



ORADIS

OPTIMAL RACKING AND
DISTRIBUTION SYSTEMS

HELPING THE AUTOMATION OF ENTERPRISE LOGISTICS SYSTEM

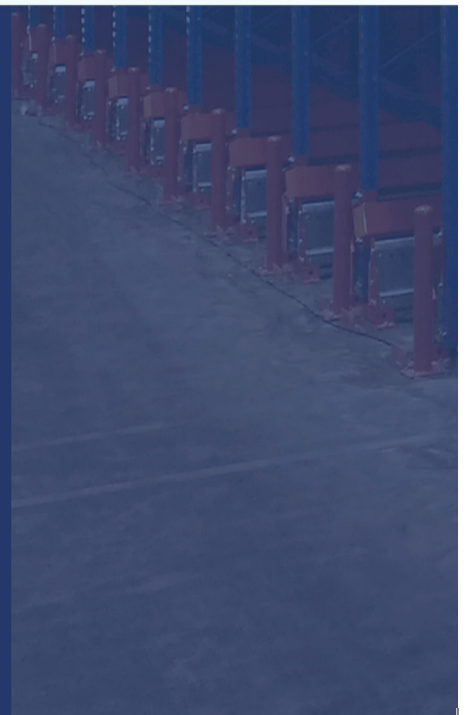


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AUTOMATIC STORAGE SYSTEMS

INTRODUCTION

WITH THE LAND AND LABOR COST INCREASING, AS WELL AS A HIGHER PRODUCTIVITY RATE, MORE COMPANIES ARE SHOWING INTEREST IN GAINING AUTOMATIC STORAGE SYSTEMS. DUE TO TECHNOLOGY AND COMPUTING DEVELOPMENT, A WAREHOUSE CAN REALIZE OPERATIONS WITHOUT PEOPLE. AN AUTOMATIC STORAGE SYSTEM SAVES A LOT OF COMPLICATED HUMAN LABOR WORKS AND OFFERS FASTER AND MORE PRECISE CARGO TRANSPORTATION AND INFORMATION TRANSMISSION.

ADVANTAGES

- INCREASE SPACE USAGE RATE.
- POSSIBLE AVOIDANCE OF BUYING NEW LAND FOR WAREHOUSE USE.
- EASIER MANAGEMENT AND CONTROL OF STOCK.
- FAST STORAGE AND RETRIEVAL OF GOODS.
- LABOR COST SAVINGS.



PRODUCTS

SHUTTLE CAR

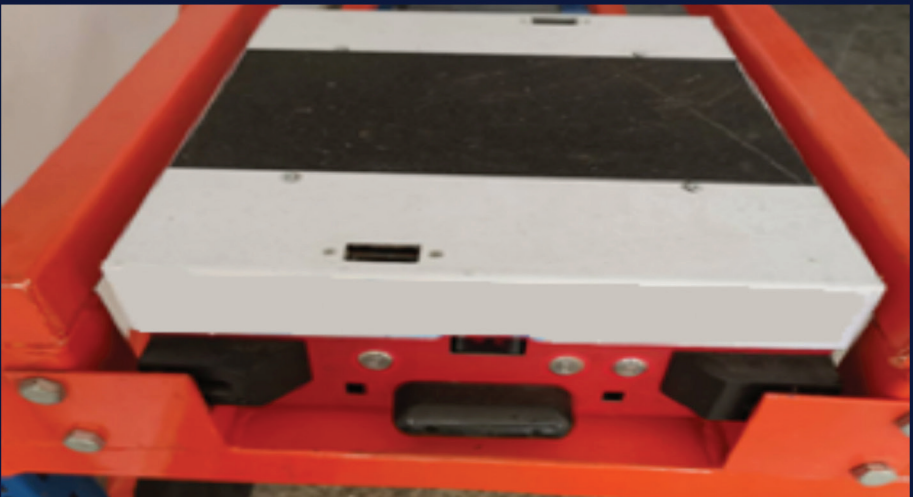
NORMAL TEMPERATURE SHUTTLE



LOW TEMPERATURE SHUTTLE



MINI SHUTTLE (PATENTED PRODUCT)



THIS DEVICE RUNS ON RAILS INSIDE THE RACK TUNNELS REPLACING A FORKLIFT JOB WHEN GETTING INSIDE A DRIVE-IN RACK SYSTEM. IT REDUCES OPERATING TIMES, AVOIDS ACCIDENT RISKS AND SAVES ILLUMINATION COSTS AS THERE'S NO NEED OF GOOD VISIBILITY INSIDE THE RACKS.

THE SHUTTLE CAR FOLLOWS THE INSTRUCTIONS SENT BY AN OPERATOR USING A DEVICE WITH WI-FI CONNECTION OR EITHER CAN BE FULLY AUTOMATED BY USING A STACKING CRANE OR A MOTHER SHUTTLE WHICH CARRY THE SHUTTLE CAR TO THE DESIRED TUNNEL IN THE RACK SYSTEM, ALL THIS CONTROLLED BY A WMS (WAREHOUSE MANAGEMENT SYSTEM) SOFTWARE.

