

ES12-25WA

Electric Stacker 1.2t

Straddle Design Improves the Stability of Stacking; Suitable for Handling and Stacking of Various Non-standardized Pallets.

**EP EQUIPMENT CO.,LTD** www.ep-equipment.com



### **■** FEATURE

#### Performance

- The innovative AC system offers strong power, accurate control, excellent performance.
- High strength vertical gearbox, longer working life.
- Low-noise but durable hydraulic unit, good quality cylinder as well as hose ensure the high reliability of hydraulic system.
- AMP connector and durable electric wires greatly reduce malfunctions of components.
- H shape channel mast improves the strength of the whole truck.
- Staddle design ensures the stability of high lifting.







### Safety

- Safe hydraulic system design prevents mast from falling down abruptly when hydraulic pipeline cuts off.
- Emergency reverse belly button protects the operator from getting hurt.
- Emergency disconnector will cut off power source to avoid accident when truck goes out of control.
- Multiple lifting limit protection ensures safety.
- Automatic switch to lower speed when the fork reaches its setting height.
- Anti-rolling back brake keeps the truck from skidding down when truck is out of control or travelling on ramp.
- Long operational tiller ensures safety distance for operators.

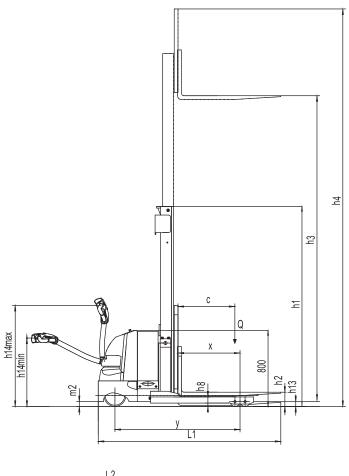
#### Operation

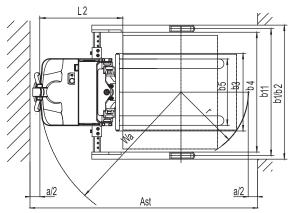
- With the new design of ergonomical tiller head, all buttons can be reached conveniently &comfortably.
- Long tiller reduces the steering force greatly.
- Adjustable forks, suitable for complicated pallets or cargos.
- Creep speed function: when tiller is in near vertical position, the driving speed will decrease automatically, allowing delicate operation in confined space.
- Side-open battery design for easy battery replacement and various applications.
- Two-speed lowering offers better stability and accuracy of goods stacking

- AC traction motor, maintenance free.
- Hour meter and battery indicator remind the operator of battery charging.
- Easily remove the back cover by only loosing four bolts; Access to all key components for inspection, maintenance and replacement.
- Vertical motor makes the inspection & service much more convenient.
- Control system allows easy trouble-shooting.
- Mast and chassis are assembled together, easy for maintenance.
- Low voltage cut off setting protects batteries.

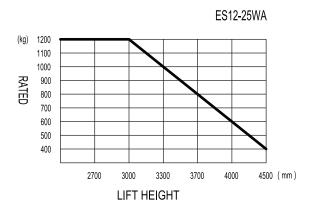
### Electric Stacker 1.2t ES12-25WA

|                     | 1.1    | Manufacturer  |       |      | EP                  |
|---------------------|--------|---|-------|------|---------------------|
| ¥                   | 1.2    | Model designation                                   |       |      | ES12-25WA           |
| Distinguishing mark | 1.3    | Drive   |       |      | Electric            |
| whin.               | 1.4    | Operator type                                       |       |      | Pedestrian          |
| guis                | 1.5    | Load capacity                                       | Q     | kg   | 1200                |
| istir               | 1.6    | Load center distance                                | С     | mm   | 600                 |
|                     | 1.8    | Load distance, centre of drive axle to fork         | Х     | mm   | 618                 |
|                     | 1.9    | Wheelbase   | У     | mm   | 1320                |
| e #                 | 2.1    | Service weight                                      |       | kg   | 1150                |
| Service             | 2.2    | Axle loading, laden front/rear                      |       | kg   | 685/1665            |
| ω ><br>———          | 2.3    | Axle loading, unladen front/rear                    |       | kg   | 665/485             |
|                     | 3.1    | Tyre type   |       |      | Polyurethane        |
| ψ <sub>0</sub>      | 3.2.1  | Tyre size, front                                    |       | mm   | Ф230x75             |
| assi                | 3.3.1  | Tyre size, rear                                     |       | mm   | Ф102x50             |
| Tyres/chassis       | 3.4    | Additional wheels (castor wheels)                   |       | mm   |                     |
| Tyre                | 3.5    | Wheels, number front/rear (x=drive wheels)          |       | mm   | 1x+0/4              |
|                     | 3.6.1  | Tread width, front                                  | b10   | mm   |                     |
|                     | 3.7.1  | Tread width, rear                                   | b11   | mm   | 1045/1145/1245/1345 |
|                     | 4.0    | Max. Lift Height                                    | Н     | mm   | 3280                |
|                     | 4.2    | Retracted mast height                               | h1    | mm   | 2110                |
|                     | 4.3    | Free lift   | h2    | mm   | 150                 |
|                     | 4.4    | Lift height   | h3    | mm   | 3220                |
|                     | 4.5    | Height, mast extended                               | h4    | mm   | 4185                |
|                     | 4.6    | Initial lift  | h5    | mm   |                     |
|                     | 4.9    | Height of tiller handle in drive position min./max. | h14   | mm   | 715/1200            |
|                     | 4.10   | Height of wheel arms                                | h8    | mm   | 100                 |
|                     | 4.15   | Lowered height                                      | h13   | mm   | 60                  |
| suc                 | 4.19   | Overall length                                      | I1    | mm   | 1947                |
| Dimensions          | 4.20   | Length to face of forks                             | 12    | mm   | 877                 |
| Di m                | 4.21   | Overall width                                       | b1/b2 | mm   | 1120/1220/1320/1420 |
|                     | 4.22   | Fork dimensions                                     | s/e/I | mm   | 40/100/1070         |
|                     | 4.24   | Fork carriage width                                 | b3    | mm   | 800                 |
|                     | 4.25   | Distance between fork-arms                          | b5    | mm   | 200-760             |
|                     | 4.26   | Distance between wheel arms/loading surfaces        | b4    | mm   | 970/1070/1170/1270  |
|                     | 4.31   | Ground clearance, laden, below mast                 | m1    | mm   | 78                  |
|                     | 4.32   | Ground clearance, center of wheelbase               | m2    | mm   | 60                  |
|                     | 4.34.1 | Aisle width for pallets 1000×1200 crossways         | Ast   | mm   | 2405                |
|                     | 4.34.2 | Aisle width for pallets 800×1200 crossways          | Ast   | mm   | 2400                |
|                     | 4.35   | Turning radius                                      | Wa    | mm   | 1490                |
|                     | 5.1    | Travel speed, laden/unladen                         |       | km/h | 5.0/5.5             |
| Performance data    | 5.2    | Lifting speed, laden/unladen                        |       | m/s  | 0.127/0.23          |
| anc                 | 5.3    | Lowering speed, laden/unladen                       |       | m/s  | 0.26/0.20           |
| form                | 5.8    | Max. gradeability, laden/unladen                    |       | %    | 8/16                |
| Perl                | 5.10   | Service brake                                       |       |      | Electromagnetic     |
|                     | 6.1    | Drive motor rating S2 60 min                        |       | kW   | 1.1                 |
| igne                | 6.2    | Lift motor rating at S3 15%                         |       | kW   | 2.2                 |
| Ęį.                 | 6.4    | Battery voltage/nominal capacity                    |       | V/Ah | 24/210              |
| Electric-engine     | 6.5    | Battery weight                                      |       | kg   | 160                 |
|                     | 8.1    | Type of drive control                               |       | -    | AC                  |
| Addition<br>data    | 10.5   | Steering design                                     |       |      | Mechanical          |
|                     |        | -   |       |      |                     |





