

WELCOME TO THE WORLD OF KAPELOU

Solutions that 100% satisfy intralogistics needs

Products & Systems

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ABOUT KAPELOU

28.09.2023

5 REASONS TO CHOOSE KAPELOU



Stability

As a financially independent business, KAPELOU strives for long-term partnerships. You can be sure that our team of experts will be there today, tomorrow and in the future.

Efficiency

KAPELOU solutions are scalable and able to grow along with your business. You can always carry out modernization or retrofitting.

Quality

As an original equipment manufacturer and system integrator, KAPELOU offers individual and high-quality solutions from a single source, specially designed to solve your tasks.

Reliability

With timely service and customer support, KAPELOU ensures the smooth operation of your system both during and after installation.

Know-how

KAPELOU solutions always meet the latest technological standards and can be easily integrated into the existing (IT) system.



ABOUT KAPELOU



Production 21,000 m2



200 + employees



600+ completed projects



36 Mio € turnover in sales





Manufacturer of conveyor systems and supplier of intralogistics solutions









ROBOTS & ELEVATORS > 215



KAPELOU IN NUMBERS



KAPELOU was **founded in 2013** for the assembly of racking systems

In 2017, KAPELOU diversified the services by offering the integration of automation systems in intralogistics

In 2018, KAPELOU production was launched

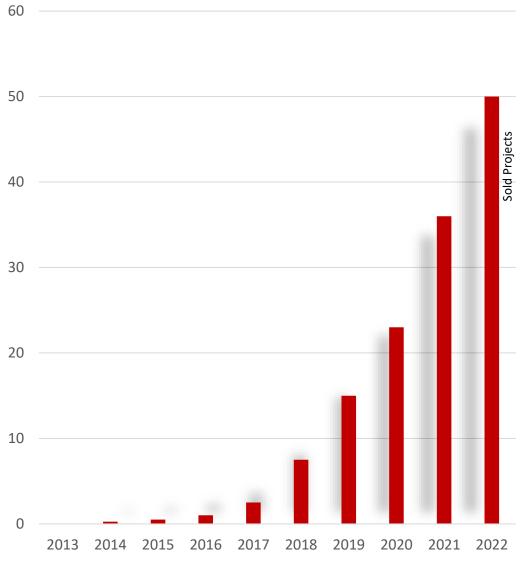
600+ projects have been implemented

KAPELOU employes >200 people

In 2022, KAPELOU Sold Projects Volume was €50 million

In 2023, KAPELOU plans to achieve €70 million

Kapelou is part of Ukraine's critical Infrastructure



KAPELOU PROJECTS & COUNTRIES



KAPELOU has already implemented over **600 projects** since its foundation.

The majority of these projects were realized in the KAPELOU home market Ukraine.

By strategic orientation of KAPELOU the project map is extended more to the west, to Central Europe.

Projects implemented in these countries, among others:

- Bulgaria
- Germany
- Greece
- Holland
- Poland
- Sweden
- Ukraine
- Hungary
- Serbia

.... and others



KAPELOU PARTNERS











KAPELOU - certified partner META, SICK, SIEMENS























KAPELOU CUSTOMERS











































PRODUCTION





Laser Trumpf



Milling DMG MORI



Bending Trumpf





Punch Trumpf



Lathe DMG MORI



Swaging

PRODUCTION





Laser Trumpf



Milling dmg mori



Bending Trumpf





Punch Trumpf



Lathe DMG MORI



Swaging



KAPELOU R&D PRODUCTS & SYSTEMS

R&D PRODUCTS







PLATFORMS

PLATFORMS





- MEZZANINE ON THE PLATFORM
- PLATFORM 1 LEVEL
- **PICK TOWER**

Maximum efficient use of warehouse space

- The possibility of organizing independent storage areas;
- Effective use of warehouse space;
- Relative ease of installation;
- The possibility of expanding the structure;
- Various modifications of the racking system;
- Ability to use different types of flooring.

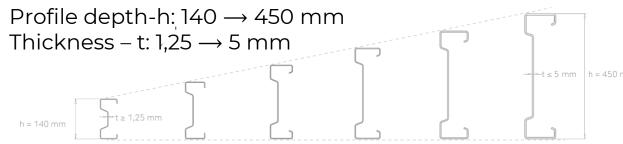
Technical characteristics

Available construction height, max	18 m
Load per m², max.	100 – 1.500 kg
Number of levels, max.	5
Type of overlap	lattice flooring; fire-resistant and moisture-resistant chipboard; perforated flooring; non-perforated flooring
Element processing is available	enamel powder coating galvanized execution
Available construction height, max.	18 m

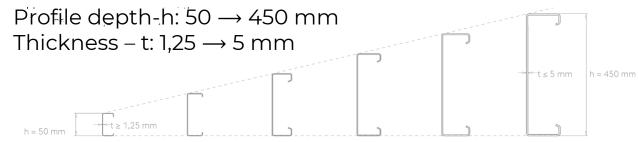
PLATFORMS



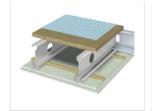
SIGMA & SIGMA-PLUS PROFILES:

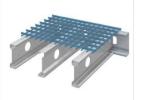


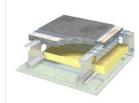
CEE & CEE-PLUS PROFILES:

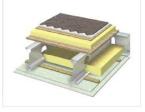


Types of flooring



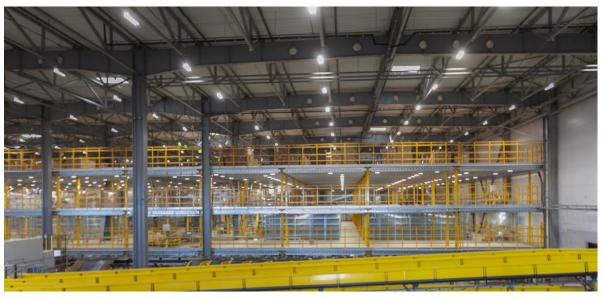






For industrial premises

For office premises

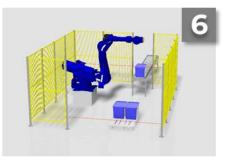


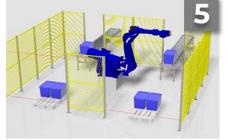




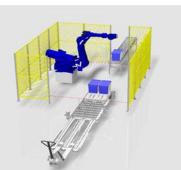


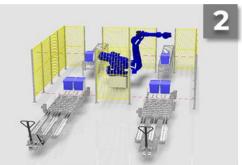


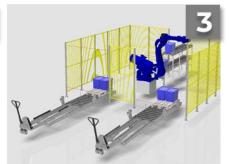












LEAVE THE PHYSICAL WORK TO THE ROBOTS. INTELLIGENCE BELONGS TO PEOPLE.