SPECIFICATIONS AND PARAMETERS*

**PALLET SIZE CUSTOMIZABLE (MM, IN)	400 X 350 WIDTH X DEPTH 16 X 14	TO	3000 X 4000 WIDTH X DEPTH 118 X 157.5
***RUNNING MAX SPEED (M/MIN, FT/MIN)	50~60 DRY LOAD 164~197		40~50 FULL LOAD 131~164
***LOAD CAPACITY (KG, LB)	1500 (3307) (STANDARD) 3000 (6614) (HEAVY DUTY)		
POWER SUPPLY	RECHARGEABLE LITHIUM BATTERY, MORE THAN 8 HOURS DURATION (MANUAL OR AUTOMATIC RECHARGING)		
CONTROLLING MODES	MANUAL, SEMI-AUTOMATIC, AUTOMATIC		
OTHER INFORMATION	<ul style="list-style-type: none"> ● LIFT HEIGHT: 45MM (1.77 IN) ● WORKING TEMPERATURE: <ul style="list-style-type: none"> > 0 °C ~ 40 °C (32 °F ~ 104 °F) STANDARD VERSION > -20 °C ~ 0 °C (-4 °F ~ 32 °F) LOW TEMPERATURE VERSION > -30 °C ~ -20 °C (-22 °F ~ -4 °F) ULTRA-LOW TEMPERATURE VERSION 		

* SPECIALIZED PRODUCTS CAN BE MADE EVEN THOUGH LIMIT IS OUT THIS TABLE PARAMETERS.

** SHOULD ASK TECHNICAL FEASIBILITY CONFIRMATION WITH ENGINEERING DEPARTMENT

*** ACCORDING TO PRODUCT DIMENSIONS FOR PALLETS AROUND 1000X1200MM

STACKER CRANES

STACKER CRANES TRAVEL ALONG THE WAREHOUSE AUTOMATICALLY TO PICK-UP, STORE OR DELIVER THE NEEDED MATERIAL. A MANAGEMENT SOFTWARE SYSTEM IS IN CHARGE OF THE COORDINATION OF THIS STACKER CRANES.

STACKERS ARE EASILY ADAPTED TO THE NEEDS OF A WAREHOUSE SUCH AS LOAD CAPACITY, BUILDING HEIGHT, DIMENSIONS AND FLEXIBILITY IN THE OPERATION PROCESS. DEPENDING ON NEEDS, STACKERS CAN HAVE DIFFERENT PICK-UP ACCESORIES OR SHUTTLES.

SINGLE COLUMN STACKER:
FOR PALLETS UP TO 1M (3.3 FT)
HEIGHT AND 1 TON (2205 LB) WEIGHT.



DOUBLE COLUMN STACKER:
FOR PALLETS UP TO 6 TON (13228 LB).



BIN STACKER (SINGLE OR DOUBLE COLUMN)



PLATE STACKER (FOR BIG DIMENSION PALLETS)



TRACK CHANGING STACKER (FIXED RAIL)



FOUR DIRECTIONS STACK CRANE (AGV, NO FLOOR RAIL NEEDED, UP TO 2 TON (4410 LB) PALLETS)