### RATED CAPACITIES GRAPH



| Mast types      | Lift height<br>h3+h13 (mm) | Height, mast lowered<br>h1 (mm) | Free lift<br>h2 (mm) | Height, mast extended<br>h4 (mm) |
|-----------------|----------------------------|---------------------------------|----------------------|----------------------------------|
|                 | 2470                       | 1710                            | 150                  | 3385                             |
|                 | 2670                       | 1810                            | 150                  | 3585                             |
| 2-Standard Mast | 2970                       | 1960                            | 150                  | 3885                             |
| 2-Standard Wast | 3270                       | 2110                            | 150                  | 4185                             |
|                 | 3470                       | 2210                            | 150                  | 4385                             |
|                 | 3570                       | 2260                            | 150                  | 4485                             |
| 2-Free Mast     |                            |                                 |                      |                                  |
| 2-Fiee Mast     |                            |                                 |                      |                                  |
|                 | 4000                       | 1822                            | 904                  | 4915                             |
| 3-Free Mast     | 4500                       | 2022                            | 1104                 | 5415                             |
| o-riee iviast   | 4800                       | 2122                            | 1204                 | 5715                             |
|                 | 5000                       | 2187                            | 1269                 | 5915                             |

| No.        | Optional items                  | ES12-25WA  |
|------------|---------------------------------|--|
| 1.1        | Fork dimension                  | ●1070°1150°1220°920                                    |
| 1.2        | Fork lowered height             | ●60  |
| 1.3        | Fork carriage width             | •800   |
| 1.4        | backrest height                 | ●915mm   |
| 2.1        | Load wheel type                 | ● Double   |
| 2.2        | Load wheel material             | <ul> <li>Polyurethane</li> </ul>                       |
| 2.3        | Drive wheel material            | ●Polyurethane  |
| 2.7        | Battery capacity                | •210Ah • 205Ah(Li-ion )                                |
| 2.8        | Charger                         | ●24V-30A External ○24V-100A External (Li-ion)          |
| 2.9        | Battery indicator               | ●With time ○With time (Bluetooth, for Li-ion battery)  |
| 3.3        | Water auto-filling system       | No∘Yes and not customized (only for Lead-acid battery) |
| 3.20       | Telematics                      | ●No○Yes and not customized (Only for Li-ion battery)   |
| Note: ●Sta | ndard o Optional - Inconformity |  |



ES12-12WA/ES14-14WA ES16-16WA Electric Stacker 1.2-1.6t

Ideal Choice for Heavy Duty Short Distance Handling and Stacking Tasks: Long-tiller Design Makes Operations Easy and Convenient; Long aside tiller offers wider view and safer operation.

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#### Performance

- The innovative AC system offers strong power, accurate control, excellent performance.
- High strength vertical gearbox, longer working life.
- Low-noise but durable hydraulic unit, good quality cylinder as well as hose ensure the high reliability of hydraulic system.
- AMP connector and durable electric wires greatly reduce malfunctions of components.
- H shape mast channel mast improves the strength of the whole truck.









### Safety

- Safe hydraulic system design prevents mast from falling down abruptly when hydraulic pipeline cuts off.
- Emergency reverse belly button protects the operator from getting hurt.
- Emergency disconnector will cut off power source to avoid accident when truck goes out of control.
- Multiple lifting limit protection ensures safety.
- Automatic switch to lower speed when the fork reaches its setting height.
- Anti-rolling back brake keeps the truck from skidding down when truck is out of control or travelling on ramp.
- Long aside tiller reduces operator's hazards.

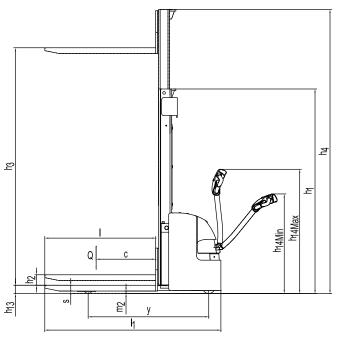
### Operation

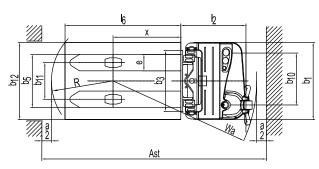
- With the new design of ergonomical tiller head, all buttons can be reached conveniently &comfortably.
- Creep speed function: when tiller is in near vertical position, the driving speed will decrease automatically, allowing delicate operation in confined space.
- Long tiller offers easier operation.
- Aside Operation, Greater View.
- Two-speed lowering offers better stability and accuracy of goods stacking.

- AC traction motor, maintenance free.
- Hour meter and battery indicator remind the operator of battery charging.
- Back cover can be removed easily; Access to all key components for inspection, maintenance and replacement.
- Easy access for battery maintenence.
- Vertical motor makes the inspection & service much more convenient.
- Control system allows easy trouble-shooting.
- Mast and chassis are assembled together, easy for maintenance.
- Low voltage cut off setting protects batteries.