Solutions based on robotics allow you to work **24/7** without stops, breaks and sick days. Many times increase the accuracy of operations and the speed of work.

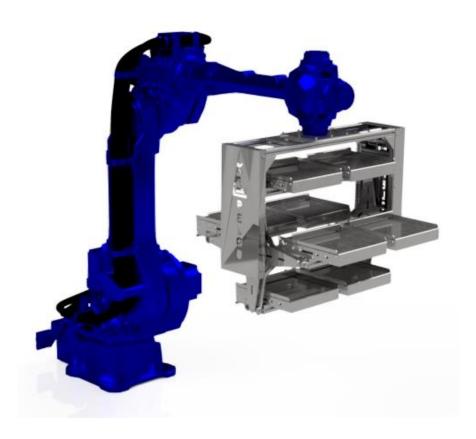
Robots perform physically demanding work and require a minimum of maintenance.

The payback of the project is **less than 12 months**. Calculated on the basis of the current project.

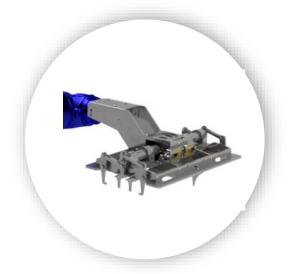
Solutions

1	600 cycles per hour
2	800 cycles per hour
3	800 cycles per hour
4	600 cycles per hour
5	700 cycles per hour
6	700 cycles per hour

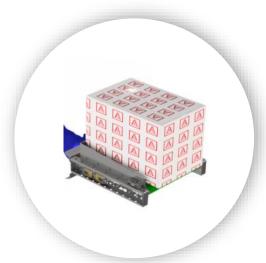




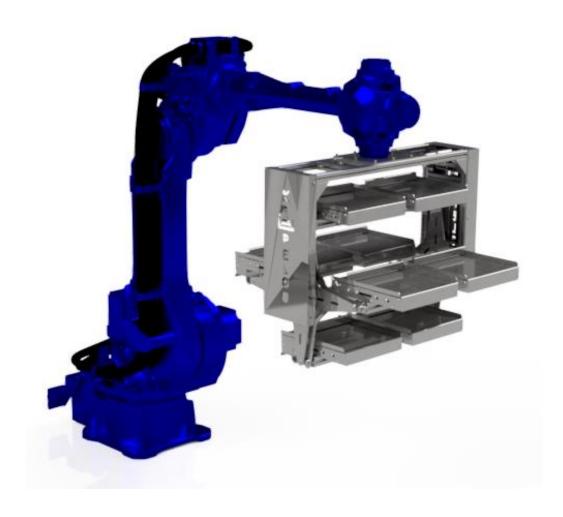














PRODUCTIVITY x8

A feature of the four-tier automatic sorting system is that the carriages move along a curve, around their axis, which increases the reception/issuance of goods in a short period of time.

Performance indicators

Productivity	3,600 pcs per hour
Rotation speed	30 rpm
Filling time	8 s
The overall size of the carriage	330 x 330 mm
Number of carriages	8 pcs
Power	0,45 kW



Speedbot – equipment for quickly moving goods to storage locations



Speedbot efficiently performs the process of sorting parcels according to customer orders or shipping directions.

Works with any type of packaging, accurately and quickly places parcels from the conveyor in the required cells. Easily integrates with the warehouse management system, consumes electricity economically.

Performance indicators

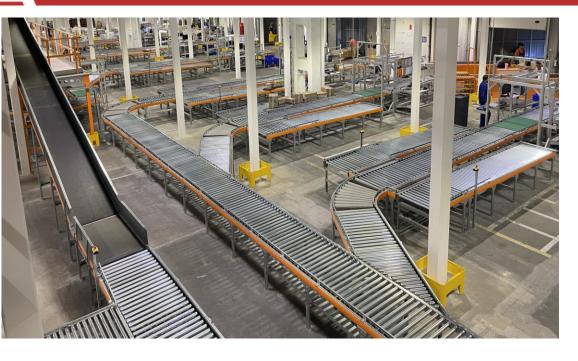
Productivity	up to 1 000 pcs per hour
Weight of the box	up to 30 kg
Dimensions of the box	400 x 400x 600 mm
The overall size of the carriage	330 x 330 mm
Product type	soft packaging, tablar, plastic and cardboard boxes
Power	0,45 kW



