

№ Q210101.5482 05.04.2021 Palletizing line Elevator, Octopus 1845S

# **COMMERCIAL OFFER DELIVERY AND MOUNTING OF AUTOMATIC GROUP PALLETIZING LINE**

## **Technical requirements**

- Product in corrugated boxes
- The weight of the formed pallet is up to 800 kg
- Capacity is up to 60 pallets per hour
- > Pallet 800x1200 mm

## **OUR CUSTOMERS**

Our customers trust us because we effectively assist them in resolving issues in the field of production automation.































in the production automation market

of executed complex automation projects

over 3000

units of equipment installed at the manufacturing facilities

"SKLADPACK" COMPANY is a leader in the national production automation market in the field of stabilization and palletizing of products. It was founded as a private Ukrainian company in 2008. The company has made great contributions to the development of modern packaging solutions for various Industrial sectors in Ukraine throughout its operation.

WE SINCERELY VALUE THE TIME OF OUR CUSTOMERS and offer a full range of engineering solutions for production automation; palletizing and automation; packing, labeling and marking; and complete maintenance and support of your equipment. Our range of products include the most well-known packaging machines; stationary and mobile equipment; as well as industrial safety systems.

# OFFICIAL DISTRIBUTOR

















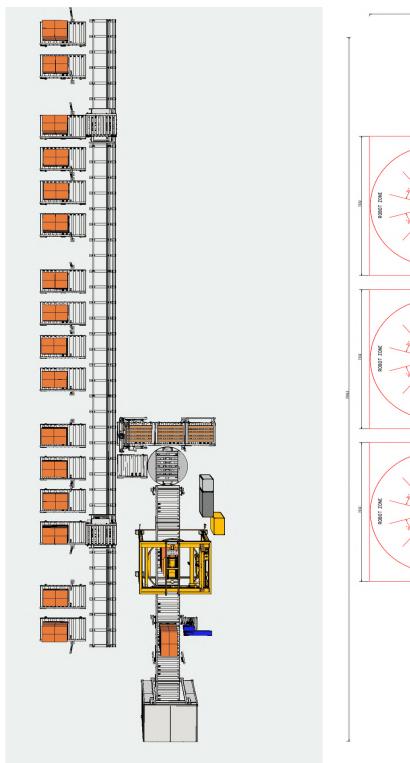


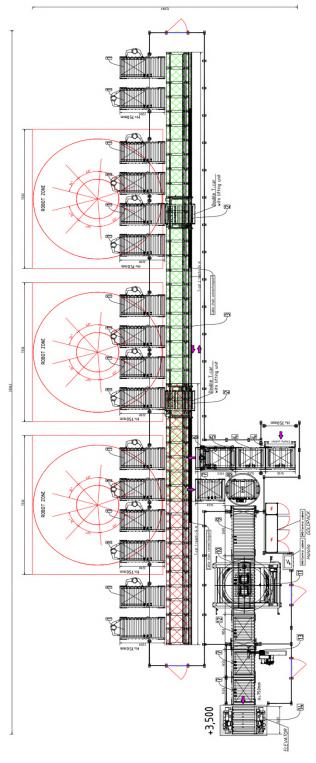


## **Contacts in Kryvyi Rih city**



## PROJECT VISUALIZATION AND OVERALL DIMENSIONS OF THE AUTOMATIC COMPLEX





The complete configuration of the packaging complex, the location of the units can be amended upon agreement of the parties.

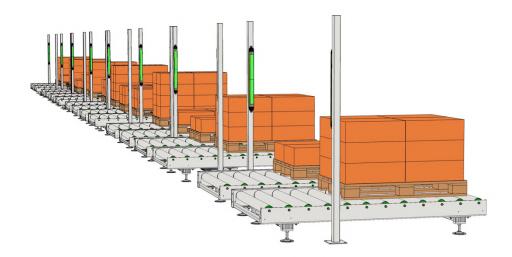
## **Contacts in Kyiv city**

## Contacts in Kryvyi Rih city



## **ROLLER CONVEYOR VP with centering unit**

Technical data		
Length	2200 mm	
Width	1000 mm	
Height	750 mm	
Max. loading on the pallet	1500 kg	
Roller diameter	90 mm	
Motor	SEW	
Reducer	SEW	
Sensors	SICK / LEUZE	
Chain drive		
Reversible		
Rigid frame, painted steel		
Supports are adjustable with screwing legs		
Appropriate part of electrical equipment in electrical cabinet		
Appropriate part of programme equipment		



