



Since 1907

JFB 15 / 20 / 25 / 30

Josts Electric Counterbalance Trucks
(Capacity 1500 / 2000 / 2500 / 3000 Kg)

(AC / DC Drive)

- ENVIRONMENT FRIENDLY
- HIGH PERFORMANCE
- EASY OPERATION
- SUPERIOR SAFETY
- EASY MAINTENANCE
- UNMATCHED SERVICE





Since 1907

JFB 15 / 20 / 25 / 30

Josts Electric Counterbalance Trucks

Operators Area : Ergonomically convenient operator's area provides operator's comfort. All controls are located at easily accessible reach with ample leg room. Adjustable seat (Optional) further enhances operator's comfort.

Drive : The vehicle is driven by an SEPEX / AC drive motor of suitable rating with class 'F' insulation powered by suitable battery capacity. Efficient power transmission to front wheels is through noise free dual stage gear reduction unit and differential mechanism. Full floating drive axle mechanism ensures that the tyres loads are carried by differential housing.

Drive Control : Microprocessor based MOSFET controller enables smooth step less acceleration, variable speed control and precise inching movement. The controller comes with self diagnostic feature which monitors the control system for fault diagnostic purposes. The controller also enables regenerative braking thereby increasing the battery utilisation period.

Brakes : Automatic braking is enabled by regenerative braking when the operator removes his foot from the acceleration pedal. Service braking is ensured by self adjusting brakes with heavy duty brake linings and is effected by hydraulic braking actuated by ergonomically located foot pedal. Parking brake is through expandable shoes operated by cable connected to a hand operated lever located on operators left hand side.

Power Steering : Hydrostatic power steering system with automotive type tiltable steering column enables virtually fatigue free operation while maneuvering in confined area. The hydraulic steering unit, controls the steering action hydraulically through the steering cylinder mounted on the steer axle. The steering column is operated by 16 " hand wheel provided with foam grip for operator's comfort.

Steer Axle : Articulating hydraulic steer axle of robust construction ensures accurate steering geometry, minimum tyre wear and sharp angle steering for greater maneuverability. It comprises of hardened steel bushing for the center pivot for prolonged trouble free life and integrated balanced, hydraulic cylinder located at convenient accessible position for easy maintenance.

Wheels : Solid cushion tyres with split rim construction are provided at the front and rear for operating over a variety of surface conditions. Solid cushion tyre provides adequate resilience while operating over a variety of surfaces and overcoming the high reactive forces. Split-rim construction enables easy maintenance and replacement. The larger size tyres ensures better stability and carrying capacity, higher ground clearance and increased life. Non-marking tyres can also be provided as an option.

Chassis, Canopy and Counter Weight : Chassis is fabricated from heavy steel plates for excellent rigidity and strength. Battery compartment with cover is integrated with chassis and supports the operator's seat without compromising the accessibility of battery for routine maintenance. The canopy is made of hollow section for rigidity and protects the operator against the hazards of falling objects. The counter weight at the rear provides the adequate balancing load without making the truck bulky. It is provided with a lifting hook and towing bar for customer's convenience.

Mast, Carriage and Fork : Options of twin and triple masts of various lifts are available depending on the applications. Z section external mast and I section internal masts are reinforced with rigid tie bars and interlocked with load rollers ensures smooth movement and stability of the load. Carriage is fabricated of quality steel plates and provided with load rollers for smooth movement within the mast and durable service. Full floating lifting cylinders located on either sides of the mast assembly reduces side loading on seals and packaging. Free lift for container applications can be provided through center cylinder in triplex mast. Hose burst valve at base of cylinder assemblies act as a safety device in case hose failure. Forged and heat treated forks sustain the load for prolonged work cycles. Load back rest is provided as a standard.

