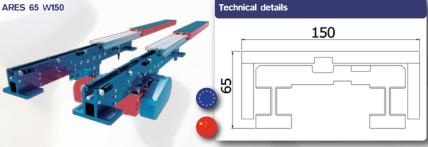


# LHD Group main products

ARES 65

ARES 65 K

# ARES 85 K



Technical details

### Description

The strength of the ARES 65 W150 is its load capacity of 300 kg on each fork, with only 150 mm width of the upper slide. The standard version has a transmission system with racks and pinions. Just like every LHD telescopic fork, the ARES 65 W150 can be supplied in the monofork, pair or battery arrangement.

 min. length max. length max. length min. stroke max. stroke
 700 mm max. payload max. acceleration 1 m/s² max. acceleration 1 m/s² max. speed 45 m/min

### Description

Typical telescopic fork for automated warehouses, designed to move 800x1200 europallets. The upper slides are made of a single bent piece to increase the rigidity, and the ends are arrow-shaped to fit more easily under the pallet. As for the transmission, both chains and racks-and-pinions systems are available.

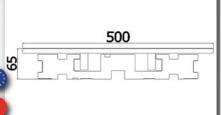
 min. length
 400 mm
 max. payload
 1200 kg

 max. length
 2000 mm
 max. acceleration
 1 m/s²

 min. stroke
 445 mm
 max. speed
 45 m/min

 max. stroke
 2100 mm

### Technical details



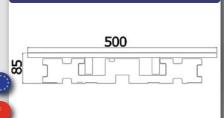
172

### Description

The ARES 65 K is a particular wide-body telescopic monofork, which finds application where the load unit to move is else than a normal pallet (heavy boxes or closed pallets); in this case the load unit must be placed on special stands or L-profile to allow the fork to entry.

min. length 1200 mm max. payload 1000 kg max. length 2000 mm max. acceleration 1 m/s² min. stroke 1300 mm max. speed 45 m/min max. stroke 2100 mm

### Technical details Description



The ARES 85 K relies upon the same design as the 65 K, but with a middle slide thickness increased by 20 mm, which allows the handling of heavier loads (up to 1.750 kg).

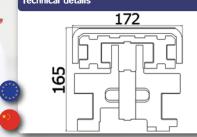
 min. length
 1200 mm
 max. payload
 1750 kg

 max. length
 2000 mm
 max. acceleration
 1 m/s²

 min. stroke
 1300 mm
 max. speed
 45 m/min

 max. stroke
 2100 mm
 max. speed
 45 m/min

### Technical details Description

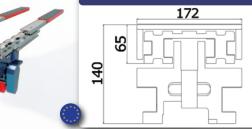


Typical double-depth telescopic fork for europallets. It's a single-engined fork, so the required space when operating is constant.

The upper slides are made of a single bent piece to increase the rigidity, and the ends are arrow-shaped to fit more easily under the pallet.

|   | min. length | 1000 mm | max. payload 1200 kg                 |
|---|-------------|---------|--------------------------------------|
| ı | max. length | 1500 mm | max. acceleration 1 m/s <sup>2</sup> |
| ı | min. stroke | 1900 mm | max. speed 45 m/min                  |
| ı | max. stroke | 3000 mm |                                      |





This is a double-engined, double-depth telescopic fork; in this model, each stroke is operated independently by an engine. Despite its small size, this fork can rely upon a remarkable strength and an outstanding size/ thoughness ratio. It offers excellent performances in the work cycles, making the depth shift quicker.

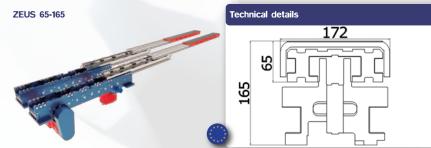
| min. length | 1100 mm | max. payload      | 500 kg             |
|-------------|---------|-------------------|--------------------|
| max. length | 1500 mm | max. acceleration | 1 m/s <sup>2</sup> |
| min. stroke | 2000 mm | max. speed 45     | m/min              |
| max. stroke | 3000 mm |                   |                    |



**ZEUS 65-140** 







### Description

The ZEUS 65-165 has small size, high operating speed and small bending when picking up/laying down loads, with independently-operated engines. The upper slides are made of a single bent piece to increase the rigidity, and the ends are arrow-shaped to fit more easily under the pallet.

| min. length | 1100 mm | max. payload 1200 kg    |
|-------------|---------|-------------------------|
| max. length | 1500 mm | max. acceleration 1 m/s |
| min. stroke | 2000 mm | max. speed 45 m/mir     |
| max. stroke | 3000 mm |                         |

### max. stroke Description

It's an enhanced version of the ZEUS 65-165. The 70-172 keeps all the peculiar features of the smaller sister, but with a higher load capacity. It's particularly fit for storage plants within bigger production facilities. Its shape allows attaining the highest moment of inertia of all telescopic forks currently on the market.

| ı | min. length | 1100 mm | max. payload 1300 kg                 |
|---|-------------|---------|--------------------------------------|
| 1 | max. length | 1800 mm | max. acceleration 1 m/s <sup>2</sup> |
| 1 | min. stroke | 2400 mm | max. speed 45 m/min                  |
| 1 | may etroko  | 2200 mm |                                      |