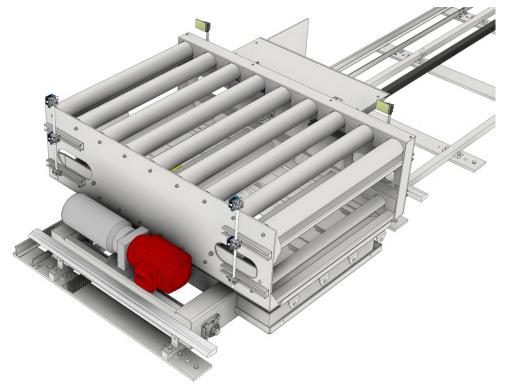


### T-MOBILE 2+2 SANDWICH-ROLLER CONVEYOR

The T-mobile sandwich-roller conveyor is designed for submitting empty pallets to the robotic palletizer and for sending out full pallets from the laying line to the packing machine. The line will be equipped with a double T-shaped unit. T-mobile sandwich roller conveyors will be equipped with special laser guidance devices for instant tracking of equipment location. A 360º laser collision avoidance system is also installed 0.5 m around.

The safety system is programmed and synchronized with all safety zones. If one of the safety zones is interrupted, the T-conveyor will continue to operate by entering this zone at half speed. After leaving this area it will restore the standard speed.

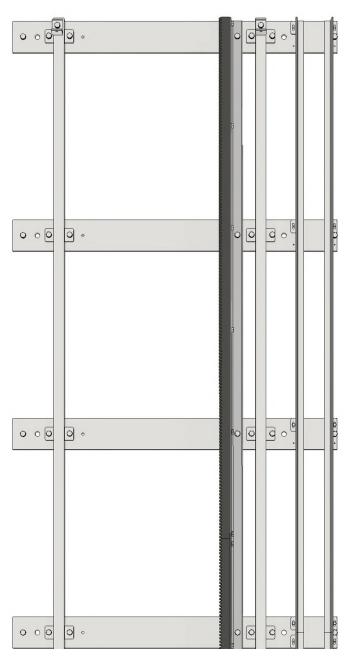
Technical data		
Length	1500 mm	
Width	1100 mm	
Height	400 / 750 mm	
Max. loading on the pallet	1500 kg	
Motor	SEW	
Reducer	SEW	
Sensors	SICK / LEUZE	
Reversible		
Chain drive		
Rigid frame, painted steel		
Supports are adjustable with screwing legs		
Appropriate part of electrical equipment in electrical cabinet		
Appropriate part of programme equipment		





## **RAILS FOR T-MOBILE CONVEYOR**

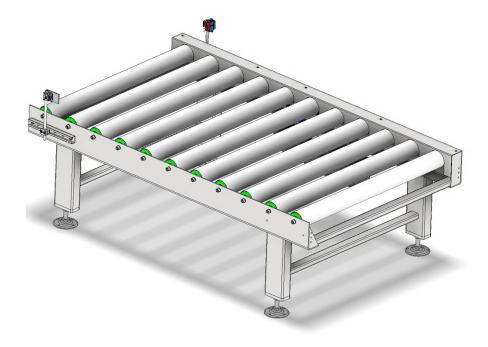
## Technical data Length 31000 mm





### **ROLLER CONVEYOR VP**

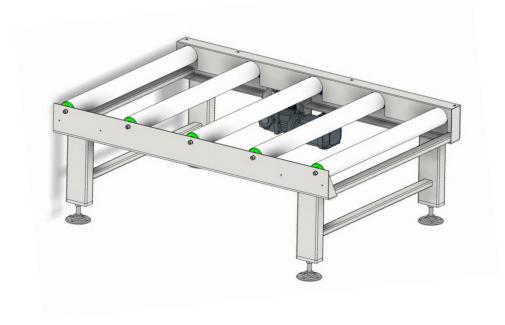
Technical data		
Length	according to the layout	
Width	1000 mm	
Height	750 mm	
Max. loading on the pallet	1500 kg	
Roller diameter	90 mm	
Motor	SEW	
Reducer	SEW	
Sensors	SICK / LEUZE	
Chain drive		
Reversible		
Rigid frame, painted steel		
Supports are adjustable with screwing legs		
Appropriate part of electrical equipment in electrical cabinet		
Appropriate part of programme equipment		