### Electric Stacker 1.2-1.6t ES12-12WA/ES14-14WA ES16-16WA

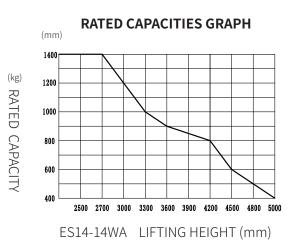
|                        | 1.1    | Manufacturer  |       |       | EP              | EP              | EP              |
|------------------------|--------|---|-------|-------|-----------------|-----------------|-----------------|
|                        | 1.2    | Model designation                                   |       |       | ES12-12WA       | ES14-14WA       | ES16-16WA       |
| mark                   | 1.3    | Drive   |       |       | Electric        | Electric        | Electric        |
| ng r                   | 1.4    | Operator type                                       |       |       | Pedestrian      | Pedestrian      | Pedestrian      |
| Distinguishing         | 1.5    | Load capacity                                       | Q     | kg    | 1200            | 1400            | 1600            |
| ting                   | 1.6    | Load center distance                                | С     | mm    | 600             | 600             | 600             |
| Dis                    | 1.8    | Load distance, centre of drive axle to fork         | x     | mm    | 688             | 693             | 693             |
|                        | 1.9    | Wheelbase   | V     | mm    | 1315            | 1305            | 1305            |
|                        | 2.1    | Service weight                                      | ,     | kg    | 955             | 1050            | 1070            |
| Service<br>weight      | 2.2    | Axle loading, laden front/rear                      |       | kg    | 715/1440        | 755/1695        | 780/1890        |
| Ser                    | 2.3    | Axle loading, unladen front/rear                    |       | kg    | 645/310         | 715/335         | 730/340         |
|                        | 3.1    | Tyre type   |       | Ng    | Polyurethane    | Polyurethane    | Polyurethane    |
|                        | 3.2.1  | Tyre size, front                                    |       | mm    | Ф230х75         | Ф230х75         | Ф230х75         |
| . <u>vs</u>            | 3.3.1  | Tyre size, rear                                     |       | mm    | Ф85х70          | Ф85х70          | Ф85х70          |
| Tyre <i>s</i> /chassis | 3.4    | Additional wheels (castor wheels)                   |       | mm    | Φ130x55         | Φ130x55         | Φ130x55         |
| re s/                  | 3.5    | Wheels, number front/rear (x=drive wheels)          |       | mm    | 1x +1/4         | 1x +1/4         | 1x +1/4         |
| Ţ                      | 3.6.1  | Tread width, front                                  | b10   |       | 538             | 538             | 538             |
|                        |        |   | b10   | mm    |                 |                 |                 |
|                        | 3.7.1  | Tread width, rear                                   |       | mm    | 380/515         | 360/495         | 360/495         |
|                        | 4.0    | Max. Lift Height                                    | Н     | mm    | 3000            | 3000            | 3000            |
|                        | 4.2    | Retracted mast height                               | h1    | mm    | 1970            | 2030            | 2030            |
|                        | 4.3    | Free lift   | h2    | mm    | 100             | 100             | 100             |
|                        | 4.4    | Lift height   | h3    | mm    | 2912            | 2912            | 2912            |
|                        | 4.5    | Height, mast extended                               | h4    | mm    | 3420            | 3465            | 3465            |
|                        | 4.6    | Initial lift  | h5    | mm    |                 |                 |                 |
|                        | 4.9    | Height of tiller handle in drive position min./max. | h14   | mm    | 715/1200        | 715/1200        | 715/1200        |
|                        | 4.10   | Height of wheel arms                                | h8    | mm    |                 |                 |                 |
| v <sub>o</sub>         | 4.15   | Lowered height                                      | h13   | mm    | 88              | 88              | 88              |
| sion                   | 4.19   | Overall length                                      | l1    | mm    | 1826            | 1940            | 1940            |
| Dimensions             | 4.20   | Length to face of forks                             | 12    | mm    | 676             | 790             | 790             |
| 亩                      | 4.21   | Overall width                                       | b1/b2 | mm    | 800             | 800             | 800             |
|                        | 4.22   | Fork dimensions                                     | s/e/I | mm    | 60x170x1150     | 60x190x1150     | 60x190x1150     |
|                        | 4.24   | Fork carriage width                                 | b3    | mm    |                 |                 |                 |
|                        | 4.25   | Distance between fork-arms                          | b5    | mm    | 550/685         | 550/685         | 550/685         |
|                        | 4.26   | Distance between wheel arms/loading surfaces        | b4    | mm    |                 |                 |                 |
|                        | 4.31   | Ground clearance, laden, below mast                 | m1    | mm    |                 |                 |                 |
|                        | 4.32   | Ground clearance, center of wheelbase               | m2    | mm    | 28              | 30              | 30              |
|                        | 4.34.1 | Aisle width for pallets 1000×1200 crossways         | Ast   | mm    | 2333            | 2465            | 2465            |
|                        | 4.34.2 | Aisle width for pallets 800×1200 crossways          | Ast   | mm    | 2303            | 2440            | 2440            |
|                        | 4.35   | Turning radius                                      | Wa    | mm    | 1463            | 1589            | 1589            |
| data                   | 5.1    | Travel speed, laden/unladen                         |       | km/h  | 5.0/5.5         | 5.0/5.5         | 5.0/5.5         |
| Performance data       | 5.2    | Lifting speed, laden/unladen                        |       | m/s   | 0.10/0.16       | 0.13/0.16       | 0.13/0.16       |
| mai                    | 5.3    | Lowering speed, laden/unladen                       |       | m/s   | 0.19/0.18       | 0.22/0.13       | 0.22/0.13       |
| erfo                   | 5.8    | Max. gradeability, laden/unladen                    |       | %     | 8/16            | 8/16            | 8/16            |
|                        | 5.10   | Service brake                                       |       |       | Electromagnetic | Electromagnetic | Electromagnetic |
| Electric-engine        | 6.1    | Drive motor rating S2 60 min                        |       | kW    | 1.1             | 1.1             | 1.1             |
| c-en                   | 6.2    | Lift motor rating at S3 15%                         |       | kW    | 2.2             | 3.0             | 3.0             |
| ectri                  | 6.4    | Battery voltage/nominal capacity                    |       | V/Ah  | 24/210          | 24/210          | 24/230          |
| ΞĔ                     | 6.5    | Battery weight                                      |       | kg    | 190             | 190             | 210             |
| ion                    | 8.1    | Type of drive control                               |       |       | AC              | AC              | AC              |
| Addition<br>data       | 10.5   | Steering design                                     |       |       | Mechanical      | Mechanical      | Mechanical      |
|                        | 10.7   | Sound pressure level at the driver's ear            |       | dB(A) | 74              | 74              | 74              |

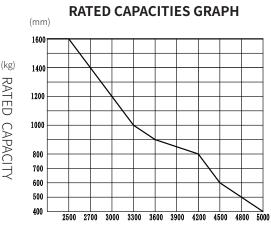




### **RATED CAPACITIES GRAPH** (mm) 1200 ® RATED CAPACITY 1000 800 400 300 2500 2700 3000 3300 3600 3900 4200 4500 4800







ES16-16WA LIFTING HEIGHT (mm)

® RATED CAPACITY

### ES12-12WA

| Mast types      | Lift height<br>h3+h13 (mm) | Height, mast lowered<br>h1 (mm) | Free lift<br>h2 (mm) | Height, mast extended<br>h4 (mm) |
|-----------------|----------------------------|---------------------------------|----------------------|----------------------------------|
|                 | 2500                       | 1720                            | 100                  | 2900                             |
|                 | 2700                       | 1820                            | 100                  | 3100                             |
|                 | 3000                       | 1970                            | 100                  | 3400                             |
| 2-Standard Mast | 3300                       | 2120                            | 100                  | 3700                             |
|                 | 3600                       | 2270 100                        |                      | 4000                             |
|                 | 3900                       | 2420                            | 100                  | 4300                             |
|                 | 4170                       | 2550                            | 100                  | 4560                             |
|                 | 2700                       | 1819                            | 1320                 | 3119                             |
| 2-Free Mast     | 3000                       | 1969                            | 1470                 | 3419                             |
|                 | 3300                       | 2119                            | 1620                 | 3719                             |
|                 | 4000                       | 1822                            | 1390                 | 4460                             |
| 3-Free Mast     | 4500                       | 2022                            | 1590                 | 4960                             |
|                 | 4800                       | 2122                            | 1690                 | 5260                             |

