

№ Q210101.5481 05.04.2021

Robopal, Octopus 1825B

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

Contacts in Kyiv city

Contacts in Kryvyi Rih city

OUR CUSTOMERS

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



over **12** years

in the production
automation market

over **50**

of executed complex
automation projects

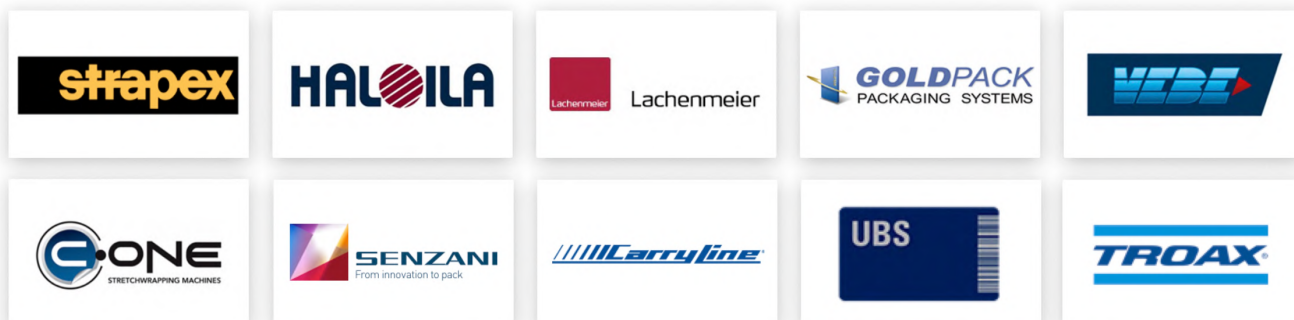
over **3000**

units of equipment installed at
the manufacturing facilities

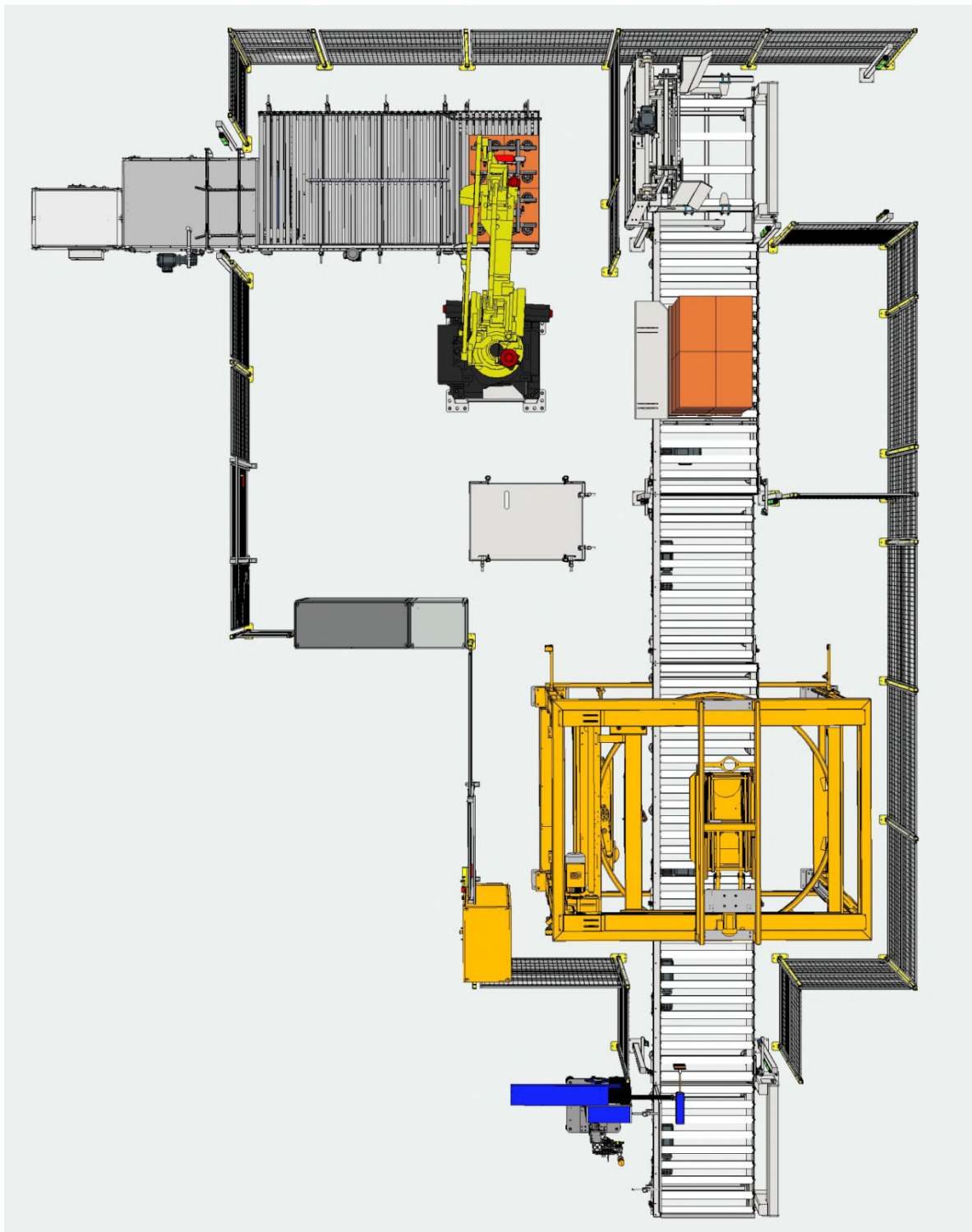
"SKLADPACK" COMPANY is a leader in the national production automation market in the field of stabilization and palletizing of products. It was founded as a private Ukrainian company in 2008. The company has made great contributions to the development of modern packaging solutions for various Industrial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

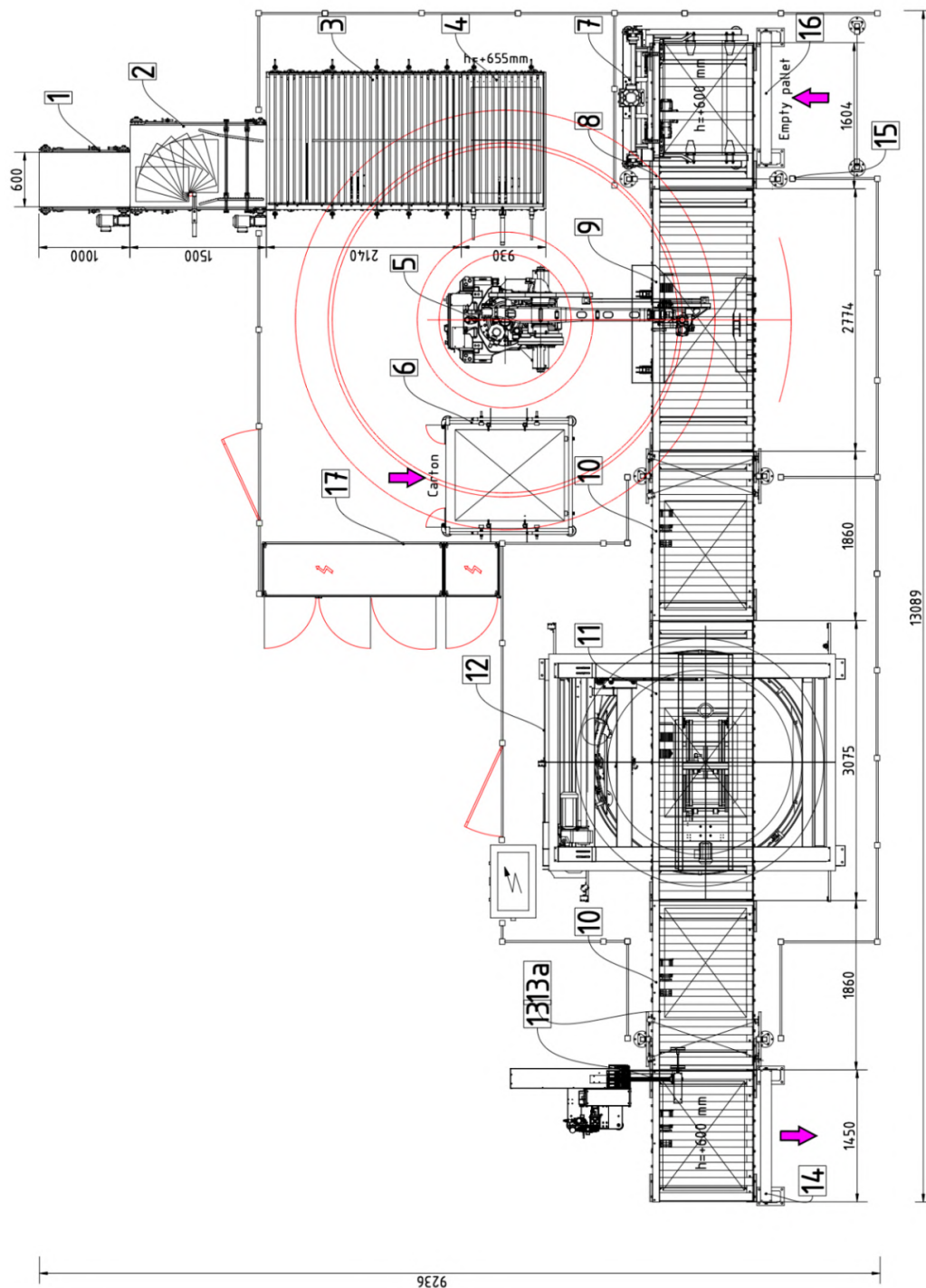


PROJECT VISUALIZATION



Layout is for familiarization only, location of units can be changed upon the consent of the parties