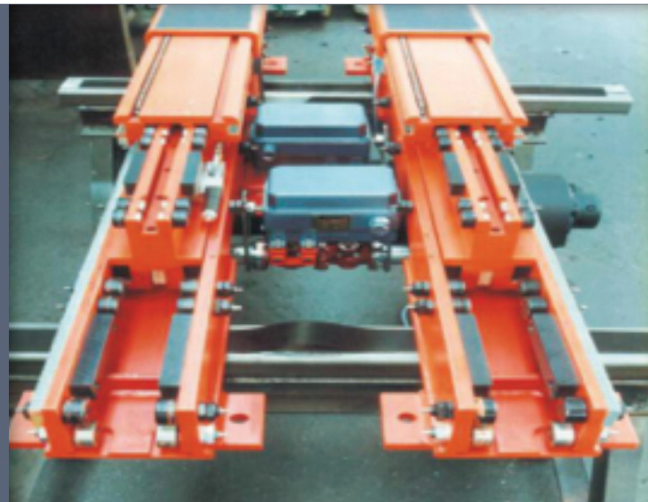


STACKER PICK-UP ACCESSORIES

**SINGLE EXTENSION FORK:
FOR SINGLE DEPTH SYSTEMS**



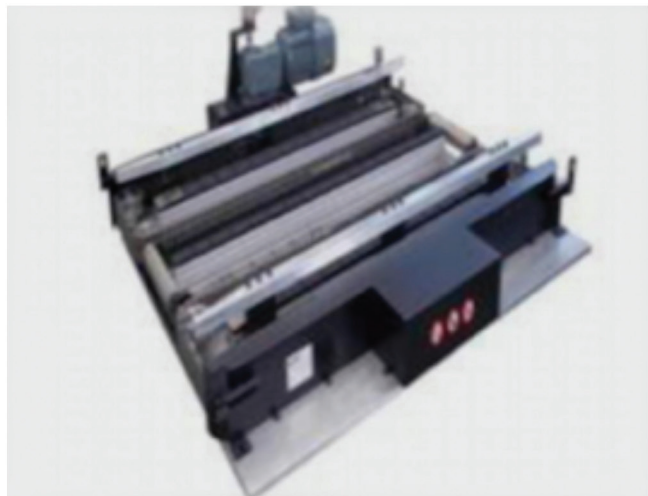
**DOUBLE EXTENSION FORK:
FOR DOUBLE DEPTH SYSTEMS**



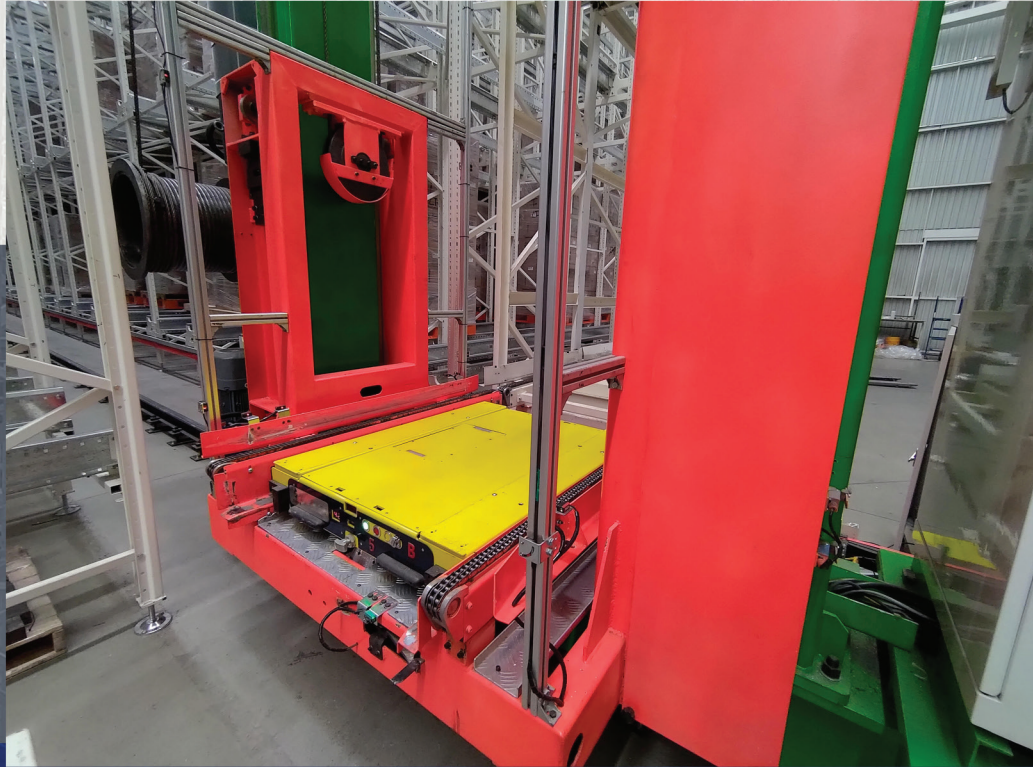
HOLDING FORK: FOR ROLLS



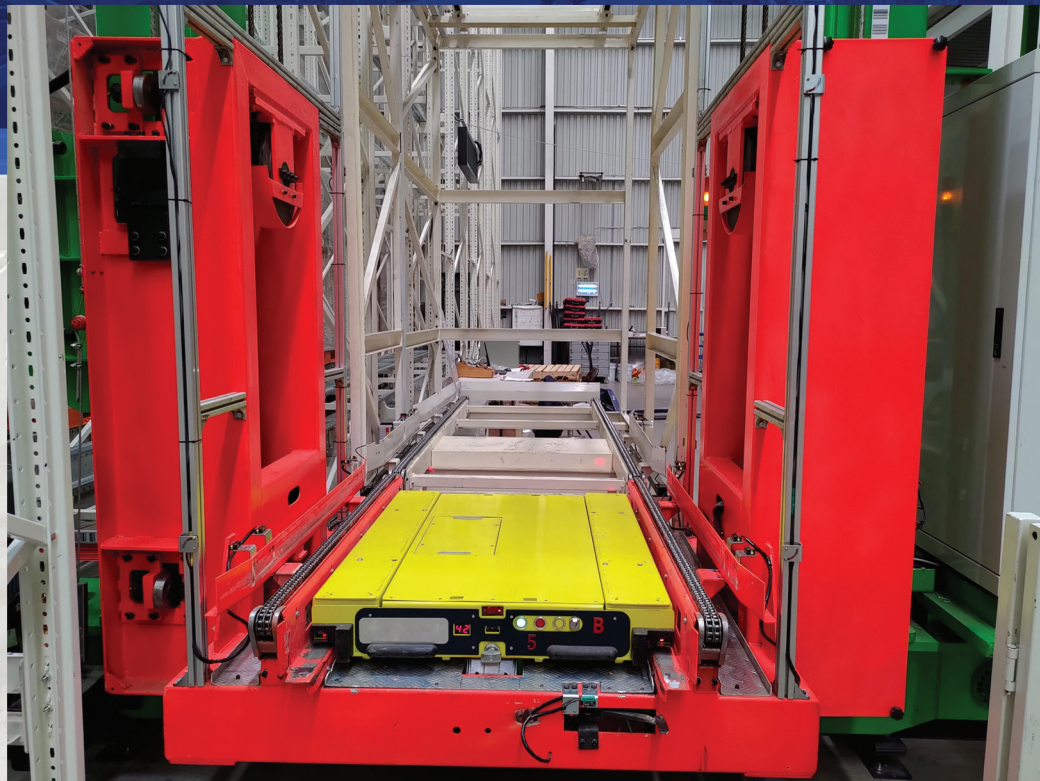
**PUSH AND PULL FORK CLIP:
FOR PRODUCTS WITHOUT PALLETS
(LESS THAN 50KG (110 LB))**



STACKER+SHUTTLE CAR



STACKER+SHUTTLE CAR



MOTHER SHUTTLE



MOTHER SHUTTLE TRAVELS ALONG THE WAREHOUSE, IT CARRIES SHUTTLE CAR SO IT CAN PICK-UP, STORE OR DELIVER THE NEEDED MATERIAL. CONVENIENT FOR BIG WAREHOUSES AS IT OFFERS FASTER STORAGE THAN STACKER SYSTEMS. A MANAGEMENT SOFTWARE SYSTEM IS IN CHARGE OF THE CONTROL.