## **ROLLER CONVEYOR VP for MP15**

Technical data		
Length	according to the layout	
Width	1000 mm	
Height	750 mm	
Max. loading on the pallet	800 kg	
Roller diameter	90 mm	
Motor	SEW	
Reducer	SEW	
Sensors	SICK / LEUZE	
Chain drive		
Reversible		
Rigid frame, painted steel		
Supports are adjustable with screwing legs		
Appropriate part of electrical equipment in electrical cabinet		
Appropriate part of programme equipment		

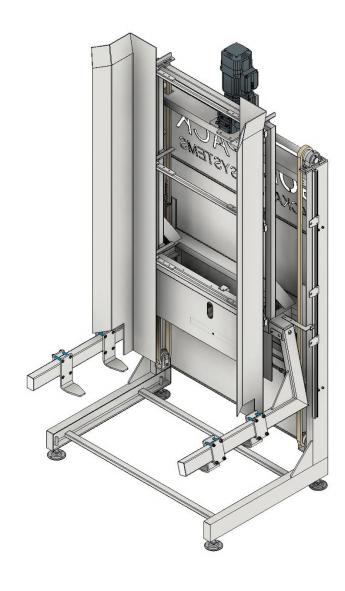




### **EMPTY PALLET MAGAZINE MP15**

The empty pallet storage is designed to automatically feed the empty pallets to the drive conveyor, which is part of the magazine. Storage capacity is 15 pallets.

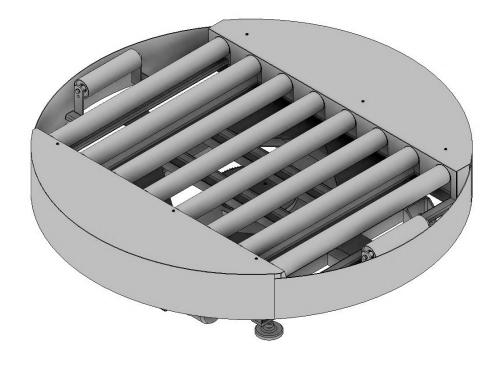
Technical data		
Pneumatics	FESTO / SMC	
Motor	SEW	
Reducer	SEW	
Sensors	SICK / LEUZE	
Appropriate part of electrical equipment in electrical cabinet		
Appropriate part of programme equipment		





### **ROTARY PLATFORM OBP**

Technical data		
Diameter	according to the layout	
Max. loading on the pallet	1500 кг	
Rollers	Interrol	
Conveyor height	750 mm	
Reducer	SEW	
Motor	SEW	
Rollers diameter	90 mm	
Chain drive		
Reversible		
Rigid frame, painted steel		
Supports are adjustable with screwing legs		
Appropriate part of electrical equipment in electrical cabinet		
Appropriate part of programme equipment		





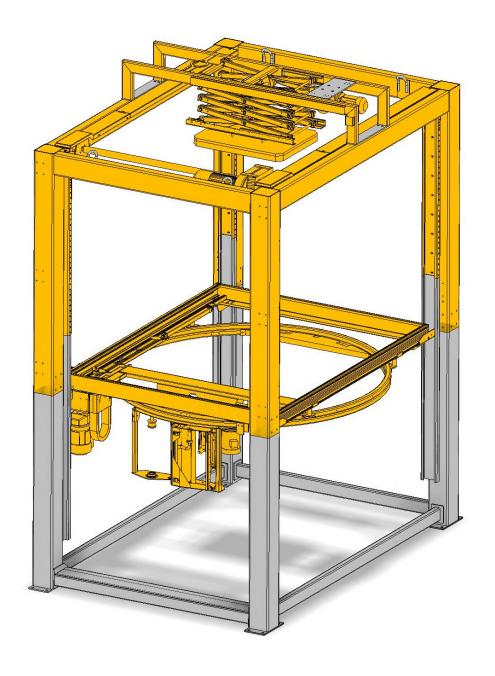
### **ROLLER CONVEYOR VP for OCTOPUS**

Technical data		
Length	according to the layout	
Width	1000 mm	
Height	750 mm	
Max. loading on the pallet	800 kg	
Roller diameter	90 mm	
Motor	SEW	
Reducer	SEW	
Sensors	SICK / LEUZE	
Chain drive		
Reversible		
Rigid frame, painted steel		
Supports are adjustable with screwing legs		
Appropriate part of electrical equipment in electrical cabinet		
Appropriate part of programme equipment		





# OCTOPUS 1845S Speed-Up HIGH PERFORMANCE AUTOMATIC PALLET WRAPPER



Octopus 1845S WRAPPER Speed-Up Layout is for familiarization only and may differ from the design of equipment supplied.