BOX CONVEYOR TECHNOLOGY

CONVEYOR MODULES FOR BOXES



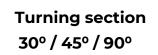




Straight section



← Non-driven / Inclined sections













300x 300x 50 мм

800x 600x 400x 600x 400 мм 600 мм

Infeed section 30° / 45° / 60° / 90°



The weight of transported products - 35 kg

The speed of transportation - up to 1 m/sc

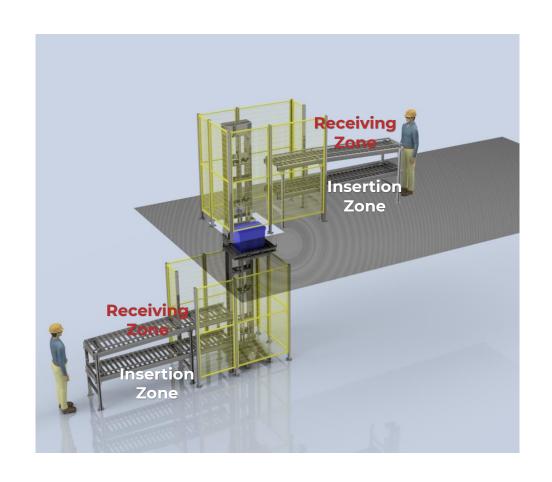


VERTICAL CONVEYOR FOR BOXES



Performance indicators

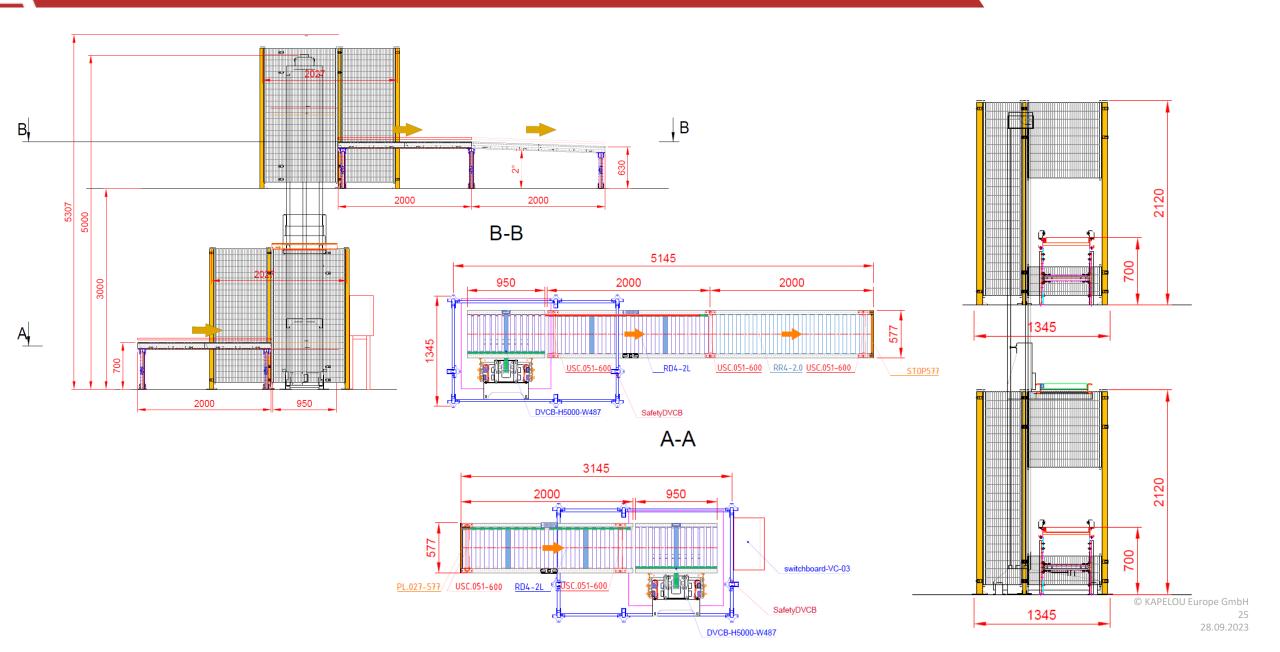
Direction	Up & Down
Transportation	Totes
Capacity	600 cycles
Generel Height	4.000 mm
Height between Floors	2.500 mm
Receiving Zones	2 m Non-driven Roller Conveyor + 1m Driven Conveyor
Insertion Zone	3 m Driven Roller Conveyor
Guardance	Fence included





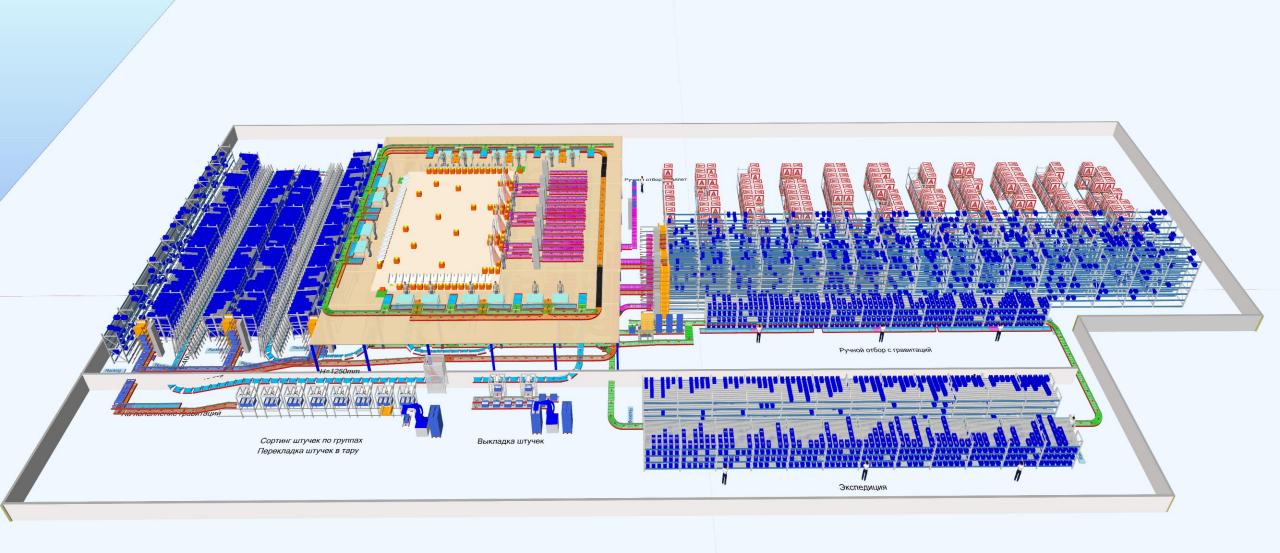
VERTICAL CONVEYOR FOR BOXES





PHARMA CASE STUDY





BOX SHUTTLE







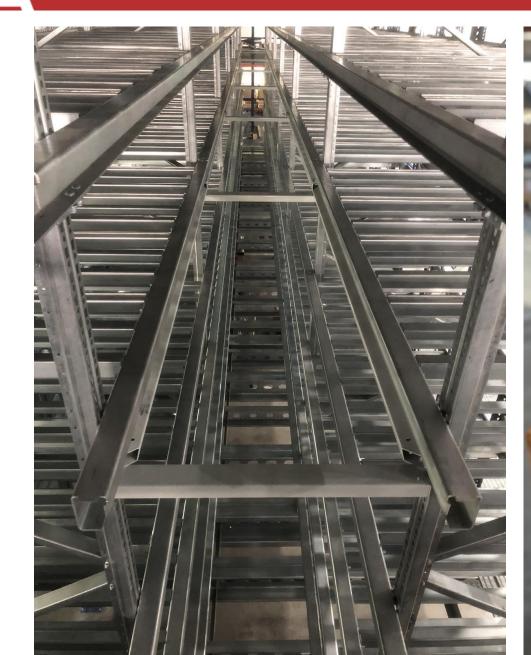
An automated system of placement and picking of goods, which allows you to store goods as densely as possible, quickly and accurately deliver them to warehouse operators.

Parameters

Speed, max.	2 m/s
Load, max.	30 kg
Product dimensions (L x W)	600 x 400 mm
Type of goods	boxes, trays
Length, max.	100 m
Height, max.	12 m
Storage type	one-row, two-row

BOX SHUTTLE









G2P. Increases storage density by 80-400%

KAPELOU's latest development, an autonomous goods handling robot, which we call GNOM, is designed for automatic pick, storage and simultaneous processing of several boxes.