SPECIFICATIONS AND PARAMETERS*

**PALLET SIZE CUSTOMIZABLE (MM, IN)	400 X 350 WIDTH X DEPTH 16 X 14	TO TO	3000 X 4000 WIDTH X DEPTH 118 X 157.5
***RUNNING MAX SPEED (M/MIN, FT/MIN)	60 DRY LOAD 197		54 FULL LOAD 177
***LOAD CAPACITY (KG, LB)	1500 (3307) (STANDARD) 3000 (6614) (HEAVY DUTY)		
POWER SUPPLY	48V RECHARGEABLE BATTERY, OR SLIDING CONTACT CABLE		
CONTROLLING MODES	MANUAL, SEMI-AUTOMATIC, AUTOMATIC		
OTHER INFORMATION	<ul style="list-style-type: none"> • CHAIN DELIVERY SPEED (M/MIN): 12, 40 FT/MIN • COMMUNICATION: WIFI • WORKING TEMPERATURE: <ul style="list-style-type: none"> > 0 °C ~ 40 °C (32 °F ~ 104 °F) STANDARD VERSION > -20 °C ~ 0°C (-4 °F ~ 32 °F) LOW TEMPERATURE VERSION > -30 °C ~ -20°C (-22 °F ~ -4 °F) ULTRA-LOW TEMPERATURE VERSION • RUNNING AND TRANSMISSION MOTOR: <ul style="list-style-type: none"> > AC MOTOR > 48V DC MOTOR RECHARGEABLE BATTERIES • POSITIONING TYPE: BARCODE • BATTERY AUTOMATIC RECHARGING 		

* SPECIALIZED PRODUCTS CAN BE MADE EVEN THOUGH LIMIT IS OUT THIS TABLE PARAMETERS.

**SHOULD ASK TECHNICAL FEASIBILITY CONFIRMATION WITH ENGINEERING DEPARTMENT

***ACCORDING TO PRODUCT DIMENSIONS FOR PALLETS AROUND 1000X1200MM

AGV (AUTOMATED GUIDED VEHICLE)

AGV (AUTOMATIC GUIDED VEHICLE), IS EQUIPPED WITH A MAGNETIC OR OPTICAL GUIDING DEVICE TO RUN WITH A DESIGNED ROUTINE, IT HAS SAFETY PROTECTION SWITCHES AND SENSORS, AND DIFFERENT TRANSPORTATION FUNCTIONS. IT DOESN'T REQUIRE A DRIVER. NORMALLY ITS RUNNING ROUTINE IS CONTROLLED BY COMPUTER, BASED ON ELECTROMAGNETIC PATH-FOLLOWING SYSTEM OR QR CODE. MAGNETIC PATH OR QR CODE ARE INSTALLED ON THE GROUND ACCORDING TO THE NEEDS.

COMPARED TO OTHER TYPES OF TRANSPORTATION SYSTEM, IT DOESN'T REQUIRE INSTALLATION OF MECHANICAL FIXED RAILS. IT CAN SHOW A LOT OF EFFICIENCY AND FLEXIBILITY.



**SPECIFICATIONS
AND PARAMETERS***

**PALLET SIZE CUSTOMIZABLE (MM, IN)	500 X 500 TO 5000 X 2500 WIDTH X DEPTH TO WIDTH X DEPTH 20 X 20 TO 197 X 98.5
***RUNNING MAX SPEED (M/MIN, FT/MIN)	<ul style="list-style-type: none"> ◆ 10-45 (SPEED IS ADJUSTABLE AS REQUESTED, SUGGESTED LINEAL SPEED IS 35, SUGGESTED TURNING SPEED IS 20) ◆ 32.80-148 (SPEED IS ADJUSTABLE AS REQUESTED, SUGGESTED LINEAL SPEED IS 115, SUGGESTED TURNING SPEED IS 65)
***LOAD CAPACITY (KG, LB)	5,000 (11,023)
POWER SUPPLY	48V RECHARGEABLE BATTERY
CONTROLLING MODES	MANUAL, SEMI-AUTOMATIC, AUTOMATIC
OTHER INFORMATION	<ul style="list-style-type: none"> ● CARGO LOADING ON AGV: <ul style="list-style-type: none"> > CHAINS > SLIDING ROLLERS > MANUALLY ● GUIDING MODE: <ul style="list-style-type: none"> > MAGNETIC PATH > QR CODE ● COMMUNICATION: WIFI ● DRIVING CONFIGURATION <ul style="list-style-type: none"> > ROTATING WHEELS VERSION > FIXED WHEELS VERSION ● MINIMUM TURNING RADIUM: <ul style="list-style-type: none"> 0 ° FOR ROTATING WHEELS VERSION ● POSITIONING TYPE: <ul style="list-style-type: none"> > RFID (MAGNETIC PATH) > QR CODE ● STOP PRECISION: ± 5MM ● BATTERY DURATION <ul style="list-style-type: none"> > ≥10H, RECHARGEABLE TIMES ≥600 ● AUTOMATIC RECHARGING ● POWER DISPLAY ALARM ● INTERFACE SCREEN: 12864 LED ● SAFETY: OBSTACLE CONTACT BUFFER+ SENSOR+EMERGENCY SWITCHES ● WORKING TEMPERATURE: <ul style="list-style-type: none"> > 0°C ~ 40°C (32 °F ~ 104 °F) (STANDARD VERSION) > -20°C ~ 0°C (-4 °F ~ 32 °F) (LOW TEMPERATURE VERSION) > -30°C ~ -20°C (-22 °F ~ -4 °F) (ULTRA-LOW TEMPERATURE VERSION) ● RUNNING AND TRANSMISSION MOTOR: <ul style="list-style-type: none"> > 48V DC MOTOR RECHARGEABLE BATTERIES

* SPECIALIZED PRODUCTS CAN BE MADE EVEN THOUGH LIMIT IS OUT THIS TABLE PARAMETERS.