# Contacts in Kryvyi Rih city



**TECHNICAL DATA** 

**General description** Повна автоматична машина для пакування піддонів

**Product** Гофроящик з м'ясними виробами

Pallet type

**Load dimensions** Length: min. 1200 mm max. 1200 mm

Width: Width: max. 1000 mm Height: Height: max. 2000 mm Weight: Weight: max. N / A kg

**Combinations:** Combinations:

Type of palletizing Layers, automatic palletizing

Over palletizing All sides N / A mm

**Under palletizing** All sides N / A mm

**Conveyor height** N/Amm

**Conveyor speed** N/AM/min

Pallets orientation Short side Leading

Load transfer Max. +/- H / A mm from the center

**Ordering pallets** V large sizes continuously

Pallet input / output See Section Documents attached

**Power requirements** Nominal power line, 60-70 pallets / h Requirement for excess capacity, N / A% ref. load height, 2000 mm

Number of wrappers, 30

Wrapping way: Double wrapping from above

Ceiling height N / A mm, the lowest in the area where the equipment is installed

Route size / the size of  $N/A mm \times N/A mm$ 

the door

3 x 400VAC 50Hz + N + PE The supply voltage

4, Business Center "Horizon Park"

### WRAPPING MACHINE OCTOPUS 1845S Speed-Up

#### RING TECHNOLOGY

- Octopus is the first machine ever using ring technology, originally invented by Haloila in 1983
- Improved packaging quality when product pallet is stationary andi ring is rotated
- Less mechanical stress compared to rotary arm and turntable technology
- Versatile wrapping features by one machine compared to other technologies like rotating arm technology
- Video link: https://youtu.be/ebv4JAdfMds



- Efficient power pre stretch reduced cost per pallet
- Controlled film pre stretch it cannot be adjusted by operators: Consistency of film consumption, consistency of packaging quality, and accurate estimation of film costs/pallet



- Constant control of film tension between film carriage and pallet load with stepless lay on force adjustment, high packaging quality, improved reliability
- Due to the unique control method, variation of pallet load sizes or shape does not effect to adjusted lay on force towards product
- Separate starting and film welding force to load, regardless of wrapping force to load, ensure high production reliability
- > Due to the wireless technology system force load control is not sensitive for dust or equal, and demand of maintenance decreased

## **NEW - FILM FORCE TO LOAD SETTING**

- Each wrapping programs with own settings
- Three force to load settings available for each wrapping program, e.g. different values for top, bottom and overlap wraps - to meet the requirement for load stability and protection
- Unique control system adjust continuously film force to load according given setting and pallet size & shape
- Versatile product specified setting to optimize transport packaging
- Video link: <a href="https://youtu.be/hymZo\_9FDHI">https://youtu.be/hymZo\_9FDHI</a>

PE «Skladpack»

#### HIGH PERFORMANCE S-TYPE FILM CARRIAGE

- S-type film carriage = how film thread is done in film carriage when it is pre-stretched
- Improved film stretch performance due S-type film thread compared to W-type
- S-carriage has less film neck down due to continuous contact between film and rollers, i.e. film applied to pallet is wider
- > Durable roller surface with patterned design for high stretch performance during the pre-stretch.





#### **EASY FILM LOAD**

- Patented design S-carriage with gate to open carriage
- No need thread film between rollers
- Easy2Fix –help gripper. Improved SAFETY, simply hang the film end to gripper without going into the machine.
- Shorter film reel change time
- Video link: <a href="https://youtu.be/nATWDGs58DI">https://youtu.be/nATWDGs58DI</a>

## **COST EFFECTIVE MOVEMENTS – LOWER MAINTENANCE COST**

- All movements by belts instead of chains drives with smooth start & stop
- Sanitary design clean for machine area and product pallet inside the machine while not using chains

### **AUTO SPEED control**

- Machine speed is controlled according to capacity of production line
- Optimized capacity lower maintenance cost
- Automatically or by speed selected from HMI

### **DOUBLE NT2 - NO TOUCH NO TAIL FILM SEAMING AND CUTTING**

- High quality and reliable film seaming in its whole width on the counter plate, not towards the product.
- No Tail solution automatic warehouse proof solution, less downtime as film tail does not exist
- Uneven pallet surface has no effect to the seaming result
- Service free cutting element, no film tail after cutting
- Two units, one for each film carriage
- Video link: <a href="https://youtu.be/jEhsJcPDriU">https://youtu.be/jEhsJcPDriU</a>