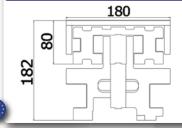
### 172 0Z

### ZEUS 80-182

**ZEUS 70-172** 

### Technical details

Technical details



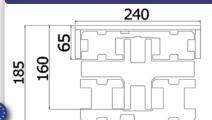
### Description

This is an even stronger version of the ZEUS 70-172. It keeps all the peculiar features of the twin-engined ZEUS series, but with an even higher carrying capacity (up to 1.600 kg).

| н |             |         |                 |                       |
|---|-------------|---------|-----------------|-----------------------|
| ı | min. length | 1100 mm | max. payload    | 1600 kg               |
| ı | max. length | 1800 mm | max. accelerati | on 1 m/s <sup>2</sup> |
| ı | min. stroke | 2400 mm | max. speed      | 45 m/min              |
| ı | may etroko  | 2200 mm |                 |                       |

### CRONOS 185 Technical details





### Description

Little sister of the more powerful CRONOS 248, the CRONOS 185 finds its application in the handling of pallets in triple depth. Simpler and easier than the 248, it perfectly fulfills the needs of those customer who need to move medium loads with long strokes for picking and laying.

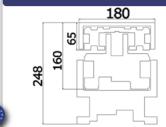
| min. length | 1300 mm | max. payload      | 1000 kg              |
|-------------|---------|-------------------|----------------------|
| max. length | 1600 mm | max. acceleration | n 1 m/s <sup>2</sup> |
| min. stroke | 3000 mm | max. speed        | 15 m/min             |
| max. stroke | 3700 mm |                   |                      |

### CRONOS 248





Technical details



**LHD** 

### Description

With its overall thickness of 248 mm, this equipment represents the solution to borderline cases in the sector of the linear handling. It finds application where a normal double-depth telescopic fork would be beyond the stroke limit, or where an even smaller bending, all other parameters being equal, is needed.

| ı | min. length | 1300 mm | max. payload 1200 kg                 |
|---|-------------|---------|--------------------------------------|
| ı | max. length | 1600 mm | max. acceleration 1 m/s <sup>2</sup> |
| ı | min. stroke | 3000 mm | max. speed 45 m/min                  |
| J | max. stroke | 3700 mm |                                      |

### CRONOS 165-248



### Description

Same as a normal CRONOS 248, but with a twin drive (2 motors and 2 independent gear trains) allowing to operate the double and the triple depth separately, carrying out a double-depth stroke with only 165 mm thickness of the moving elements.

| 1 | min. length | 1300 mm | max. payload   | 1200 kg  |
|---|-------------|---------|----------------|----------|
|   | max. length | 1600 mm | max. accelerat |          |
|   | min. stroke | 3000 mm | max. speed     | 45 m/min |
|   | max. stroke | 3700 mm | maxi opoou     |          |

### **HEPHAESTUS CERBERUS X1**

130

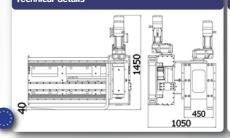
### Description

This machine can handle loads up to 800 kg with a low deflection, despite its thickness of just 55 mm. The peculiar arrangement of its gear train allows to cover the middle slide completely, making the HEPHAESTUS particularly recommended for "dirty" working environments (e.g. sand molded casting).

| min. length | 1000 mm | max. payload      | 800 kg             |
|-------------|---------|-------------------|--------------------|
| max. length | 1500 mm | max. acceleration | 1 m/s <sup>2</sup> |
| min. stroke | 1100 mm | max. speed 45     | m/min              |
| max. stroke | 1600 mm |                   |                    |

Technical details

Technical details

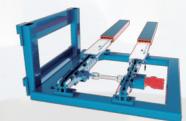


### Description

The CERBERUS X1 allows handling pallets with a load capacity up to 1.500 kg. The rotation and translation speed is as fast as 30m/min. Thanks to this system, the pallets can be set down and picked up even rotated by 90° compared to the standard position on shelves. Both movements can be carried out simultaneously.

| min. length | 1700 mm | max. payload      | 1500 kg               |
|-------------|---------|-------------------|-----------------------|
| max. length | 2000 mm | max. acceleration | on 1 m/s <sup>2</sup> |
| min. stroke | 1350 mm | max. speed        | 25 m/min              |
| max, stroke | 1650 mm |                   |                       |

**SPHINX** 







### Description

The SPHINX is a moving carriage, designed to be installed on the vertical mast of forklift trucks, allowing them to act as a stacker crane on wheels; this way, a forklift can pick up and lay down pallets laterally in a warehouse, making it possible to operate in narrower

| min. length | 1000 mm | max. payload | 1500 kg |
|-------------|---------|--------------|---------|
| max. length | 1500 mm |              |         |

**VARIAXIS** 



### Technical details

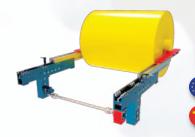


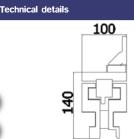
### Description

It's possible to handle different kinds of load units by installing the fork set on a VARIAXIS. It's a relatively simple system that makes the stocking operation more flexible. A motor operates a system of screws with recirculating balls and prismatic rails; it's possible to shift only one fork, or both of them symmetrically.

| max. adjustm | ent     | max. payload  | 2000 kg  |
|--------------|---------|---------------|----------|
| range        | 2000 mm | max. adjustme | ent      |
| mobile forks | 1 or 2  | speed         | 10 m/min |

ARES 140 SLV





### Description

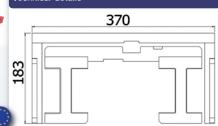
Smaller sister of the ATHENA 220 SLV, in this type of telescopic fork the high moment of inertia totally lies in its arm thickness rather than in its width. It's designed to pass through particularly narrow openings, although it can handle notably heavy loads, such as big metal or paper coils, with low bending and long life cycle.