**SHOULD ASK TECHNICAL FEASIBILITY CONFIRMATION WITH ENGINEERING DEPARTMENT.

***ACCORDING TO A 1300MM WIDTH X 1800MM LENGTH AND 1200MM HEIGHT AGV.

RGV (RAIL GUIDED VEHICLE)



RGV (RAIL GUIDED VEHICLE) OR RAIL SHUTTLE CAR, CAN BE PROGRAMMED TO TAKE OUT, TRANSPORT AND PLACE LIGHT OR HUGE WEIGHT CARGO (DEPENDING ON RGV SIZE). WITH RFID AND BAR CODE IDENTIFICATION TECHNOLOGY IT CAN IDENTIFY PRODUCTS AUTOMATICALLY TO STORE THEM IN AND OUT. RGV CAN FASTLY CONNECT DIFFERENT TRANSPORTATION STATIONS. IT IS CONTROLLED BY SOFTWARE AS WELL AS MANUALLY WHEN NECESSARY.

SPECIFICATIONS AND PARAMETERS*

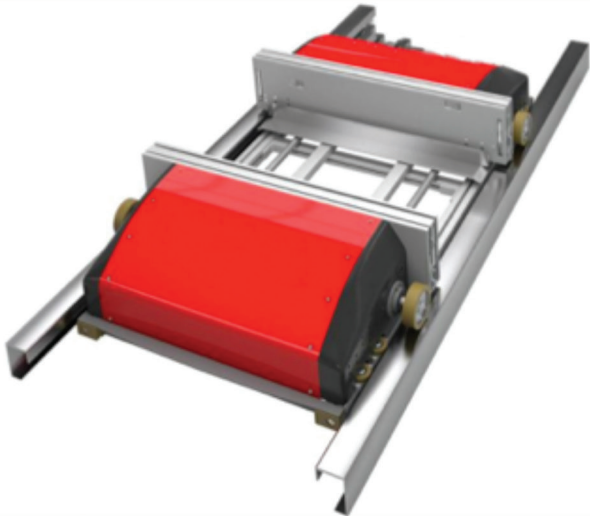
**PALLET SIZE CUSTOMIZABLE (MM, IN)	200 X 200 TO 5000 X 5000 WIDTH X DEPTH 8 X 8 TO 197 X 197
***RUNNING MAX SPEED (M/MIN, FT/MIN)	120 DRY LOAD 108 FULL LOAD 394 354
LOAD CAPACITY (KG, LB)	1500*** (3307) (STANDARD) 3000*** (6614) (HEAVY DUTY) MORE THAN 10,000 (22,064) ON BIG RGV'S
POWER SUPPLY	48V RECHARGEABLE BATTERY OR SLIDING CONTACT CABLE
CONTROLLING MODES	MANUAL, SEMI-AUTOMATIC, AUTOMATIC
OTHER INFORMATION	<ul style="list-style-type: none"> • COMMUNICATION: WIFI • CHAIN DELIVERY SPEED (M/MIN): 12 • POSITION TYPE: <ul style="list-style-type: none"> > RFID > QR CODE • WORKING TEMPERATURE: <ul style="list-style-type: none"> > 0 °C ~ 40 °C (32 °F ~ 104 °F) STANDARD VERSION > -20 °C ~ 0 °C (-4 °F ~ 32 °F) LOW TEMPERATURE VERSION > -30 °C ~ -20 °C (-22 °F ~ -4 °F) ULTRA-LOW TEMPERATURE VERSION • RUNNING AND TRANSMISSION MOTOR: <ul style="list-style-type: none"> > 48V DC MOTOR RECHARGEABLE BATTERIES > AC MOTOR

* SPECIALIZED PRODUCTS CAN BE MADE EVEN THOUGH LIMIT IS OUT THIS TABLE PARAMETERS.

**SHOULD ASK TECHNICAL FEASIBILITY CONFIRMATION WITH ENGINEERING DEPARTMENT

***ACCORDING TO PRODUCT DIMENSIONS FOR PALLETS AROUND 1000X1200MM

MULTI-LAYER SHUTTLE



MULTI-LAYER SHUTTLE CAR CAN QUICKLY STORE IN AND OUT LIGHT BOXED CARGO IN THE WAREHOUSE BY RUNNING ALONG THE RAILS IN THE RACKS.