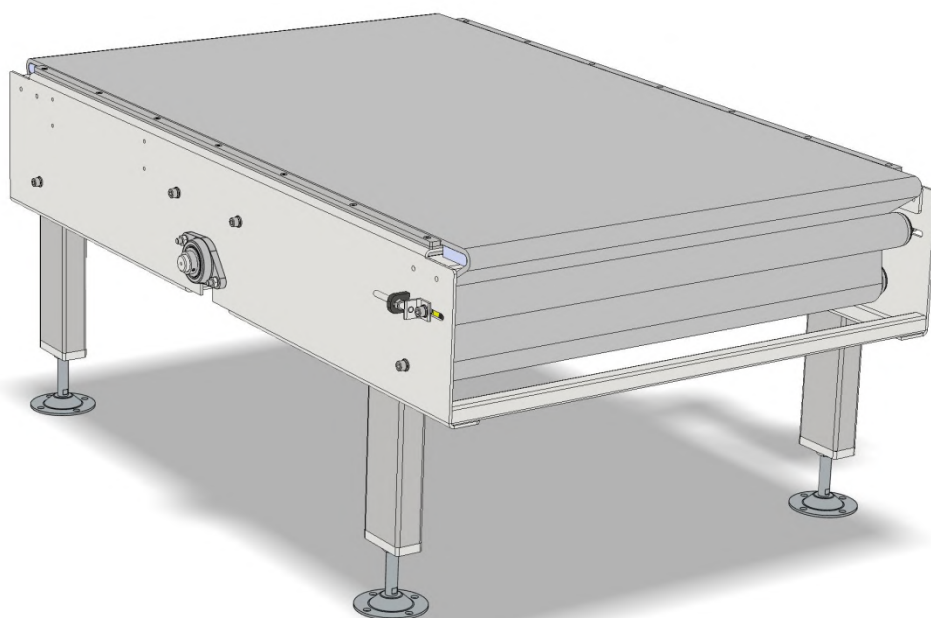
OVERALL DIMENSIONS OF THE AUTOMATIC COMPLEX



Layout is for familiarization only, location of units can be changed upon the consent of the parties.

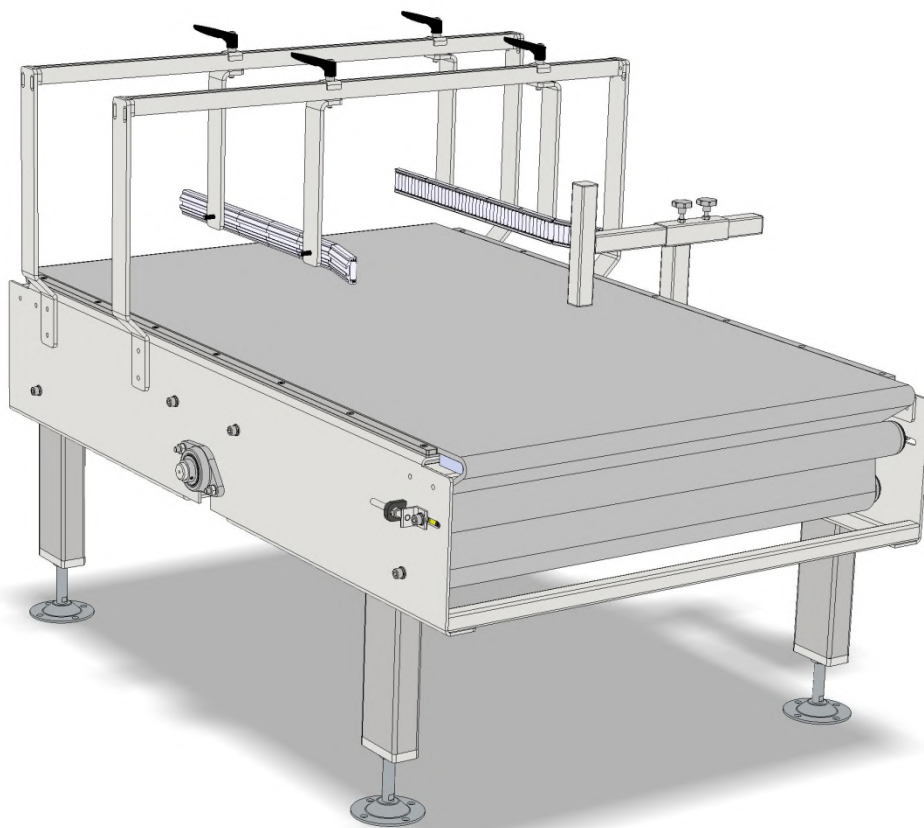
FEEDING BELT CONVEYOR TR**Technical data**

Length	1000 mm
Width	600 mm
Motor	SEW
Reducer	SEW
Sensors	SICK / LEUZE
Rigid frame, painted steel	
Hot galvanised rollers	
Appropriate part of electrical equipment in electrical cabinet	
Appropriate part of programme equipment	



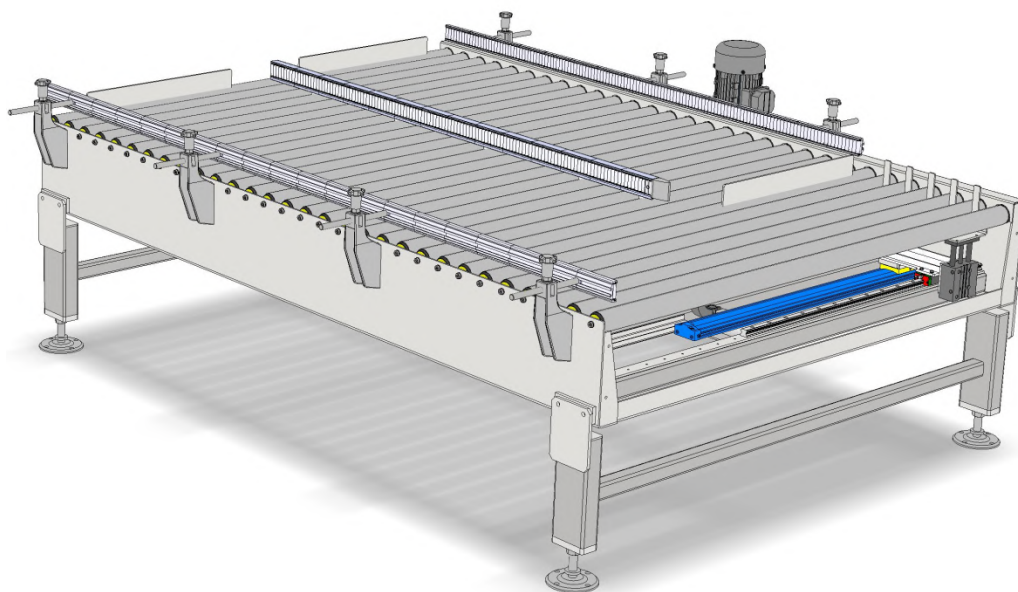
CONVEYOR WITH ROTARY DEVICE FOR PRODUCT**Technical data**

Length	1500 mm
Width	900 mm
Motor	SEW
Reducer	SEW
Sensors	SICK / LEUZE
Pneumatics	SMC
Hot galvanised rollers	
Rigid frame, painted steel	
Appropriate part of electrical equipment in electrical cabinet	
Appropriate part of programme equipment	