### ES14-14WA/ES16-16WA

| Mast types      | Lift height<br>h3+h13 (mm) | Height, mast lowered<br>h1 (mm) | Free lift<br>h2 (mm) | Height, mast extended<br>h4 (mm) |
|-----------------|----------------------------|---------------------------------|----------------------|----------------------------------|
|                 | 2700                       | 1870                            | 100                  | 3165                             |
|                 | 3000                       | 2020                            | 100                  | 3465                             |
| 2-Standard Mast | 3300                       | 2170                            | 100                  | 3765                             |
| 2-Standard Mast | 3600                       | 2320                            | 100                  | 4065                             |
|                 | 3900                       | 2470                            | 100                  | 4365                             |
|                 | 4170                       | 2600                            | 100                  | 4625                             |
|                 |                            |                                 |                      |                                  |
| 2-Free Mast     |                            |                                 |                      |                                  |
|                 |                            |                                 |                      |                                  |
|                 | 4000                       | 1830                            | 1390                 | 4470                             |
| 3-Free Mast     | 4500                       | 2030                            | 1590                 | 4970                             |
|                 | 4800                       | 2130                            | 1690                 | 5270                             |

| No.  | Optional items             | ES12-12WA                   | ES14-14WA/ES16-16WA         |
|------|----------------------------|-----------------------------|-----------------------------|
| 1.1  | Fork length                | ●1150○1220                  | ●1150○1220                  |
| 1.2  | Fork width                 | ●550○685                    | ●550○685                    |
| 1.3  | Fork lowered height        | •88                         | ●88                         |
| 2.1  | Load wheel type            | <ul><li>Double</li></ul>    | <ul> <li>Double</li> </ul>  |
| 2.2  | Load wheel material        | ∙PU                         | ∙PU                         |
| 2.3  | Drive wheel material       | ●PU○Trace PU                | ●PU○Trace PU                |
| 2.7  | Battery capacity           | ●165AH○210Ah○230Ah          | ●210Ah○230Ah                |
| 2.8  | Charger                    | ●24V-30A External           | ●24V-30A External           |
| 2.9  | Battery indicator          | <ul><li>With time</li></ul> | <ul><li>With time</li></ul> |
| 3.3  | Castor wheels              | •                           | •                           |
| 3.4  | Water auto-filling system  | 0                           | 0                           |
| 3.7  | Warning lamp               | 0                           | 0                           |
| 3.9  | Blue lamp                  | 0                           | 0                           |
| 3.12 | Hummer                     | 0                           | 0                           |
| 3.16 | Vertical handler working   | •                           | •                           |
| 4.1  | Battery side pull function | •                           | •                           |
| 4.5  | Proportional lift system   | 0                           | 0                           |



| Manufacturer                     |       |      | EP             |
|----------------------------------|-------|------|----------------|
| Model designation                |       |      | ES14-30WA      |
| Drive                            |       |      | Electric       |
| Load capacity                    | Q     | kg   | 1400           |
| Load center distance             | С     | mm   | 600            |
| Service weight                   |       | kg   | 1320           |
| Lift height                      | h3    | mm   | 3140           |
| Height, mast extended            | h4    | mm   | 4115           |
| Length to face of forks          | 12    | mm   | 917            |
| Overall width                    | b1/b2 | mm   | 1270/1370/1470 |
| Fork dimensions                  | s/e/l | mm   | 40/100/1070    |
| Turning radius                   | Wa    | mm   | 1545           |
| Max. gradeability, laden/unladen |       | %    | 8/10           |
| Travel speed, laden/unladen      |       | km/h | 5.5/6.0        |
| Lifting speed, laden/unladen     |       | m/s  | 0.127/0.23     |
| Lowering speed, laden/unladen    |       | m/s  | 0.26/0.20      |
| Battery voltage/nominal capacity |       | V/Ah | 24/210         |



#### Performance

- The innovative AC system offers strong power, accurate control, excellent performance.
- High strength vertical gearbox, longer working life.
- Low-noise but durable hydraulic unit, good quality cylinder as well as hose ensure the high reliability of hydraulic system.
- AMP connector and durable electric wires greatly reduce malfunctions of components.
- H shape channel mast improves the strength of the whole truck.
- Staddle design ensures the stability of high lifting.





### Safety

- Safe hydraulic system design prevents mast from falling down abruptly when hydraulic pipeline cuts off.
- Emergency reverse belly button protects the operator from getting hurt.
- Emergency disconnector will cut off power source to avoid accident when truck goes out of control.
- Multiple lifting limit protection ensures safety.
- Automatic switch to lower speed when the fork reaches its setting height.
- Anti-rolling back brake keeps the truck from skidding down when truck is out of control or travelling on ramp.
- Long operational tiller ensures safety distance for operators.

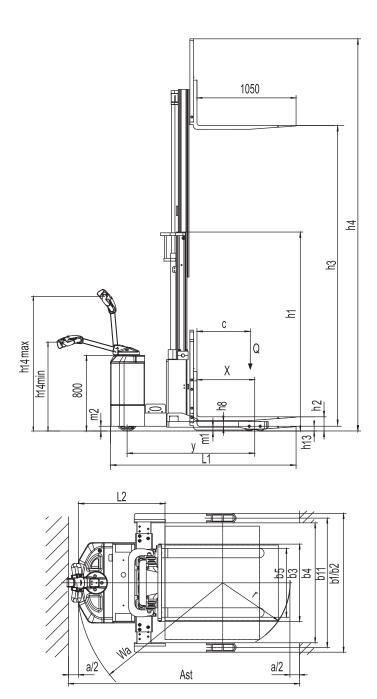
### Operation

- With the new design of ergonomical tiller head, all buttons can be reached conveniently &comfortably.
- Long tiller reduces the steering force greatly.
- Creep speed function: when tiller is in near vertical position, the driving speed will decrease automatically, allowing delicate operation in confined space.
- Side-open battery design for easy battery replacement and various applications.

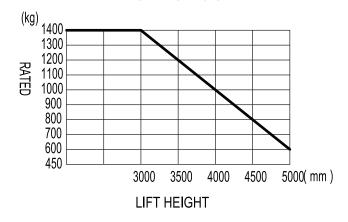
- AC traction motor, maintenance free.
- Hour meter and battery indicator remind the operator of battery charging.
- Easily remove the back cover by only loosing four bolts; Access to all key components for inspection, maintenance and replacement.
- Vertical motor makes the inspection & service much more convenient.
- Control system allows easy trouble-shooting.
- Mast and chassis are assembled together, easy for maintenance.
- Low voltage cut off setting protects batteries.