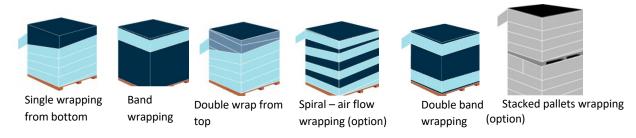
### OCTOFACE 2.0 - NEW GENERATION HMI SOLUTION

- Control system includes Siemens S7 PLC and OctoFACE HMI
- Unlimited number of wrapping programs
- Informative, e.g.
  - o Current capacity / pallets/h
  - o Film left on reel (option)
  - o PackML status screen
  - o Visual symbols
- Consumption of air & energy (option)
- User profiles for each operators with specific password level
- Audit Trail go back to previous settings. All changes to settings are recorded to trace back: When changed, by whom, previous value, new value
- QR –codes, quick access to machine documentation by mobile device
- Back up for memory stick function



#### WRAPPING PROGRAMS

- Unlimited number of wrapping programs for different type of products, different shipment distances, different protection & stability demands.
- Cost effective optimized pallet stability and packaging material use by means of different parameters.
- Name your program OctoFACE HMI enables each wrapping program to be freely named, e.g. Line 1 / Product X etc.
- Wrapping method, i.e. single, double, banderol wrapping
- Film overlap when wrapping up- and downwards
- Number of top and bottom layers
- Use of support layers number if used
- Adjustable crossing height the pallet top edge with film
- Wrapping film tension. By OctoFACE and wireless technology variable force to load setting each wrapping program for different part of load to meet the requirement for load stability and protection.
- NEW Back up feature copy of made wrapping programs to USB memory stick can be taken by using OctoFACE and memory stick set into that
- Due to ring structure with integrated film welding & cut, and versatile wrapping program settings, multiple ways to wrap pallets



## **OCTOFACE SERVICE SCREENS**

- Monitoring of utilization of key machine functions
- Adjustable warning & alarm levels to meet production area's demand
- Warnings when set value has been exceeded indicating proactively when preventing maintenance / maintenance check should be done
- Alarms when set value has been exceeded
  - O Right timing for maintenance
  - o Proactive approach

### **OCTOFACE FAULT DIAGNOSTIC**

- Operating panel includes fault diagnostic feature, showing the picture on operating panel and instructions how to solve fault
- Less down time, improved through output, less costs
- History data
- Quick access to machine documentation by QR-code





#### **P3-P** LOAD STABILIZER. MOTOR DRIVEN

- Enable wrapping of unstable or light products. Product or units on pallet remain stable during the wrapping cycle also with high film tension.
- Keep the top film on pallet when load top is not even, or in windy production area
- When used with Integrated Top Film dispenser, load stabilizer is equipped with top film blow down unit
- Driven by gear motor
- Adjusting the system to a specific product for a minimum movement interval
- Video Link: <a href="https://youtu.be/z">https://youtu.be/z</a> <a href="https://youtu.be/z">lkZp5jZfs</a>



## **TECHNICAL DATA**

### **MACHINE STANDARDS**

The offer is based on Oy M. Haloila Ab std. component lists. All the possible amendments must be agreed upon separately.

The Octopus machine has been designed and manufactured in accordance with the following European laws and standards.

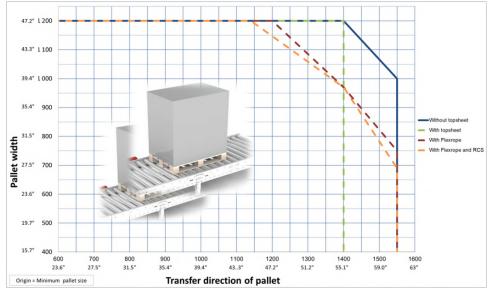
EU Directive 2006/42 / EC

EN415-6: 2013 Packaging machines safety. Part 6. Machines for pallet packing.

