

YOUR *DEVELOPMENT*  
**PARTNER** ALWAYS!

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# MATERIAL STORAGE & HANDLING EQUIPMENTS

 For Weaving Factories

 Digitization

 Automation

 Intelligence

YOUR *DEVELOPMENT*  
**PARTNER** ALWAYS!

## OUR PRODUCTION LINE FAMILY



### FABRIC MAKE-UP MACHINES

Automatic solutions for dyeing and finishing plants, including **Camera Inspecting, Rolling, Cutting, Taping, Labeling, Packing, Sorting** and **Stacking**, etc., meet every unique request for your business.



### MATERIAL STORAGE & HANDLING EQUIPMENT

Various **Electric Trolleys** (Trucks) with **AC Technology** as well as automatic **Beam Stacker** for warp beam/fabric beams. Turn-key project to optimize the production process for your modern weaving mill.



### SPECIAL RAPIER LOOM

**Special Rapier Loom** for **fiberglass and carbon fiber**, particularly applied in aerospace, automotive, construction, environmental energy and other high-value industries.



### NONWOVEN MACHINES

SUNTECH **Patent Technology STair** enables to steadily produce premium nonwovens at high speed, satisfying the high demand of hygiene and medical industry, which makes you stand out from the market.

27

Production Lines

24

Countries  
Global Agent Presence

120+

Export Countries

5000+

Global Customers

17000+

Installed Machines

400000m<sup>2</sup>

Factory Scale

## WHY SUNTECH?



### CUSTOMIZED SOLUTIONS

Meet Your Special Demand in Business



### QUALITY CONFIDENCE

Strict Quality Control, 5S Management, CE Guarantee



### HONOR CUSTOMER ZONE

Enjoy the Premium Membership Service



### LIFE CYCLE SERVICE

Technical Iteration and Maintenance Plan

An ISO certified and SGS audited company,  
with CE certificates for EU markets:



## ABOUT SUNTECH

Over 50 years experience specialized in textile machinery manufacturing, SUNTECH has deepened in the constant exploration of more digital and automated textile solutions for our customers worldwide. The continuous development and iteration of new technologies and techniques, bring our products to the next level. We embed value creation to our customer. We make every effort to become your development partner always!



FABRIC MAKE-UP MACHINES

\* **MATERIAL STORAGE  
& HANDLING EQUIPMENTS**

SPECIAL RAPIER LOOM

NONWOVEN MACHINES

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# Part 1

## COMPUTERIZED BEAM STORAGE SYSTEM

### ST-BS

#### BEAM STACKER (TRIPLE-BEAM)

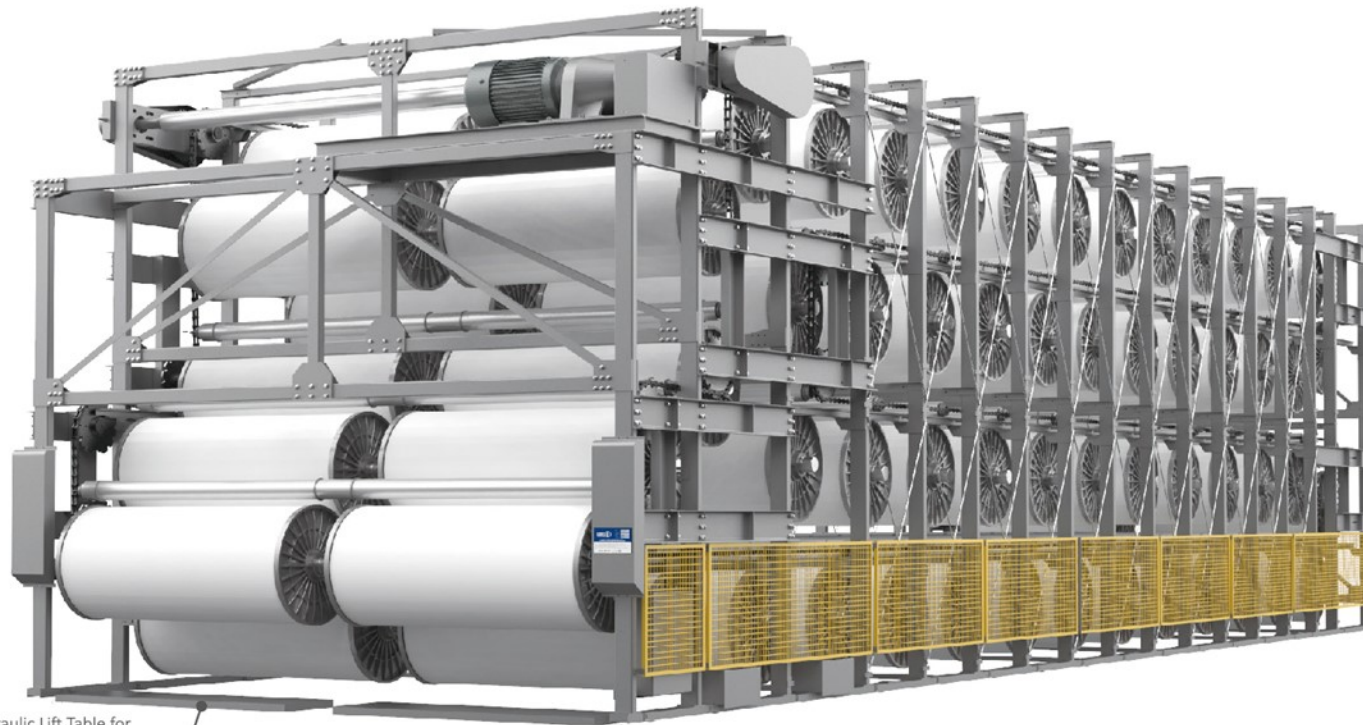


The model ST-BS is the best solution for storage of ready warp beam/size beam/weaving beam/fabric roll, which is widely applicable in the weaving preparation workshop, weaving unit and finishing unit for space utilization and to avoid damage of ready warp/fabric roll. They are available in different models for handling each particular situation. For example, loading and unloading can be undertaken from one position to several positions at one or different level.

The model ST-BS could employ a microprocessor controlled information system for storage and retrieval particular beams.

# ST-BS

## BEAM STACKER (DOUBLE-BEAM)

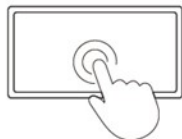


Electric Hydraulic Lift Table for Loading & Unloading

## 7 GUARANTEES

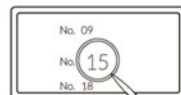
- 1. Raw Material Guarantee**  
Sourcing From International Standard Steel Giants.
- 2. Precision Guarantee**  
Components Processed by High-precision CNC, like Running Wheels, Chain Wheels etc.
- 3. Machining Guarantee**  
CNC Cutting and Welding Qualified with Crack Testing Report.
- 4. Artistic Appearance**  
Patented Shot Blasting Technology Improve the Fatigue Strength, Increase the Coverage; Optimize Surface Roughness.
- 5. Double Rustproof Guarantee**  
Epoxy primer+Surface metallic Painting.
- 6. ZERO Accident Guarantee**  
European Safety Standard + Newest Chain-Synchronization Auto Detecting Technology + All Electric Parts from French "Schneider".
- 7. Factory Qualification Guarantee**  
SGS approved, ISO9001: 2015 standard.