Movement speed	1 m/s
Carriage movement speed	0,25 m/s
Load	up to 30 kg
Product dimensions (W x H x D)	400x220 (up to 400) x600 mm
Storage range	0,4 – 1,5 м
Platform rotation angle	90°
Number of places for simultaneous movement of goods	3+1





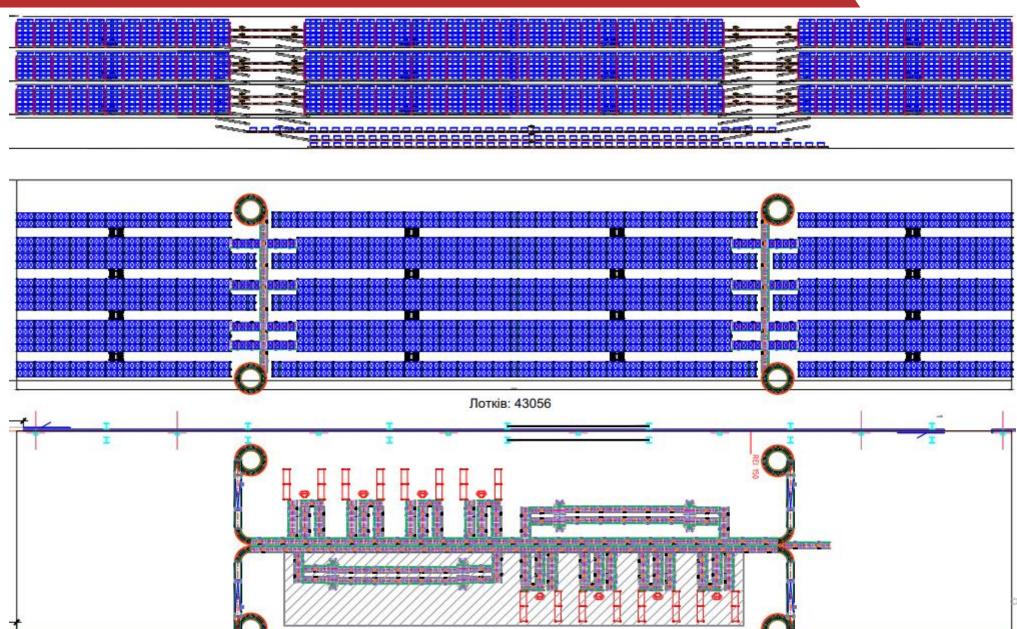
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Eliminates the need for extra runs of pickers, increasing the accuracy of picking and reducing labor intensity.

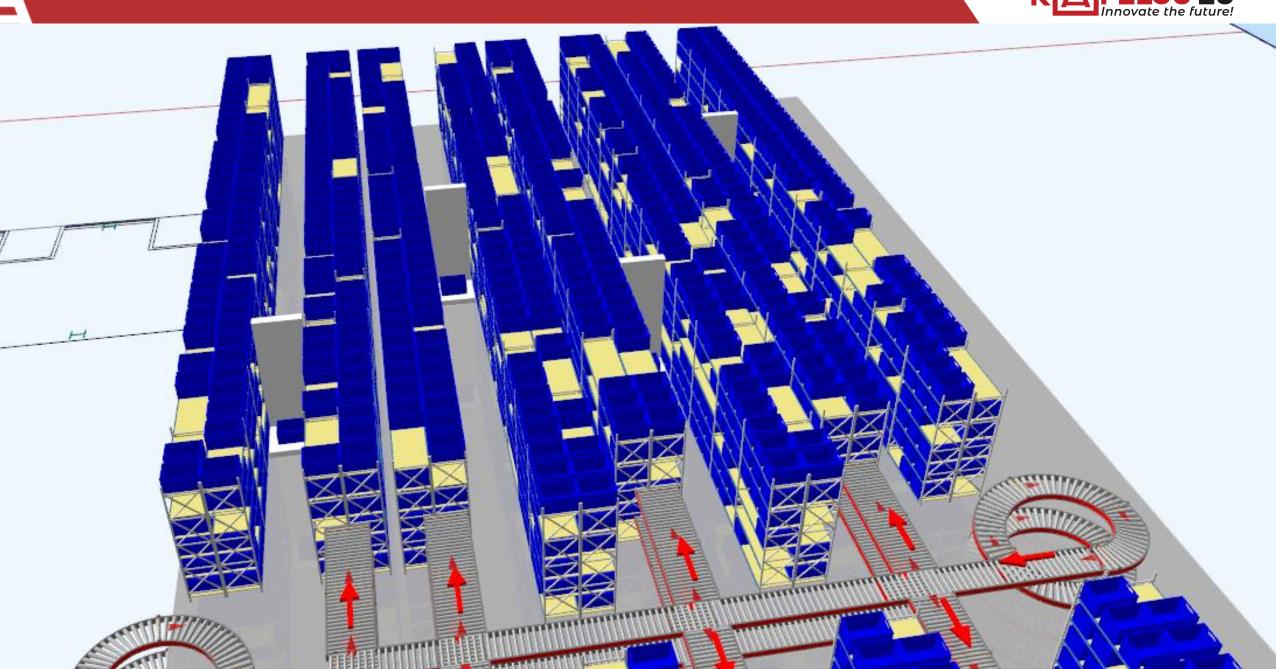
Compared to manual selection, automated solutions **increase efficiency by 2-3 times.**

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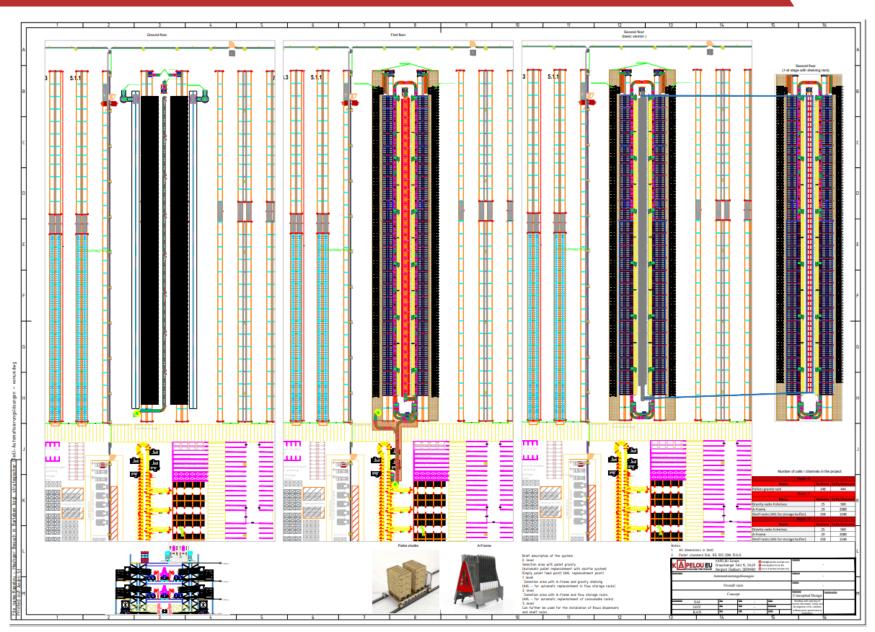