| min. length | 1000 mm  | max. payload 1600 kg    |
|-------------|----------|-------------------------|
| max. length | 1900 mm  | max. acceleration 1 m/s |
| min. stroke | 1100 mm  | max. speed 45 m/mir     |
| max. stroke | 12000 mm |                         |

ATHENA 183



### Technical details



### Description

This model of the heavy-duty ATHENA series is particularly suitable for handling heavy loads with long strokes and low bending. In its version with inclined slides is expressly designed to handle big size coils.

| min. length | 1500 mm | max. payload  | 5000 kg              |
|-------------|---------|---------------|----------------------|
| max. length | 3000 mm | max. acceler. | 0,5 m/s <sup>2</sup> |
| min. stroke | 1600 mm | max. speed    | 30 m/min             |
| max, stroke | 3200 mm |               |                      |









ATHENA 220 SLV



# Technical details 114 027

### Description

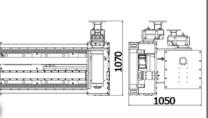
Bigger sister of the ARES 140 SLV, in this type of telescopic fork the high moment of inertia totally lies in its arm thickness rather than in its width. It's designed to pass through particularly narrow openings, although it can handle notably heavy loads, such as big metal or paper coils, with low bending and long life cycle.

| min. length | 1300 mm | max. payload  | 4000 kg              |
|-------------|---------|---------------|----------------------|
| max. length | 2900 mm | max. acceler. | 0,5 m/s <sup>2</sup> |
| min. stroke | 1400 mm | max. speed    | 30 m/min             |
| max, stroke | 3000 mm |               |                      |

### **CERBERUS X2**





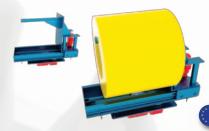


### Description

The CERBERUS X2 is designed to handle coils, up to 1.500 kg heavy. The rotation and translation speed is as fast as 30m/min. Both movements can be carried out simultaneously.

| ı | min. length | 1700 mm | max. payload 1500 kg                 |
|---|-------------|---------|--------------------------------------|
| ı | max. length | 2000 mm | max. acceleration 1 m/s <sup>2</sup> |
| ı | min. stroke | 1350 mm | max. speed 25 m/min                  |
| ı | max. stroke | 1650 mm |                                      |

### **CERBERUS X3**



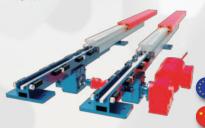


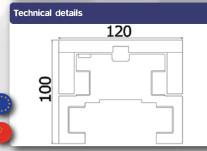
### Description

The CERBERUS X3 is a single-sided sideshift suitable for picking up pallets or coils on all sides. It is equipped with a rotary table for a  $360^{\circ}$  storage. Its carrying capacity is as high as  $2.500 \ kg$ .

| min. length  | 1600 mm | max. payload   | 2500 kg                |
|--------------|---------|----------------|------------------------|
| max. length  | 2300 mm | max. accelerat | ion 1 m/s <sup>2</sup> |
| min. stroke  | 1100 mm | max. speed     | 25 m/min               |
| manu admalia | 4000    |                |                        |

### ARES 100





### Description

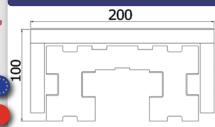
It's a very versatile and useful telescopic fork, entirely operated by racks and pinions, to pass through narrower openings other forks don't fit in. Although its limited thickness, the ARES 100 benefits from an outstanding carrying capacity resulting in a high moment of inertia, a small bending and a high speed.

| min. length | 1000 mm | max. payload   | 800 kg                  |
|-------------|---------|----------------|-------------------------|
| max. length | 2000 mm | max. accelerat | tion 1 m/s <sup>2</sup> |
| min. stroke | 1100 mm | max. speed     | 45 m/min                |
| max. stroke | 2100 mm |                |                         |

### ATHENA 100







### Description

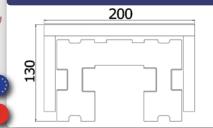
This is the smaller product of the ATHENA heavy series. Its strong structure allows remarkable lengths and strokes. Its ultimate application field is the automotive industry; it's also suitable for the sectors of wood (panels), paper (rolls) and steel (coils). It's available both with racks-and-pinions and with chain transmission.

| ı | min. length | 900 mm  | max. payload      | 2000 kg               |
|---|-------------|---------|-------------------|-----------------------|
| ı | max. length | 2200 mm | max. acceleration | on 1 m/s <sup>2</sup> |
| ı | min. stroke | 950 mm  | max. speed        | 45 m/min              |
| ı | max. stroke | 2300 mm |                   |                       |

### ATHENA 130



### Technical details



### Description

Intermediate fork of the ATHENA series, it's a versatile and safe device equipment, with a remarkably small bending. It's the most used fork of this series, because despite its thoughness it preserves good operating speed and working paces. It's available both with racks and pinions and with chains.

| ı | min. length | 1500 mm | max. payload    | 2500 kg   |
|---|-------------|---------|-----------------|-----------|
| ı | max. length | 2200 mm | max. accelerati | on 1 m/s² |
| ı | min. stroke | 1600 mm | max. speed      | 45 m/min  |
| ı | max. stroke | 2300 mm |                 |           |

PALLETS FOR WAREHOUSES

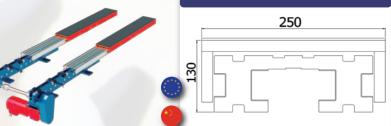




PALLETS FOR WAREHOUSES

PAPER REELS AND STEEL COILS





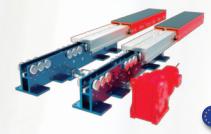
### Description

This ATHENA for special applications allows handling heavy loads with long strokes and small bending. Not suitable for high speeds and accelerations, it works at its best where thoughness, repeatability and fatigue stress are required. As for the transmission, it's available both with racks and pinions and with chains.