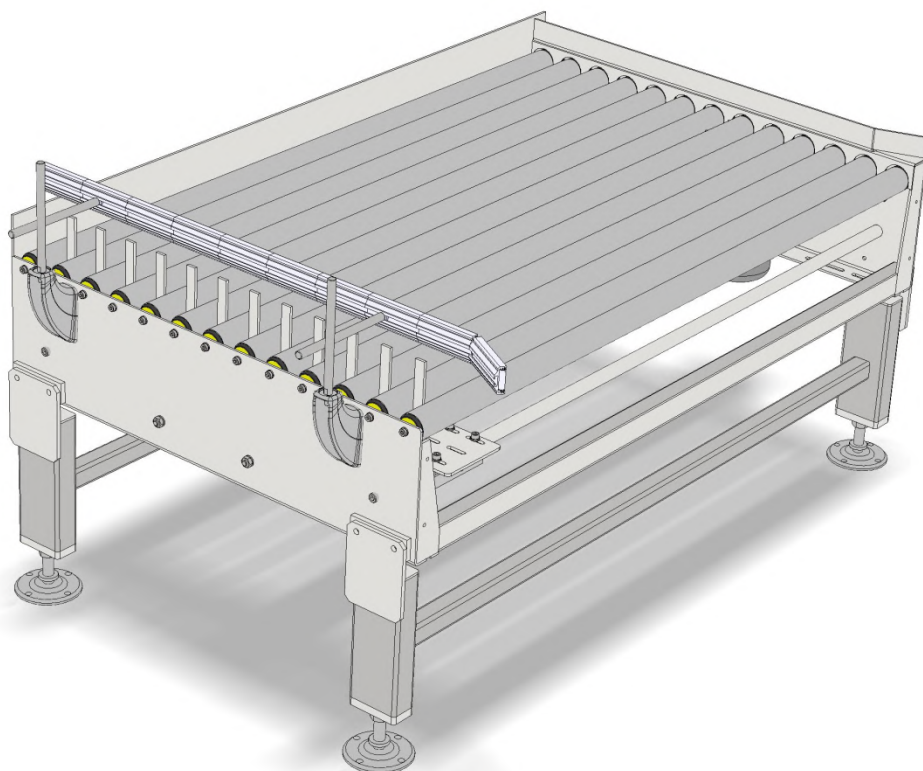
BUFFER CONVEYOR**Technical data**

Length	2140 mm
Width	1400 mm
Motor	SEW
Reducer	SEW
Sensors	SICK / LEUZE
Pneumatics	SMC
Product positioning system in x0, y0 position with pneumatic pusher and lock and layer formation	
Hot galvanised rollers	
Rigid frame, painted steel	
Appropriate part of electrical equipment in electrical cabinet	
Appropriate part of programme equipment	



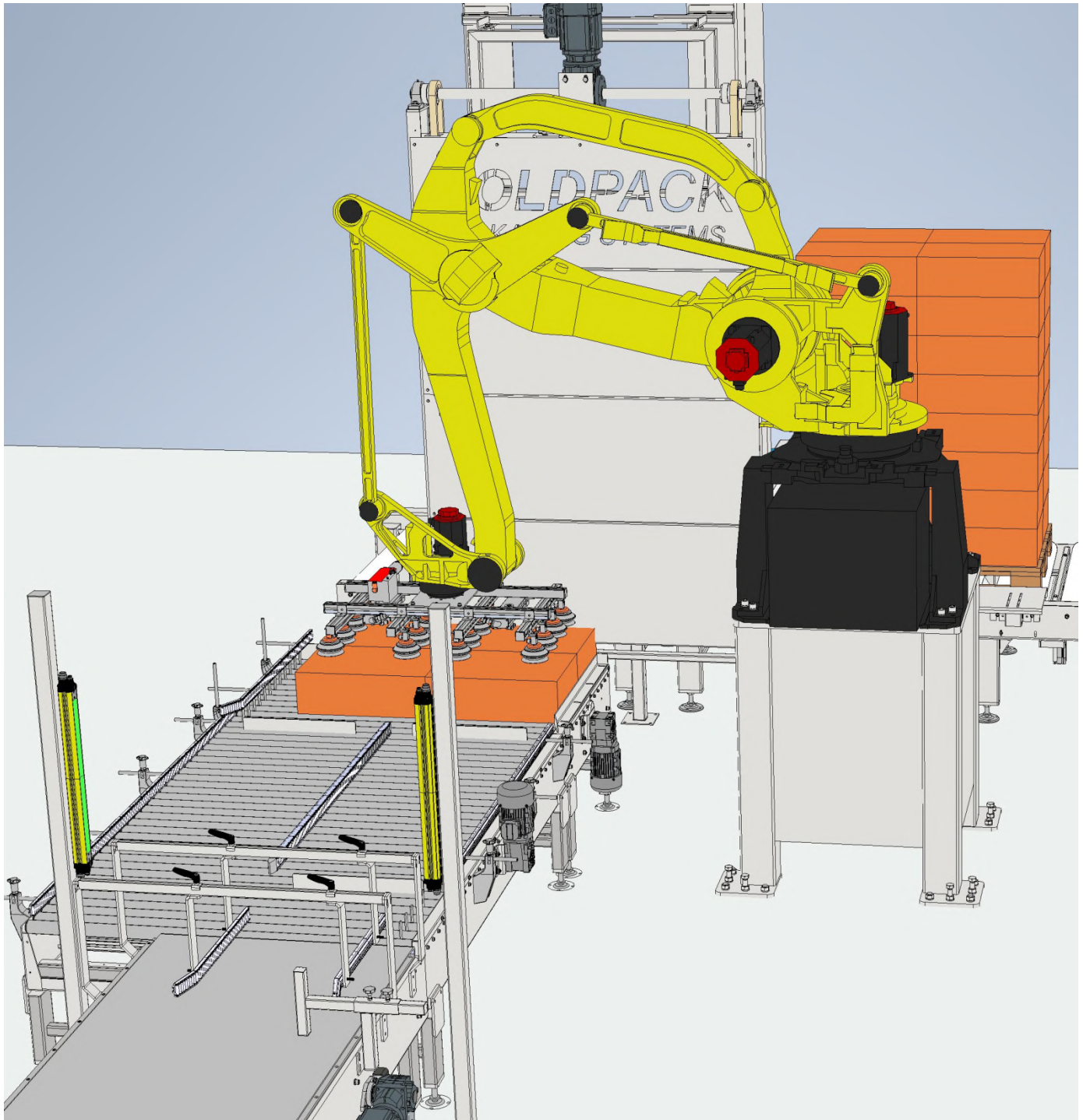
PRODUCT POSITIONING AND LAYER FORMATION CONVEYOR**Technical data**

Length	930 mm
Width	1400 mm
Motor	SEW
Reducer	SEW
Sensors	SICK / LEUZE
Pneumatics	SMC
Product positioning system in x0, y0 position with pneumatic pusher and lock and layer formation	
Hot galvanised rollers	
Rigid frame, painted steel	
Appropriate part of electrical equipment in electrical cabinet	
Appropriate part of programme equipment	