### Electric Stacker 1.4t ES14-30WA

|                                       | 1.1    | Manufacturer  |            |       | EP              |
|---------------------------------------|--------|---|------------|-------|-----------------|
| 캶                                     | 1.2    | Model designation                                   |            |       | ES14-30WA       |
| Distinguishing mark                   | 1.3    | Drive   |            |       | Electric        |
| shin                                  | 1.4    | Operator type                                       |            |       | Pedestrian      |
| ngui                                  | 1.5    | Load capacity                                       | Q          | kg    | 1400            |
| Distii                                | 1.6    | Load center distance                                | С          | mm    | 600             |
|                                       | 1.8    | Load distance, centre of drive axle to fork         | Х          | mm    | 610             |
|                                       | 1.9    | Wheelbase   | у          | mm    | 1350            |
| e #                                   | 2.1    | Service weight                                      |            | kg    | 1320            |
| Service<br>weight                     | 2.2    | Axle loading, laden front/rear                      |            | kg    | 815/1905        |
| · · · · · · · · · · · · · · · · · · · | 2.3    | Axle loading, unladen front/rear                    |            | kg    | 805/515         |
|                                       | 3.1    | Tyre type   |            |       | Polyurethane    |
| w                                     | 3.2.1  | Tyre size, front                                    |            | mm    | Ф230x75         |
| Tyres/chassis                         | 3.3.1  | Tyre size, rear                                     |            | mm    | Ф102х73         |
| s/ch                                  | 3.4    | Additional wheels (castor wheels)                   |            | mm    | Ф85х48          |
| Tyre                                  | 3.5    | Wheels, number front/rear (x=drive wheels)          |            | mm    | 1x+2/4          |
|                                       | 3.6.1  | Tread width, front                                  | b10        | mm    | 580             |
|                                       | 3.7.1  | Tread width, rear                                   | b11        | mm    | 1170/1270/1370  |
|                                       | 4.0    | Max. Lift Height                                    | Н          | mm    | 3200            |
|                                       | 4.2    | Retracted mast height                               | h1         | mm    | 2118            |
|                                       | 4.3    | Free lift   | h2         | mm    | 150             |
|                                       | 4.4    | Lift height   | h3         | mm    | 3140            |
|                                       | 4.5    | Height, mast extended                               | h4         | mm    | 4115            |
|                                       | 4.6    | Initial lift  | h5         | mm    | <del></del>     |
|                                       | 4.9    | Height of tiller handle in drive position min./max. | h14        | mm    | 990/1500        |
|                                       | 4.10   | Height of wheel arms                                | h8         | mm    | 100             |
|                                       | 4.15   | Lowered height                                      | h13        | mm    | 60              |
| suc                                   | 4.19   | Overall length                                      | <b>I</b> 1 | mm    | 1987            |
| Dimensions                            | 4.20   | Length to face of forks                             | 12         | mm    | 917             |
| Dim                                   | 4.21   | Overall width                                       | b1/b2      | mm    | 1270/1370/1470  |
|                                       | 4.22   | Fork dimensions                                     | s/e/l      | mm    | 40/100/1070     |
|                                       | 4.24   | Fork carriage width                                 | b3         | mm    | 800             |
|                                       | 4.25   | Distance between fork-arms                          | b5         | mm    | 200-760         |
|                                       | 4.26   | Distance between wheel arms/loading surfaces        | b4         | mm    | 1070/1170/1270  |
|                                       | 4.31   | Ground clearance, laden, below mast                 | m1         | mm    | 81              |
|                                       | 4.32   | Ground clearance, center of wheelbase               | m2         | mm    | 50              |
|                                       | 4.34.1 | Aisle width for pallets 1000×1200 crossways         | Ast        | mm    | 2460            |
|                                       | 4.34.2 | Aisle width for pallets 800×1200 crossways          | Ast        | mm    | 2460            |
|                                       | 4.35   | Turning radius                                      | Wa         | mm    | 1545            |
|                                       | 5.1    | Travel speed, laden/unladen                         |            | km/h  | 5.5/6.0         |
| Performance data                      | 5.2    | Lifting speed, laden/unladen                        |            | m/s   | 0.127/0.23      |
| ance                                  | 5.3    | Lowering speed, laden/unladen                       |            | m/s   | 0.26/0.20       |
| orm                                   | 5.8    | Max. gradeability, laden/unladen                    |            | %     | 8/10            |
| Perf                                  | 5.10   | Service brake                                       |            |       | Electromagnetic |
|                                       | 6.1    | Drive motor rating S2 60 min                        |            | kW    | 1.1             |
| ingii                                 | 6.2    | Lift motor rating at S3 15%                         |            | kW    | 3.0             |
| ric-e                                 | 6.4    | Battery voltage/nominal capacity                    |            | V/Ah  | 24/210          |
| Electric-engine                       | 6.5    | Battery weight                                      |            | kg    | 190             |
|                                       | 8.1    | Type of drive control                               |            | .,9   | AC              |
| Addition<br>data                      | 10.5   | Steering design                                     |            |       | Mechanical      |
| Add                                   | 10.7   | Sound pressure level at the driver's ear            |            | dB(A) | 74              |
|                                       | 10.7   | Courts prosoure level at the universited            |            | 4D(A) | 17              |







| Mast types      | Lift height<br>h3+h13 (mm) | Height, mast lowered<br>h1 (mm) | Free lift<br>h2 (mm) | Height, mast extended<br>h4 (mm) |
|-----------------|----------------------------|---------------------------------|----------------------|----------------------------------|
|                 | 2640                       | 1838                            | 150                  | 3555                             |
| 2-Standard Mast | 3000                       | 2018                            | 150                  | 3915                             |
| 2-Standard Mast | 3200                       | 2118                            | 150                  | 4115                             |
|                 | 3590                       | 2303                            | 150                  | 4505                             |
| 2-Free Mast     |                            |                                 |                      |                                  |
| 2-Fiee Mast     | —                          |                                 |                      |                                  |
|                 | 4000                       | 1822                            | 907                  | 4915                             |
| 3-Free Mast     | 4500                       | 2022                            | 1107                 | 5415                             |
| 5-Free Mast     | 4800                       | 2122                            | 1207                 | 5715                             |
|                 | 5000                       | 2187                            | 1272                 | 5915                             |

| No.        | Optional items              | ES14-30WA   |
|------------|-----------------------------|---|
| 1.1        | Fork dimension              | ●1070°1150°1220°920   |
| 1.2        | Fork lowered height         | •60   |
| 1.3        | Fork carriage width         | •800  |
| 1.4        | backrest height             | ●915mm  |
| 2.1        | Load wheel type             | ●Double   |
| 2.2        | Load wheel material         | <ul> <li>Polyurethane</li> </ul>  |
| 2.3        | Drive wheel material        | <ul> <li>Polyurethane</li> </ul>  |
| 2.7        | Battery capacity            | •210Aho205Ah(Li-ion)  |
| 2.8        | Charger                     | ●24V-30A External ○24V-100A External (Li-ion)   |
| 2.9        | Battery indicator           | $\bullet \textbf{With time} \circ \textbf{With time} \ (  \textbf{Bluetooth, only for Li-ion battery}  )$ |
| 2.11       | Attachments                 | ●No∘External shifter  |
| 3.2        | Castor wheels               | ●Yes and can be customized  |
| 3.3        | Water auto-filling system   | No∘Yes and not customized (only for Lead-acid battery)  |
| 3.20       | Telematics                  | ●No⊙Yes and not customized (only for Li-ion battery)  |
| 4.5        | Proportional lift system    | ●Yes and can be customized  |
| lote: ∙Sta | andard o Optional - Inconfo | rmity   |



| Manufacturer                     |       |      | EP             |
|----------------------------------|-------|------|----------------|
| Model designation                |       |      | ES18-40WA      |
| Drive                            |       |      | Electric       |
| Load capacity                    | Q     | kg   | 1800           |
| Load center distance             | С     | mm   | 600            |
| Service weight                   |       | kg   | 1520           |
| Lift height                      | h3    | mm   | 3135           |
| Height, mast extended            | h4    | mm   | 4115           |
| Length to face of forks          | 12    | mm   | 1022           |
| Overall width                    | b1/b2 | mm   | 1270/1370/1470 |
| Fork dimensions                  | s/e/l | mm   | 45/100/1070    |
| Turning radius                   | Wa    | mm   | 1645           |
| Max. gradeability, laden/unladen |       | %    | 6/10           |
| Travel speed, laden/unladen      |       | km/h | 4.5/5.0        |
| Lifting speed, laden/unladen     |       | m/s  | 0.127/0.23     |
| Lowering speed, laden/unladen    |       | m/s  | 0.26/0.20      |
| Battery voltage/nominal capacity |       | V/Ah | 24/280         |



#### Performance

- The innovative AC system offers strong power, accurate control, excellent performance.
- High strength vertical gearbox, longer working life.
- Low-noise but durable hydraulic unit, good quality cylinder as well as hose ensure the high reliability of hydraulic system.
- AMP connector and durable electric wires greatly reduce malfunctions of components.
- H shape channel mast improves the strength of the whole truck.
- Staddle design ensures the stability of high lifting.