1



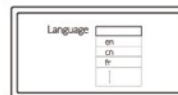
TOUCH PANEL  
CONTROL

2



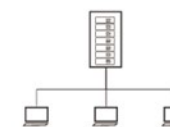
SOFTWARE WITH  
BEAM SEARCH FUNCTION

3



MULTI-LANGUAGE  
SELECTION

4



ERP  
COMPATIBLE

5

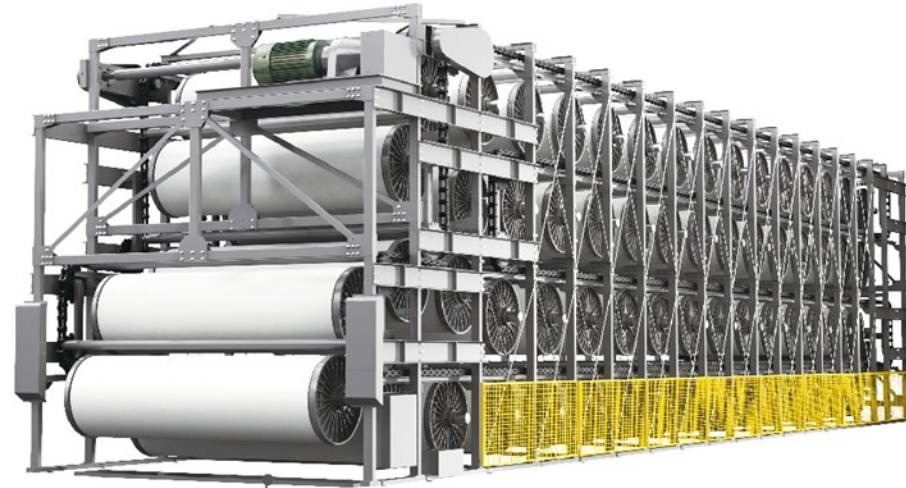


MOBILE APP  
AVAILABLE

# ST-BS

## BEAM STACKER (SINGLE-BEAM)

For Single Beam:



Electric Hydraulic Lift Table for Loading & Unloading

| Installation Options                                    | Storage Layer     | Storage Capacity | Diameter of Beam or Fabric Roll | Width of Beam or Fabric Roll | Loading & Unloading               |
|---|-------------------|------------------|---------------------------------|------------------------------|-----------------------------------|
| <br>1/2 Exit<br>1/2 Embedded Exit<br>1/2 Vertical Layer | <br>2/4/6/8 Layer | <br>20-120 pcs   | <br>$\phi 500-1250$ mm          | <br>Model 1500-3900          | <br>electric hydraulic lift table |

### FEATURES

- 1 Enclosed Control Panel with PLC for sequential control of machine
- 2 HMI (Touch Panel) for easy and quick access of data and machine operation.
- 3 Automatic Beam Selection based on entered data like beam No./beam code/mill code/etc. Machine will select shortest path and bring the selected beam at doffing position.
- 4 Safety controls are interlocked with machine operation.


## TECHNICAL SPECIFICATIONS

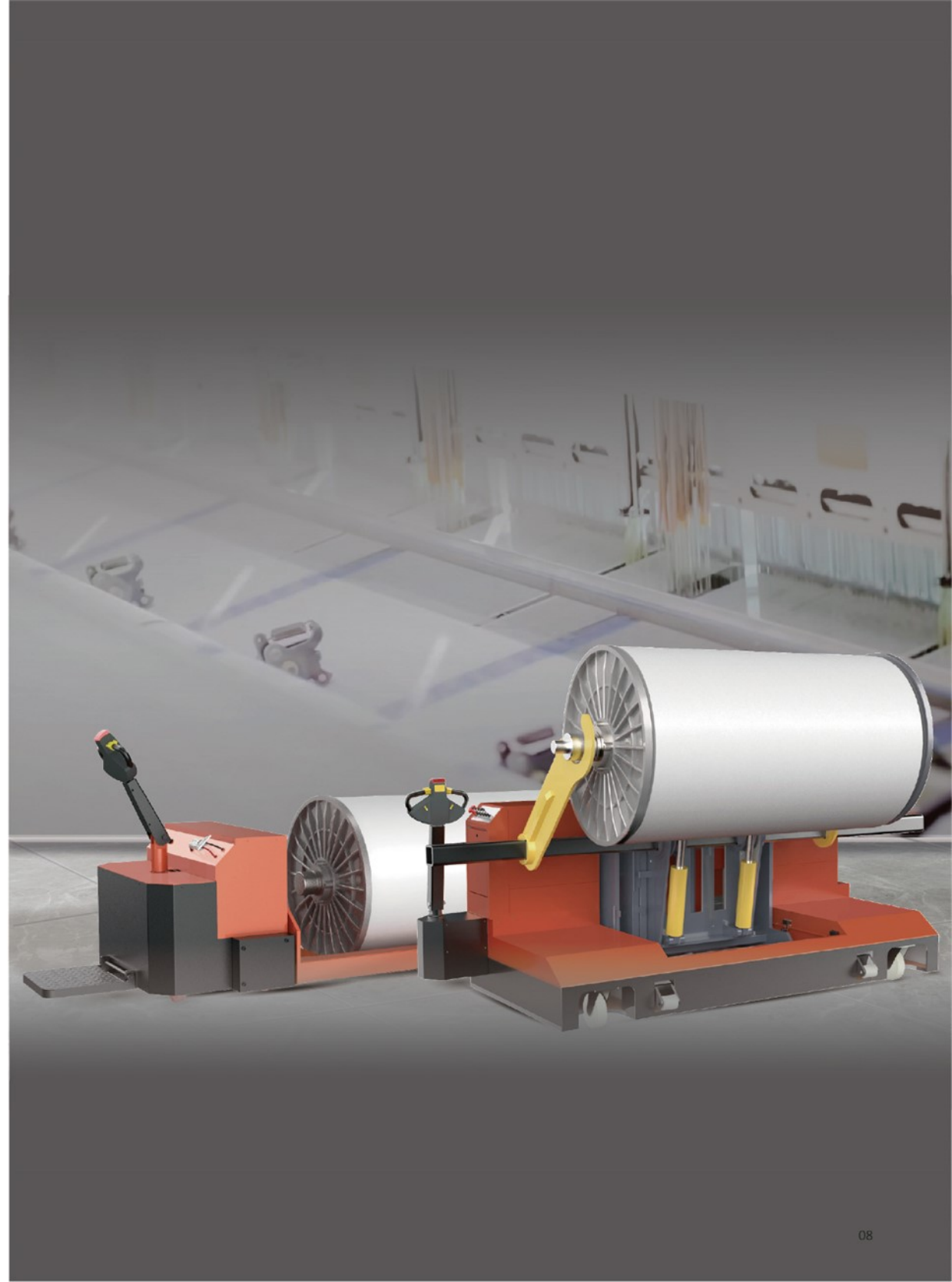
\*(some standard models)

| Storage Capacity | Overall Dimension(mm) |      |      | Type of Warp Beam (PICANOL) | Layer |
|------------------|-----------------------|------|------|-----------------------------|-------|
|                  | L                     | W    | H    |                             |       |
| 30               | 11360                 | 4000 | 5420 | $\Phi 1000 \times 220$ cm   | 4     |
| 40               | 14800                 |      |      |                             |       |
| 50               | 18250                 |      |      |                             |       |
| 60               | 21700                 |      |      |                             |       |
| 70               | 15150                 |      |      |                             |       |
| 80               | 28600                 |      |      |                             |       |
| 100              | 35500                 |      |      |                             |       |
| 30               | 12100                 | 4000 | 5812 | $\Phi 1100 \times 220$ cm   | 4     |
| 40               | 15780                 |      |      |                             |       |
| 50               | 19460                 |      |      |                             |       |
| 60               | 23140                 |      |      |                             |       |
| 70               | 26820                 |      |      |                             |       |
| 80               | 30500                 |      |      |                             |       |
| 100              | 37860                 |      |      |                             |       |
| 70               | 18600                 | 4000 | 8775 | $\Phi 1100 \times 220$ cm   | 6     |
| 80               | 21000                 |      |      |                             |       |
| 100              | 25900                 |      |      |                             |       |