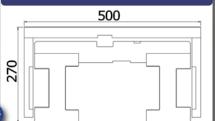
min. length max. length 2500 mm min. stroke 1200 mm max. stroke 2600 mm

1100 mm max. payload 4000 kg max, acceleration 1 m/s<sup>2</sup> max. speed 45 m/min

ATHENA 270



### Technical details



### Description

It's a very strong, though and performing telescopic fork. Thanks to its though structure, the ATHENA 270 has a very small bending, even when carrying heavy loads. It's particularly suitable for the handling of car bodies and chassis within the automotive sector.

1300 mm min. length max. payload 20000 kg max. length 2900 mm max. acceler. 0,5 m/s<sup>2</sup> min. stroke 1400 mm max, speed 20 m/min max. stroke 3000 mm

**GOLIATH** 



### Technical details



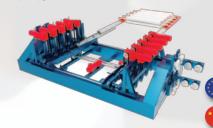
### Description

Our GOLIATH, also known by its nickname Tipper, is indeed designed to tip over, by means of its pivoting framework, big hoppers in plants for chemical or food industry, to pour the contents into chemical reactors, autoclaves and such appliances.

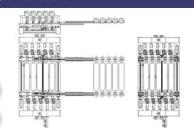
minimum hopper height above ground 1000 mm maximum hopper height above ground 1700 mm

tipping angle 180° max. payload 1600 kg

### **HERMES**



### Technical details



### Description

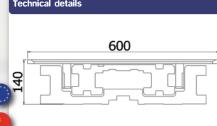
The HERMES, operating jointly with telescopic forks for special loads, allows the operator to cherry-pick the desired items from a multiple storage, with an on-board selection system that lifts the items to keep while the telescopic forks put back down the remaining units. Also available for miniload boxes.

load units q.ty up to 5 max. u. payload 300 kg max. vertical max. acceleration 0,5 m/s2 stroke 450 mm max. speed 10 m/min

### **CYCLOPS**



### Technical details

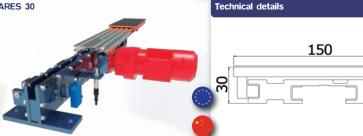


### Description

The strong points of this monofork are its high moment of inertia and its relatively small size. With only 140 mm thickness, it can pick up a 2000 kg load in double depth alone, despite the small bending and the high work pace it can reach. It's very useful for all those tasks where there's no room for a typical pair of forks.

min. lenath 1300 mm max. payload 2000 kg 2000 mm 0.5 m/s<sup>2</sup> max. length max, acceler. min. stroke 2650 mm max. speed 30 m/min 3900 mm max, stroke

### ARES 30



The ARES 30 fork is designed to handle loads with limited weight, especially where a good size/load ratio is required. Chains and pulleys provide the movement of the top element. This light series of telescopic fork achieves remarkable performances as for top speed and acceleration.

| min. length | 600 mm  | max. payload      | 15 kg              |
|-------------|---------|-------------------|--------------------|
| max. length | 900 mm  | max. acceleration | 1 m/s <sup>2</sup> |
| min. stroke | 700 mm  | max. speed 45     | m/min              |
| max, stroke | 1000 mm |                   |                    |









### PALLETS FOR WAREHOUSES

PAPER REELS AND STEEL COILS

# ARES 40 W120

## Technical details 120

### Description

The ARES 40 W120 fork is designed to handle loads with limited weight, especially where a good size/load ratio is required. Chains and pulleys provide the movement of the top element. This light series of telescopic fork achieves remarkable performances as for top speed and acceleration.

| min. length | 650 mm  | max. payload   | 80 kg                  |
|-------------|---------|----------------|------------------------|
| max. length | 1250 mm | max. accelerat | ion 1 m/s <sup>2</sup> |
| min. stroke | 750 mm  | max. speed     | 45 m/min               |
| max. stroke | 1350 mm |                |                        |

max. strok

Description

The ARES 40 W150 fork is designed to handle loads with limited weight, especially where a good size/ load ratio is required. Chains and pulleys provide the movement of the top element. This light series of telescopic fork achieves remarkable performances as for top speed and acceleration.

| ı |             |         |                   |                    |
|---|-------------|---------|-------------------|--------------------|
| ı | min. length | 650 mm  | max. payload      | 100 kg             |
| ı | max. length | 1350 mm | max. acceleration | 1 m/s <sup>2</sup> |
| ı | min. stroke | 750 mm  | max. speed 45     | m/min              |
| ı | max. stroke | 1450 mm |                   |                    |

150

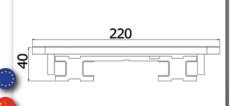
ARES 40 W220

ARES 40 W150



Technical details

Technical details



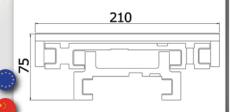
Description

It's the most important fork within the ARES miniload series, meant for unusual, bulky and heavy loads. It's driven through a chains/gears compound, to reach remarkable top speeds and accelerations. The wider top plate (with grip pad) allows carrying the load safely and firmly, in high-performaces mini-load plants.