ROBOPAL PALLETIZER

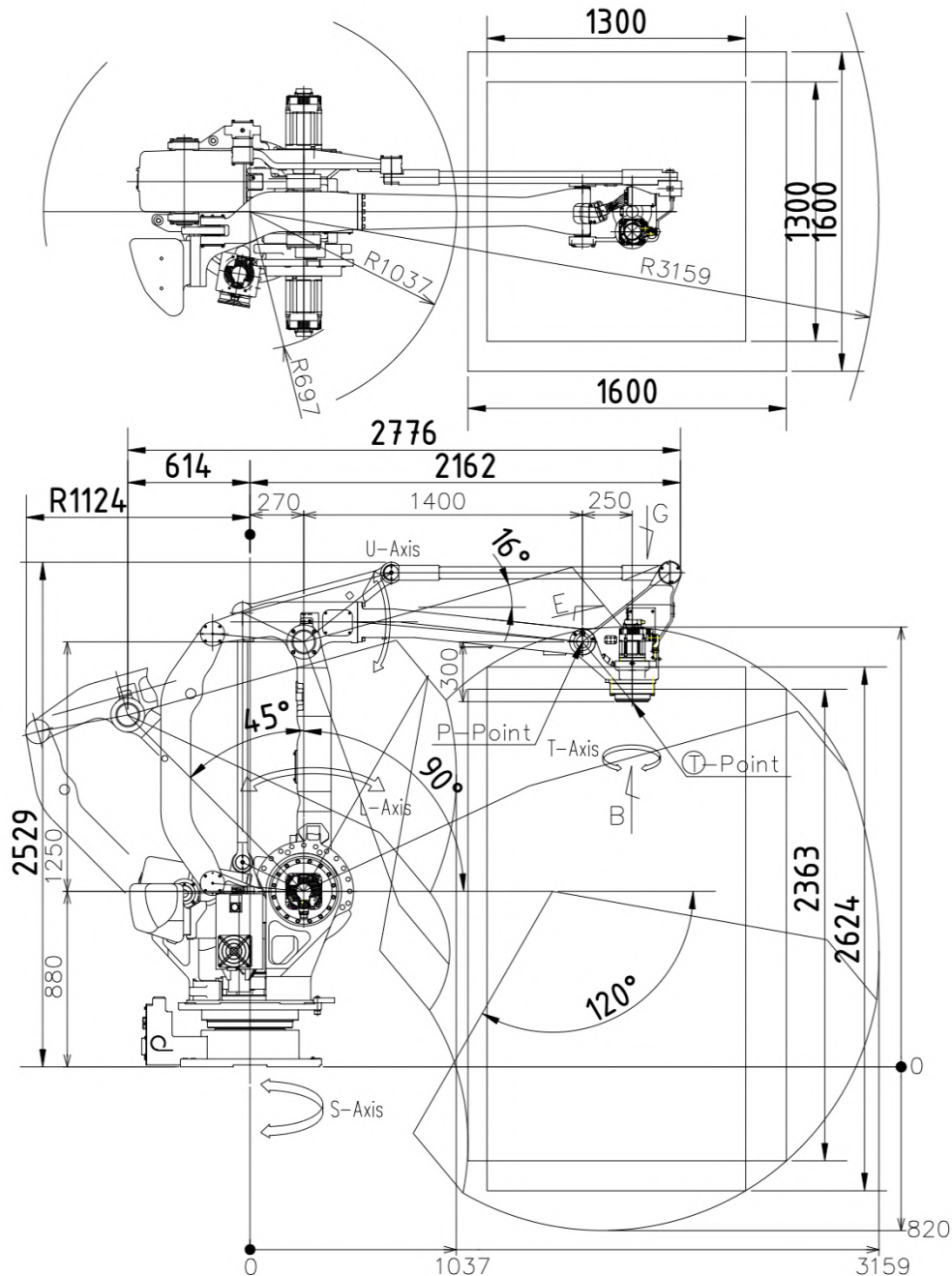
The four-axis RoboPAL is a high-speed, high-load robot designed specifically for use in palletizing.



360 ° operating range, multiple feed conveyors and / or pallets can be supported.

Its fast axial drives reduce cycle time and increase the bandwidth.

PC-based autonomous programming software is available as an option for use of software programs offered for palletizing.

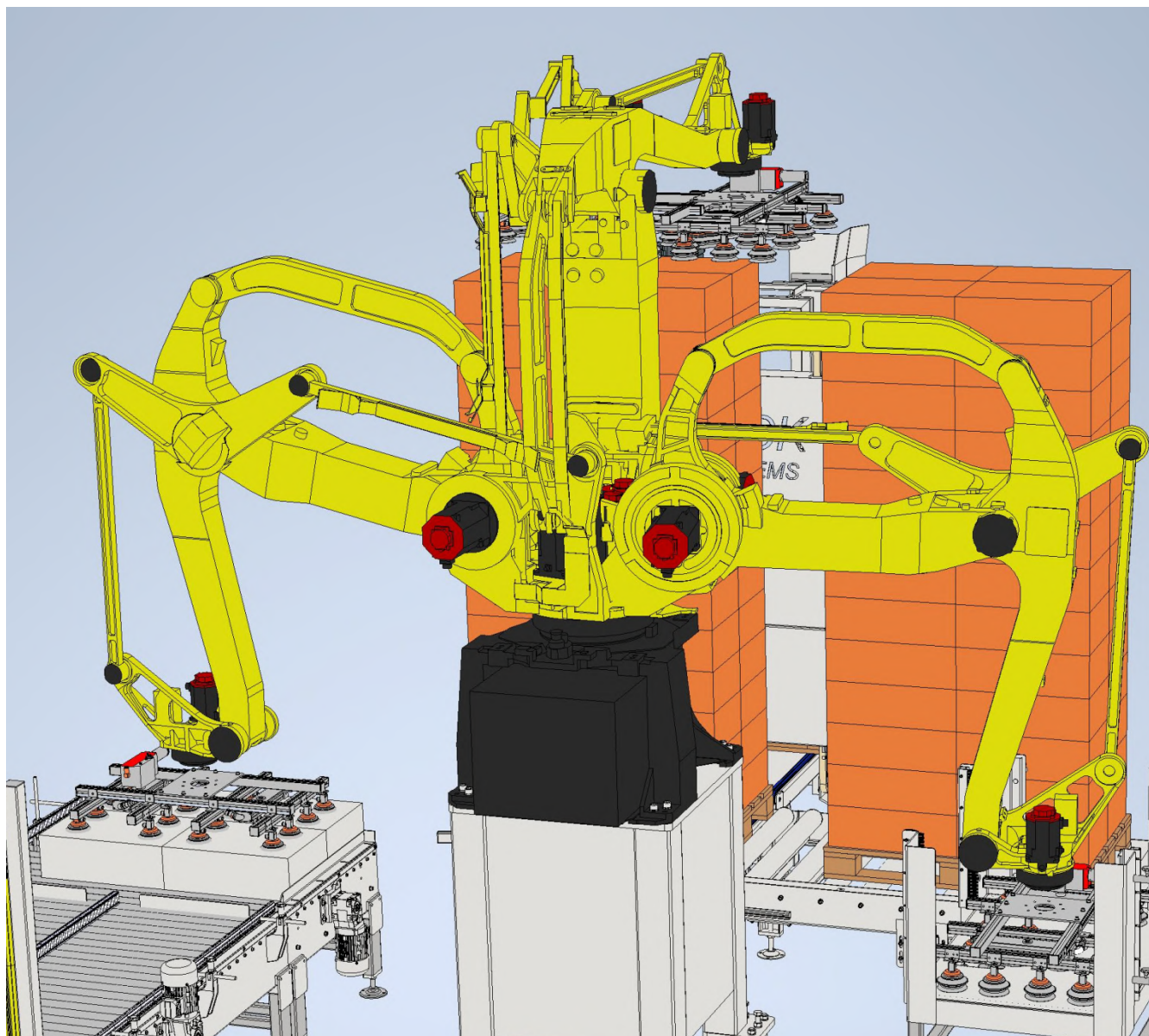


ADVANCED CONTROLLER

The system has excellent suspension programming design, fast processing and user-friendly programming language. Extended motion control (ARM) provides high path accuracy and dynamic acceleration based on payload, so cycle time is reduced.

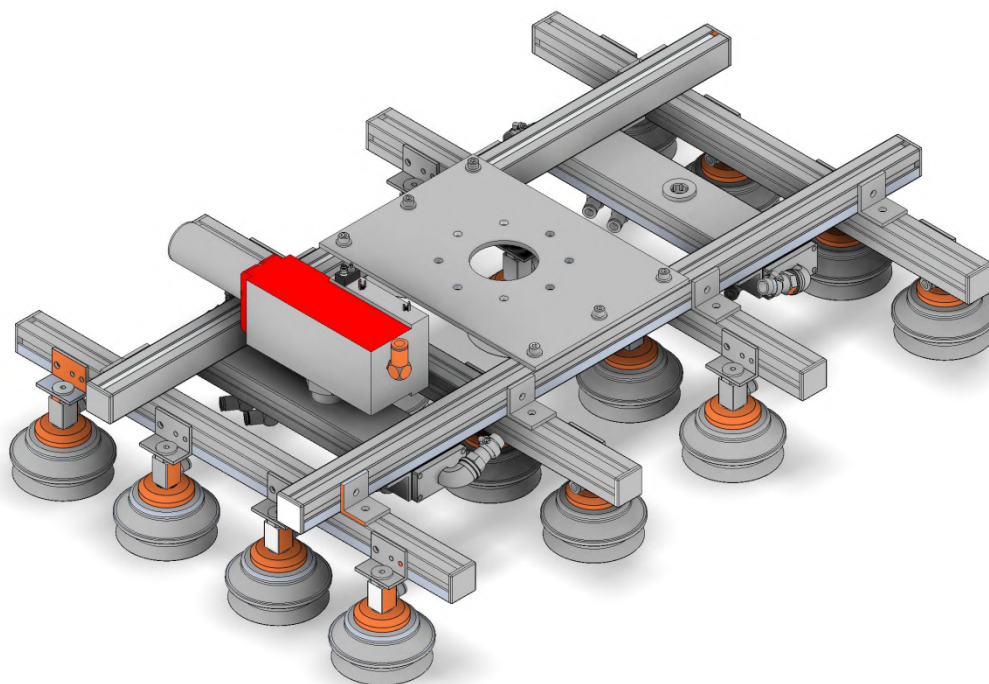
Programmable acceleration and deceleration eliminate landing points and reduce training time.