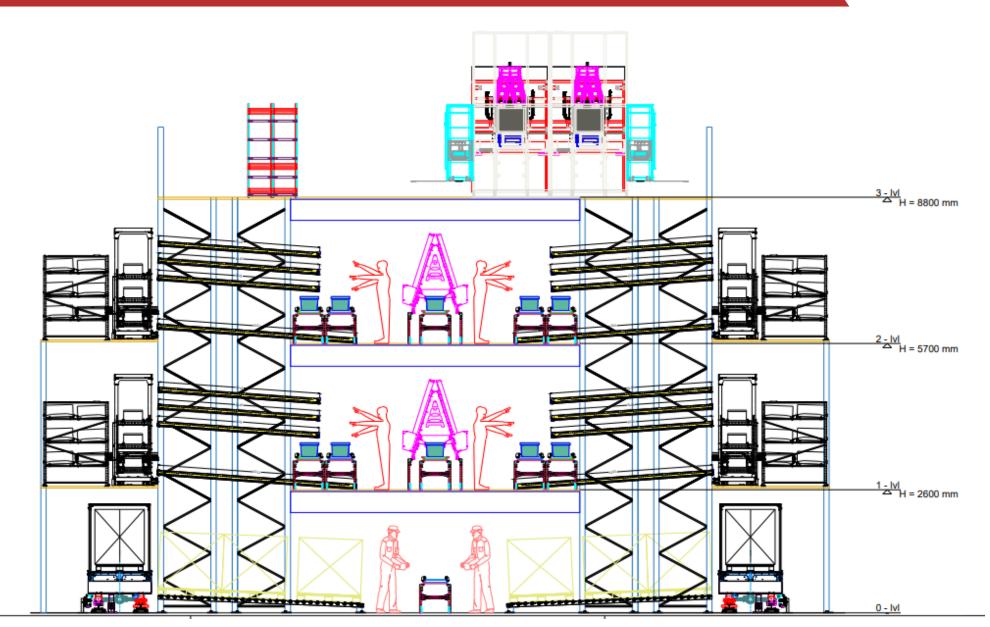




















BUFFER-SEQUENCER



PRELIMINARY PREPARATION AND SORTING OF THE WAVE

The system solves the problem of peak load of highly dynamic e-commerce warehouses, FMCG, manufactures, distributors.



HIGH PRODUCTIVITY AND ACCURACY

The uniqueness of the order storage system ensures a fully automated process of supplying trays with goods for order picking and eliminates errors in the picking process.

24/7

Works without vacations and lunches, overtime

600 trays/hour

Maximum productivity at 4 tiers

2-16 tiers

The number of tiers for forming order waves

1 time a year

Minimal maintenance

"Goods to people" (G2P)

Waves of orders are sequentially delivered to the sorting workplace

CROSS-BELT SORTER



Parameters

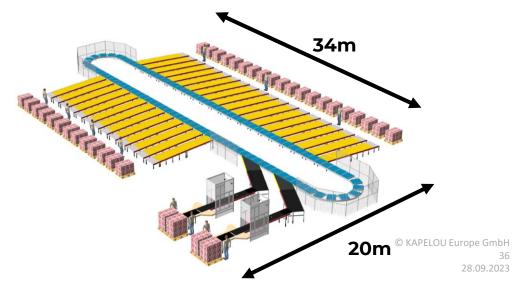
Capacity	> 8.000 parcels / hour
Destinations	33
Infeed Conveyor	Seperating Parcels
Volume Scanner	For Transportation Optimization
Weighing Module	For Verification
PreSorting	Start of System
Lifting Belt	Lifts Goods, so that they can easy be diverted out
Outfeeds	8 – Goods are pushed to here for 4 Destinations
Sorting Cages	32 – 4 Cages at each area

Features

- Ideal for high capacities. If ROI permits, it represents the most advantageous system for installation
- Capable of sorting sizes ranging from 50x50x5 mm to 900x700x500 mm
- Versatile enough to handle products of irregular shapes

Process

- Parcels will be infeed into sorting cycle
- The sorting belt runs at a constant speed
- Parcels get pushed out to the right outfeed



CONVEYOR SORTER

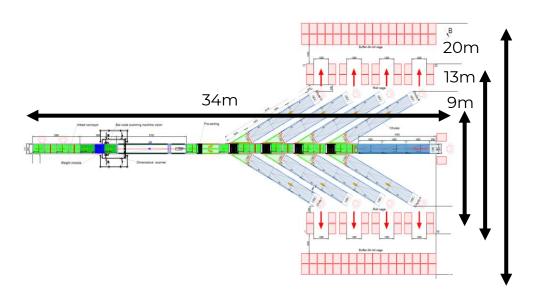


Features

- Conveyor Sorters are robust and cost efficient. The capacity is limited by hall space depending on infeed & outfeed.
- Dimensions 300x200x5 to 800x600xs, shape must be cubic.

Process

- Parcels put on Infeed
- Premodules scan weight & volume
- Barcode Scanner scans the Parcel
- Diverter System pushes good to right outfeed

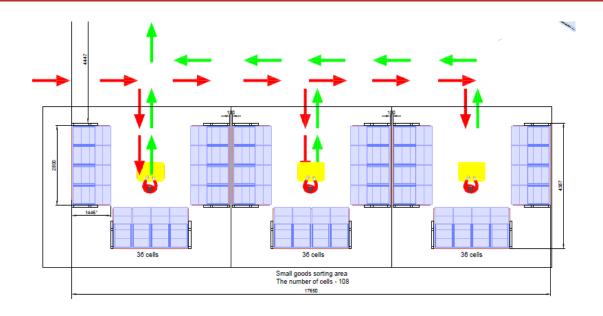


Parameters

Capacity	2.000 parcels / hour
Destinations	32
Infeed Conveyor	Seperating Parcels
Volume Scanner	For Transportation Optimization
Weighing Module	For Verification
PreSorting	Start of System
Lifting Belt	Lifts Goods, so that they can easy be diverted out
Outfeeds	8 – Goods are pushed to here for 4 Destinations
Sorting Cages	32 – 4 Cages at each area

PICK TO LIGHT & PUT TO LIGHT SYSTEM







PBL Systems are fast Sorting Options and support the manual process. They help reducing errors. Recommended for goods up to 2kg.