Hydraulic System : Hydraulic system is powered by Series DC motor of suitable capacity which drives a positive displacement high pressure external gear pump and operates the hydraulic functions of lifting-lowering, tilting and side shifting of loads (optional).The hydraulic functions are controlled manually through valve block. The pressure limiting valves prevent excessive pressure overloads. A high performance filter system with suction and return line filters ensures clean oils. The hydraulic system is controlled by MOSFET controller to drive the motor at different speeds for precise flow of oils for the required application thereby saving battery power. The hydraulic motor operates only when the functional switches are operated and gets automatically switched off otherwise.

Instrumentation and control : The hour meter and battery discharge indicators are provided as a standard on the front panel. The On-Off switch, forward reverse direction switch are located on the panel within easy reach. The control levers are positioned ergonomically for fatigue free operation.

Accessories : The truck comes with head / tail / brake / side indicator lights, reverse light / horn, and rear view mirror as standard. Revolving lights can also be supplied as an option.

Battery : The vehicle is supplied with suitable traction battery with lead acid cells and adequate capacity rating as standard for non intensive application. Optional higher capacity rating batteries can also be provided for more intensive applications.

Charger : Microprocessor based charger of suitable ratings can be supplied, depending on the battery selection.

Technical Specification

1.1	Model		JFB 15		JFB 20		JFB 25		JFB 30		
Identification	1.2	Drive Type	SEPEX	AC	SEPEX	AC	SEPEX	AC	SEPEX	AC	
	1.3	Residual Capacity Lift	Q = Kg	Refer Chart	Refer Chart	Refer Chart	Refer Chart	Refer Chart	Refer Chart	Refer Chart	
	1.4	Load Center For rated capacity	c = mm	500	500	500	500	500	500	500	
	1.5	Load distance (from load wheel to fork face)	x = mm	470	470	470	470	475	475	475	475
	1.6	Wheelbase	y = mm	1425	1425	1425	1425	1625	1625	1625	1625
	Weights	2.1	Service weight incl. Battery	Kg	3500	3500	3930	3930	4350	4350	4800
2.2		Axle loading, laden front / rear	Kg	4280/720	4280/720	5180/750	5180/750	6070/780	6070/780	6990/810	6990/810
2.3		Axle loading, Unladen front / rear	Kg	1270/2230	1270/2230	1670/2330	1670/2330	1900/2450	1900/2450	2250/2550	2250/2550
Chassis	3.1	Tyres		Solid Cushion	Solid Cushion	Solid Cushion	Solid Cushion	Solid Cushion	Solid Cushion	Solid Cushion	Solid Cushion
	3.2	Tyres size, front		6.50-12	6.50-12	6.50-12	6.50-12	7-12	7-12	7-12	7-12
	3.3	Tyres size, Rear		5-8	5-8	5-8	5-8	18x7-8	18x7-8	18x7-8	18x7-8
	3.4	Wheels, number front/rear (x=driven wheels)		2x2	2x2	2x2	2x2	2x2	2x2	2x2	2x2