### MINIMUM AND MAXIMUM DIMENSIONS OF PRODUCTS

The maximum length and width of the product tray are given below. For example, without the option of top coating with film, the maximum length of the product is 1450 mm with a width of 1000 mm The diagram shows the maximum length and width of the product or pallet, depending whichever is greater

The frame of the machine expands to the required maximum load height: 2000 mm



### **CALCULATION OF PRODUCTIVITY**

The calculation is based on the example of wrapping according to the following data. Changes of any data will affect the calculation:

Conveyor speed is 15m / min, length of the wrapping conveyor inside Octopus 3000mm, simultaneous supply and output of pallet cargoes, transport time of the conveyor is 10,8 sec

Wrapping method: Double wrap on top Product height: 2000 mm, including pallet

Total number of coils: 30

Wrapping capacity is 58 pallets / h, including conveyor time

Wrapping method: Double wrap on top Product height: 1200 mm, including pallet

Total number of coils: 22

Wrapping capacity 68 pallets / h, including conveyor time

Actual line capacity according to the request: 60-70 pallets / hour

**CONNECTION** without conveyor control

3 x 400VAC / 50Hz + N + PE Voltage supply:

16mm<sup>2</sup> separate cable to the grounding rail of the machine Grounding:

10 kW, 3 x 35A to customer's circuit breakers Power supply:

min. 0.6 provided by the customer Compressed air supply:

9 NI / wrapping cycle Air consumption:

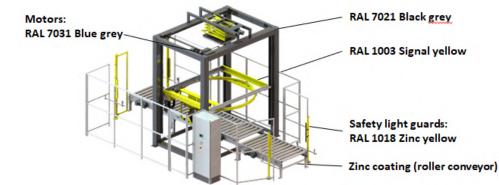
Available air volume – accordingly

Compressed air connection: Rapid clutch pin KS-3/8

### **MACHINE COLORS**

RAL 7021 black graphite RAL 1003 yellow RAL 7035 light grey

RAL 9005 black - grid and frame



### **WORKING CONDITIONS OF EQUIPMENT OPERATION**

Dry, warm premises (working temperature from + 5°C to + 35°C)

#### **CONVEYOR IN THE MIDDLE OF B OCTOPUS**

The length of the conveyor rotation area is 3000 mm

The conveyor package height area should be 300-600 mm

Request a quote for a high-speed conveyor kit, including a 2500mm conveyor belt, a 2000mm conveyor and a 2500mm conveyor to reduce transportation time

Please contact if the conveyors are supplied by others, or existing ones are used, and the dimensions do not correspond

### TRANSPORT AND OWN DIMENSIONS

Dimensions of the transport package when packing Octopus for truck transportation:

Overall length: 3520 mm Overall width: 2470 mm Overall height: 2640 mm Total weight: 2750 kg

The size and transportation of the door should be taken into account accordingly. Ask for container packaging for sea transportation.

### HEIGHT OF THE MACHINE FRAME AFTER INSTALLATION

Conveyor height: 720 mm (TOR) Max. product height: 2000mm Height of the machine: 4150 mm

Top PE machine height: 4450 mm (optional)

Note that the height of the machine frame will vary depending on the height of the conveyor, the load stabilizer and the TS option.

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#### FILM SPECIFICATION

LLDPE stretch film manufactured for this purpose The thickness of the stretch film depends on the quality of the film and the pre-stretching process applied

Coil width: 500 mm

Max. diameter of a cylinder: 270 mm

Diameter / length of a core: 76 mm / 500-515 mm

Film thickness: typically 15-23 microns

NOTE: The thickness of the film strongly depends on the level of pre-stretching used. Please inquire if the thickness applied does not meet the standard specification.

## The top film, PE-film, is made for this purpose

Max. coil width: 1800 mm

Max. diameter of the coil: 250 mm

Sleeve diameter: 76 mm Film thickness: 30-80 microns

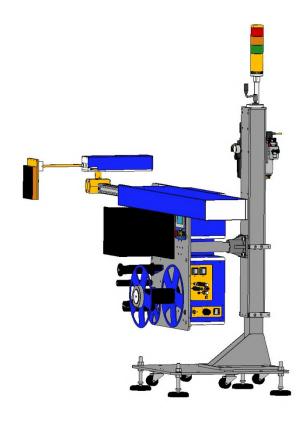
NOTE: The top film with a thickness of less than 50 µm must be examined before the final commissioning of the equipment.



### **APPLICATOR APL35S**

The UBS Print & Apply pallet marking system is fully compatible with the most well-known Print Engine brands on the market: Zebra, Datamax, Sato and Avery Dennison, among others. Each branded printing device has maintenance, repair and spare parts services available worldwide through the manufacturer's reseller / distributors and / or a network of third-party service centers.