### Safety

- Safe hydraulic system design prevents mast from falling down abruptly when hydraulic pipeline cuts off.
- Emergency reverse belly button protects the operator from getting hurt.
- Emergency disconnector will cut off power source to avoid accident when truck goes out of control.
- Multiple lifting limit protection ensures safety.
- Automatic switch to lower speed when the fork reaches its setting height.
- Anti-rolling back brake keeps the truck from skidding down when truck is out of control or travelling on ramp.
- Long operational tiller ensures safety distance for operators.

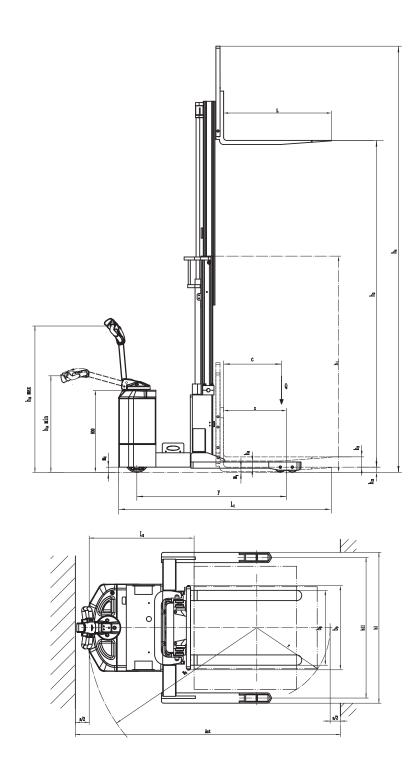
### Operation

- With the new design of ergonomical tiller head, all buttons can be reached conveniently &comfortably.
- Long tiller reduces the steering force areatly.
- Creep speed function: when tiller is in near vertical position, the driving speed will decrease automatically, allowing delicate operation in confined space.
- Side-open battery design for easy battery replacement and various applications.

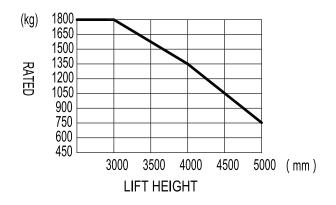
- AC traction motor, maintenance free.
- Hour meter and battery indicator remind the operator of battery charging.
- Easily remove the back cover by only loosing four bolts; Access to all key components for inspection, maintenance and replacement.
- Vertical motor makes the inspection & service much more convenient.
- Control system allows easy trouble-shooting.
- Mast and chassis are assembled together, easy for maintenance.
- Low voltage cut off setting protects batteries.

### Electric Stacker 1.8t ES18-40WA

| 1.1 Manufacturer  1.2 Model designation  1.3 Drive  1.4 Operator type  1.5 Load capacity Q kg  1.6 Load center distance c mm  | EP<br>ES18-40WA<br>Electric |
|---|-----------------------------|
| 1.2 Model designation  1.3 Drive  1.4 Operator type  1.5 Load capacity Q kg   |                             |
| 1.3 Drive 1.4 Operator type 1.5 Load capacity Q kg  | Electric                    |
| 1.4 Operator type 1.5 Load capacity Q kg  |                             |
| 1.5 Load capacity Q kg  | Pedestrian                  |
|   | 1800                        |
| 1.6 Load center distance c mm   | 600                         |
| 1.8 Load distance, centre of drive axle to fork x mm  | 610                         |
| 1.9 Wheelbase y mm  | 1455                        |
| 2.1 Service weight kg   | 1520                        |
| 2.1 Service weight kg  2.2 Axle loading, laden front/rear kg  3.3 Axle loading, upladen front/rear  | 945/2375                    |
| 2.3 Axle loading, unladen front/rear kg   | 925/595                     |
| 3.1 Tyre type   | Polyurethane                |
| 3.2.1 Tyre size, front mm   | Ф230х75                     |
| 3.3.1 Tyre size, rear mm  | Ф102х73                     |
| 3.3.1 Tyre size, rear mm  3.4 Additional wheels (castor wheels) mm  3.5 Wheels, number front/rear (x=drive wheels) mm   | Ф102x63.5                   |
| 3.5 Wheels, number front/rear (x=drive wheels) mm   | 1x+2/4                      |
| 3.6.1 Tread width, front b10 mm   | 580                         |
| 3.7.1 Tread width, rear b11 mm  | 1170/1270/1370              |
| 4.0 Max. Lift Height H mm   | 3200                        |
| 4.2 Retracted mast height h1 mm   | 2118                        |
| 4.3 Free lift h2 mm   | 150                         |
| 4.4 Lift height h3 mm   | 3135                        |
| 4.5 Height, mast extended h4 mm   | 4115                        |
| 4.6 Initial lift h5 mm  | _                           |
| 4.9 Height of tiller handle in drive position min./max. h14 mm  | 990/1500                    |
| 4.10 Height of wheel arms h8 mm   | 100                         |
| 4.15 Lowered height h13 mm  | 65                          |
| · ·   | 2092                        |
| 4.20 Length to face of forks   12 mm  | 1022                        |
| 4.19 Overall length I1 mm  4.20 Length to face of forks I2 mm  4.21 Overall width b1/b2 mm  | 1270/1370/1470              |
| 4.22 Fork dimensions s/e/l mm   | 45/100/1070                 |
| 4.24 Fork carriage width b3 mm  | 800                         |
| 4.25 Distance between fork-arms b5 mm   | 200-760                     |
| 4.26 Distance between wheel arms/loading surfaces b4 mm   | 1070/1170/1270              |
| 4.31 Ground clearance, laden, below mast m1 mm  | 81                          |
| 4.32 Ground clearance, center of wheelbase m2 mm  | 50                          |
| 1011  | 0500                        |
| 4.34.1 Aisle width for pallets 1000×1200 crossways Ast mm  4.34.2 Aisle width for pallets 800×1200 crossways Ast mm   | 2560                        |
| 4.34.2 Alsie width of pallets 600^1200 crossways Ast IIIIII  4.35 Turning radius Wa mm  | 1645                        |
|   | 4.5/ 5.0                    |
| 5.1 Travel speed, laden/unladen km/h 5.2 Lifting speed, laden/unladen m/s 5.3 Lowering speed, laden/unladen m/s 5.8 Max. gradeability, laden/unladen % 5.10 Service brake | 0.127/0.23                  |
| 5.2 Lining speed, laden/unladen m/s  5.3 Lowering speed, laden/unladen m/s  | 0.127/0.23                  |
| 5.3 Lowering speed, laden/unladen m/s  5.8 Max. gradeability, laden/unladen %   | 6/10                        |
| 5.6 Max. gradeability, lader/unladen  | Electromagnetic             |
|   | ·                           |
| 6.1 Drive motor rating S2 60 min kW   | 1.1                         |
| 6.2 Lift motor rating at S3 15% kW  | 3.0                         |
| 6.1 Drive motor rating S2 60 min kW  6.2 Lift motor rating at S3 15% kW  6.4 Battery voltage/nominal capacity V/Ah  6.5 Battery weight kg                                 | 24/280                      |
|   | 250                         |
| 8.1 Type of drive control  10.5 Steering design  10.7 Sound pressure level at the driver's ear.  (B(A)  | AC                          |
| The steering design   | Mechanical                  |
| 10.7 Sound pressure level at the driver's ear dB(A)   | 74                          |