# Part 2

## MATERIAL HANDLING EQUIPMENT

- 01**  **WARP BEAM LIFT TROLLEY**
- 02**  **WARP BEAM LIFT TROLLEY WITH HARNESS MOUNTING DEVICE**
- 03**  **TWIN WARP BEAM LIFT TROLLEY WITH HARNESS MOUNTING DEVICE**
- 04**  **WARP BEAM HIGH LIFT TROLLEY**
- 05**  **UP & BOTTOM WARP BEAM HIGH LIFT TROLLEY**
- 06**  **WARP KNITTING HIGH LIFT TROLLEY**
- 07**  **CLOTH ROLL DOFFING TROLLEY**
- 08**  **BIG BATCH TRANSPORT TROLLEY**
- 09**  **WARP BEAM TRANSPORT TROLLEY**
- 10**  **PALLET STACKER**
- 11**  **A-FRAME TRACTOR**







01



## WARP BEAM LIFT TROLLEY

# ST-MBT-01I

## ELECTRIC TYPE

### HOOK TYPE

Warp beam weighing up to 1800kgs and beam width as per requirements. The trolley is applicable for any weaving machines with their nominal working width 170-340cm without changing its size. A transverse of 10cm for easy beam positioning.



| Carrying Capacity | Lifting Height | Beam Flange Diameter | Lifting/Driving | Battery             |
|-------------------|----------------|----------------------|-----------------|---------------------|
|                   |                |                      |                 |                     |
| 1000-1800 kgs     | 700 mm         | 800-1250 mm          | 3 Motors        | 24 V/ 210 Ah(240Ah) |

### FEATURES

- 1 Regular drive with 3 drive motors.
- 2 Maintenance-free battery.
- 3 Electronic pulse steering for smooth starting and braking.
- 4 Automatically extending support rollers for transverse movement.
- 5 Lifting movement by the motor-driven with automatic quick lift.

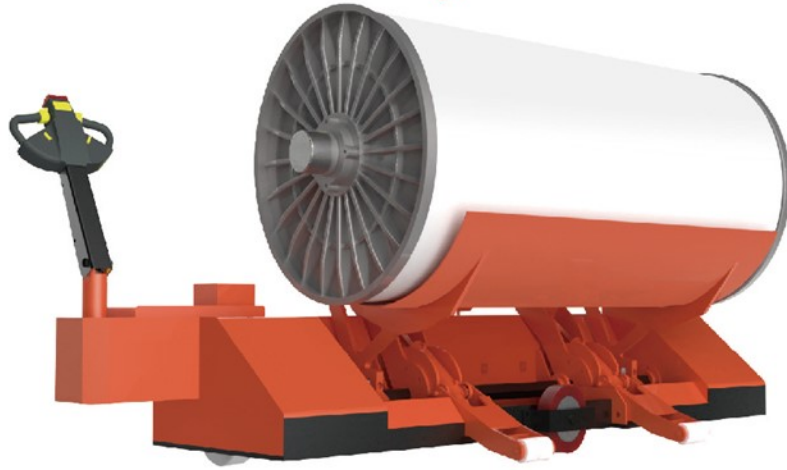
# ST-MBT-01II

## ELECTRIC TYPE

### CRADLE TYPE

Warp beam weighing up to 1800kgs and beam width as per requirements. The trolley is applicable for any weaving machines with their nominal working width 170-340cm without changing its size. A transverse of 10cm for easy beam positioning.

**P** PREMIUM



| Carrying Capacity | Lifting Height | Beam Flange Diameter | Lifting/Driving | Battery             |
|-------------------|----------------|----------------------|-----------------|---------------------|
|                   |                |                      |                 |                     |
| 1000-1800 kgs     | 700 mm         | 800-1250 mm          | 3 Motors        | 24 V/ 210 Ah(240Ah) |

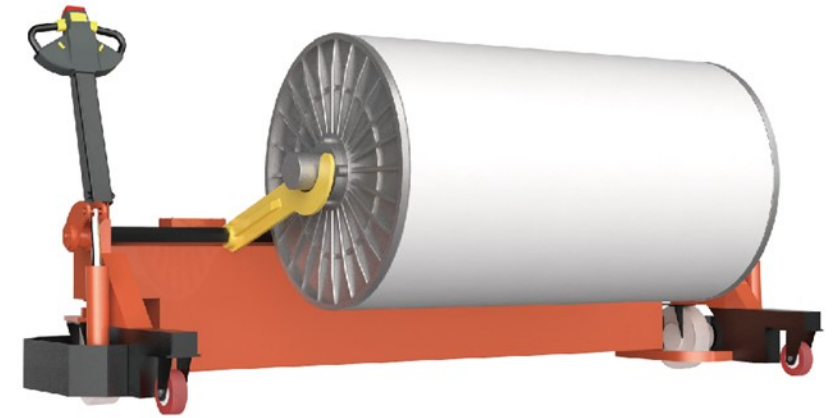
### FEATURES

- 1 Regular drive with 3 drive motors.
- 2 Maintenance-free battery.
- 3 Electronic pulse steering for smooth starting and braking.
- 4 Automatically extending support rollers for transverse movement.
- 5 Lifting movement by the motor-driven with automatic quick lift.

# ST-MBT-01

## ELECTRIC TYPE

Suitable for Bottom Beam transporting, inserting in weaving machines; Warp beam weighing up to 2500kgs and beam width as per requirement.



| Carrying Capacity | Lifting Height | Beam Flange Diameter | Lifting/Driving | Battery             |
|-------------------|----------------|----------------------|-----------------|---------------------|
|                   |                |                      |                 |                     |
| 1000-2500 kgs     | 700 mm         | 800-1250 mm          | 3 Motors        | 24 V/ 210 Ah(240Ah) |

### FEATURES

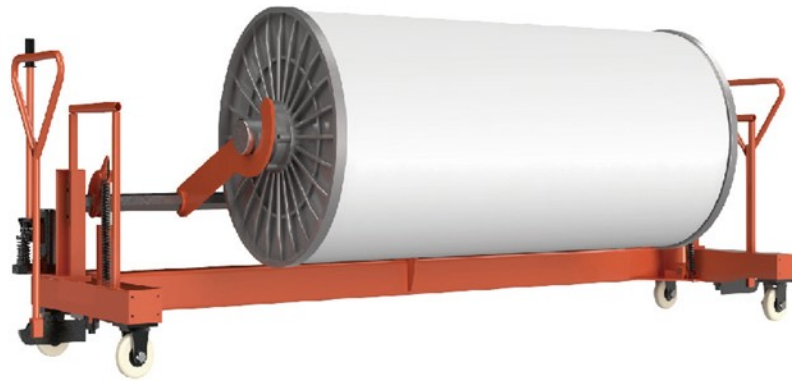
- 1 Regular drive with 3 drive motors.
- 2 Maintenance-free battery.
- 3 Electronic pulse steering for smooth starting and braking.
- 4 Lifting movement by the motor-driven with automatic quick lift.