The controller offers standard network options for DeviceNet, ControlNet, Profibus-DP and Interbus-S for easy connection to the information infrastructure.

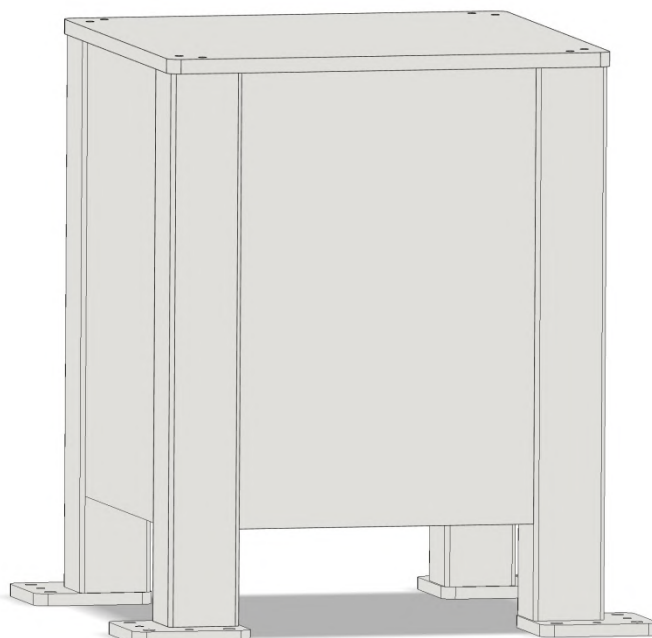


Special gripper

Our gripper configuration will be designed specifically for your product type.



Stand for the robot



CARDBOARD GASKETS MAGAZINE

The device is connected to the robot.

Technical data

Size	Згідно макету
Pneumatics	SMC
Motor	SEW
Reducer	SEW
Sensors	According to the layout
Rigid frame, painted steel	
Appropriate part of electrical equipment in electrical cabinet	
Appropriate part of programme equipment	

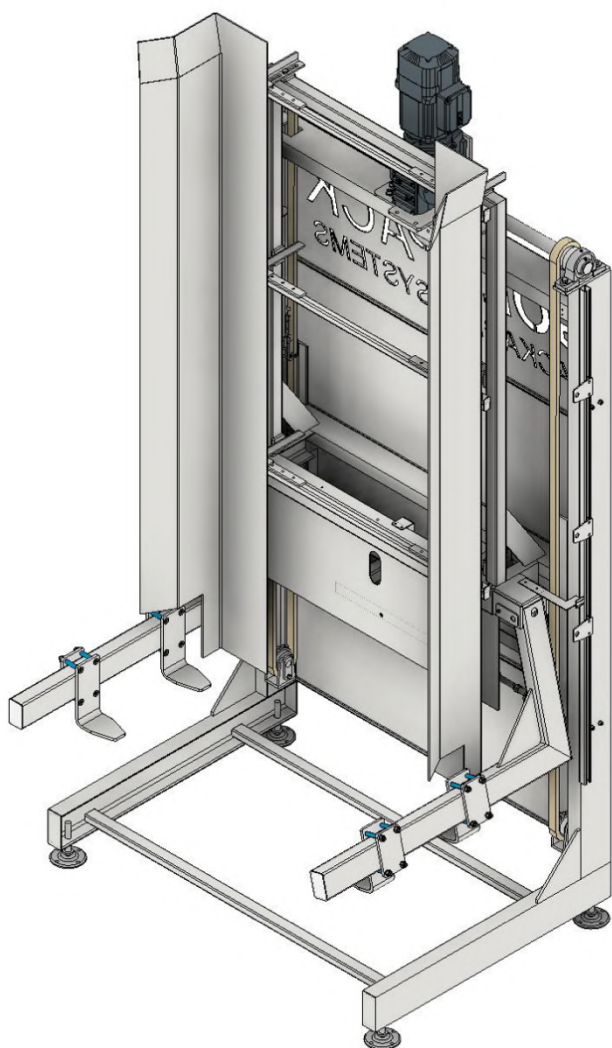


EMPTY PALLET MAGAZINE MP15

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.

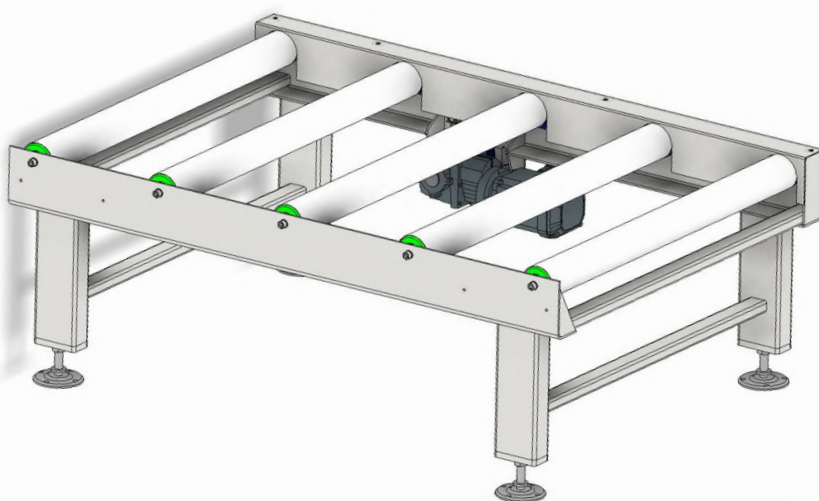
Technical data

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



ROLLER CONVEYOR VP for MP 15

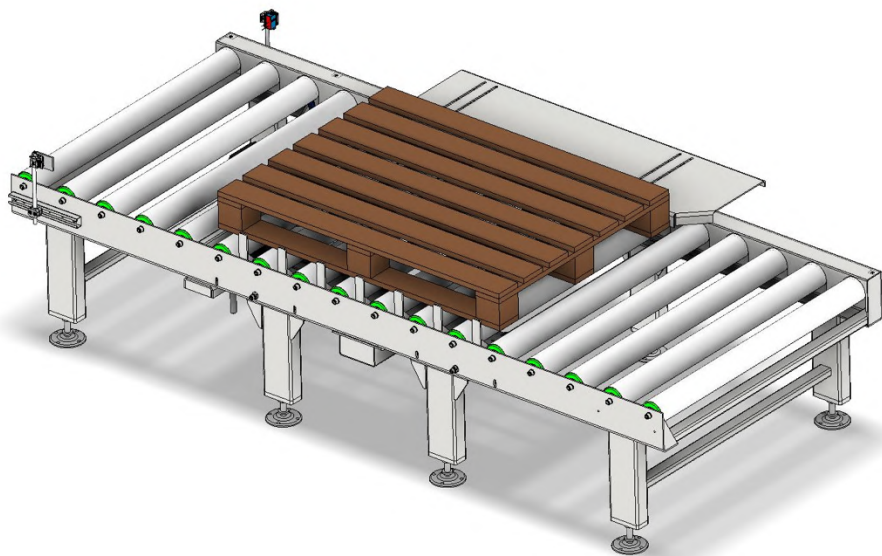
Technical data	
Length	1600 mm
Width	1000 mm
Height	600 mm
Max. loading onto the pallet	800 kg
Roller diameter	90 mm
Motor	SEW
Reducer	SEW
Sensors	SICK / LEUZE
Chain drive	
Reversible	
Rigid frame, painted steel	
Supports are adjustable with screwing of legs	
Appropriate part of electrical equipment in electrical cabinet	
Appropriate part of programme equipment	