### RATED CAPACITIES GRAPH



| Mast types      | Lift height<br>h3+h13 (mm) | Height, mast lowered<br>h1 (mm) | Free lift<br>h2 (mm) | Height, mast extended<br>h4 (mm) |
|-----------------|----------------------------|---------------------------------|----------------------|----------------------------------|
|                 | 2640                       | 1838                            | 150                  | 3555                             |
| 2-Standard Mast | 3000                       | 2018                            | 150                  | 3915                             |
| 2-Standard Mast | 3200                       | 2118                            | 150                  | 4115                             |
|                 | 3590                       | 2303                            | 150                  | 4505                             |
| 2-Free Mast     |                            |                                 |                      |                                  |
|                 |                            |                                 |                      |                                  |
|                 | 4000                       | 1822                            | 907                  | 4915                             |
| 3-Free Mast     | 4500                       | 2022                            | 1107                 | 5415                             |
|                 | 4800                       | 2122                            | 1207                 | 5715                             |
|                 | 5000                       | 2187                            | 1272                 | 5915                             |

| No.                                       | Optional items            | ES18-40WA   |
|---|---------------------------|---|
| 1.1                                       | Fork dimension            | ●1070°1150°1220°920   |
| 1.2                                       | Fork lowered height       | ●65   |
| 1.3                                       | Fork carriage width       | •800  |
| 1.4                                       | backrest height           | •915  |
| 1.5                                       | Leg width                 | ●1070○1170○1270   |
| 2.1                                       | Load wheel type           | <ul> <li>Double</li> </ul>                                      |
| 2.2                                       | Load wheel material       | <ul> <li>Polyurethane</li> </ul>                                |
| 2.3                                       | Drive wheel material      | <ul> <li>Polyurethane</li> </ul>                                |
| 2.7                                       | Battery capacity          | •280Aho360Aho205Ah(Li-ion)                                      |
| 2.8                                       | Charger                   | •24V-30A External 024V-50A External 024V-100A External (Li-ion) |
| 2.9                                       | Battery indicator         | ●With time ○With time (Bluetooth)                               |
| 2.11                                      | Attachments               | ●No○External shifter  |
| 3.2                                       | Castor wheels             | ●Yes and not customized   |
| 3.3                                       | Water auto-filling system | ●No⊙Yes and not customized (only for Lead-acid battery)         |
| 3.20                                      | Telematics                | No∘Yes and not customized (only for Li-ion battery)             |
| 4.5                                       | Proportional lift system  | ●Yes and not customized   |
| Note: •Standard o Optional - Inconformity |                           |   |
|   |                           |   |



# ES20-WA Electric Stacker2.0t

Ideal Choice for Heavy Duty Short Distance Handling and Stacking Tasks: Long-tiller Design Makes Operations Easy and Convenient; Long aside tiller offers wider view and safer operation.

**EP EQUIPMENT CO.,LTD** www.ep-equipment.com





#### Performance

- The innovative AC system offers strong power, accurate control, excellent performance.
- High strength vertical gearbox, longer working life.
- Low-noise but durable hydraulic unit, good quality cylinder as well as hose ensure the high reliability of hydraulic system.
- AMP connector and durable electric wires greatly reduce malfunctions of components.
- CJ shape mast channel improves the strength of the whole truck.







#### Safety

- Safe hydraulic system design prevents mast from falling down abruptly when hydraulic pipeline cuts off.
- Emergency reverse belly button protects the operator from getting hurt.
- Emergency disconnector will cut off power source to avoid accident when truck goes out of control.
- Multiple lifting limit protection ensures safety.
- Automatic switch to lower speed when the fork reaches its setting height.
- Anti-rolling back brake keeps the truck from skidding down when truck is out of control or travelling on ramp.
- Long aside tiller reduces operator's hazards.

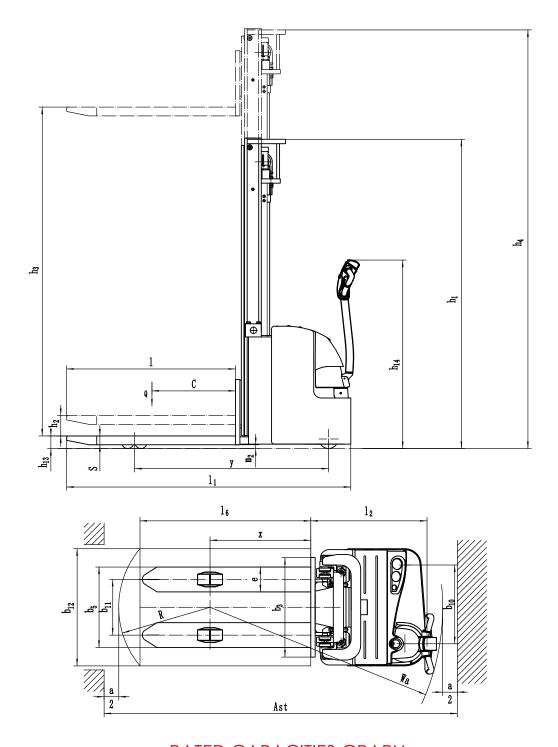
### Operation

- With the new design of ergonomical tiller head, all buttons can be reached conveniently &comfortably.
- Creep speed function: when tiller is in near vertical position, the driving speed will decrease automatically, allowing delicate operation in confined space.
- Long tiller offers easier operation.
- Aside Operation, Greater View.
- Two-speed lowering offers better stability and accuracy of goods stacking.

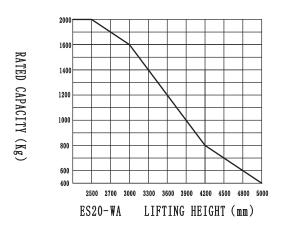
- AC traction motor, maintenance free.
- Hour meter and battery indicator remind the operator of battery charging.
- Back cover can be removed easily;
   Access to all key components for inspection, maintenance and replacement
- Easy access for battery maintenence.
- Vertical motor makes the inspection & service much more convenient.
- Control system allows easy trouble-shooting.
- Mast and chassis are assembled together, easy for maintenance.
- Low voltage cut off setting protects batteries.

