#### www.josts.com



## Jumbolectric Tow Trucks

Josts

(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 hault 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.





# JUMBOLECTRIC TOW TRUCK (AC / DC Drive)

(Capacity 2000 / 3000 / 5000 Kg.)

### **Performance Data**

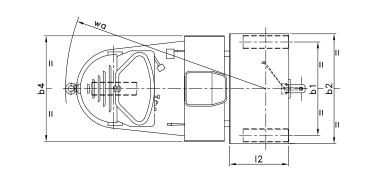
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Vertex         2.1         Service weight incl. battery (Apx.)         Kg         800         925         1100           2.2         Battery weight (Apx.)         Kg         350         450         450           3.1         Tyres         Solid Rubber         Mass x127         Ø438 x127         Ø435         <	u	1.1	Model	nos.	JETW – 20 JETW – 30		/ - 30	JETW – 50	
Vertex         2.1         Service weight incl. battery (Apx.)         Kg         800         925         1100           2.2         Battery weight (Apx.)         Kg         350         450         450           3.1         Tyres         Solid Rubber         Mass x127         Ø438 x127         Ø435         <		1.2	Type of Operation	type	Seated		Seated		Seated
Vertex         2.1         Service weight incl. battery (Apx.)         Kg         800         925         1100           2.2         Battery weight (Apx.)         Kg         350         450         450           3.1         Tyres         Solid Rubber         Mass x127         Ø438 x127         Ø435         <		1.3	Towing Capacity*	Kg	2000		3000		5000
3.1TyrestypeSolid RubberSolid Rubber <td>1.4</td> <td>Wheelbase</td> <td>y = mm</td> <td colspan="2">1320</td> <td colspan="2">1320</td> <td>1550</td>		1.4	Wheelbase	y = mm	1320		1320		1550
3.1TyrestypeSolid RubberSolid Rubber <td>2.1</td> <td>Service weight incl. battery (Apx.)</td> <td>Kg</td> <td colspan="2">800</td> <td colspan="2">925</td> <td>1100</td>		2.1	Service weight incl. battery (Apx.)	Kg	800		925		1100
yes         3.2         Tyre size, Front         mm $\phi$ 438 x 127 $\phi$ 438		2.2	Battery weight (Apx.)	Kg	350		450		450
Ver         3.3         Tyre size, Rear         mm	Chassis	3.1	Tyres	type	Solid Rubber		Solid Rubber		Solid Rubber
3.4         Wheels, Front / Kear (x = driven wheels)         Inos.         I x 2 <thi 2<="" th="" x=""> <thi 2<="" th="" x="">         I x 2</thi></thi>		3.2	Tyre size, Front	mm	Ø438 x 127		Ø438 x 127		Ø438 x 127
3.4         Wheels, Front / Kear (x = driven wheels)         nos.         1 x 2		3.3	Tyre size, Rear	mm	Ø438 x 127		Ø438 x 127		Ø438 x 127
4.1         Overall height         h1 = mm         1170         1170         1170           4.2         Overall length         I1 = mm         2110         2160         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         1960         1000           4.7         Platform Size         12 x b2=mm         400 x 1000         400 x 1000         660 x 100           4.8         Platform / Towing height <sup>#</sup> h2 / h3 = mm         480 / 350         480 / 350         480 / 350         480 / 350         480 / 350         480 / 350         480 / 350         480 / 350         480 / 350         480 / 350         10.0         9.0         10.0         9.0         10.0         9.0         10.0         9.0         10.0         9.0         10.0         9.0         10.0         9.0         10.0         9.0         10.0         9.0         10.0         9.0         10.0         9.0         10.0		3.4	Wheels, Front / Rear (x = driven wheels)	nos.	1 x 2		1 x 2		1 x 2
$ \begin{array}{ c c c c c c c } \hline \begin{tabular}{ c c c c c c c } \hline \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$		3.5	Track width, Rear	b1 = mm	85	850		50	850
Vert 4.3Battery compartment widthb4 = mm $865$ $945$ $945$ 4.4Overall widthb2 = mm $1000$ $1000$ $1000$ $1000$ 4.4Overall widthb2 = mm $1000$ $1000$ $1000$ $1000$ 4.5Ground clearanceb3 = mm $95^{\circ}$ $95^{\circ}$ $95^{\circ}$ 4.6Turning radiusWa = mm $1720$ $1720$ $1960$ 4.7Platform Size $12 \times b2 = mm$ $400 \times 1000$ $400 \times 1000$ $660 \times 1000$ 4.8Platform / Towing height # $h2 / h3 = mm$ $480 / 350$ $480 / 350$ $480 / 350$ 5.1Travel speed : Laden (min.)kmph $8.0$ $6.0$ $8.0$ $6.0$ $7.0$ 5.2Unladen (min.)kmph $10.0$ $9.0$ $10.0$ $9.0$ $10.0$ 5.3Gradient performance :LadenMax.% $8$ $7$ $8$ $7$ $5$ 5.4UnladenMax.% $12$ $10$ $12$ $10$ $16$ 5.5Service braketype $Hyd=ulic$ $Hyd=ulic$ $Hyd=ulic$ $Hand$ operated6.1Drive motor rating S2 = 60 min.Kw $1.5$ $1.7$ $2.6$ $2.6$ $3.6$		4.1	Overall height	h1 = mm	11	70	1170		1170