ROLLER CONVEYOR VP with centering unit for PAL

Technical data

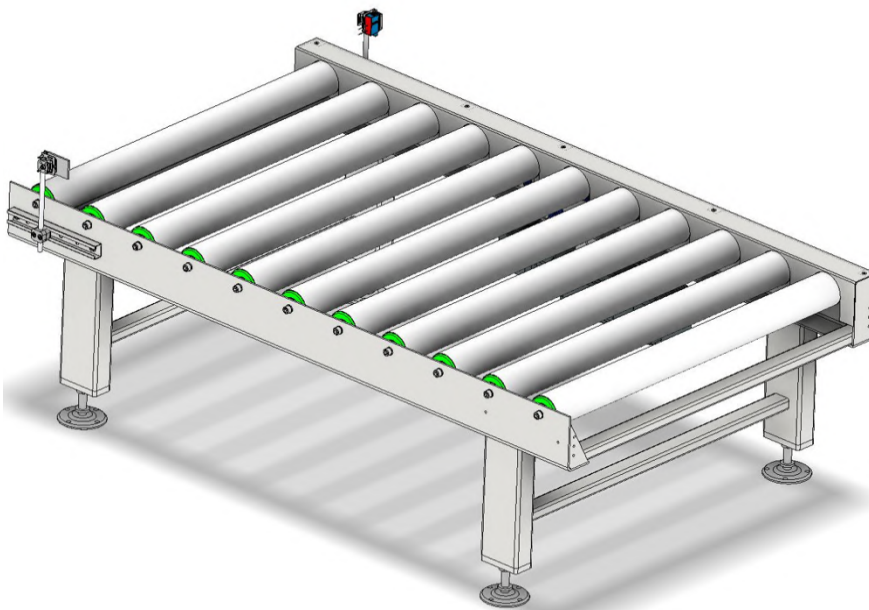
Length	2800 mm
Width	1000 mm
Height	600 mm
Max. loading onto the pallet	1500 кг
Roller diameter	90 mm
Motor	SEW
Reducer	SEW
Sensors	SICK / LEUZE
Chain drive	
Reversible	
Rigid frame, painted steel	
Supports are adjustable with screwing of legs	
Appropriate part of electrical equipment in electrical cabinet	
Appropriate part of programme equipment	

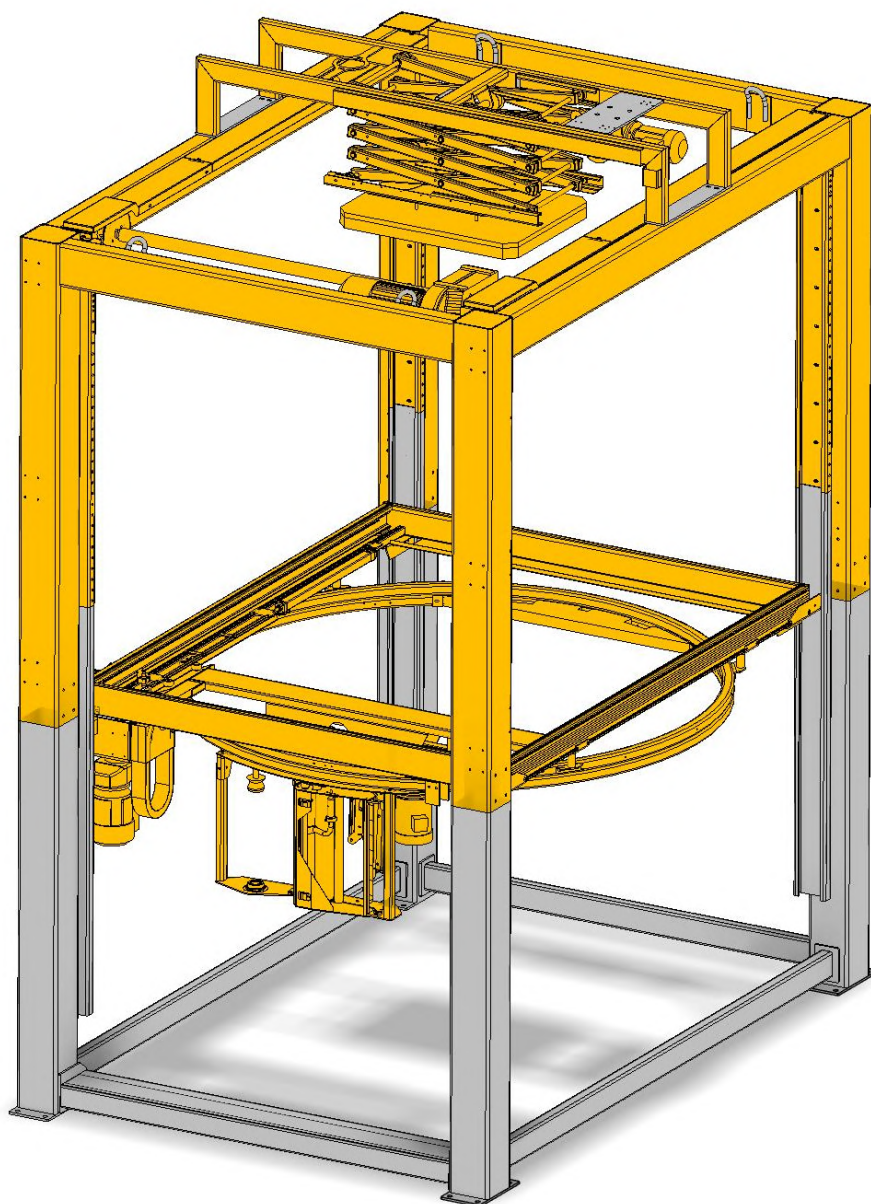


ROLLER CONVEYOR VP

Technical data

Length	according to the layout
Width	1000 mm
Height	600 mm
Max. loading onto 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 of legs	
Appropriate part of electrical equipment in electrical cabinet	
Appropriate part of programme equipment	



OCTOPUS 1825B AUTOMATIC PALLET WRAPPER MACHINE

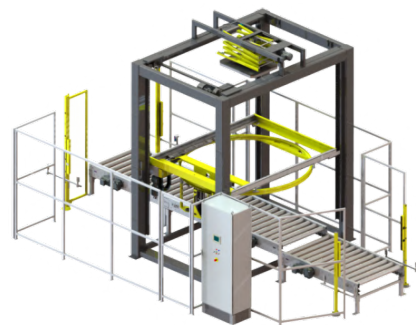
Octopus 1825B wrapper

The image is for reference only and may differ from the design of the equipment supplied

OCTOPUS 1825B WRAPPING MACHINE

RING TECHNOLOGY

- Octopus - First machine ever using ring technology, originally invented by Haloila in 1983
- Improved packaging quality when product pallet is stationary and ring is rotated – protects load corners
- Less mechanical stress compared to rotary arm and turntable technology
- Versatile wrapping features by one machine compared to other technologies like rotating arm technology (e.g. single wrapping from bottom to top)
- Video link: <https://youtu.be/ebv4JAdfMds>

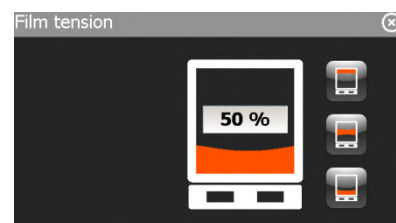


CONSISTENCY - FIXED PRE-STRETCH POWER

- 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

FILM FORCE TO LOAD CONTROL

- 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 film 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: https://youtu.be/hymZo_9FDHI

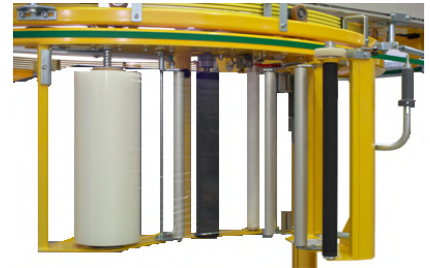
HIGH PERFORMANCE S-TYPE FILM CARRIAGE

- S-type film carriage = how film thread is done in film carriage when it is pre-stretched
- 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 LOAD FILM CARRIAGE WITH SAFE FILM THREAD

- 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 a machine. Shorter film reel change time
- Video link: <https://youtu.be/nATWDGs58DI>



COST EFFECTIVE MOVEMENTS

- 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

AUTOMATIC SPEED CONTROL

- Optimized capacity reduces maintenance costs
- The speed of the machine is controlled according to the capacity of the production line
- Automatically or using the speed selected from the HMI

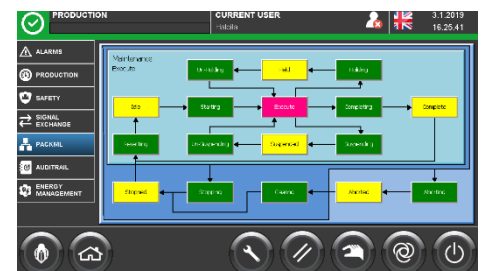
NT2 - NO TOUCH NO TAIL FILM SEAMING AND CUTTING