Process

- Scan the barcode
- Light appears at the spot where to place the good
- Put good into the right place
- Repeat process with next good

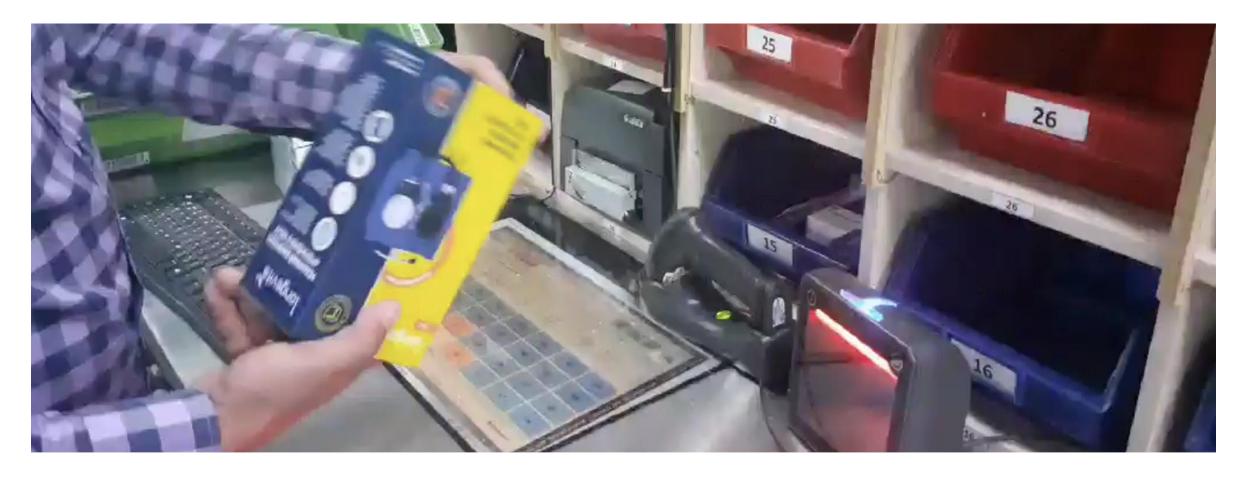
Parameters

Sorting system	Pick by Light / Put to Light
Capacity	Fast (depending on manual speed)
Main benefit	Reducing of failures in manual picking
Handheld scanner	Identification of barcode
Light system	Light flashing to identify storage area
Racking	Flowrack system

PICK TO LIGHT & PUT TO LIGHT SYSTEM



- Video of a client's System for Pharma Solutions
- A put-to-light system, but not a classical one





UNITHUB® 3-IN-1 SYSTEM



UnitHub® is a space-saving, automated storage system based on a 3D measuring system and dynamic shelving.



STORING products / orders



DISPENSING orders



SENDING parcels

Application example of the Unithub:



A package is placed in the **Unithub** by a member of staff



The customer receives a notification code on his smartphone for the collection of the parcel



The volume of the package is automatically measured in the **Unithub**



The customer can initiate the collection with the help of the notification code and an app



The parcel is stored in a corresponding, possibly dynamically adjusted, storage place



Unithub delivers the corresponding package to the customer





UNITHUB® 3-IN-1 SYSTEM



Parameters

Storage capacity, max.	400 trays
Size of the storage place (WxL)	600x400 mm
Height of the storage place	Dynamic
Measurement of parcel size and weight	Automatically
Parcel weight, max.	30 kg
Location	Indoor / Outdoor
Possible climate control levels	2-8°C/8-15°C/15-25°C
Type of goods	Cartons, plastic trays, containers, bottles and more

Main benefits of UnitHub

- 24/7 service
- Maximum storage capacity through dynamic storage locations
- Fully automated parcel delivery and acceptance
- Scalable system
- Can be used as a cold store
- State-of-the-art warehouse automation to increase customer satisfaction



UNITHUB® 3-IN-1 SYSTEM















A-FRAME



A-Frame is a warehouse picking system, that packs products from vertical channels into boxes, cartons or onto a conveyor belt that moves through the center of the system.



Parameters

Size of product, min.	45x40x60 mm
Size of product, max.	160x85x190 mm
Picking speed, max.	3.000 products / hour
Output system speed, max.	5 products / second
Product weight in vertical channel, max.	15 kg

24 channels, 12 on each side



CONTROL AND PACKING TABLES





CONVENIENCE AND ERGONOMICS

It is intended for the convenient organization of the workplace of an employee who is engaged in picking, sorting, packing and controlling goods.

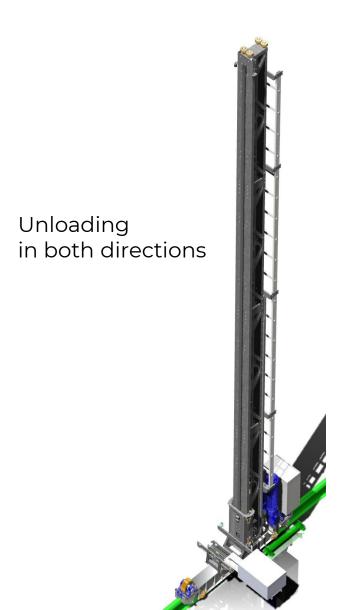
Suitable for working with any goods.

Using the table simplifies the work - you no longer have to lift and carry a heavy product, it is enough to pull it from the conveyor to the auxiliary corner of the table, and then perform the assigned tasks.

Features

- The table top is made of stainless steel and is therefore resistant to scratches, impacts and other mechanical damage
- The wooden pad protects the worker from contact with the cold metal surface
- Well-thought-out protection against cuts pasted protective tape in places where you can harm yourself
- Modularity and versatility allow you to assemble a table according to the parameters (height) of a specific employee.





