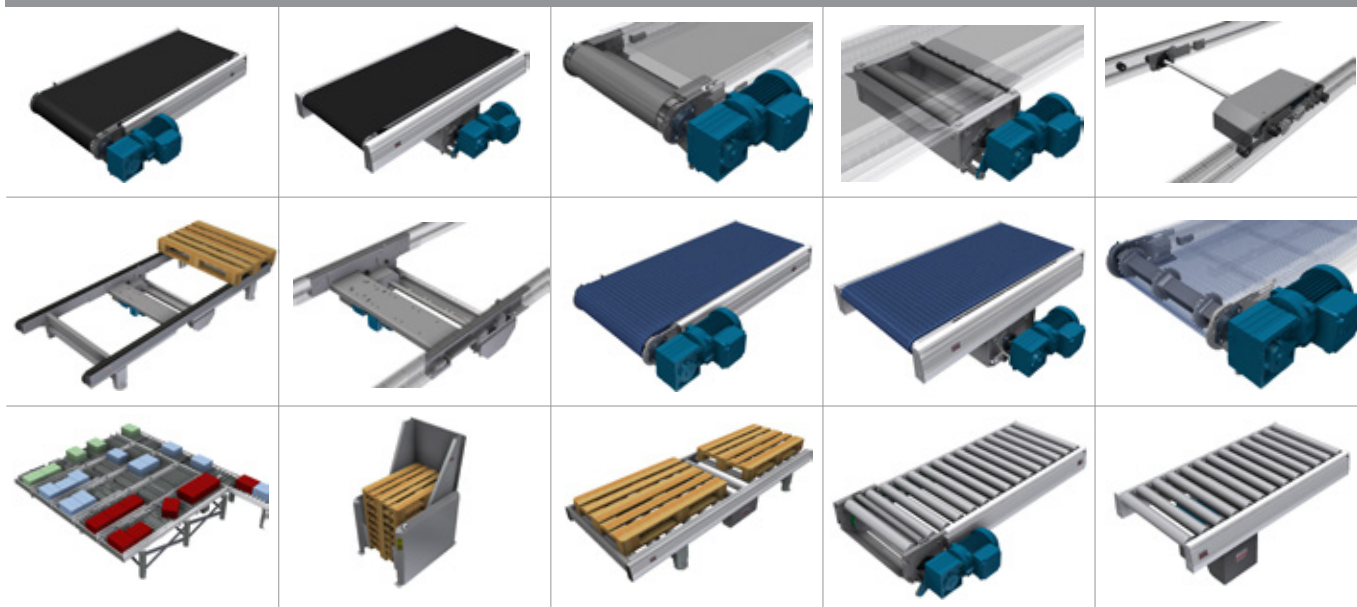
P: 150/200 mm

Chain conveyor 80

c/c: 1050 mm

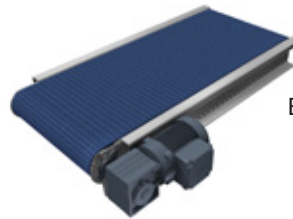


Accessories and options (examples)



CLINO 50/80

Flexible conveyor system in stainless steel



Roller conveyor 50
Belt conveyor 50
Module belt conveyor 50
EL: 320/420/520/620 mm
TL: 600-10000 mm
P: 50/75/100 mm



Vertical conveyor 50
Continuous alternatively reversing operation
Capacity: max 30/min
Product size: max 600x600 mm

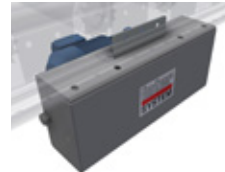
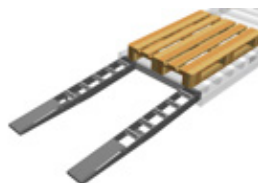


Slat belt conveyor 50
CW: 62/83/140/220 mm



Roller conveyor 80
EL: 950/1150 mm
P: 150/200 mm
Chain conveyor 80
c/c: 1050 mm

Complete product catalogue on intersystem.se



OPTIMIZED PALLETIZING. WE TOLD YOU SO!

We have spent the last 25 years palletizing. It is a narrow niche, but also a factor that can decide if you succeed or fail on the way between you and your customers. We know from experience that any disruption in the flow can affect your profitability, reduce customer satisfaction and damage the client trust that you work so hard to strengthen every day.

This is an insight that has driven us during the first 25 years of work to develop the perfect palletizer. Along the way, we have identified all potential problems and developed solutions to them, and our palletizer has become a finely-tuned masterpiece that works miracles among companies on three continents. It is also the heart of an ecosystem of products and services that enables customized palletizing to perform perfectly while solving your unique challenges.

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