- High quality and reliable film seaming in its whole width on 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 items, each for every reel
- Video link: <https://youtu.be/jEhsJcPDriU>



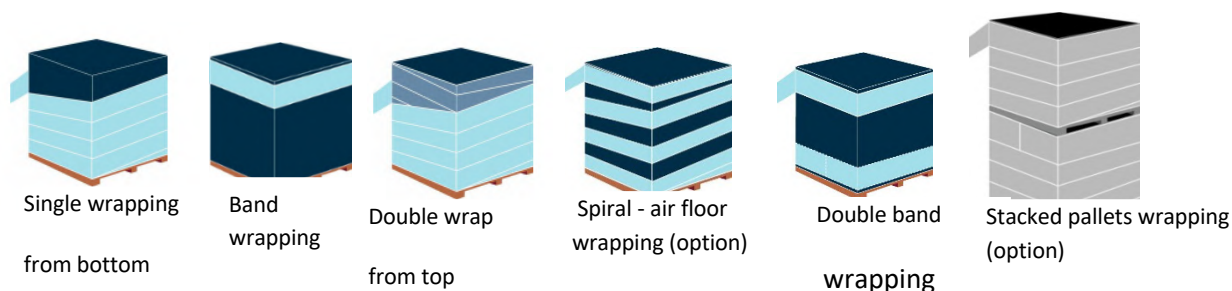
OCTOFACE 2.0 - NEW GENERATION HMI SOLUTION

- Control system includes Siemens S7 PLC and OctoFACE HMI
- Unlimited number of wrapping programs
- Informative, e.g.
 - Current capacity / pallets/h
 - Film left on reel (option)
 - Visual symbols
 - PackML status screen
- 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 are available as a standard**

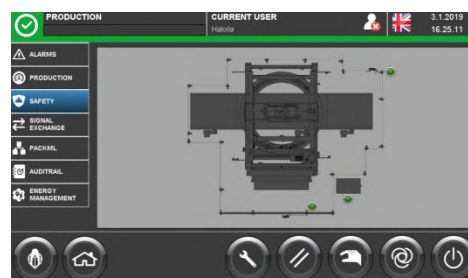


OCTOFACE SERVICE SCREENS

- 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
 - Right timing for maintenance
 - Pro-active 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
- History data
- Quick access to machine documentation by QR-code



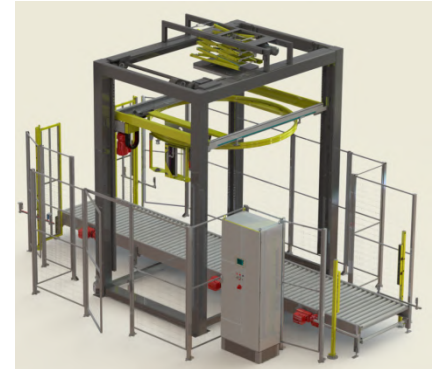
TROAX SAFETY FENCES

- According EN415-6: 2013 (Safety of wrapping machines)
- According enclosure layout, others to be agreed separately
- Height 2050 mm + 150 mm feet
- Mesh panel net 20 x 100 mm by 3 mm wire
- Cycle stop function with electric lock in door
- LOTO ready door locking with hook for padlock
- Video Link: <https://youtu.be/ZPpmGsm2ZNI>



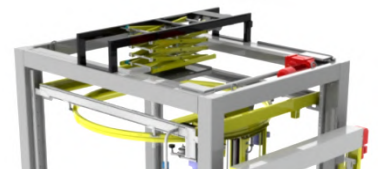
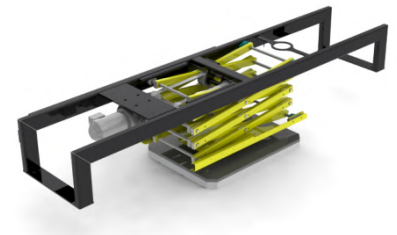
SAFETY LIGHT GUARDING

- Muting photocells to detect pallet load
- Two (2) light guards, one on infeed and one on discharge side
- On infeed side light guard is equipped with turning fence elements and safety switches, according) EN415-6: 2013 (Safety of wrapping machines)
- Steel column, RAL 1003 (signal yellow) and other necessary mechanical and electrical parts are included.



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
- Stroke according to min. load height
- Video Link: https://youtu.be/z_lkZp5jZfs



TRCS II AUTOMATIC STRETCH FILM ROLL CHANGE SYSTEM RCSII

- The film cassette will change automatically without operator intervention when the system experiences absence of film or film breakage
- NOTE: If the film breaks, the system may also change the full roll of film
- The operator can change a new roll of film when the octopus rotates
- Less than 1 minute time for stopping production for automatic change to a new roll
- Equipped with a coil change manipulator, one additional cassette and additional elements of the protective fence with a door for loading film coils
- Reliability with locking system for ring rotation, ring rotation up / down and manipulator rotation. Fixed, mechanically locked cylinder position change
- Video Link: <https://youtu.be/TZcFk1Z-qFw>



TECHNICAL DATA

MACHINE STANDARDS

The offer is based on Oy M. Haloila Ab std. component lists. All 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

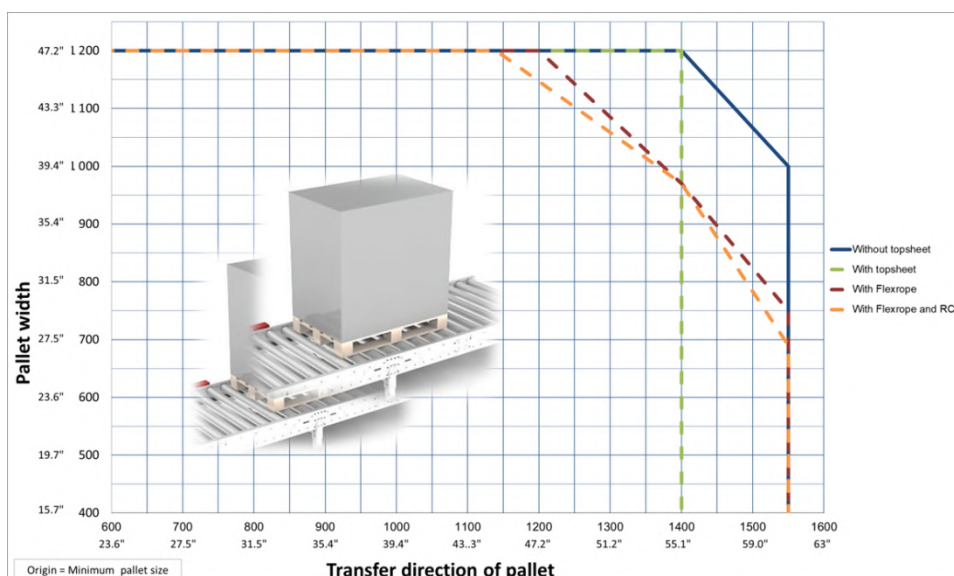
EN415-6: 2013 Safety of packaging machines. Part 6. Machines for pallet packaging

MINIMUM AND MAXIMUM DIMENSIONS OF PRODUCTS

The maximum length and width of the product pallet are given below. For example, without the option of film top coating, 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, whichever is larger

The frame of the machine expands to the required maximum load height: 2800 mm



PRODUCTIVITY CALCULATION

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

Conveyor speed 12m / min, length of the wrapping conveyor inside Octopus is 3000mm, supply and release of pallet cargoes is simultaneous, time of transportation of the conveyor is 10.8 sec

Wrapping method: Double wrap on top

Product height: 1300 mm, including pallet

Total number of turns: 13

Wrapping capacity 57 pallets / h, including conveyor time

Wrapping method: Double wrap on top

Product height: 2300 mm, including pallet

Total number of turns: 45

Wrapping capacity is 37 pallets / h, including conveyor time

Actual line bandwidth capacity according to the query data: 26-55 pallets / hour

CONNECTION without conveyor control

Supply voltage:	3 x 400VAC / 50Hz + N + PE
Grounding:	separate 16 mm cable to the grounding rail of the machine
Power capacity:	6.0 kW, 3 x 20A to the customer's fuses
Compressed air supply:	min. 0.6 MPa, provided by the customer
Air consumption:	9 NI / wrapping cycle
Compressed air connection	Available air volume accordingly pin for quick grip