A compact tool for moving boxes, which significantly increases the speed of loading and unloading cargo in the warehouse, eliminates delays and improves work efficiency.

Parameters

Dimension of robot (LxWxH)	600x400x200 mm
Box weight	50 kg
Number of boxes on the carriage	1 pc
Box lift height	6 m
Speed of movement along the horizon	2 m/s
Horizontal acceleration	2 m/s ²
Carriage lifting speed	2 m/s
Carriage acceleration	2 m/s ²
Crane mass	500 kg













GOOD TO PERSON (G2P)

A modern method of moving goods in the warehouse, which speeds up the process of placing and picking goods.

Benefits

- x3 to sorting efficiency
- 99.99% accuracy
- 1-2 years ROI
- A flexible solution
- Run up to 8 weeks

Parameters

Dimension of robot (LxWxH)	480x380x200 mm
Box weight, max.	5 kg
Speed, max.	1,5 m/s



PALLET CONVEYOR TECHNOLOGY

PALLET GRAVITY



MODULAR SYSTEM STRUCTURE:







Intermediate section



Unloading section for pallet jack



1500 kg

Maximum pallet weight

80 %

The ratio of utilization of the volume of the warehouse

More than 10 years

Term of service

15 pallets

Channel depth

FIFO

Principle of product picking

1 time a year

Min. maintenance

Each floor of the system can be assigned to a different product SKU or turnover

The modules are available for both tilt and non-tilt forklifts.





800х 1200 мм 1000x 1200 mm 1200x 1200 mm

PALLET GRAVITY



PROJECTS IN PROGRESS















Basic data

Width (W)	1.500 mm
Length (L)	2.400 mm
Column height (H)	Up to 15 m
Transportation height (TH)	Min. 400 mm
Base area	3 m^2

Performance indicators

Productivity	60 units / hour
Carriage lifting speed, max.	0,3 m/s
Acceleration, max	0,3 m/s
Load capacity, max.	1.200 kg
Mode of transportation	1 pallet / cycle

Options:

- Model for operation in the cold (-30C)
- Visualization system (HMI / SCADA)

Lifting devices:

- Roller conveyor
- Chain conveyor
- Lifting table
- Turntable





800х 1200 мм **1000х** 1200 мм **1200**х 1200 мм









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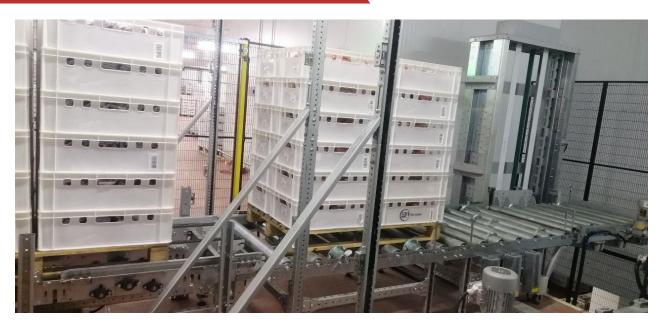


















PALLET LIFT



Basic data

Width (W)	1.500 mm
Length (L)	2.400 mm
Column height (H)	Up to 25 m
Transportation height (TH)	Min. 400 mm
Base area	3,45 m ²

Performance indicators

Productivity	100 units / hour
Carriage lifting speed, max.	0,3 m/s
Acceleration, max	0,3 m/s
Load capacity, max.	2.000 kg
Mode of transportation	1 pallet / cycle

Advantages:

- Minimum occupied area
- Feed/unload from all sides
- Suitable for vertical sorting
- Quiet
- Strong steel construction
- Standard equipment with cable safety device

Options:

- Model for operation in the cold (-30C)
- Visualization system (HMI / SCADA)

Lifting devices:

- Roller conveyor
- Chain conveyor
- Lifting table
- Turntable





800x 1200 мм 1200 мм

1000x

1200x 1200 мм



PALLET LIFT









PALLET CONVEYOR [ROLLER DRIVE]





INCREASED EFFICIENCY AND SECURITY:

- The Kapelou modular pallet conveyor is a reliable and durable system designed for the horizontal transport of various types of pallets, including euro pallets, industrial pallets and half pallets.
- The conveyor consists of a strong frame and galvanized rollers Ø76 mm, which are easy to maintain. The rollers are driven by a single drive roller, and the drive is closed for safety. The guides are installed separately on rollers, which ensures smooth and accurate transportation of pallets. This system is ideal for businesses looking for a quality and efficient pallet handling solution.

Options

- Model for cold storage (-30C)
- Visualization system (HMI / SCADA)
- End stop
- Application of ZPA

PLAY VIDEO

Basic data

Basic data	
Width (W)	1.050 / 1.250 / 1.450 mm
Length (L)	1.000 – 10.000 mm
Pitch of rollers (P)	175 mm
Transportation height (TH)	Min. 160 mm
Engine Power	0,18 / 0,25 / 0,37 / 0,55 kW

Performance indicators

Transport speed, max.	0,3 m/s
Acceleration	0,3 m/s
Load capacity, max.	1.500 kg
Productivity	Up to 300 units / hour

PALLET CONVEYOR [MOTOR-REDUCER]





INCREASED EFFICIENCY AND SECURITY:

- The modular pallet conveyor from Kapelou is a strong and reliable system designed for the horizontal transport of various types of pallets, including euro pallets, industrial pallets and half pallets.
- The galvanized conveyor consists of a stable frame and Ø89 mm rollers that are easy to maintain. The rollers are set in motion with the help of a motor-reducer, which ensures efficient and smooth transportation of pallets. This system can operate in the mode of a pass-through conveyor or in the mode of an accumulation conveyor, when only those areas that transport pallets are active at any time. This feature increases performance and reduces power consumption.

Options

- Model for cold storage (-30C)
- Visualization system (HMI / SCADA)
- End stop
- Application of ZPA

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Transport speed, max.	0,3 m/s		
Acceleration	0,3 m/s		
Load capacity, max.	1.500 kg		
Productivity	Up to 900 units / hour		

Basic data

Width (W)	1.050 / 1.250 / 1.450 mm			
Length (L)	1.000 – 10.000 mm			
Pitch of rollers (P)	200 mm			
Transportation height (TH)	Min. 160 mm			
Engine Power	0,18 / 0,25 / 0,37 / 0,55 kW			

CHAIN CONVEYOR FOR PALLETS



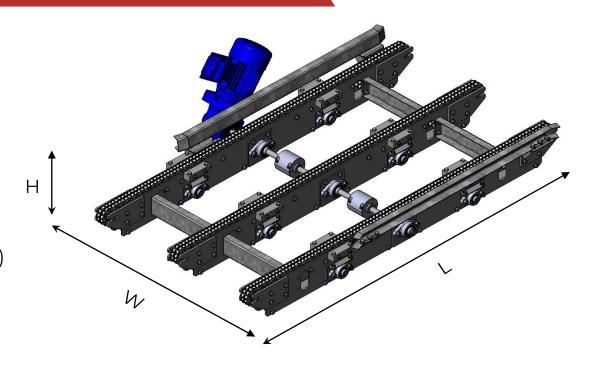
The drive direct chain conveyor is designed for automatic transport of pallets on the wide side. It consists of 2 integrated parallel chains connected by a motor-reducer.