# ST-HBT-01

## HYDRAULIC TYPE

Suitable for Bottom Beam transporting, inserting in weaving machines; Warp beam weighing up to 2500kgs and beam width as per requirement.

The carriage, which is equipped with oscillating suspended double wheels from a loading capacity of 2500kgs, is very gentle to the floor, because the load is really distributed to both wheels.



| Carrying Capacity  | Lifting Height  | Beam Flange Diameter   | Hydraulic Cylinders  | Hydraulic Unit  |
|--|---|--|--|---|
| <br>1000-2500 kgs | <br>700 mm | <br>800-1250 mm | <br>2 | <br>1 |

### FEATURES

- 1 Separate steering by push/pull bar at both sides.
- 2 Steering in travelling direction fixable on the left and right side.
- 3 Two steered wheels and two guided wheels.
- 4 Wheels with ball bearings and thread protection caps.
- 5 Lifting movement by the hydraulic rod with quick lift.



# 02



## WARP BEAM LIFT TROLLEY WITH HARNESS MOUNTING DEVICE

# ST-MBT-02I

## ELECTRIC TYPE



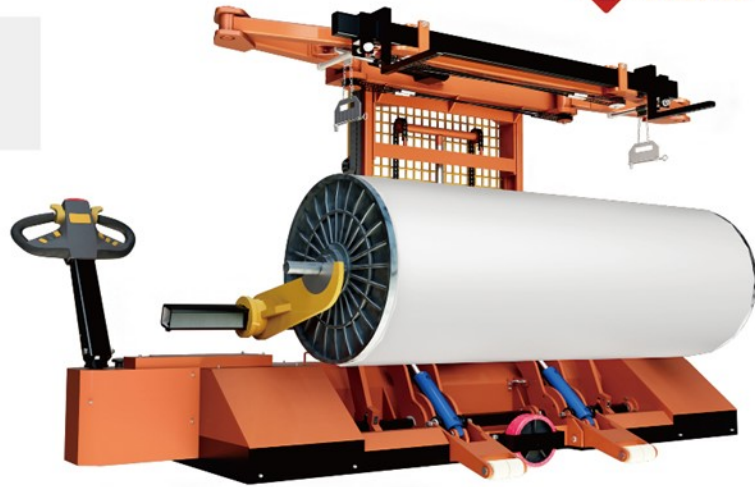
Electric Harness Mounting Device








Remote Control

Suitable for Bottom Beam transporting, inserting in weaving machines. Warp beam weighing up to 1800kgs and an additional loading capacity of 300kgs for the heald frame.

The harness is accommodated by the standard take-up for the harness frame or the complete warp stop motion. A transverse of 10cm for easy beam positioning.



| Carrying Capacity   | Lifting Height   | Beam Flange Diameter   | Lifting/Driving   | Battery  |
|---|--|--|---|--|
| <br>KG | <br>H | <br>D |  |  |
| 1000-1800 kgs(Bottom Beam)<br>300 kgs(Heald Frame)  | 700 mm(Bottom Beam)<br>1950 mm(Heald Frame)  | 800-1250 mm  | 3 Motors  | 24 V/ 210 Ah(240Ah)  |

### FEATURES

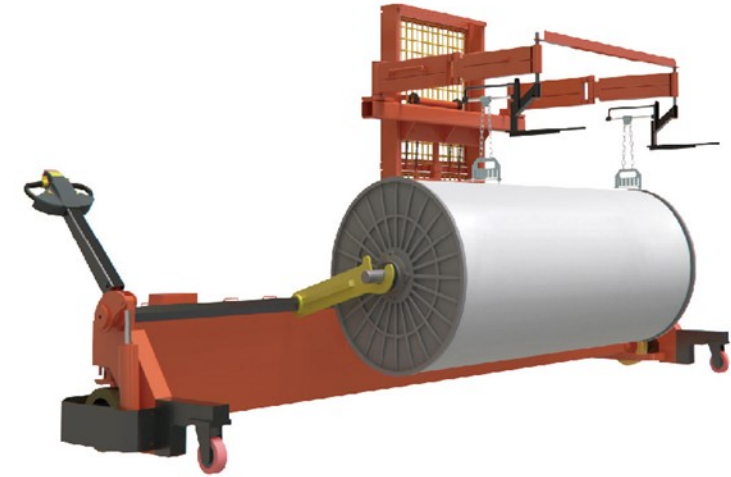
- 1 Regular drive with 3 drive motors.
- 2 Maintenance-free battery.
- 3 Electronic pulse steering for smooth starting and braking.
- 4 Automatically extending support rollers for transverse movement.
- 5 Lifting movement by the motor-driven with automatic quick lift.
- 6 Harness mounting device. The carrying arms are guided parallel to keep the warp tension even.






# ST-MBT-02

## ELECTRIC TYPE

Suitable for Bottom Beam transporting, inserting in weaving machines. Warp beam weighing up to 2500kgs and an additional loading capacity of 300kgs for the heald frame.

The harness is accommodated by the standard take-up for the harness frame or the complete warp stop motion.



| Carrying Capacity   | Lifting Height   | Beam Flange Diameter   | Lifting/Driving   | Battery   |
|---|--|--|---|---|
| <br>KG | <br>H | <br>D |  |  |
| 1000-2500 kgs(Bottom Beam)<br>300 kgs(Heald Frame)  | 700 mm(Bottom Beam)<br>1950 mm(Heald Frame)  | 800-1250 mm  | 3 Motors  | 24 V/ 210 Ah(240Ah)   |

### FEATURES

- 1 Regular drive with 3 drive motors.
- 2 Maintenance-free battery.
- 3 Electronic pulse steering for smooth starting and braking.
- 4 Lifting movement by the motor-driven with automatic quick lift.
- 5 Harness mounting device. The carrying arms are guided parallel to keep the warp tension even.

# ST-HBT-02

## HYDRAULIC TYPE

Suitable for Bottom Beam transporting, inserting in weaving Machines; warp beam weighing up to 2500kgs and an additional loading capacity of 300kgs for the heald frame. The harness is accommodated by the standard take-up for the harness frame or the complete warp stop motion.



| Carrying Capacity                                  | Lifting Height                              | Beam Flange Diameter | Hydraulic Cylinders | Hydraulic Unit |
|--|---|----------------------|---------------------|----------------|
|  |   |                      |                     |                |
| 1000-2500 kgs(Bottom Beam)<br>300 kgs(Heald Frame) | 700 mm(Bottom Beam)<br>1950 mm(Heald Frame) | 800-1250 mm          | 3                   | 2              |

### FEATURES

- 1 Separate steering by push/pull bar at both sides.
- 2 Steering in travelling direction fixable on the left and right side.
- 3 Two steered wheels and two guided wheels.
- 4 Lifting movement by the hydraulic rod with quick lift.
- 5 Harness mounting device.The carrying arms are guided parallel to keep the warp tension even.