	3.5	Track width, front / Rear	b11 = mm	975/920	975/920	975/920	975/920	975/960	975/960	975/960	975/960
Basic Dimensions	4.1	Mast Standard		Refer Chart	Refer Chart	Refer Chart	Refer Chart	Refer Chart	Refer Chart	Refer Chart	Refer Chart
	4.2	Overhead guard (cab) height	h6 = mm	2200	2200	2200	2200	2200	2200	2200	2200
	4.3	Seat height	h7 = mm	1125	1125	1125	1125	1125	1125	1125	1125
	4.4	Overall length	l1 = mm	3320	3320	3320	3320	3550	3550	3550	3550
	4.5	Length to face of fork	l2 = mm	2320	2320	2320	2320	2550	2550	2550	2550
	4.6	Overall Width	b1 = mm	1150	1150	1150	1150	1150	1150	1150	1150
	4.7	Fork dimensions	s/e/l = mm	40/80/1000	40/80/1000	40/100/1000	40/100/1000	45/120/1000	45/120/1000	45/120/1000	45/120/1000
	4.8	Fork carriage (class/type)		2B-2A	2B-2A	2B-2A	2B-2A	2B-2A	2B-2A	2B-2A	2B-2A
	4.9	Fork carriage width	b3 = mm	1080	1080	1080	1080	1080	1080	1080	1080
	4.10	Width over forks (Min./Max.)	b5 = mm	200/1000	200/1000	200/1000	200/1000	240/1000	240/1000	240/1000	240/1000
	4.11	Ground clearance, under mast, laden	m1 = mm	80	80	80	80	80	80	80	80
	4.12	Ground clearance, center of wheel base	m2 = mm	125	125	125	125	125	125	125	125
	4.13	Aisle width for 1000 x 1200 cross / length ways (b12 x l16)	mm	3640/3810	3640/3810	3640/3810	3640/3810	3860/4040	3860/4040	3860/4040	3860/4040
	4.14	Turning radius	Wa = mm	2250	2250	2250	2250	2450	2450	2450	2450
Performance	5.1	Travel speed, laden / unladen	Km / h	9/10	11	9/10	11	9/10	10	9/10	10
	5.2	Lift speed, laden / unladen	m / s	0.25/0.28	0.25/0.28	0.24/0.28	0.24/0.28	0.22/0.30	0.22/0.30	0.20/0.27	0.20/0.27
	5.3	Lowering speed, laden / laden	m / s	0.22/0.20	0.22/0.20	0.23/0.20	0.23/0.20	0.23/0.20	0.23/0.20	0.25/0.20	0.25/0.20
	5.4	Gradient performance, laden / unladen max.	%	13/20	13/20	13/17	13/17	13/17	13/17	13/17	13/17
	5.5	Service brake		Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic
Power	6.1	Drive motor rating S2 60 min.	Kw	6.5	6.5	6.5	6.5	7.0	7.0	7.0	7.0
	6.2	Lift motor rating S3 15%	Kw	8.0	8.0	8.0	8.0	8.5	8.5	8.5	8.5
	6.3	Battery voltage, nominal capacity	V/Ah	48/290	48/290	48/375	48/375	48/440	48/440	72/385	72/385
	6.4	Charger (Three Phase)	Automatic	48V/40Ah	48V/40Ah	48V/50Ah	48V/50Ah	48V/50Ah	48V/50Ah	72V/50Ah	72V/50Ah
	6.5	Battery weight	Kg	500	500	650	650	750	750	990	990
Others	7.1	Type of drive control		Mosfet	Mosfet	Mosfet	Mosfet	Mosfet	Mosfet	Mosfet	Mosfet
	7.2	Operating pressure for hydraulics	bar	190	190	220	220	230	230	230	230
	7.3	Oil Volume hyd. System	lit.	40	40	40	40	45	45	45	45
	7.4	Sound level	db (A)	74	66	74	66	74	66	74	66

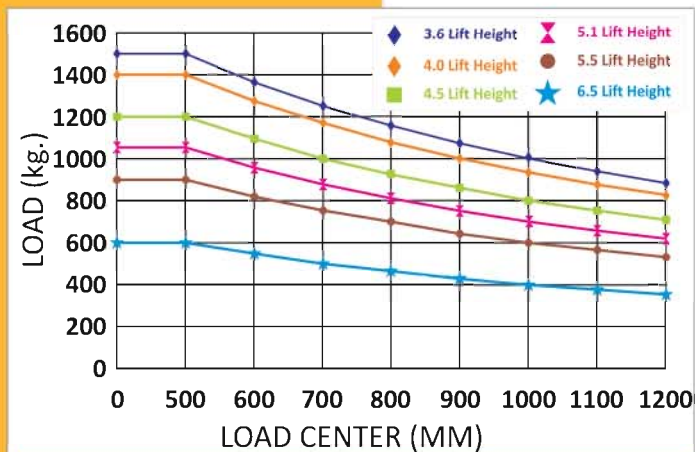
Dimensions indicated here are subject to variations of $\pm 20\%$ and performance within $\pm 10\%$. Right to make changes and technical improvements reserved.
For any special requirements, Please contact Jost's marketing department.