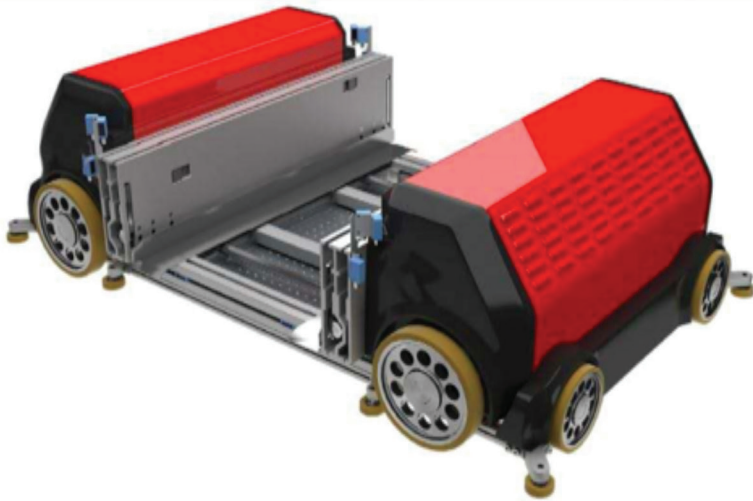
SPECIFICATIONS AND PARAMETERS*

** PALLET SIZE CUSTOMIZABLE (MM, IN)	300 X 400 WIDTH X DEPTH 12 X 16	TO	500 X 600 WIDTH X DEPTH 20 X 23.5
RUNNING MAX SPEED (M/MIN, FT/MIN)	120 DRY LOAD 394		120 FULL LOAD 394
** LOAD CAPACITY (KG, LB) DEPENDING ON SHUTTLE SIZE	50 (110)		
POWER SUPPLY	48V RECHARGEABLE BATTERY OR SLIDING CONTACT CABLE		
CONTROLLING MODES	MANUAL, SEMI-AUTOMATIC, AUTOMATIC		
OTHER INFORMATION	<ul style="list-style-type: none"> ● COMMUNICATION: WIFI ● POSITION TYPE: BARCODE ● WORKING TEMPERATURE: <ul style="list-style-type: none"> > 0 °C ~ 40 °C (32 °F ~ 104 °F) STANDARD VERSION > -20 °C ~ 0 °C (-4 °F ~ 32 °F) LOW TEMPERATURE VERSION > -30 °C ~ -20 °C (-22 °F ~ -4 °F) ULTRA-LOW TEMPERATURE VERSION ● RUNNING AND TRANSMISSION MOTOR: <ul style="list-style-type: none"> > 48V DC MOTOR RECHARGEABLE BATTERIES > AC MOTOR ● MAXIMUM ACCELERATION: 2 M/S² (6.56 FT/S²) 		

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**SHOULD ASK TECHNICAL FEASIBILITY CONFIRMATION WITH ENGINEERING DEPARTMENT

LIGHT FOUR-WAY SHUTTLE



THIS 4 DIRECTIONS FAST LIGHT CARGO SHUTTLE HAS THE BENEFITS OF THE MULTI-LAYER SHUTTLE PLUS MUCH MORE FLEXIBILITY BECAUSE IT CAN CHANGE DIRECTION TO ENTER INTO ANY TUNNEL. DEPENDING ON THE NEEDS OF STORAGE, MORE SHUTTLES CAN BE ADDED TO THE SYSTEM TO WORK AS A TEAM IN ORDER TO SOLVE THE CAPACITY PROBLEM IN PEAK TIME. IN CASE A SHUTTLE CAR HAD ANY PROBLEM, THE SYSTEM CAN ARRANGE ANOTHER ONE TO REPLACE ITS FUNCTIONS.

SPECIFICATIONS AND PARAMETERS*

**PALLET SIZE CUSTOMIZABLE (MM, IN)	300 X 400 TO 500 X 600 WIDTH X DEPTH TO WIDTH X DEPTH 12 X 16 TO 20 X 23.5
RUNNING MAX SPEED (M/MIN, FT/MIN)	120 DRY LOAD FULL LOAD 394 394
**LOAD CAPACITY (KG, LB) DEPENDING ON SHUTTLE SIZE	50 (110)
POWER SUPPLY	48V RECHARGEABLE BATTERY OR SLIDING CONTACT CABLE
CONTROLLING MODES	MANUAL, SEMI-AUTOMATIC, AUTOMATIC
OTHER INFORMATION	<ul style="list-style-type: none"> ● COMMUNICATION: WIFI ● POSITION TYPE: BARCODE ● WORKING TEMPERATURE: <ul style="list-style-type: none"> > 0 °C ~ 40 °C (32 °F ~ 104 °F) STANDARD VERSION > -20 °C ~ 0°C (-4 °F ~ 32 °F) LOW TEMPERATURE VERSION > -30 °C ~ -20°C (-22 °F ~ -4 °F) ULTRA-LOW TEMPERATURE VERSION ● RUNNING AND TRANSMISSION MOTOR: <ul style="list-style-type: none"> > 48V DC MOTOR RECHARGEABLE BATTERIES > AC MOTOR ● MAXIMUM ACCELERATION: 2 M/S² (6.56 FT/S²)

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**SHOULD ASK TECHNICAL FEASIBILITY CONFIRMATION WITH ENGINEERING DEPARTMENT

FOUR-WAY SHUTTLE



THIS FOUR-WAY SHUTTLE HAS THE BENEFITS OF A SHUTTLE CAR PLUS MUCH MORE FLEXIBILITY BECAUSE IT CAN CHANGE DIRECTION TO ENTER INTO ANY WORKING TUNNEL. DEPENDING ON THE NEEDS OF STORAGE, MORE SHUTTLES CAN BE ADDED TO THE SYSTEM TO WORK AS A TEAM IN ORDER TO SOLVE THE CAPACITY PROBLEM IN PEAK TIME. IN CASE A SHUTTLE CAR HAD ANY PROBLEM, THE SYSTEM CAN ARRANGE ANOTHER ONE TO REPLACE ITS FUNCTIONS.