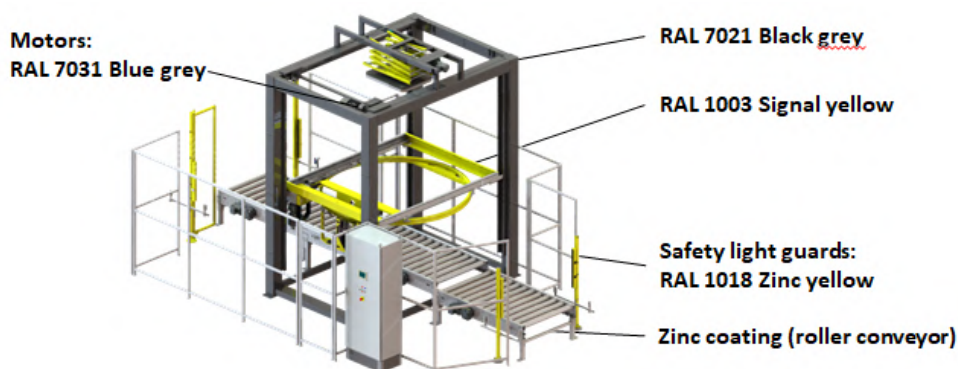
MACHINE COLORS

RAL 7021 black graphite

RAL yellow

RAL light grey

RAL black - mesh and frame



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

Ethernet / Profinet data exchange

Photocell product detection

Barcode scanner on a pad

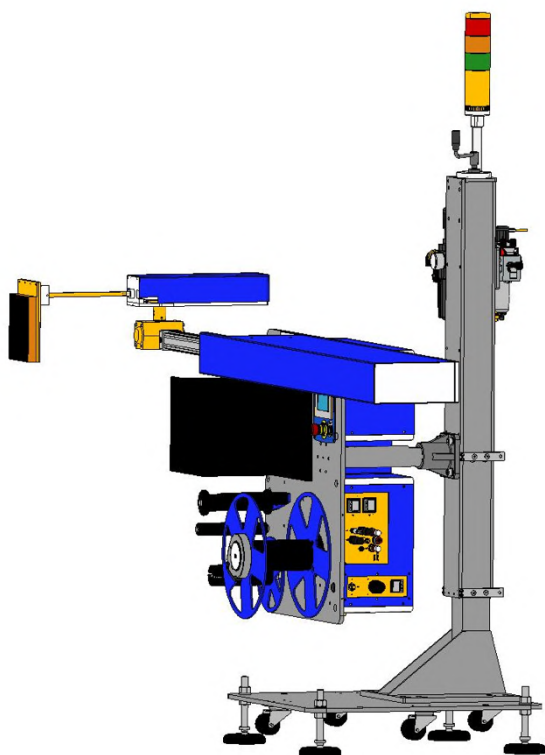
Slowing brake when unwinding

Mechanical height adjustment of the machine

Applied label sealant

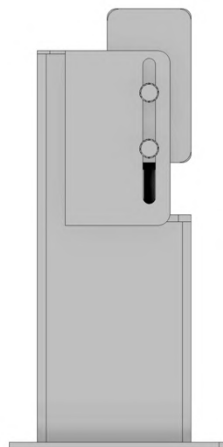
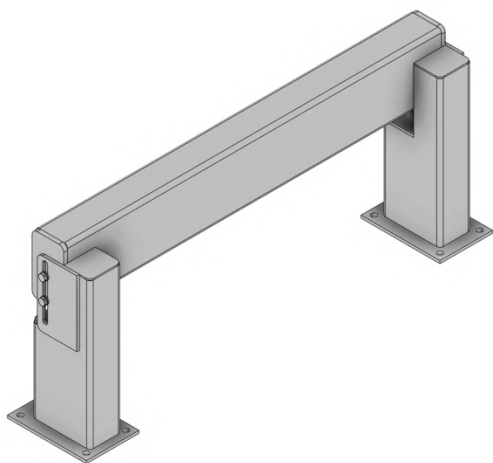
Low level detector for consumables

Appropriate part of programme equipment

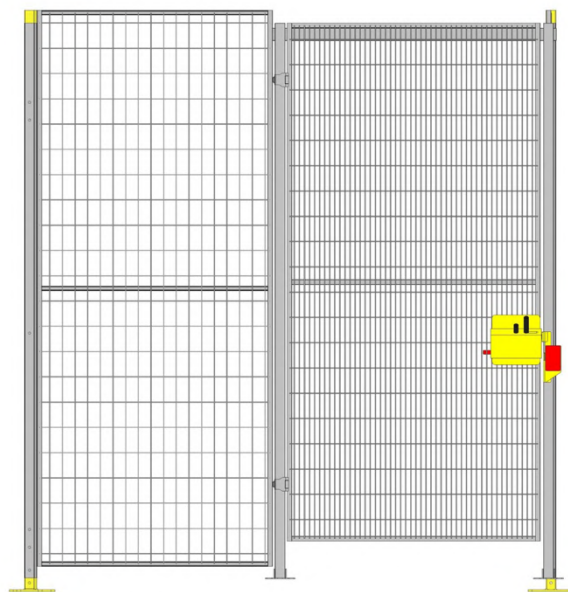
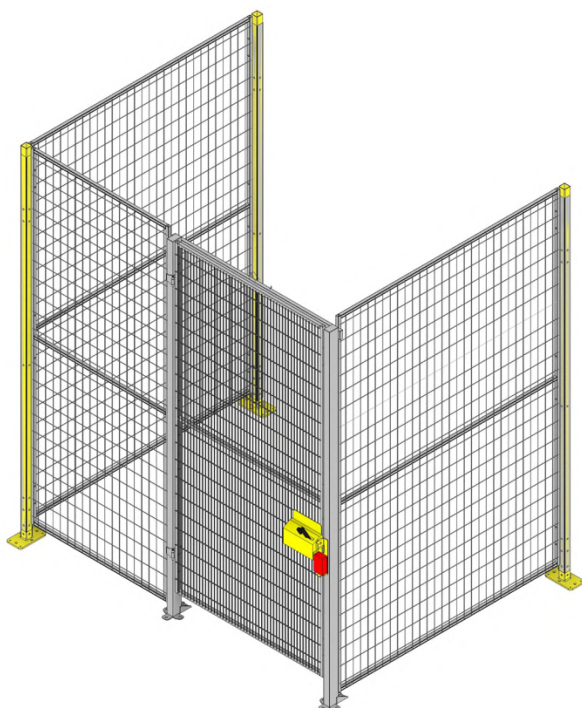


FORK TRUCK BLOCKADE

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.



CONTROL ELECTRICAL CABINET

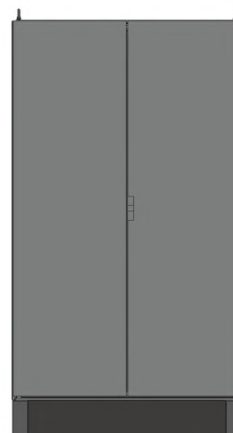
Fully equipped RITTAL electrical cabinet is located on the line (12m around the line).

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, Telemecanique
Transformers	Mean Well
Cables	Hellukabel
Electric cabinet	Rittal
Other electrical components	Klockner Mueller
Rollers	Interroll

- IP56 safety level

EQUIPMENT SPECIFICATION

EQUIPMENT		Q-ty
1.	TR 1.0 Conveyor	1
2.	Conveyor with a rotary device for the product	1
3.	TR 2.0 Buffer conveyor	1
4.	Conveyor with forming system	1
5.	RoboPAL Robot palletizer	1
5a.	Special gripper for a full range and gasket	1
5b.	Stand for the robot	1
6.	Cardboard gaskets magazine	1
7.	MP15 empty pallet magazine	1
8.	VP 1.60 roller conveyor for MP15	1
9.	VP 2.8 roller conveyor for with the centering unit for RoboPAL	1
10.	VP 1.80 roller conveyor	2
11.	VP 3.0 roller conveyor with lifting system for wrapping the pallet wooden part of	1
12.	OCTOPUS 1825B automatic wrapper - clamping upper stabilizer	1
13.	APL35s applicator with A6 double sided marking system	1
13a.	KPZ pallet weighing unit	1
14.	VP 1.45 roller conveyor	1
15.	Troax protective fence Input sensors, Sick output sensors Sick safety light barriers, category 4 Troax door lock, etc. CE	1
16.	Movement restrictor with sensor	2
17.	Electrical cabinet and software	1
18.	Packaging	1
19.	Delivery	1
Integration		
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.

Contacts in Kyiv city**Contacts in Kryvyi Rih city**

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!