Mast Standard >>> Residual Load Capacity Chart

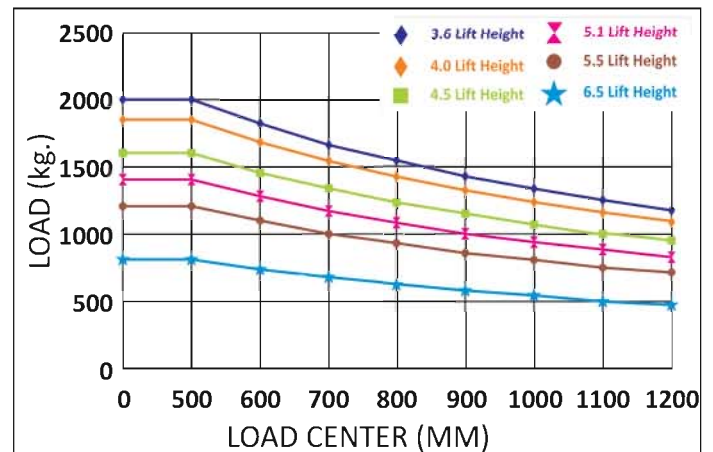
Mast Model	Closed Mast Height h1		Lift	Extended Mast Height #	Free Lift	Residual Load Capacity (Load Centre 500mm) (Kg)				Tilt angle
	FB15 / FB20	FB25 / FB30	h3	h4	h2* / h5	FB15	FB20	FB25	FB30	$\alpha \times \beta$
	mm	mm	mm	mm	mm					
2 Stage PT 30	2100	2175	3060	3650	100*	1500	2000	2500	3000	6°x12°
2 Stage PT 36	2400	2475	3660	4250	100*	1500	2000	2500	3000	6°x12°
3 Stage PD 36	1750	1825	3660	4250	1250	1500	2000	2500	3000	6°x12°
3 Stage PD 40	1900	1975	4060	4650	1350	1400	1850	2300	2750	6°x6°
3 Stage PD 45	2100	2175	4560	5150	1550	1200	1600	2000	2400	3°x6°
3 Stage PD 51	2350	2425	5160	5750	1800	1050	1400	1750	2100	3°x6°
3 Stage PD 55	2650	2725	5560	6150	2100	900	1200	1500	1800	3°x6°
3 Stage PD 60	2650	2725	6060	6650	2100	750	1000	1250	1500	3°x6°
3 Stage PD 65	2900	2975	6560	7150	2350	600	800	800	1200	2°x6°

Residual capacity derated by 200 kg. with side shifter.

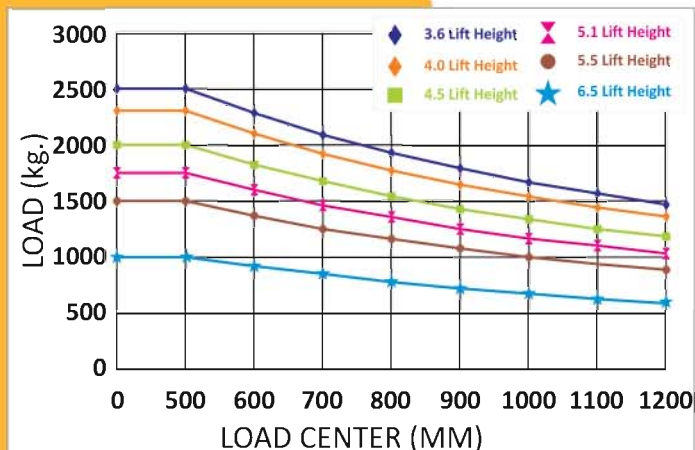
Extended Back Rest height = h4 + 570.