| min. length | 650 mm  | max. payload      | 120 kg             |
|-------------|---------|-------------------|--------------------|
| max. length | 1450 mm | max. acceleration | 1 m/s <sup>2</sup> |
| min. stroke | 750 mm  | max. speed 45     | m/min              |
| max. stroke | 1550 mm |                   |                    |

ZEUS 75

Technical details

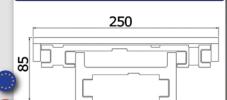


Description

Being the double-depth version of the ARES 40, the ZEUS 75 is fit for those applications where a small space of the slides is required. The steel/aluminium fixed body reduces the overall weight. The ZEUS 75 is recommended as single fork with a larger plate on top, to handle small carton or plastic boxes.

| min. length | 700 mm  | max. payload    | 100 kg                |
|-------------|---------|-----------------|-----------------------|
| max. length | 1200 mm | max. accelerati | on 1 m/s <sup>2</sup> |
| min. stroke | 1300 mm | max. speed      | 45 m/min              |
| max. stroke | 2400 mm |                 |                       |

ZEUS 85



Description

Being the thicker version of the ZEUS 75, the ZEUS 85 is fit for those applications where a small space of the slides is required. The steel/aluminium fixed body reduces the overall weight. The ZEUS 85 is recommended as single fork with a larger plate on top, to handle small carton or plastic boxes.

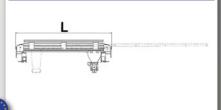
| ı | min. length | 700 mm  | max. payload      | 120 kg             |
|---|-------------|---------|-------------------|--------------------|
| ı | max. length | 1200 mm | max. acceleration | 1 m/s <sup>2</sup> |
| ı | min. stroke | 1300 mm | max. speed 45     | m/min              |
| ı | max. stroke | 2400 mm |                   |                    |

PHOEBUS X1



Technical details

Technical details



Description

Designed for backing up the telescopic forks, the side belt conveyor allows moving the loads onboard simultaneously. The fork set can pick up the load from the shelf, and then the PHOEBUS can lay it down in the unloading bay with no need of telescopic stroke. The X1 version has 1 pair of side belts (for single depth).

| min. length | 420 mm  | max. payload      | 50 kg              |
|-------------|---------|-------------------|--------------------|
| max. length | 1250 mm | max. acceleration | 1 m/s <sup>2</sup> |
|             |         | max. speed 4      | 5 m/min            |



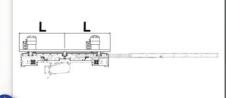
WAREHOITS FOR

PAPER REELS AND STEEL COILS

### PHOEBUS X2



### Technical details



### Description

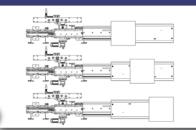
Designed for backing up the telescopic forks, the side belt conveyor allows moving the loads onboard simultaneously. The fork set can pick up the load from the shelf, and then the PHOEBUS can lay it down in the unloading bay with no need of telescopic stroke. The X2 version has 2 pairs of side belts (for double depth).

min. length 420 mm max. length 1250 mm max. payload 2x50 kg max. acceleration 1 m/s² max. speed 45 m/min

### **MEDUSA**



### Technical details



### Description

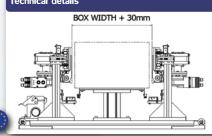
The MEDUSA is essentially a double-depth telescopic fork (usually in a monofork arrangement) equipped with a further moving plate that can shift along the top slide, regardless the position of the fork, allowing to change the position of a load unit that sits on the upper slide according to customer needs, with no need of side belts.

min. length 650 mm max. length 1200 mm min. stroke 1300 mm max. stroke 2400 mm max. payload 100 kg max. acceleration 1 m/s² max. speed 45 m/min

### ARACHNE X4



### Technical details



### Description

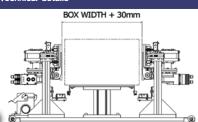
The ARACHNE X4 can carry out the handling of 1 50 kg heavy plastic box (or carton) about as big as 600x400 mm in single depth; in the picking phase, two telescopic arms reach the load on the shelf and, by means of small pivoting fingers, drag it onboard the shuttle. Its light structure allows high work speeds.

min. length 700 mm max. length 1200 mm min. stroke 850 mm max. stroke 1300 mm max. payload 50 kg max. acceleration 1 m/s² max. speed 45 m/min

### ARACHNE X6



### Technical details



### Description

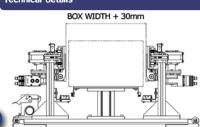
The ARACHNE X6 can carry out the handling of 2 50 kg heavy plastic boxes (or cartons) about as big as 600x400 mm in single depth; in the picking phase, two telescopic arms reach the load on the shelf and, by means of small pivoting fingers, drag it onboard the shuttle. Its light structure allows high work speeds.

min. length 900 mm max. length 1350 mm min. stroke 1000 mm max. stroke 1450 mm max. payload 2x50 kg max. acceleration 1 m/s² max. speed 45 m/min

### **ARACHNE X8**



### Technical details



### Description

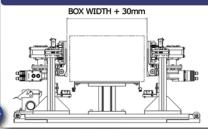
The ARACHNE X8 can simultaneously handle 3 600x400 mm plastic or cardboard boxes, weighing up to 40 kg each in single depth; during the picking phase, two telescopic arms reach the load on the shelf and, by means of small mobile fingers, drag it onto the shuttle.