4.7         Platform Size         I2 x b2=mm         400 x 1000         400 x 1000         660 x 100           4.8         Platform / Towing height <sup>#</sup> h2 / h3 = mm         480 / 350		4.2	Overall length	l1 = mm	21	10	2110		2360
4.7         Platform Size         I2 x b2=mm         400 x 1000         400 x 1000         660 x 100           4.8         Platform / Towing height <sup>#</sup> h2 / h3 = mm         480 / 350		4.3	Battery compartment width	b4 = mm	86	55	945		945
4.7         Platform Size         I2 x b2=mm         400 x 1000         400 x 1000         660 x 100           4.8         Platform / Towing height <sup>#</sup> h2 / h3 = mm         480 / 350		4.4	Overall width	b2 = mm					
4.7         Platform Size         I2 x b2=mm         400 x 1000         400 x 1000         660 x 100           4.8         Platform / Towing height <sup>#</sup> h2 / h3 = mm         480 / 350		4.5	Ground clearance	b3 = mm	9	5 9		15 <sup>@</sup>	95 <sup>@</sup>
4.7         Platform Size         I2 x b2=mm         400 x 1000         400 x 1000         660 x 100           4.8         Platform / Towing height <sup>#</sup> h2 / h3 = mm         480 / 350		4.6	Turning radius	Wa = mm	17	20	1720		1960
5.1         Travel speed : Laden (min.)         kmph $8.0$ $6.0$ $8.0$ $6.0$ $7.0$ $5.2$ Unladen (min.)         kmph $10.0$ $9.0$ $10.0$		4.7	Platform Size	l2 x b2=mm	400 x	400 x 1000		1000	660 x 1000
$5.2$ 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       Hydraulic $5.6$ Parking brake       type       Hand $\circ perated$ Hand $operated$ Hand $operated$ Hand $operated$ $6.1$ Drive motor rating S2 = 60 min.       Kw       1.5       1.7       2.6       2.6       3.6		4.8	Platform / Towing height <sup>#</sup>	h2 / h3 = mm	480 / 350		480 / 350		480 / 350
5.3Gradient performance : LadenMax. %878755.4UnladenMax. %12101210165.5Service braketypeHydraulicHydraulicHydraulicHydraulic5.6Parking braketypeHand $\bigcirc$ peratedHand $\bigcirc$ peratedHand $\bigcirc$ peratedHand $\bigcirc$ perated6.1Drive motor rating S2 = 60 min.Kw1.51.72.62.63.6		5.1	Travel speed : Laden (min.)	kmph	8.0	6.0	8.0	6.0	7.0
5.6         Parking brake         type         Hydrault         Hydrault <t< th=""><td>5.2</td><td>Unladen (min.)</td><td>kmph</td><td>10.0</td><td>9.0</td><td>10.0</td><td>9.0</td><td>10.0</td></t<>		5.2	Unladen (min.)	kmph	10.0	9.0	10.0	9.0	10.0
5.6         Parking brake         type         Hydrault         Hydrault <t< th=""><td>5.3</td><td>Gradient performance : Laden</td><td>Max. %</td><td>8</td><td>7</td><td>8</td><td>7</td><td>5</td></t<>		5.3	Gradient performance : Laden	Max. %	8	7	8	7	5
5.6         Parking brake         type         Hydrault         Hydrault <t< th=""><td>5.4</td><td>Unladen</td><td>Max. %</td><td>12</td><td>10</td><td>12</td><td>10</td><td>16</td></t<>		5.4	Unladen	Max. %	12	10	12	10	16
6.1         Drive motor rating S2 = 60 min.         Kw         1.5         1.7         2.6         2.6         3.6		5.5	Service brake	type	Hydr	Hydraulic Hy		raulic	Hydraulic
		5.6	Parking brake	type	Hand	Hand operated		operated	Hand operated
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 / 29     36 / 29		6.1	Drive motor rating S2 = 60 min.	Kw	1.5	1.7	2.6	2.6	3.6
&         6.3         Battery voltage, nominal capacity         V / Ah         24 / 330         30 / 289         36 / 299         36 / 299         36 / 299		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		6.4	Charger (Single Phase) (Automatic)	V / Amp.	24 / 35	4 / 35 30 / 30 36 / 40		/ 40	36 / 40
5         7.1         Drive control         type         Stepless Mosfet         Stepless Mosfet         Stepless Mos           7.2         Sound level at driver's ear         db(A)         85         85         85	Jers	7.1	Drive control	type	Stepless Mosfet		Stepless Mosfet		Stepless Mosfet
b         7.2         Sound level at driver's ear         db(A)         85         85         85	đ	7.2	Sound level at driver's ear	db(A)	85		85		85

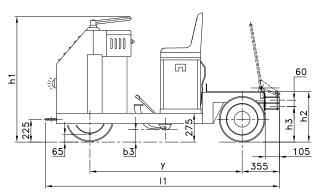
Note : 1. \* = Towing Capacity includes trolley weight plus pay load weight.,

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 ± 20 mm and performance ± 10%. Service weight ± 50 kg. Right to make changes and technical improvement reserved.

### Jost's Engineering Company Limited

C-7 Wagle Industrial Estate, Road No. 12, Thane - 400 604. Maharashtra. INDIA. T.: +91.22.6117 4000 / 2582 1727 F.: +91.22.6117 4020 E.: infomhe@josts.in

Bengaluru : +91-80-4123 4775 / 4885 Chennai : +91.44. 2626 8536 / 2628 8407 Delhi : +91.11.4567 6000 / 14 Kolkata : +91.33.2242 9510 / 4008 1242 Pune : +91.20.2543 4350 / 90 Secunderabad : +91.40.2771 4934 / 44 / 54 Vadodara : +91.265.2351 642