## Electric Stacker2.0t ES20-WA

|   | 1.1    | Manufacturer  |       |          | EP              |
|---|--------|---|-------|----------|-----------------|
| 1.2 1.3 1.4 1.5 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 |        | Model designation                                   |       |          | ES20-WA         |
|   | Drive  |   |       | Electric |                 |
| shin  | 1.4    | Operator type                                       |       |          | Pedestrian      |
| ıgui  | 1.5    | Load capacity                                       | Q     | kg       | 2000            |
| istin   | 1.6    | Load center distance                                | С     | mm       | 600             |
| _ <u>_</u>  | 1.8    | Load distance, centre of drive axle to fork         | х     | mm       | 693             |
|   | 1.9    | Wheelbase   | у     | mm       | 1305            |
| 8 <b>±</b>  | 2.1    | Service weight                                      |       | kg       | 1170            |
| Service   | 2.2    | Axle loading, laden front/rear                      |       | kg       | 850/2320        |
| ω >   | 2.3    | Axle loading, unladen front/rear                    |       | kg       | 780/390         |
|   | 3.1    | Tyre type   |       |          | Polyurethane    |
| w   | 3.2.1  | Tyre size, front                                    |       | mm       | Φ230x75         |
| Tyres/chassis   | 3.3.1  | Tyre size, rear                                     |       | mm       | Ф85х70          |
| s/chi   | 3.4    | Additional wheels (castor wheels)                   |       | mm       | Ф130х55         |
| yre   | 3.5    | Wheels, number front/rear (x=drive wheels)          |       | mm       | 1x +1/4         |
|   | 3.6.1  | Tread width, front                                  | b10   | mm       | 538             |
|   | 3.7.1  | Tread width, rear                                   | b11   | mm       | 410             |
|   | 4.0    | Max. Lift Height                                    | Н     | mm       | 3000            |
|   | 4.2    | Retracted mast height                               | h1    | mm       | 2020            |
|   | 4.3    | Free lift   | h2    | mm       | 100             |
|   | 4.4    | Lift height   | h3    | mm       | 2912            |
|   | 4.5    | Height, mast extended                               | h4    | mm       | 3465            |
|   | 4.6    | Initial lift  | h5    | mm       | _               |
|   | 4.9    | Height of tiller handle in drive position min./max. | h14   | mm       | 715/1200        |
|   | 4.10   | Height of wheel arms                                | h8    | mm       | _               |
|   | 4.15   | Lowered height                                      | h13   | mm       | 88              |
| suc   | 4.19   | Overall length                                      | l1    | mm       | 1940            |
| Dimensions  | 4.20   | Length to face of forks                             | 12    | mm       | 790             |
| Di iii  | 4.21   | Overall width                                       | b1/b2 | mm       | 800             |
|   | 4.22   | Fork dimensions                                     | s/e/l | mm       | 60x190x1150     |
|   | 4.24   | Fork carriage width                                 | b3    | mm       | _               |
|   | 4.25   | Distance between fork-arms                          | b5    | mm       | 600             |
|   | 4.26   | Distance between wheel arms/loading surfaces        | b4    | mm       |                 |
|   | 4.31   | Ground clearance, laden, below mast                 | m1    | mm       |                 |
|   | 4.32   | Ground clearance, center of wheelbase               | m2    | mm       | 18              |
|   | 4.34.1 | Aisle width for pallets 1000×1200 crossways         | Ast   | mm       | 2465            |
|   | 4.34.2 | Aisle width for pallets 800×1200 crossways          | Ast   | mm       | 2440            |
|   | 4.35   | Turning radius                                      | Wa    | mm       | 1589            |
|   | 5.1    | Travel speed, laden/unladen                         |       | km/h     | 4.5/5.0         |
| Performance data  | 5.2    | Lifting speed, laden/unladen                        |       | m/s      | 0.11/0.16       |
| ance  | 5.3    | Lowering speed, laden/unladen                       |       | m/s      | 0.32/0.23       |
| - E   | 5.8    | Max. gradeability, laden/unladen                    |       | %        | 6/12            |
| Perf  | 5.10   | Service brake                                       |       |          | Electromagnetic |
|   | 6.1    | Drive motor rating S2 60 min                        |       | kW       | 1.1             |
| ingii   | 6.2    | Lift motor rating at S3 15%                         |       | kW       | 3.0             |
| i ce  | 6.4    | Battery voltage/nominal capacity                    |       | V/Ah     | 24/280          |
| Electric-engine   | 6.5    | Battery weight                                      |       | kg       | 240             |
|   | 8.1    | Type of drive control                               |       | 9        | AC              |
| Addition<br>data  | 10.5   | Steering design                                     |       |          | Mechanical      |
| Ado   | 10.7   | Sound pressure level at the driver's ear            |       | dB(A)    | 74              |
|   |        | ,   |       | ۲.7      | <del></del>     |



### RATED CAPACITIES GRAPH



| Mast types       | Lift height<br>h3+h13 (mm) | Height, mast lowered<br>h1 (mm) | Free lift<br>h2 (mm) | Height, mast extended<br>h4 (mm) |
|------------------|----------------------------|---------------------------------|----------------------|----------------------------------|
|                  | 2500                       | 1770                            | 100                  | 2965                             |
|                  | 2700                       | 1870                            | 100                  | 3165                             |
| 2-Standard Mast  | 3000                       | 2020                            | 100                  | 3465                             |
| 2-Staridard Mast | 3300                       | 2170                            | 100                  | 3765                             |
|                  | 3600                       | 2320                            | 100                  | 4065                             |
|                  | 3900                       | 2470                            | 100                  | 4365                             |
|                  |                            |                                 |                      |                                  |
| 2-Free Mast      |                            |                                 |                      |                                  |
|                  |                            |                                 |                      |                                  |
|                  | 4000                       | 1830                            | 1390                 | 4470                             |
| 3-Free Mast      | 4500                       | 2030                            | 1590                 | 4970                             |
|                  | 4800                       | 2130                            | 1690                 | 5270                             |
|                  | 5000                       | 2195                            | 1740                 | 5470                             |
|                  | 5500                       | 2360                            | 1910                 | 5970                             |

| No.       | Optional items                   | ES20-WA   |
|-----------|----------------------------------|---|
| 1.1       | Fork dimension                   | ●600*1150○600*1220○685*1150○685*1220  |
| 1.3       | Fork lowered height              | •88   |
| 2.1       | Load wheel type                  | <ul><li>Double</li></ul>  |
| 2.2       | Load wheel material              | •PU   |
| 2.3       | Drive wheel material             | •PU   |
| 2.7       | Battery capacity                 | •280Aho205Ah(Li-ion)  |
| 2.8       | Charger                          | ●24V-30A External ○24V-50A External (Li-ion)<br>○24V-100A External(Li-ion)                                |
| 2.9       | Battery indicator                | $\bullet \textbf{With time} \circ \textbf{With time} \ (  \textbf{Bluetooth, only for Li-ion battery}  )$ |
| 3.2       | Castor wheels                    | ●Yes and not customized   |
| 3.3       | Water auto-filling system        | No∘Yes and not customized(only for Lead-acid Battery)   |
| 3.20      | Telematics                       | ●No∘Yes and not customized(only for Li-ion Battery)   |
| 4.1       | Battery side pull function       | ●Yes and not customized   |
| 4.5       | Proportional lift system         | ●No ∘Yes and not customized   |
| 5.1       | Battery side pull attachment     | No∘Side-pull trolley  |
| Note: ∙St | andard o Optional - Inconformity |   |