min. length 1300 mm max. length 2015 mm min. stroke 1375 mm max. stroke 2070 mm max. payload 3x40 kg max. acceleration 1 m/s² max. speed 45 m/min

### ARACHNE X10



### Technical details



### Description

The ARACHNE X10 can simultaneously handle 4 300x400-mm plastic or cardboard boxes, or 2 600x400-mm boxes, with an overall load of 100 kg; during the picking phase, two telescopic arms reach the load on the shelf and, by means of small mobile fingers, drag it onto the shuttle.

min. length 1550 mm max. length 2015 mm min. stroke 1605 mm max. stroke 2070 mm max. payload 4x25 kg max. acceleration 1 m/s<sup>2</sup> max. speed 45 m/min





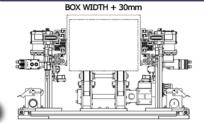




### **ARACHNE XX4**



### Technical details



### Description

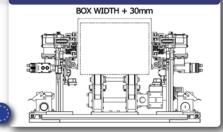
The ARACHNE XX4 can carry out the handling of 1 50 kg heavy plastic box (or carton) about as big as 600x400 mm in double depth; in the picking phase, two telescopic arms reach the load on the shelf and, by means of small pivoting fingers, drag it onboard the shuttle. Its light structure allows high work speeds.

| min. length | 700 mm  | max. payload      | 50 kg              |
|-------------|---------|-------------------|--------------------|
| max. length | 1300 mm | max. acceleration | 1 m/s <sup>2</sup> |
| min. stroke | 1400 mm | max. speed 45     | m/min              |
| may etroko  | 2400 mm |                   |                    |

### **ARACHNE XX6**



### Technical details



### Description

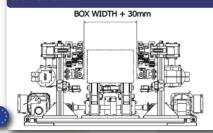
The ARACHNE XX6 can carry out the handling of 2 30 kg heavy plastic boxes (or cartons) about as big as 600x400 mm in double depth; in the picking phase, two telescopic arms reach the load on the shelf and, by means of small pivoting fingers, drag it onboard the shuttle. Its light structure allows high work speeds.

|             | •       | _               |                       |
|-------------|---------|-----------------|-----------------------|
| min. length | 800 mm  | max. payload    | 2x30 kg               |
| max. length | 1350 mm | max. accelerati | on 1 m/s <sup>2</sup> |
| min. stroke | 1400 mm | max. speed      | 45 m/min              |
| may etroko  | 2450 mm |                 |                       |

**ARACHNE XXX6** 



Technical details



### Description

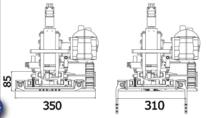
The ARACHNE XXX6 can carry out the handling of 2 30 kg heavy plastic boxes (or cartons) about as big as 600x400 mm in triple depth; in the picking phase, two telescopic arms reach the load on the shelf and, by means of small pivoting fingers, drag it onboard the shuttle. Its light structure allows high work speeds.

| min. length | 800 mm  | max. payload    | 2x30 kg               |
|-------------|---------|-----------------|-----------------------|
| max. length | 1350 mm | max. accelerati | on 1 m/s <sup>2</sup> |
| min. stroke | 1700 mm | max. speed      | 45 m/min              |
| max. stroke | 2885 mm |                 |                       |

### **ARACHNE Z4**



### Technical details



### Description

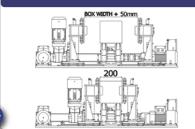
The ARACHNE Z4 consists of a telescopic monofork operating upside down, whose last element includes small pivoting fingers, designed to drag light loads, such as carton or plastic boxes, on idle roller conveyors or similar surfaces, in a push/pull operation. With its light structure, it can attain remarkable work speeds.

| min. length | 850 mm  | max. payload    | 50 kg                   |
|-------------|---------|-----------------|-------------------------|
| max. length | 1000 mm | max. accelerate | tion 1 m/s <sup>2</sup> |
| min. stroke | 1450 mm | max. speed      | 45 m/min                |
| max. stroke | 2000 mm |                 |                         |

### KARKINOS X



Technical details

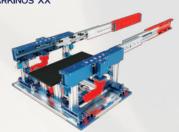


### Description

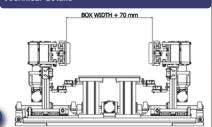
The KARKINOS is the best solution for handling plastic boxes or cartons in single depth, with high speed and reliability. It doesn't require much maintenance and it's easy to operate. With no mobile dragging "fingers", it can handle the load in a very simple way through a clamping movement.

| min. length | 600 mm  | max. payload   | 100 kg                 |
|-------------|---------|----------------|------------------------|
| max. length | 1200 mm | max. accelerat | ion 1 m/s <sup>2</sup> |
| min. stroke | 700 mm  | max. speed     | 45 m/min               |
| may stroke  | 1300 mm |                |                        |

### KARKINOS XX



### Technical details



### Description

The KARKINOS XX is the double-depth version of the KARKINOS X, to handle up to 4 plastic boxes or cartons per side (2 at once).

| min. length | 600 mm  | max. payload 100 kg                  |
|-------------|---------|--------------------------------------|
| max. length | 1200 mm | max. acceleration 1 m/s <sup>2</sup> |
| min. stroke | 1100 mm | max. speed 45 m/min                  |
| max. stroke | 2200 mm |                                      |





45 m/min

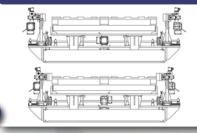
PALLETS FOR WAREHOUSES

PAPER REELS AND STEEL COILS

### KARKINOS R



### Technical details



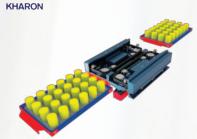
### Description

The KARKINOS R allows handling pallets or trays in single depth along an idle roller conveyor, with high speed and reliability. It's easy to operate and it doesn't require much maintenance. With no mobile dragging "fingers", it can handle the load in a very simple way.

