

# Jumboelectric Tow Trucks

(AC / DC Drive)

(Capacity 2000 / 3000 / 5000 Kg.)



- MOSFET stepless speed controller and heavy duty contactors.
- Towing capacity up to 5000 kg.
- Pollution free and user friendly.
- Easy and comfortable to ride.

The Jost's electric tow truck is a three wheel battery operated material handling equipment used for towing load up to 5000 kg over long distances on asphalt or smooth concrete road. It is ideal for use in inter-plant transportation, factories, airports, railways and large processing plants. Jost's leads the way with tough, dependable industrial towing trucks. **Josts Tow Trucks with AC technology provides additional advantage of reduced maintenance, improved power utilization and improved battery life.**

**Operator Area :** Comfortable seat with back rest ergonomically positioned over battery cover with easy reach to steering handle and optimum leg-space with suitable foot rest for operating the accelerator and brakes. The control switches on the panel are easily visible and accessible.

**Drive and Transmission :** The vehicle is driven by a DC / AC motor of suitable rating with class 'F' insulation and powered by suitable traction battery. A two stage self contained completely enclosed transmission gear unit coupled with motor shaft on one side and directly fitted on to the front wheel on the other side, transmits the power efficiently.

**Drive Control :** Microprocessor based MOSFET controller provides smooth and stepless control of speed and acceleration. The high life cycle contactors used in the controller circuit enhances dependability and productivity. Alternatively four step resistance control can also be provided as an option.

**Control Panel :** The control panel is provided with conveniently located simple controls such as ON - OFF key switch, forward and reverse switch, emergency power cut-off switch and battery discharge indicators. Battery level indicator with hour meter display can also be supplied as an option.

**Chassis :** The chassis consist of robust welded steel frames. The tow truck has a small platform at the rear for keeping materials like tools etc. A separate trolley with roller bed can be supplied as an option for easy loading / unloading of batteries. Optionally a hand lever operated self return towing arrangement can be provided at the rear of the truck which can be operated by the operator without dismounting from the seat. The chassis is adequately balanced for towing the specified loads without any problem.

**Suspension :** The standard model comes with front suspension made of helical coil springs which provides adequate cushion to shocks.

**Steering :** The direct mounted steering handle with low friction bearings ensure comfortable steering within narrow aisle. The steering can be operated in the range of 90° on the either side. The steering handle is wide enough for the operator to steer the vehicle with little effort.

**Brakes :** Internally expanding foot operated hydraulic brakes on rear wheels ensures smooth braking within adequate distance, without the collision of the towing trolley. Parking brake is actuated by hand operated lever on the left hand side of the operators seat. The truck comes to halt automatically with removal of foot from acceleration pedal. With 3 phase AC motor, the regenerative function of the motor provides additional braking during above operation.

**Wheels :** Solid rubber moulded tyres are provided on both drive wheel as well as rear axle for operating over a variety of surface conditions. Non-marking tyres can also be supplied as an option on customers request.

**Accessories :** The truck comes with head / tail / brake lights and horn as a standard. The truck can also be provided with Beakon lights, reverse buzzer, side indicators, canopy, battery roller bed, battery changing trolley as an option.

**Safety :** The parking brake enables vehicle to park on slopes without any kind of movement. The emergency power cut-off switch isolates the battery from the control panel to prevent any situation in emergency. Adequate braking distance prevents collisions of the trailing trollies at the time of braking. Safety accessories like Beakon lights, reverse buzzer, side indicators, canopy can also be supplied with the truck as an option.

**Servicing :** The modular, service friendly design with easily removable front / top cover provides easy access to all components for servicing, thus saving valuable time during maintenance.

**Battery :** The truck is supplied with lead acid traction batteries of 24V / 330Ah (AC model) and 30V / 289Ah (DC model) for 2000 kg model, 36V / 299Ah for 3000 kg and 5000 kg Model as standard. Maintenance free batteries also can be supplied as an option.

**Charger :** The truck is supplied with high frequency constant current charger of suitable rating as a standard.

# JUMBOELECTRIC TOW TRUCK (AC / DC Drive)

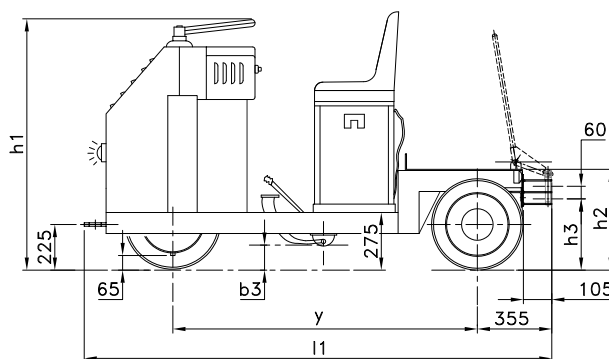
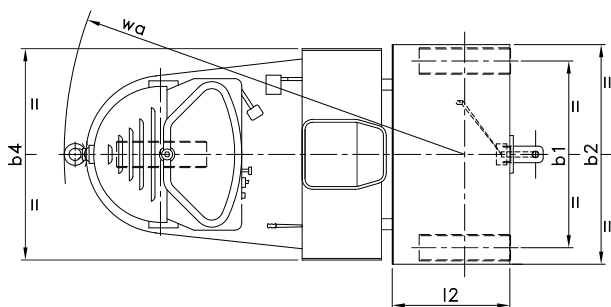
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(Capacity 2000 / 3000 / 5000 Kg.)