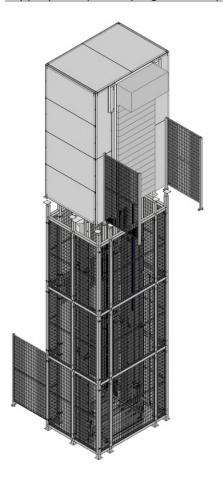
Technical data
Label size is A6
Double-sided application technology
Slowing brake when unwinding
Ethernet / Profinet data exchange
Photocell product detection
Barcode scanner on a pad
Mechanical height adjustment of the machine
Low level detector for consumables
Applied label sealant
Appropriate part of programme equipment

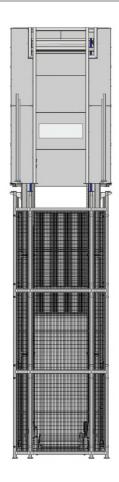


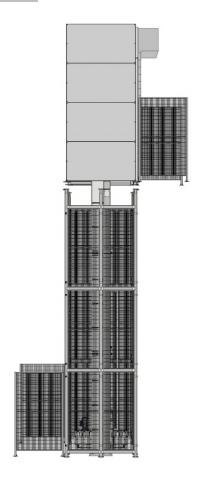


### **VERTICAL ELEVATOR AND ELEVATOR SHAFT**

Technical data		
Length	згідно макету	
Width	1100 mm	
Lifting height	3500 mm	
Max. loading on the pallet	1500 кг	
Diameter of rollers	90 mm	
Motor	SEW	
Reducer	SEW	
Sensors	згідно конфігурації	
Chain drive		
Reversible		
Rigid frame, painted steel		
Supports are adjustable with screwing of legs		
Appropriate part of electrical equipment in electrical cabinet		
Appropriate part of programme equipment		



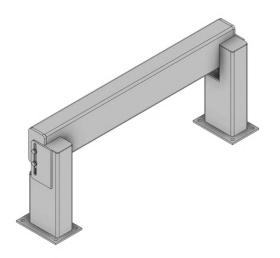


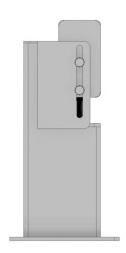




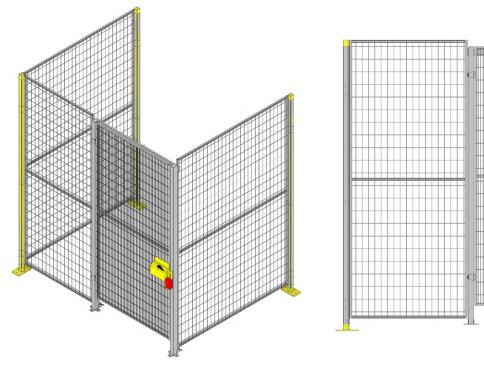
### **FORK TRUCK BLOCKADE**

It is installed before conveyors and protects them from damages in case of collisions with unloaders.





### TROAX SAFETY FENCE



- 2 m height;
- doors with safety microswitches and protective locks;
- emergency stop buttons located on the control cabinet and doors;
- safety sensors on the input and output conveyor;
- level of protection according to European standards.

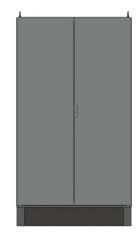
## Contacts in Kryvyi Rih city

### **CONTROL ELECTRICAL CABINET**

Fully equipped RITTAL electrical cabinet is located on the line (12m around the line). Electricity 3Ph N Pe.

Complete cable line with cable channels.

Technical data		
Electrical cabinet	RITTAL	
Operator panel for conveyor system		
PLC	SIEMENS S7	
Display	SIEMENS	
Switches and keys	Telemecanique	
Terminals	Weidmüller, Phoenix	
Frequency converters	Mitsubishi	
Security unit	SICK / Pepperl+Fuchs	
Appropriate part of electrical equipment in electrical cabinet		
Appropriate part of programme equipment		



COMPONENTS - Goldpack		
	According to customer's request	
PLC	Siemens S7 upon customer's request - recommend Siemens S7 1500	
Display	Siemens	
Frequency converters	Mitsubishi	
Motor	SEW	
Reducer	SEW	
Servo motors	SEW	
Pneumatics	SMC	
Pneumatic connectors	FESTO	
Sensors	Pepperl+Fuchs	
Photo cell	Sick	
Light curtains	Leuze	
Security units	Sick	
Temperature control	Shinko	
Terminals	Weidmüller, Phoenix	
Relay	Weidmüller, Telemechanique	
Transformers	Mean Well	
Cables	Hellukabel	
Electric cabinet	Rittal	
Other electrical components	Klockner Mueller	
Rollers	Interroll	