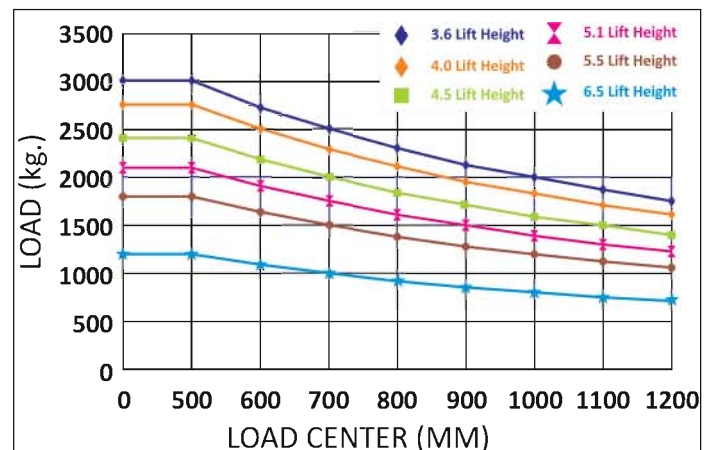
JFB 15



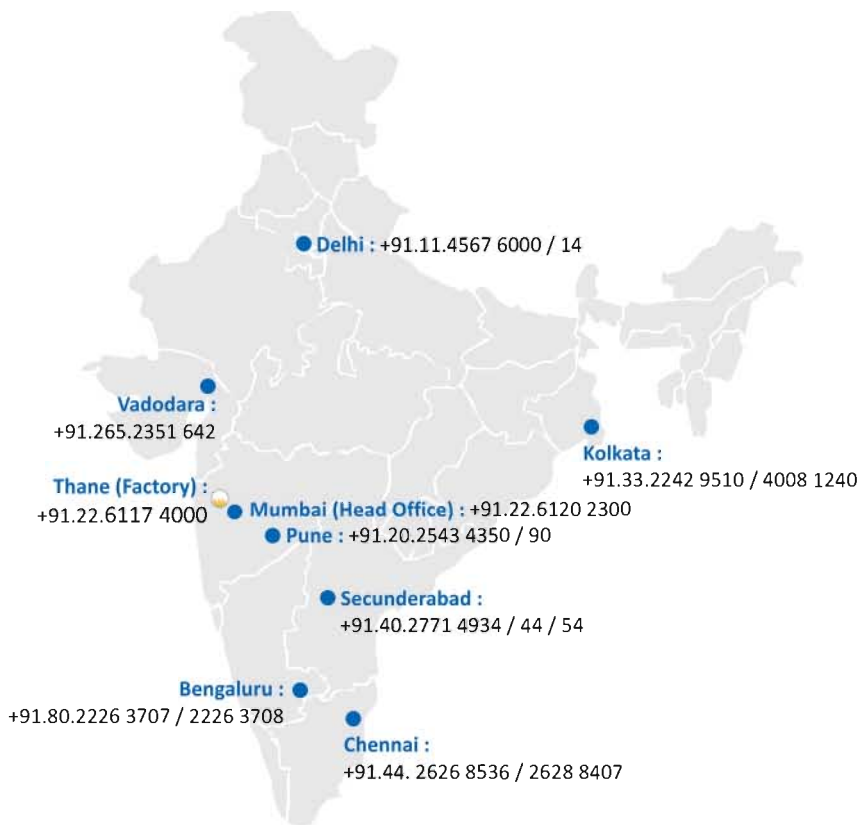
JFB 20



JFB 25



JFB 30



Since 1907

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



• For any special requirement, please contact Jost's marketing department. • Dimensions indicated here are subject to variations of $\pm 20\text{mm}$ and performance within $\pm 10\%$. • Right to make changes and technical improvement reserved.