SPECIFICATIONS AND PARAMETERS*

**PALLET SIZE CUSTOMIZABLE (MM, IN)	1000 X 1200 TO 3000 X 4000 WIDTH X DEPTH 39.5 X 47.5 TO 118 X 157.5
***RUNNING MAX SPEED (M/MIN, FT/MIN)	60 DRY LOAD 54 FULL LOAD 197 177
***LOAD CAPACITY (KG, LB) DEPENDING ON SHUTTLE SIZE	1500 (3307) (STANDARD) 3000 (6614) (HEAVY DUTY)
POWER SUPPLY	48V RECHARGEABLE BATTERY OR SLIDING CONTACT CABLE
CONTROLLING MODES	MANUAL, SEMI-AUTOMATIC, AUTOMATIC
OTHER INFORMATION	<ul style="list-style-type: none"> • COMMUNICATION: WIFI • CHAIN DELIVERY SPEED (M/MIN): 12 (40 FT/MIN) • WORKING TEMPERATURE: <ul style="list-style-type: none"> > 0 °C ~ 40 °C (32 °F ~ 104 °F) STANDARD VERSION > -20 °C ~ 0°C (-4 °F ~ 32 °F) LOW TEMPERATURE VERSION > -30 °C ~ -20°C (-22 °F ~ -4 °F) ULTRA-LOW TEMPERATURE VERSION • RUNNING AND TRANSMISSION MOTOR: <ul style="list-style-type: none"> > 48V DC MOTOR RECHARGEABLE BATTERIES > AC MOTOR • BATTERY AUTOMATIC RECHARGING • POSITIONING TYPE: QR CODE

* SPECIALIZED PRODUCTS CAN BE MADE EVEN THOUGH LIMIT IS OUT THIS TABLE PARAMETERS.

**SHOULD ASK TECHNICAL FEASIBILITY CONFIRMATION WITH ENGINEERING DEPARTMENT

***ACCORDING TO PRODUCT DIMENSIONS FOR PALLETS AROUND 1000X1200MM

CUBIC CAR PARKING

CUBIC CAR PARKING SYSTEM AS ONE OF THE CAR PARKING SOLUTIONS, FEATURES A CONVENIENT IN AND OUT STORAGING BECAUSE OF ITS EFFICIENCY, SPACE OPTIMIZATION AND EASY MAINTENANCE. WITH LESS GROUND OCCUPATION, LOW CONSTRUCTION COST AND NO JAM PROBLEM, IS A GOOD SOLUTION FOR CAR PARKING PROBLEM.



ELEVATOR

A VERTICAL ELEVATOR CAN MOVE MATERIAL CONTINUOUSLY CONNECTING ALL THE FLOORS AT A WAREHOUSE, MAKING THE OPERATION FASTER AND SAFER THAN WITH TALL FORKLIFTS OPERATION.



CHAIN CONVEYOR

WITH A LARGE AND EFFICIENT CONVEYING CAPACITY, LARGE AMOUNTS OF MATERIALS CAN BE TRANSPORTED IN A SMALL PLACE. ITS ALLOY STEEL CHAIN PROCESSED BY ADVANCED HEAT TREATMENT MAKES THE CHAIN HAVE A 2-3 YEARS LIFE (DEPENDING ON THE TRANSPORTED MATERIALS). WHEN LIFE IS OVER IT CAN BE CHANGED EASILY.

THE PROCESS LAYOUT IS FLEXIBLE AND CAN BE ARRANGED ON ELEVATED GROUND. IT CAN BE INSTALLED HORIZONTALLY OR WITH A CLIMBING INCLINATION ($\leq 15^\circ$),

IT IS WIDELY USED IN THE AUTOMATIC DELIVERY AND DISTRIBUTION OF MANY GOODS SUCH AS PACKED FOOD, CANS, PHARMACEUTICALS, BEVERAGES, COSMETICS AND DETERGENTS, PAPER PRODUCTS, CONDIMENTS, DAIRY AND TOBACCO, ETC.



ROLLER CONVEYOR

ROLLER CONVEYORS CAN HAVE FLEXIBLE LAYOUT CONFIGURATIONS, AND VARIABLE PATHS WHICH CAN CHANGE DIRECTION. IT EVEN CAN MAKE A U-TURN IF NEEDED.

THERE ARE ALSO S-TYPE ROLLER CONVEYORS, AS IT NAMES SAYS, WITH AN S SHAPE WHICH MAKES THE PROCESS MORE FLEXIBLE.

THE ROLLER CONVEYOR IS SUITABLE FOR THE TRANSPORTATION OF ALL KINDS OF BOXES, BAGS, PALLETS, ETC.

BULK MATERIALS, SMALL ITEMS OR IRREGULAR ITEMS NEED TO BE PLACED ON THE PALLET, IN A BOX OR ANY CONTAINER WHICH FITS THE CONVEYOR.

IT CAN TRANSPORT A SINGLE PIECE OF MATERIAL WITH A LARGE WEIGHT OR WITHSTAND A LARGE IMPACT LOAD. THIS CONVEYORS CAN BE USED TO FORM A COMPLEX LOGISTICS SYSTEM WITH MULTIPLE ROLLER LINES AND OTHER CONVEYORS OR SPECIAL LANES TO COMPLETE VARIOUS PROCESS NEEDS. ITS STRUCTURE IS SIMPLE, WITH HIGH RELIABILITY AND EASY MAINTENANCE.



RACKS

RACK TYPE:

IT EXIST A WIDE RACK TYPE VARIETY SUCH AS:

•MOBILE RACKS, SHUTTLE RACKS, GRAVITY RACKS, ADJUSTABLE RACKS, HIGH-RISE RACKS, LOFT-STYLE RACKS, PUSH-BACK RACKS, DRIVE-IN RACKS, SHELF RACKS, LAYER FORMAT RACKS, MEZZANINE, PLATFORM, DRAWER RACKS, ROTATING RACKS, CABINET RACKS, U-SHAPED FRAME, CANTILEVER FRAME RACKS, GRID FRAME RACKS, SADDLE FRAME RACKS, TIRE SPECIAL RACKS, AND SO ON. ANY ONE NOT ON THIS LIST CAN BE CUSTOMIZED DEPENDING ON CUSTOMER NEEDS.