> IP56 safety level

## **EQUIPMENT SPECIFICATION**

EQUI	PMENT	Q-ty
1.	VP 2.2 roller conveyor with centering unit and panel with control buttons	16
2.	T-mobile 2 + 2 sandwich roller conveyor	2
3.	Rails for the T-mobile conveyor L = 31 m	1
4.	VP 1.45 roller conveyor with mechanical centering	2
5.	VP 1.90 roller conveyor for MP15	1
6.	MP15 empty pallet magazine	1
7.	VP 1.45 roller conveyor	3
8.	OBP revolving platform	1
9.	VP 2.60 roller conveyor	1
10.	VP 3.0 roller conveyor with lifting system for wrapping pallet wooden part	1
11.	OCTOPUS 1845S Speed-Up automatic wrapper	1
	- clamping upper stabilizer	
12.	VP 1.80 roller conveyor	1
13.	APL35s applicator double-sided A6 marking system	1
13a.	KPZ pallet weighing unit	1
14.	Vertical elevator with roller conveyor, lifting height = 3500 mm	1
14a.	The elevator shaft is made of Troax grid	1
15.	Movement restrictor with a sensor	1
16.	Troax protective fence	1
	Input sensors, Sick output sensors	
	Sick safety light barriers, category 4	
	Troax door lock, etc. CE	
17.	Electrical cabinet and software	1
18.	Packaging	1
19.	Delivery	1
Integ	ration	
20.	Mounting, training, testing (hotel, food and transport costs are included in the price)	1

### **COMMERCIAL CONDITIONS**

### **Payment conditions**

50% prepayment, 40% before shipment, 10% after signing the act of work performed

## **Delivery and customs clearance**

Delivery and customs clearance is carried out by Skladpack: DDP, Ukraine, customer address

## **Delivery time**

6-7 months

## Validity of the offer

Until 31.12.2021

## Warranty

24 months

## Mounting and personnel training

"Skladpack" company carries out Mounting and set-up of the equipment, afterwards carries out correct equipment operation training, and also simulates emergencies, in which customer's experts have to correct the mistake on their own without the help of "Skladpack" employees.

### Mounting duration (approximately)

20 working days

### PRELIMINARY CONDITIONS FOR SALE

### Preparatory work carried out by the customer:

- 1. Power supply must be carried out according to the drawings of Skladpack.
- 2. The equipment must be unloaded at the mounting site.
- 3. Providing qualified personnel to carry out the necessary work on the placement of equipment, connection of power supply, compressed air.
- 4. Ensuring the continuity of work on mounting, connection, commissioning and setting up of equipment performed by engineers of Skladpack.
- 5. When starting the line (with the proper functioning of all components and units) for the purpose of proper instruction (training) of the customer's personnel for operation and maintenance, operators and service personnel should not be distracted by any other work. Operators of all shifts are instructed all at once.

### Works carried out by Skladpack:

- 1. Mounting (organization of the line installation process).
- 2. Connection of power supply of the equipment and laying of electric connections from boards of the equipment of Skladpack to an operator's platform.
- 3. Start-up and testing of all functions of the line and packaging units using the customer's packaging materials.
- 4. Training of the customer's personnel on the rules of operation, maintenance and minor repairs of the line, immediately after start-up and inspection of all functions and modes of operation.

### **Completion of works:**

Considered to be completed after the completion of all works specified in the previous section, upon the provision by engineers of a bilaterally signed Act of completion.

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## BENEFITS OF WORKING WITH US

Buy high-quality, durable industrial equipment with a high life.





Customers of "Skladpack" receive highly skilled support during and after their purchase. The lifetime of our equipment is over 15 years. In any case, complete service is available for you every day, around the clock.

The products offered by our company are certified and meet all international quality standards. All equipment offered by our employees undergoes strict control processes and is ready for exploitation in any conditions. We thoroughly monitor this and choose our partners carefully.

Our main advantage is our individual approach to each customer. Highly skilled managers select the finished products, as well as offer individual development of complex systems.

"SKLADPACK" - IT'S TIME TO AUTOMATE!

## Contacts in Kryvyi Rih city