# 03



## TWIN WARP BEAM LIFT TROLLEY WITH HARNESS MOUNTING DEVICE

# ST-MBT-03

## ELECTRIC TYPE

Suitable for Twin Bottom Beams transporting, inserting in weaving machines. The harness is accommodated by the standard take-up for the harness frame or the complete warp stop motion.



| Carrying Capacity                                  | Lifting Height                              | Beam Flange Diameter | Lifting/Driving | Battery             |
|--|---|----------------------|-----------------|---------------------|
|  |   |                      |                 |                     |
| 1000-2500 kgs(Bottom Beam)<br>300 kgs(Heald Frame) | 700 mm(Bottom Beam)<br>1950 mm(Heald Frame) | 800-1250 mm          | 3 Motors        | 24 V/ 210 Ah(240Ah) |

### FEATURES

- 1 Regular drive with 3 drive motors.
- 2 Maintenance-free battery.
- 3 Electronic pulse steering for smooth starting and braking.
- 4 Lifting movement by the motor-driven with automatic quick lift.
- 5 Harness mounting device. The carrying arms are guided parallel to keep the warp tension even.

# ST-HBT-03

## HYDRAULIC TYPE

Suitable for Twin Bottom Beams transporting, inserting in weaving machines. The harness is accommodated by the standard take-up for the harness frame or the complete warp stop motion.



| Carrying Capacity                                  | Lifting Height                              | Beam Flange Diameter | Hydraulic Cylinders | Hydraulic Unit |
|--|---|----------------------|---------------------|----------------|
|  |   |                      |                     |                |
| 1000-2500 kgs(Bottom Beam)<br>300 kgs(Heald Frame) | 700 mm(Bottom Beam)<br>1950 mm(Heald Frame) | 800-1250 mm          | 3                   | 2              |

### FEATURES

- 1 Separate steering by push/pull bar at both sides
- 2 Steering in travelling direction fixable on the left and right side.
- 3 Two steered wheels and two guided wheels
- 4 Wheels with ball bearings and thread protection caps.
- 5 Lifting movement by the hydraulic rod with quick lift.
- 6 Harness mounting device. The carrying arms are guided parallel to keep the warp tension even.



# 04

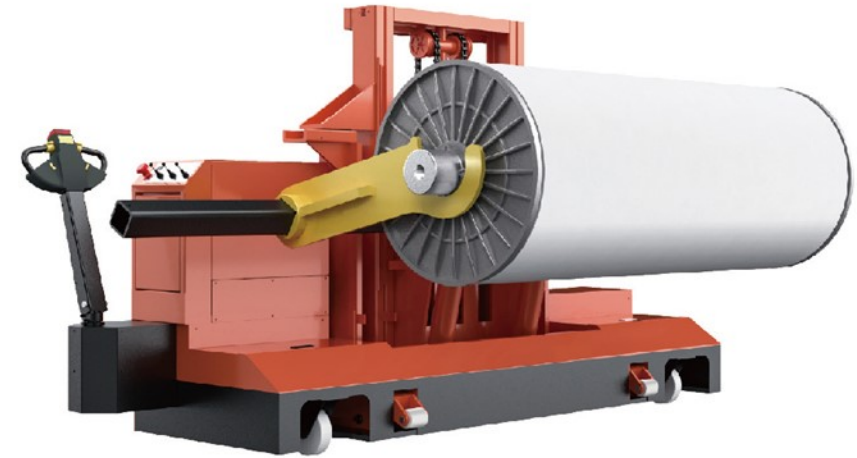


## WARP BEAM HIGH LIFT TROLLEY

# ST-MBT-04

## ELECTRIC TYPE

Suitable for Upper Beam transporting, inserting in weaving machines; the removal of batches from the winder; the loading of warp beam storage racks and batch storage racks.



| Carrying Capacity   | Lifting Height   | Beam Flange Diameter   | Lifting/Driving   | Battery   |
|---|--|--|---|---|
| <br>KG | <br>H | <br>D |  |  |
| 1000-2500 kgs   | 2300 mm  | 800-1250 mm  | 3 Motors  | 24 V/ 210 Ah(240Ah)   |

### FEATURES


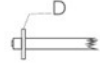


- 1 Regular drive with 3 drive motors.
- 2 Maintenance-free battery.
- 3 Electronic pulse steering for smooth starting and braking.
- 4 Automatically extending support rollers for transverse movement.
- 5 Lifting movement by the motor-driven with automatic quick lift.

# ST-HBT-04I

## SEMI-ELECTRIC TYPE

Suitable for Upper Beam transporting, inserting in weaving machines. The lifting movement is motorized, and the transporting is manually.



| Carrying Capacity  | Lifting Height   | Beam Flange Diameter   | Hydraulic Cylinders  | Hydraulic Unit  |
|--|--|--|--|---|
| <br>1000-2500 kgs | <br>2300 mm | <br>800-1250 mm | <br>2 | <br>1 |

### FEATURES

- 1 Separate steering by push/pull bar at both sides.
- 2 Steering in travelling direction fixable on the left and right side.
- 3 Two steered wheels and two guided wheels.
- 4 Wheels with ball bearings and thread protection caps.
- 5 Lifting movement by the motor-driven with quick lift.



# 05



## UP & BOTTOM WARP BEAM HIGH LIFT TROLLEY

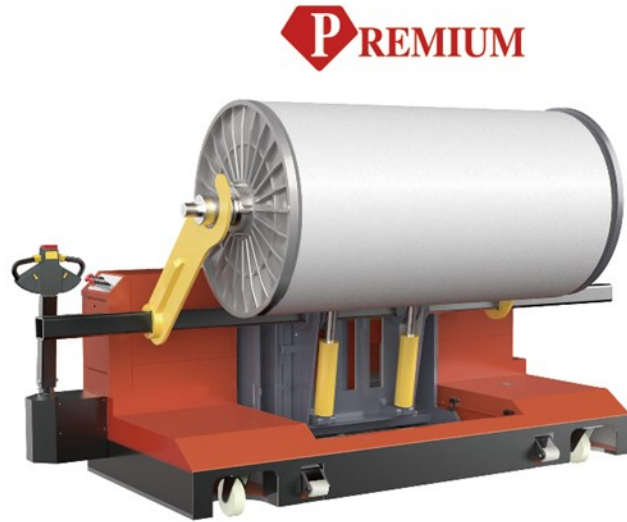


# ST-MBT-05

## ELECTRIC TYPE

Suitable for Upper& Bottom Beam transporting, inserting in weaving machines; the loading of warp beam storage racks and batch storage racks. A transverse of 10cm for easy beam positioning.

(Especially for terry towel loom)



| Carrying Capacity | Lifting Height | Beam Flange Diameter | Lifting/Driving | Battery             |
|-------------------|----------------|----------------------|-----------------|---------------------|
|                   |                |                      |                 |                     |
| 1000-2500 kgs     | 2300 mm        | 800-1250 mm          | 3 Motors        | 24 V/ 210 Ah(240Ah) |

### FEATURES

- 1 Two travelling gears ensure optimum traction and curve driving.
- 2 Two automatically extending support wheels.
- 3 Taking up of warp beam by means of adjustable grippers.
- 4 Smooth control of lifting and lowering as well as swiveling.
- 5 Smooth forward and backward moving of reach mast.

# ST-MBT-05I

## ELECTRIC TYPE

Suitable for Upper&Bottom Beam transporting, inserting in weaving machines; the loading of warp beam storage racks and batch storage racks.



| Carrying Capacity | Lifting Height | Beam Flange Diameter | Lifting/Driving | Battery             |
|-------------------|----------------|----------------------|-----------------|---------------------|
|                   |                |                      |                 |                     |
| 1000-2000 kgs     | 2300 mm        | 800-1250 mm          | 3 Motors        | 24 V/ 210 Ah(240Ah) |

### FEATURES

- 1 Carrying upper and bottom beams together.
- 2 Two travelling gears ensure optimum traction and curve driving.
- 3 Two automatically extending support wheels.
- 4 Taking up of warp beam by means of adjustable grippers.
- 5 Smooth control of lifting and lowering.