## Performance Data

|                 |     |                                          |              |                 |            |                 |            |                 |  |
|-----------------|-----|------------------------------------------|--------------|-----------------|------------|-----------------|------------|-----------------|--|
| Identification  | 1.1 | Model                                    | nos.         | JETW – 20       |            | JETW – 30       |            | JETW – 50       |  |
|                 | 1.2 | Type of Operation                        | type         | Seated          |            | Seated          |            | Seated          |  |
|                 | 1.3 | Towing Capacity*                         | Kg           | 2000            |            | 3000            |            | 5000            |  |
|                 | 1.4 | Wheelbase                                | y = mm       | 1320            |            | 1320            |            | 1550            |  |
| Weight          | 2.1 | Service weight incl. battery (Apx.)      | Kg           | 800             |            | 925             |            | 1100            |  |
|                 | 2.2 | Battery weight (Apx.)                    | Kg           | 350             |            | 450             |            | 450             |  |
| Chassis         | 3.1 | Tyres                                    | type         | Solid Rubber    |            | Solid Rubber    |            | Solid Rubber    |  |
|                 | 3.2 | Tyre size, Front                         | mm           | Ø438 x 127      |            | Ø438 x 127      |            | Ø438 x 127      |  |
|                 | 3.3 | Tyre size, Rear                          | mm           | Ø438 x 127      |            | Ø438 x 127      |            | Ø438 x 127      |  |
|                 | 3.4 | Wheels, Front / Rear (x = driven wheels) | nos.         | 1 x 2           |            | 1 x 2           |            | 1 x 2           |  |
|                 | 3.5 | Track width, Rear                        | b1 = mm      | 850             |            | 850             |            | 850             |  |
| Basic Dimension | 4.1 | Overall height                           | h1 = mm      | 1170            |            | 1170            |            | 1170            |  |
|                 | 4.2 | Overall length                           | l1 = mm      | 2110            |            | 2110            |            | 2360            |  |
|                 | 4.3 | Battery compartment width                | b4 = mm      | 865             |            | 945             |            | 945             |  |
|                 | 4.4 | Overall width                            | b2 = mm      | 1000            |            | 1000            |            | 1000            |  |
|                 | 4.5 | Ground clearance                         | b3 = mm      | 95 <sup>@</sup> |            | 95 <sup>@</sup> |            | 95 <sup>@</sup> |  |
|                 | 4.6 | Turning radius                           | Wa = mm      | 1720            |            | 1720            |            | 1960            |  |
|                 | 4.7 | Platform Size                            | l2 x b2=mm   | 400 x 1000      |            | 400 x 1000      |            | 660 x 1000      |  |
|                 | 4.8 | Platform / Towing height <sup>#</sup>    | h2 / h3 = mm | 480 / 350       |            | 480 / 350       |            | 480 / 350       |  |
| Performance     | 5.1 | Travel speed : Laden (min.)              | kmph         | 8.0             | 6.0        | 8.0             | 6.0        | 7.0             |  |
|                 | 5.2 | Unladen (min.)                           | kmph         | 10.0            | 9.0        | 10.0            | 9.0        | 10.0            |  |
|                 | 5.3 | Gradient performance : Laden             | Max. %       | 8               | 7          | 8               | 7          | 5               |  |
|                 | 5.4 | Unladen                                  | Max. %       | 12              | 10         | 12              | 10         | 16              |  |
|                 | 5.5 | Service brake                            | type         | Hydraulic       |            | Hydraulic       |            | Hydraulic       |  |
|                 | 5.6 | Parking brake                            | type         | Hand operated   |            | Hand operated   |            | Hand operated   |  |
| Power           | 6.1 | Drive motor rating S2 = 60 min.          | Kw           | 1.5             | 1.7        | 2.6             | 2.6        | 3.6             |  |
|                 | 6.2 | Drive                                    | type         | 3phase AC       | ©Series DC | 3phase AC       | ©Series DC | 3phase AC       |  |
|                 | 6.3 | Battery voltage, nominal capacity        | V / Ah       | 24 / 330        | 30 / 289   | 36 / 299        |            | 36 / 299        |  |
|                 | 6.4 | Charger (Single Phase) (Automatic)       | V / Amp.     | 24 / 35         | 30 / 30    | 36 / 40         |            | 36 / 40         |  |
| Others          | 7.1 | Drive control                            | type         | Stepless Mosfet |            | Stepless Mosfet |            | Stepless Mosfet |  |
|                 | 7.2 | Sound level at driver's ear              | db(A)        | 85              |            | 85              |            | 85              |  |

Note : 1. \* = Towing Capacity includes trolley weight plus pay load weight.,  
 2. @ = Unladen Condition.,  
 3. © = Resistance Controller available with DC series drive motor on request.,  
 4. # = Towing arrangement is for towing the vehicle only.



\* For any special requirements, Please contact Jost's H.O., Dimensions indicated here are subject to variations of  $\pm 20$  mm and performance  $\pm 10\%$ . Service weight  $\pm 50$  kg. Right to make changes and technical improvement reserved.