•AMONG THEM, STORAGE RACKS ARE DIVIDED INTO:

LIGHT (≤ 500 KG (1102 LB)), MEDIUM (500 KG (1102LB) - 1000KG (2204 LB)) AND HEAVY STORAGE RACKS (≥ 1000 KG (2204 LB))



CANTILEVER RACKS



DRAWER RACKS



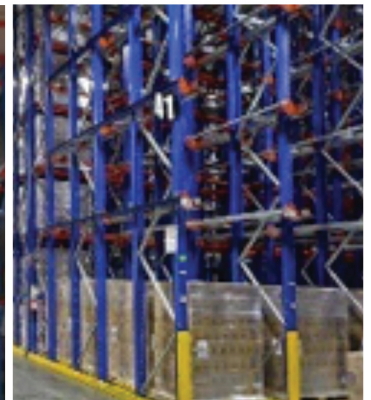
TIRE RACKS



GRAVITY RACKS



DRIVE IN RACKS





GONDOLA SHELF RACKS



SHELF RACKS



MEZZANINE



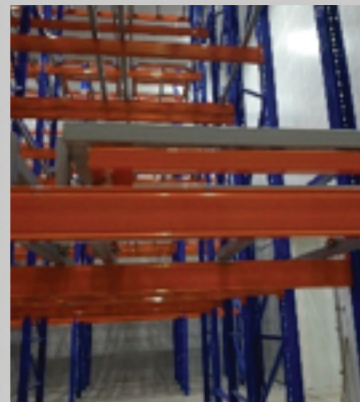
SHUTTLE RACKS



HEAVY DUTY RACKS



PLATFORM



PUSH-BACK RACKS

WAREHOUSE ACCESORIES

PALLETS



PLASTIC PALLETS



STEEL PALLETS

WIRE MESH CONTAINERS



WMS/WCS CONTROL SYSTEM

WMS (WAREHOUSE MANAGEMENT SYSTEM) AND WCS (WAREHOUSE CONTROL SYSTEM) WORK AS THE BRAIN OF AN AUTOMATIC STORAGE SYSTEM. THE CONTROL SYSTEM IS IN CHARGE OF RECEIVING ORDERS FROM THE COMPUTER SYSTEM, ANALYZING AND PROCESSING THEM TO IMPLEMENT THE ORDERS BY DRIVING ALL THE RELATED DEVICES.

OUR CONTROLLING SYSTEM CHARACTERISTICS:

- REASONABLE STRUCTURE DESIGN: AS CUSTOMERS REQUEST, SUITABLE CONTROLLING MODE AND NETWORK STRUCTURE TO REALIZE EFFICIENT AND RELIABLE PERFORMANCE.
- ERROR MANAGEMENT: SYSTEM HAS SELF-DIAGNOSE FUNCTION. WHEN AN ERROR OCCURS, SYSTEM WILL STOP AUTOMATICALLY AND SEND AN ALARM.
- RELIABILITY: WE CHOOSE RELIABLE SPARE PARTS FOR THE SYSTEM TO MAKE IT WORK WITH THE LOWEST ERRORS.
- SEPARATE CONTROLLING MODE: IN THE NETWORK SYSTEM, EACH UNIT CAN RUN SEPARATELY. IF ONE UNIT OF THE SYSTEM HAS A PROBLEM, IT DOES NOT INFLUENCE OTHER PARTS OF THE SYSTEM, KEEPING IT WORKING. IT SIMPLIFIES THE SYSTEM'S MAINTENANCE AND ADJUSTMENT. ALL THE ORDER STATUS DATA OF THE SYSTEM IS PROCESSED IN THE GENERAL CONTROL SYSTEM AND INTER-EXCHANGED WITH THE COMPUTERS.

WMS CHARACTERISTICS:

- MODULE DESIGN
- PROGRAMMABLE
- MULTI-LAYER STRUCTURE
- PLUG AND USE

WMS MAIN FUNCTIONS

- ORDER MANAGEMENT
- STOCK MANAGEMENT
- SINGLE ITEM DELIVERY MANAGEMENT
- INVENTORY
- REPORT AND DECISION SUPPORT
- AUTHORIZATION AND DATA SAFETY MANAGEMENT

WMS AUXILIARY EXPANDABLE FUNCTIONS:

- WIRELESS BAR CODE SYSTEM
- CARGO, PALLETS VIDEO SUPERVISION
- LED STORAGE DATA DISPLAY
- AUDIO ALARM SYSTEM
- GROUND TOUCH CONTROL SUPERVISION SYSTEM

SOME PROJECT IMAGES



TRADITIONAL SOLUTION: SHUTTLE CARS + FORKLIFT, SEMI-AUTOMATIC WAREHOUSE.





LOW TEMPERATURE SHUTTLE CARS + FORKLIFT, SEMI-AUTOMATIC WAREHOUSE.



SINGLE COLUMN STACKER
CRANE, AUTOMATIC WAREHOUSE

SOME PROJECT IMAGES



TRACK CHANGING DOUBLE COLUMN STACKER CRANE, AUTOMATIC WAREHOUSE





DOUBLE COLUMN STACKER CRANE + SHUTTLE CAR, AUTOMATIC WAREHOUSE



CRANE STACKER + FOUR-WAY SHUTTLE,
AUTOMATIC WAREHOUSE

SOME PROJECT IMAGES



DOUBLE COLUMN STACKER CRANE + SHUTTLE, AUTOMATIC WAREHOUSE



FACTORY PRODUCTION LINE - RGV PROGRAM



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