06



## WARP KNITTING HIGH LIFT TROLLEY

# ST-MBT-06

## ELECTRIC TYPE

With the warp knitting high lift trolley, pre-assembled warp beams weighing up to 2000kgs are picked with steel ropes from the assembling rack and are mounted into the knitting machines. The vehicle can also be used in restricted spaces due to its compact design.



| Carrying Capacity   | Lifting Height   | Beam Flange Diameter   | Lifting/Driving   | Battery   |
|---|--|--|---|---|
| <br>KG | <br>H | <br>D |  |  |
| 1000-2000 kgs   | 4200 mm  | 500-1000 mm  | 3 Motors  | 24 V/ 210 Ah(240Ah)   |

### FEATURES

- 1 Direct transport from the warehouse or the weaving preparation area to the knitting machine, without having to handle the warp beams in between.
- 2 Smooth control of lifting and lowering as well as swiveling.
- 3 Smooth forward and backward moving of foot support.
- 4 Lifting movement by motor driven.



07



## CLOTH ROLL DOFFING TROLLEY

# ST-HBT-07

## LOW LIFT

The trolley has a cradle for removing cloth rolls from weaving machines. with a loading of 500kgs, it can be easily operated and can also be handled in very narrow aisles.



| Carrying Capacity   | Cloth Roll Diameter   | Centre Height   | Hydraulic Cylinders   | Hydraulic Unit  |
|---|---|---|---|---|
| <br>KG |  |  |  |  |
| 300-500 kgs   | 500 mm  | 585 mm  | 2   | 1   |

### FEATURES

- 1 A vehicle which can be easily moved.
- 2 Push bar can be operated from both sides.
- 3 Foot-operated pump with automatic quick lift.
- 4 Special lifting system for efficient operation even in narrow aisles.

# ST-HBT-071

## HIGH LIFT

The trolley has a cradle for removing or uploading cloth rolls from or on fabric inspection machines. With a loading capacity of 500kgs, it can be easily operated and can also be handled in very narrow aisles. The pumping force is adjusted by the foot-operated pump with automatic quick lift.



| Carrying Capacity   | Cloth Roll Diameter   | Centre Height   | Hydraulic Cylinders   | Hydraulic Unit   |
|---|---|---|---|--|
|  |  |  |  |  |
| 500 kgs   | 1000 mm   | 1100 mm   | 1   | 1  |

### FEATURES

- 1 A vehicle which can be easily moved.
- 2 Foot-operated pump with automatic quick lift.
- 3 Special lifting system for efficient operation even in narrow aisles.
- 4 With a lifting height of 1100mm to match with the fabric inspection machines.



# 08



## BIG BATCH TRANSPORT TROLLEY

# ST-MBT-08

## ELECTRIC TYPE

The trolley is applied for rolling over safely and transporting big batch with max. Weight of 2500kgs. The cradle length can be adapted to the relevant batch length. The trolley height can also be adapted to the height of the batch winder.



| Carrying Capacity   | Cloth Roll Diameter   | Lifting/Driving   | Battery  |
|---|---|---|--|
|  |  |  |  |
| 1000-2500 kgs   | 800-1500 mm   | 2 Motors  | 24 V/ 210 Ah(240Ah)  |

### FEATURES

- 1 Transport of batches with diameter up to 1500mm from the weaving to the storage area.
- 2 Loading from the batching motion possible on both sides.
- 3 Smooth travelling through step-less control.



# 09

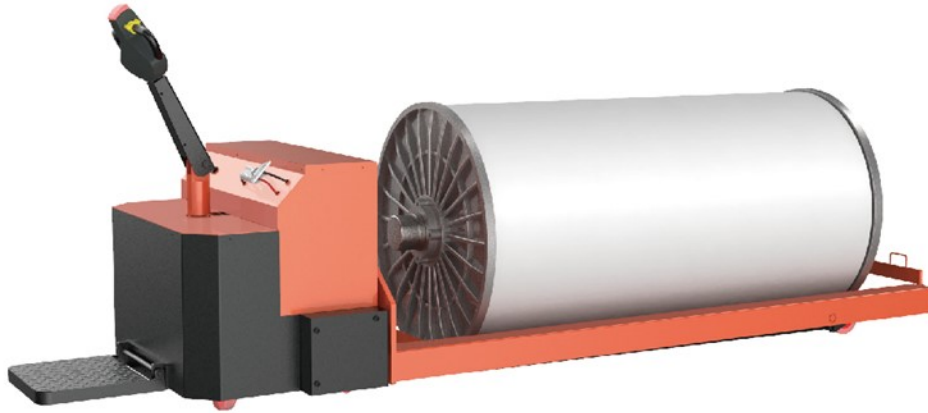


## WARP BEAM TRANSPORT TROLLEY

# ST-MBT-09

## ELECTRIC TYPE

This trolley is designed for the easy transport of warper's beams and warp beams weighing up to 2500kgs and is also suitable for longer distances, e.g. from the warping frame to the warping machine or to the warehouse.



| Carrying Capacity | Centre Height | Beam Flange Diameter | Lifting/Driving | Battery             |
|-------------------|---------------|----------------------|-----------------|---------------------|
|                   |               |                      |                 |                     |
| 800-2500 kgs      | 110 mm        | 800-1250 mm          | 2 Motors        | 24 V/ 210 Ah(240Ah) |

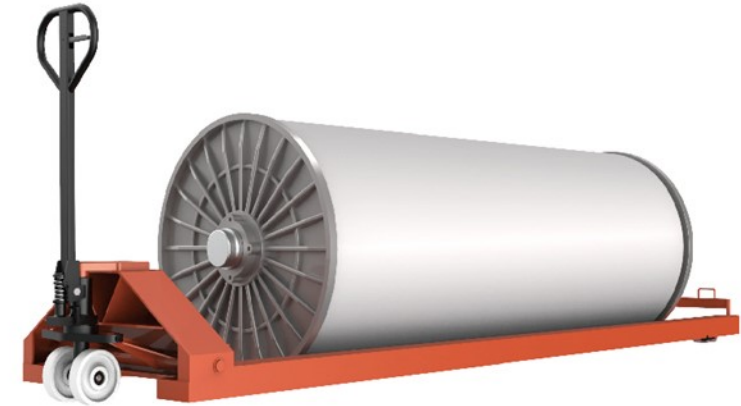
### FEATURES

- 1 Strong, robust travelling mechanism.
- 2 Polyurethane running wheels cushion the vehicle while driving on a rough roadway surface.
- 3 Solid prismatic support.

# ST-HBT-09

## FOR FULL BEAM

The prismatic forks drive underneath the warper's beams or warp beams and lift them hydraulically. With the lowering handle, the load is gently deposited on the floor.



| Carrying Capacity | Centre Height | Beam Flange Diameter | Hydraulic Cylinders | Hydraulic Unit |
|-------------------|---------------|----------------------|---------------------|----------------|
|                   |               |                      |                     |                |
| 1000-2500 kgs     | 110 mm        | 800-1250 mm          | 1                   | 1              |

### FEATURES






- 1 Well-proven, maintenance-free hydraulic system.
- 2 Reduced pump force required.
- 3 Solid prismatic supports.