Lifting devices:

- Roller conveyor
- Chain conveyor
- Lifting table
- Turntable

Options:

- Model for cold storage (-30C)
- Visualization system (HMI / SCADA)



Performance indicators

Productivity	60 units/hour
Transportation speed, max.	0,3 m/s
Load capacity, max.	1.500 kg
Engine power	0,18 - 0,55 kW

Basic data

Width (W)	760 mm
Length (L)	1.475 mm
Height (H)	145 mm
Transportation height (TH)	Min. 400 mm

LOAD/UNLOAD MODULE















800х 1200 мм 1000x 1200 мм **1200**х 1200 мм This module is used to load or unload the conveyor with pallets. For example, pallets can be placed on a conveyor or removed from it using a forklift.

It is appropriate to use the module in such cases:

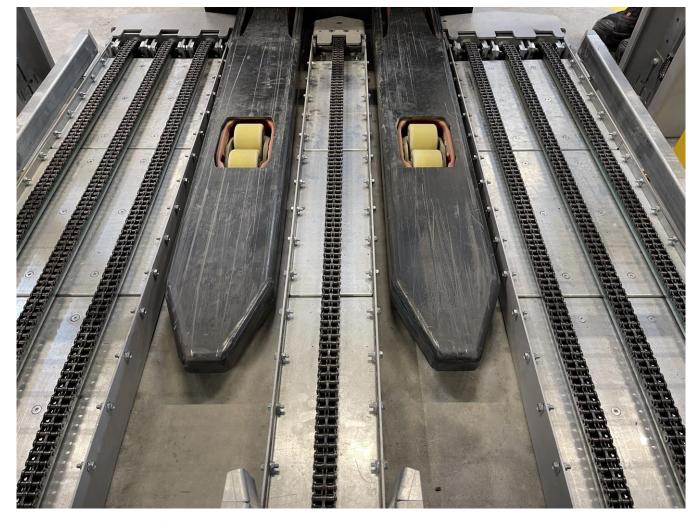
- 1. If pallets are unloaded from trucks in the shipping area of the warehouse and need to be placed on a conveyor
- 2. When pallets need to be quickly removed in the final part of the conveyor system of the system for further loading.

Performance indicators

Transport speed, max.	0,3 m/s			
Load capacity, max.	1.500 kg			
Angle of inclination	2°			
Engine power	0,18 – 0,55 kW			

LOAD/UNLOAD MODULE











800х 1200 мм

1000x 1200 мм **1200**х 1200 мм

LOAD/UNLOAD MODULE



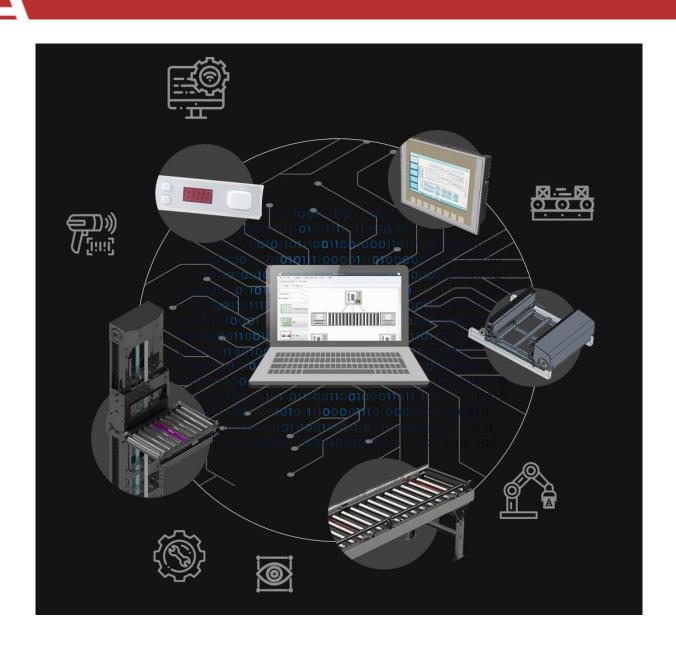




SOFTWARE

SOFTWARE





PLUG AND PLAY system - it is easy to start and manage the modules of the automated system.

- Flexible configuration
- Equipment of all types
- All products in one application
- Cross-platform
- Flexible configuration



SERVICE & MAINTENANCE

CUSTOMER SERVICE AND SUPPORT



KAPELOU supports its customers throughout the life cycle of the automated system.

A service that gives peace of mind.



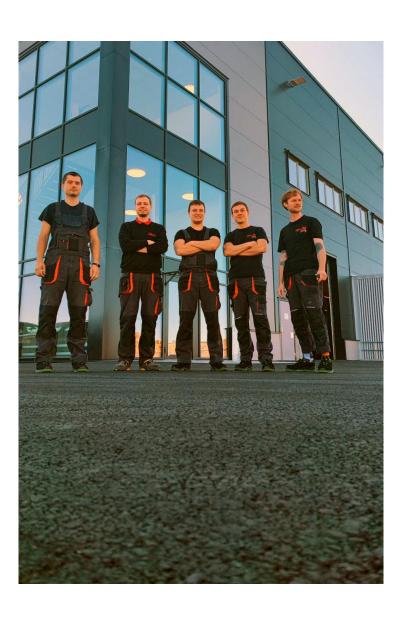
remote connection (VPN



instructions on working with automated system



24/7 technical support



Spare parts & repairs

- Spare and wearing parts from one source
- Individual packages of spare parts
- Reconstruction of equipment and modules

Service & installation

- Preventive visits and scheduled maintenance
- On-site repair and support
- Service contracts
- Installation / dismantling
- Relocation of warehouse

Modernization & training

- Modernization and updating of systems and modules
- Trainings for operators and service personnel
- Consulting on issues of modernization and renewal



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