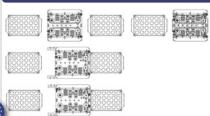
max. length max. stroke

2500 mm max. payload in 1450 mm push/pull mode 1300 kg max. acceleration 1 m/s<sup>2</sup>

max. speed



Technical details



### Description

This equipment carries out its operation by means of two cams ("fingers") moving along one or two chain loops that enable the picking. The KHARON allows picking up and laying down in automated warehouses so-called "trays", through appropriately shaped edges on both sides of these containers.

min. length max. length min. stroke max. stroke

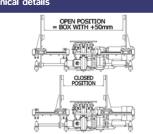
785 mm 1385 mm 865 mm 1465 mm

max. payload 100 kg max. acceleration 1 m/s<sup>2</sup> max. speed 45 m/min

### **GRYPHON**



Technical details



### Description

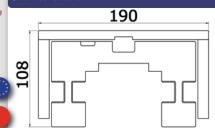
Operating jointly with telescopic forks for miniload (usually monoforks), the GRYPHON can help to keep load units aligned and stable in the moving phases, especially in case of light but voluminous carton boxes, preventing misalignments on the shelves that could result in collisions.

max. length 1000 mm max. speed 2 m/min

### **PEGASUS**



### Technical details



### Description

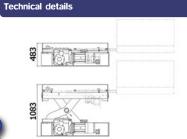
When it comes to push/pull the load, PEGASUS is the right solution. It's a single-depth telescopic fork with internal double gear train transmission, to handle up to 4.000 kg in push/pull mode. Just like normal telescopic forks, it can also be used to lift the load, the capacity depending on the thickness.

1000 mm min. length max. length 2600 mm min. stroke 1100 mm max. stroke 2700 mm

max. payload in push/pull mode 4000 kg max. acceleration 1 m/s<sup>2</sup> max. speed 45 m/min

### TITAN





### Description

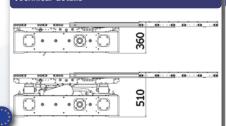
The TITAN is a new concept of electrically operated scissor lift: all of the now-existing machines of this kind need the center of gravity of the load to fall within their footprint. Conversely, this remarkably robust and sturdy equipment has been specifically designed to lift heavy loads in a cantilever mode.

maximum vertical stroke 1000 mm max, payload 1800 kg 10 s lifting time

### ATLAS X1



### Technical details



To ensure efficiency, an accurate, reliable, maintenancefree and powerful system is needed. Hence, our ATLAS X1 is entirely gear-driven - unlike our competitors' ones, relying on chains - with a single-body chassis and a lifting movement carried out through eccentric

minimum vertical stroke 60 mm maximum

vertical stroke 120 mm

2000 kg max. payload lifting time 5 s











### ATLAS X2



### Technical details

### Description

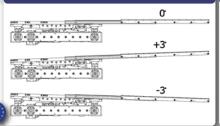
To ensure efficiency, an accurate, reliable, maintenancefree and powerful system is needed. Hence, our ATLAS X2 is entirely gear-driven - unlike our competitors' ones, relying on chains - with a single-body chassis and a lifting movement carried out through gears and racks.

| minimum                 | 60 mm  | max. payload | 2000 kg |
|-------------------------|--------|--------------|---------|
| vertical stroke         |        | lifting time | 8 s     |
| maximum vertical stroke | 180 mm |              |         |

### ATLAS X3







### Description

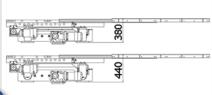
This specific version of the ATLAS Lift allows adding a tilting movement by  $-3^{\circ}$  or  $+3^{\circ}$ , useful in some applications with gravity ramps, such as gravity flow racking.

| maximum       |        | max. payload | 1200 kg |
|---------------|--------|--------------|---------|
| tilting angle | +/- 3° | tilting time | 6 s     |

### **GEMINI X1**



| Techi | المحاد | 400 | -11- |
|-------|--------|-----|------|
|       |        |     |      |



### Description

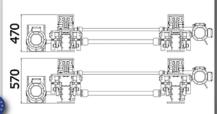
It's a narrow-body version of our ATLAS Lift, meant to operate with telescopic monoforks, and driven through eccentric cams.

| ı | minimum         |        | max. payload | 600 kg |
|---|-----------------|--------|--------------|--------|
| ı | vertical stroke | 60 mm  | lifting time | 5 s    |
| ı | maximum         |        |              |        |
| ı | vertical stroke | 120 mm |              |        |

### GEMINI X2



### Technical details



### Description

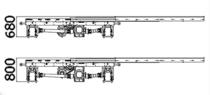
It's simply the twin-body version of our GEMINI X1 Lift, meant to operate with couples of telescopic forks, and driven through eccentric cams, with a considerably lighter structure compared to the ATLAS series.

| minimum<br>vertical stroke | 60 mm  | max. payload lifting time | 1200 kg<br>5 s |
|----------------------------|--------|---------------------------|----------------|
| maximum                    |        |                           |                |
| vertical stroke            | 120 mm |                           |                |