# ST-HBT-09I

## FOR EMPTY BEAM

Suitable for empty beam transporting, loading /unloading in loom shed and beaming section. Carrying capacity up to 500kgs and beam flange diameter up to 1250mm.



| Carrying Capacity  | Centre Height   | Beam Flange Diameter   | Hydraulic Cylinders  | Hydraulic Unit  |
|--|---|--|--|---|
| <br>100-500 kgs | <br>750 mm | <br>800-1250 mm | <br>1 | <br>1 |

### FEATURES

- 1 Suitable for loading, unloading and carrying empty beams of dia 800- 1250mm flange.
- 2 Carrying capacity up to 500kgs.
- 3 Four caster wheels provide underneath of trolley for easy movement.



# 10



## PALLET STACKER

# ST-MBT-10

## ELECTRIC STACKER

Suitable for different applications in convenient and easy operation. Apart from standard specifications already available, the stacker can be customized to meet specific requirements of loading device, carrying capacity, lifting height etc.



| Carrying Capacity | Lifting Height                                | Turning Radius | Lifting  | Battery      |
|-------------------|---|----------------|----------|--------------|
|                   |   |                |          |              |
| 1000-2000 kgs     | 1600/2500/3000/3300<br>3500/4500/5000/5500 mm | 1660 mm        | 2 Motors | 15 V/ 115 Ah |

### FEATURES

- 1 Double lift cylinder design, ensure accurate and smooth lift.
- 2 Unique wide-view mast design greatly increase operator's vision.
- 3 With explosion-proof valve at the bottom of cylinder, the mast will not rapidly decline even if the pipe burst.

# ST-HBT-10I

## SEMI-ELECTRIC STACKER

Suitable for different applications in convenient and easy operation. Apart from standard specifications already available, the stacker can be customized to meet specific requirements of loading device, carrying capacity, lifting height etc.



| Carrying Capacity | Lifting Height                       | Turning Radius | Lifting | Battery      |
|-------------------|--------------------------------------|----------------|---------|--------------|
|                   |                                      |                |         |              |
| 1000-2000 kgs     | 1600/2000/2500/<br>3000/3300/3500 mm | 1430 mm        | 1 Motor | 15 V/ 115 Ah |

### FEATURES

- 1 Strong mast material ensure high capacity.
- 2 Explosion-proof valve in the pump, to avoid rapid decline to ensure the operator's safety.
- 3 Over-discharge protection device greatly extends battery life.





11



## A-FRAME TRACTOR

# ST-MBT-11-50

## ELECTRIC TYPE

The motorized A-frame tractor can lift and tow batch trolleys A-frames up to 5000kgs. It is equipped with a collision protection device on the driving part and behind the running wheels, since it is often used under rough conditions. The lifting range of the spherical head and the spherical head diameter can be tailor-made to suit the individual customer's requirements.



| Carrying Capacity | Lifting Height | Lifting/Driving | Battery             |
|-------------------|----------------|-----------------|---------------------|
|                   |                |                 |                     |
| 5000 kgs          | 300 mm         | 2 Motors        | 24 V/ 210 Ah(240Ah) |

### FEATURES

- 1 Large steering angle.
- 2 Collision protection.
- 3 High battery capacity for a long service time.
- 4 AC control for optimal energy utilization.

# ST-MBT-11-30

## ELECTRIC TYPE

The motorized A-frame tractor can lift and tow batch trolleys A-frames up to 3000kgs. It is equipped with a collision protection device on the driving part and behind the running wheels, since it is often used under rough conditions. The lifting range of the spherical head and the spherical head diameter can be tailor-made to suit the individual customer's requirements.



**NEW**  
ARRIVAL

| Carrying Capacity | Lifting Height | Lifting/Driving | Battery             |
|-------------------|----------------|-----------------|---------------------|
|                   |                |                 |                     |
| 3000 kgs          | 300 mm         | 2 Motors        | 24 V/ 210 Ah(240Ah) |

### FEATURES

- 1 Large steering angle.
- 2 Collision protection.
- 3 High battery capacity for a long service time.
- 4 AC control for optimal energy utilization.

# ST-HBT-11-50

## HYDRAULIC TYPE

The hydraulic A-frame lifting trolley is small, robust and powerful. Due to its loading capacity of 5000kgs, the trolley can transport A-frame weighing up to 5000kgs. The spherical head diameter and the lifting range of the spherical head can be adapted to the individual requirements.



| Carrying Capacity | Lifting Height | Hydraulic Cylinders | Hydraulic Unit |
|-------------------|----------------|---------------------|----------------|
|                   |                |                     |                |
| 3000/5000 kgs     | 300 mm         | 1                   | 1              |

### FEATURES

- 1 High loading capacity.
- 2 Large, smoothly running PU wheels directly under the load. Thus, the vehicle can easily turn on the spot.
- 3 Robust hydraulic system.

# Part 3

## AUTOMATED GUIDED VEHICLES(AGV)



# ST-AGV-FL

## FORKLIFT TYPE

This AGV is in forklift structure, in light weight and heavy capacity, with latest electrical controlling system, to make sure stable and steady vehicle condition for whole procedure of design, manufacturing, operation and maintenance.



|                       |               |                  |
|-----------------------|---------------|------------------|
|                       |               |                  |
| Autonomous navigation | Planning path | Laser navigation |

Dimension(LxWxH)  
**1605×882×2036mm**

Lifting height  
**1600mm**

Position accuracy  
**±10mm**

Walk Way  
**Forwad, backward, turn**

Fork Size(LxWxH)  
**1150×180×65mm**

Capatity  
**1400kg**

Fork lifting accuracy  
**±10mm**

Driving Way  
**Single steering wheel**

Weight  
**680kg**

Guiding Way  
**Laser**

Battery  
**Lithium Battery DC 24V/180Ah**

# ST-AGV-RC

## ROLLER TYPE

This AGV is mainly used in automated logistics transportation lines in an industrial environment to complete the handling of goods between stations and stations, and between stations and warehouses, It is an important part of the future Industry 4.0 intelligent factory and can replace manual operation to undertake complicated, difficult, dangerous and repetitive tasks in logistic system.

This AGV consists of two parts, a two-wheel differential sports chassis and a cargo business module. It is equipped with the latest hardware platform and software system, and realizes cargo handling based on autonomous navigation technology and sports chassis technology.



|                       |               |                  |
|-----------------------|---------------|------------------|
|                       |               |                  |
| Autonomous navigation | Planning path | Laser navigation |

Dimension(LxWxH)  
**1146x870x712mm**  
(cargo platform not included)

Turning Radius  
**1350mm**

Guiding Way  
**Laser**

Walk Way  
**Forwad, backward, turn**

Chassis height to ground  
**30mm**

Capatity  
**100kg**

Position accuracy  
**±10mm**

Battery  
**Lithium iron phosphate Battery**

Weight  
**300kg**

Roller Conveyor Rated Speed  
**12m/min**

Rated running speed  
**1.2m/s**

Driving Way  
**Two-wheel differential**

# ST-AGV-TC-1.5

## Two Way Carrying Type

This AGV contains two parts, hardware and software, its main function is to realize the automatic docking and handling of materials in the automatic threading production line of texturing workshop. The AGV is a non-standard customized carrying AGV. The automatic threading AGV part of the texturing workshop is composed of the AGV central management system and the non-standard customized unit loaded on the AGV. At the same time, the non-standard customized unit loaded on the AGV is composed of mechanical structure and electric actuator, pneumatic actuator and other components.



|                       |               |                  |
|-----------------------|---------------|------------------|
|                       |               |                  |
| Autonomous navigation | Planning path | Laser navigation |

Dimension(LxWxH)  
2400x1400x2790mm

Turning Radius  
1600mm

Walk Way  
Forwad, backward, turn

Driving Way  
Double steering wheel

AGV Controlling System  
Imported system(NDC)

Capacity  
1500kg

Position accuracy  
±15mm

Battery  
Lithium Battery, 48V 200AH

Weight  
1500kg

Guiding Way  
Laser

Walk Speed  
0-40m/min

# ST-AGV-TC-3.5

## Two Way Carrying Type

This AGV contains two parts, hardware and software, its main function is to realize the automatic docking and handling of materials in the automatic threading production line of texturing workshop. The AGV is a non-standard customized carrying AGV. The automatic threading AGV part of the texturing workshop is composed of the AGV central management system and the non-standard customized unit loaded on the AGV. At the same time, the non-standard customized unit loaded on the AGV is composed of mechanical structure and electric actuator, pneumatic actuator and other components.



|                       |               |                  |
|-----------------------|---------------|------------------|
|                       |               |                  |
| Autonomous navigation | Planning path | Laser navigation |

Dimension(LxWxH)  
3200x2600x3000mm

Turning Radius  
1600mm

Walk Way  
Forwad, backward, turn

Driving Way  
Double steering wheel

AGV Controlling System  
Imported system(NDC)

Capacity  
3500kg

Position accuracy  
±15mm

Battery  
Lithium Battery, 48V 200AH

Weight  
2000kg

Guiding Way  
Laser

Walk Speed  
0-40m/min

# Part 4

## LOOM TAKE-UP MACHINE & BEAMS



# ST-LTM-01

## WITH INCLINED INSPECTION SCREEN

Loom Take-Up Machine(Batch Winder)is designed to attach all types of weaving machines. Any type of Woven, Non-Woven or Knitted Fabrics can be taken up on the machine and are designed to give tight and compact rolls from the most elastic to heaviest fabrics such as industrial textiles.

- Fast and easily handled, requiring for one operator only
- **Less fabric waste and increase efficiency**
- Synchronize production process

**HOT**



| Speed                              | Fabric Width | Batching Diameter Max | Edge-alignment Error | Battery                            |
|------------------------------------|--------------|-----------------------|----------------------|------------------------------------|
|                                    |              |                       |                      |                                    |
| Synchronized with Weaving Machines | 1.8-4.0 m    | ≤1500 mm              | ≤5 mm                | 3 Phase 380 V<br>50 HZ(Customized) |

REMARK: Variable working width is possible and can be tailor-made to your requirements of processing needs.

- Suitable for any kind of fabrics
- Attached to any brand of weaving machines



- I. Doffing: Manual / pneumatic / electric
- II. Automatic tension controlling ; tension setting on demand
- III. Center rewinding / surface rewinding

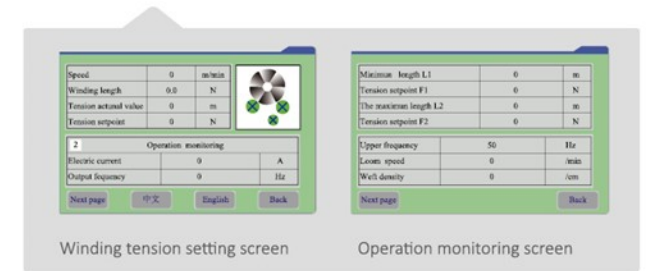
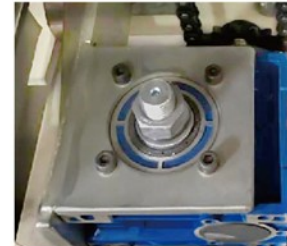
Pneumatic Roll Ejection Device



Touching Screen



Automatic Selvage Shifting Device

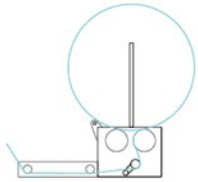


### FEATURES

- 1 Various models available allow Batching of Fabric as well as with On-Loom Inspection.
- 2 Automatic synchronization with the weaving machine.
- 3 Positive tension adjustment allows precise selection for any fabric on any Loom.
- 4 Forward &reverse (not full) movement of fabric.
- 5 Operator's platform with anti-fatigue material and toe-guards.
- 6 Crease free winding of fabric.
- 7 Compact rolls due to differential ratio of the batcher rolls.
- 8 Option- Accurate length measuring giving accuracy of  $\pm 0.01\%$ .
- 9 Option-Semi-automatic doffing device(pneumatic roll ejection device).
- 10 Option- Automatic fabric selvage shifting device for thick selvage.

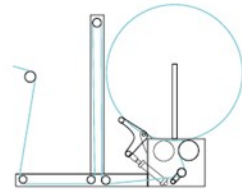
## ST-LTM-01

WITHOUT INSPECTION



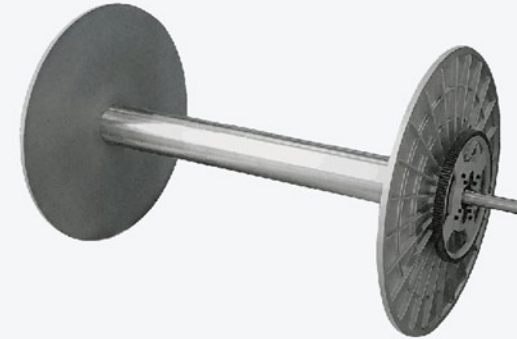
## ST-LTM-02

WITH VERTICAL INSPECTION SCREEN

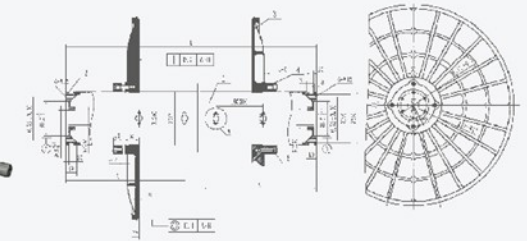


## ST-WB-01

WEAVING BEAM

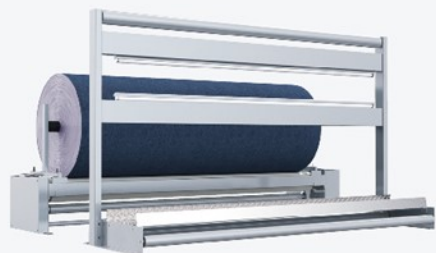


**SUNTECH WEAVER'S BEAM** is applicable for Toyota, Tsudakoma, Picanol, Sulzer, Dornier and other air jet, water jet, rapier and projectile high speed looms in single section and double section construction with or without differential motion up to 1250mm flange diameter and 540cm working width.



## ST-LTM-02

WITH SIMPLE INSPECTION LIGHT



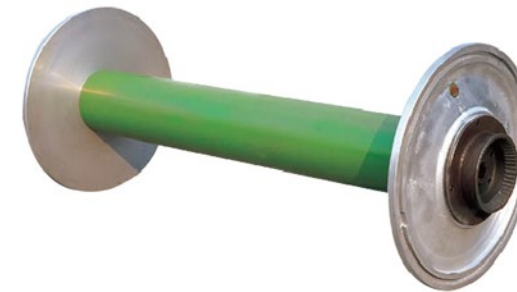
## ST-LTM-03

CENTER REWINDING SYSTEM



## ST-WB-02

WARPING BEAM



**SUNTECH WARPERS BEAM** is suitable for spun and filament yarn Benninger, Karl mayer, Hakoba, West Point, Sucker and other high speed sectional and conventional warping machines.