### ARCHIMEDES X2



Technical details



### Description

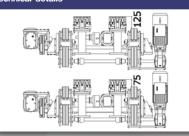
ARCHIMEDES X1 and X2 are leverage lift systems which are able to lift significant loads with repeatability and accuracy. Not using chains nor gears for lifting, they are exceptional pieces of equipment as regards the close-to-zero maintenance needed and the very low operating noise level.

| minimum         |        | max. payload | 5000 kg |
|-----------------|--------|--------------|---------|
| vertical stroke | 60 mm  | lifting time | 10 s    |
| maximum         |        |              |         |
| vertical strake | 150 mm |              |         |

### **APOLLO**



### Technical details



### Description

The APOLLO is a compound system (telescopic forks + conveyor), meant to improve the functionality of the handling device. With closed forks, the conveyor lifts, handling the pallet separately. It allows to reduce the cycle times within the automated warehouses, and to improve the positioning of the load on the shelf.

| 1 | min. length     | 1000 mm | max. payload | 1500 kg  |
|---|-----------------|---------|--------------|----------|
| 1 | max. length     | 1700 mm | max. speed   | 25 m/min |
| 1 | maximum         |         |              |          |
|   | vertical stroke | 60 mm   |              |          |

11





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### HeadQuarter - LHD S.p.A. Europe production site CEO

Mr. Giuliano Rivoir
Via Piossasco-Rivalta 30-32,
10090 Bruino (TO), Italy
Mobile +39 345 187 9559
Phone/Fax +39 011 908 62 70
g.rivoir@lhdforks.com
info@lhdforks.com
Skype lhd.spa

### LHD China/太仓艾拉德 Taicang LHD Co., Ltd. China production site

Mr. James Li/李泽俭
Building 2, No.112 Dongting North
Road in High-Tech Area,
Taicang City, Jiangsu,
People's Republic of China
Mobile/手机 +86 138 1781 2271
Phone/座机 +86 512 5354 7892
james.li@lhdforks.com

### **LHD Managing Director**

Mr. Daniele Ribetto Mobile +39 346 727 46 78 d.ribetto@lhdforks.com

### **LHD** India

Mr. Mahmood Haider Noida, New Delhi, India Mobile +91 98910 98818 m.haider@lhdforks.com

### LHD Taiwan

Mr. Bogen Tong/唐嘉鴻 Knowledge&Technology Trading Co., Ltd. (81146) 1F., No.20, Jhongtai St., Nanzih District, Kaohsiung City 811, Taiwan (R.O.C.) Mobile: +886 921 250 790 Phone/Fax: +886 7 360 961(0) bogen@germany-gear.tw

### LHD USA, Canada & Mexico

Mr. Kyle VanOphem

Carlson - Dimond & Wright, Inc. 25201 Terra Industrial Drive (Suite B) Chesterfield, Michigan, 48051 USA Mobile +1 (586) 320 3087 k.vanophem@lhdforks.com

### LHD Western Europe, Russia & CIS

Mr. Jacopo Trivero Mobile +39 391 350 64 30 j.trivero@lhdforks.com

### LHD Deutschland, Österreich & Schweiz

Mr. Jochen Gsell Mobile +39 391 763 55 79 j.gsell@lhdforks.com

### LHD BeNeLux

Mr. Jens Jacobs

Vansichen Linear Technology bvba Hasselt, Belgium Phone +32 11 37 79 63 jens@vansichen.be

### LHD LatAm

Mr. Diego Micol
Mobile +39 389 132 51 49
d.micol@lhdforks.com

### **LHD South-East Asia**

Mr. Roger Chen/陈雁 Mobile/手机 +86 133 0622 8955 roger.chen@lhdforks.com

### **LHD Vietnam**

Mr. Tao Van An

Au Viet System Co., Ltd.
Thu Duc, Ho Chi Minh, Viet Nam
Mobile + 84 989 514 905
an.taovan@avs-coltd.com







### **LHD France**

Mr. Joaquim Da Costa

Alfatec France Z.I. Des Plattes III, 20 Chemin Des Ronzières, 69390 Vourles, France Phone +33 4 72 67 01 77 info@alfatecfrance.fr

### **LHD South Korea**

Mr. Eric Myung

Eurotech Corporation #2403, Heungdeok U-Tower, 120 Heungdeokjoongang-ro, Giheung-gu, Yongin-si, Gyeonggi-do, South Korea Mobile +82 10 5663 9822 e.myung@lhdforks.com eurotech@eurotech.co.kr

### **LHD Turkey**

Mr. Çoruh Çubukçu

Tıkır Makina San. ve Tic. Ltd. Şti. Kestel OSB - Ahmetvefikpaşa OSB Mah. Karapınar Cad. No.5, 16450 Kestel, Bursa, Turkey Mobile +90 533 511 90 90 satis@lhdturkiye.com

### **LHD Thailand**

Mr. Teeradon Anumas Master Automation Co., Ltd. Phra Nakhon Si Ayutthaya, Thailand Mobile +66 8 5516 2777 teeradon.anumas@ma-thailand.com

### **LHD South Africa**

Mr. Asif Parvez

254 West Rd. South, Sandton 2196, Johannesburg, South Africa Mobile +27 72 792 8080 a.parvez@lhdforks.com

### **LHD After-Sales Service**

Mr. Alessandro Faga Mobile +39 351 505 49 04 service@lhdforks.com