

# CTC

# MIKADO CLASS

3 WHEELS ELECTRONIC  
FORKLIFT TRUCKS



**MAJOR: MK10-MK13-MK15-MK17**

Capacity kg.

1.000

1.300

1.500

1.700

# "TINY" ELECTRONIC TRUCKS

## DRIVING POSITION

Designed according to the latest ergonomic standards and asking the driver minimum expenditure of energy and concentration.



Easy stepping up: the footboard is only 520 mm high.

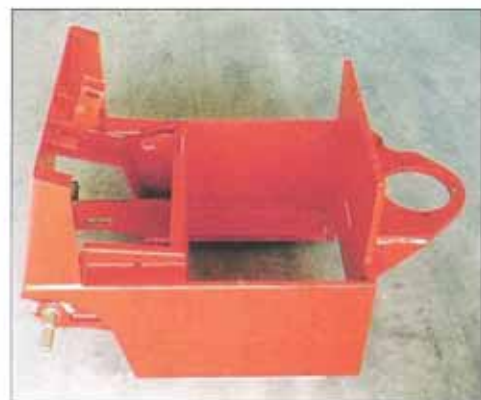
Highly comfortable seat with double adjustment (forward/backward - up/down) depending on driver's height and weight.



The truck controls lay-out (steering wheel, starting key, speed reverser, hydraulic functions levers) enables the operator easy and unweary driving: it is possible to adjust the tilt of the entire control board including the steering wheel ( which can also be lifted or lowered) adapting it to the driver's need. The hourmeter, the battery charge detector, the loading diagram are always clear at a glance.

## STRENGTH, HANDINESS AND PERFORMANCES

The thick steel monolithic chassis is especially designed for best components lay-out. His great compactness sustains any torsional stress during working at full load, full steering lock or on rough ground.



The steering operates on the drive wheel by means of a strong chain with mechanic or hydraulic control.



The truck is moved by a strong traction motor coupled to a gear transmission on the rear wheel. This one is a big section wheel that can turn 180° enabling the truck to spin on a very short turning radius, to work in narrow gangways and to keep great working stability.

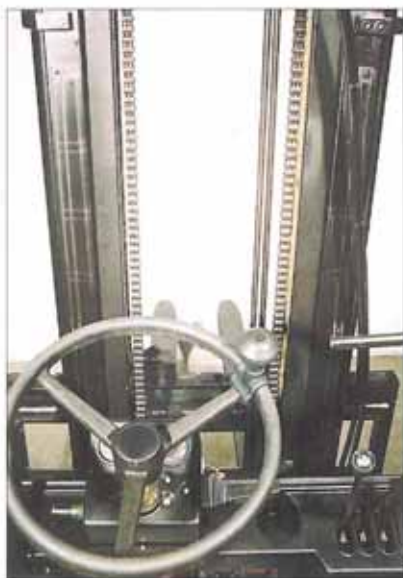




# FOR GREAT PERFORMANCES

## VISIBILITY

The mast is manufactured using cold-drawn profiles for highest torsional and flexural strength. The sliding guides are fitted to use all available width on the front side assuring the operator maximum visibility during both loading and unloading operations.



The hydraulic cylinders are placed on the profiles' sides and the chains are shielded.

The "INTEGRATED" side shifter does not cut down considerably the rated load capacity of the truck and does not reduce the operator's visibility.

## ELECTRONICS

The truck is equipped with a high frequency MOS electronic control with energy saving system for all the truck's functions.

The speed is softly and progressively controlled enabling gentle reversals, easy operations in narrow gangways and fast driving on long ways.

The MOS electronic control gives possibility of reverse current braking reducing noise and mechanic frictions. It also grants longer operation autonomy during every working shift due to better use of the battery energy. The truck can be equipped with single pedal and speed reversal lever by the steering wheel, or double pedal system.



## EASY SERVICING AND COMPONENTS ACCESS

The electronic units, the drive wheel/motor/gear transmission, in the back side of the truck, the power steering, the motor, the pump, the accelerator pedal, the hydraulic valves, under the footboard in the front side: all of these can be easily reached for servicing, check and adjustment allowing quick maintenance and cutting halt time. This means higher operating profitability and lower servicing costs.



With the "CTC TEST" you can quickly locate any electric troubles and adjust the electronic system according to the performances required.

## MK 10 - MK 13

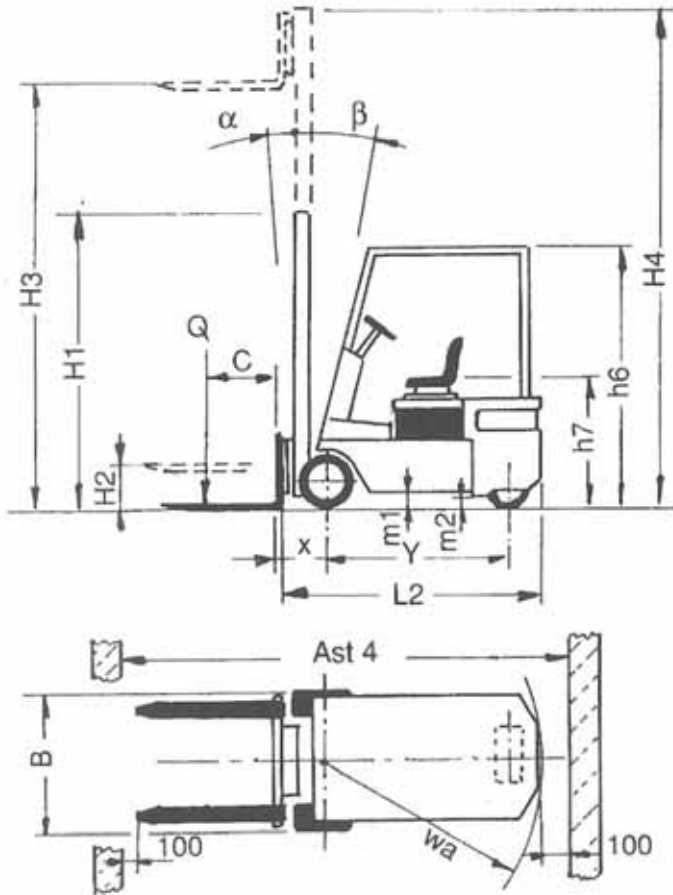
### FEATURES, DIMENSIONS, PERFORMANCES

				CTC	CTC		
FEATURES	1	Manufacturer		CTC	CTC		
	2	Model		MK 10	MK 13		
	3	Capacity	Q	Rated load	kg	1000	1300
	4	Load centre	c	Distance	mm	500	500
	5	Motor type		Electric (Battery)		Electric	Electric
	6	Driving position		Operator: standing - sitting - walking		sitting	sitting
	7	Tyres		C=Cushion SE=Superelast. P=Pneumatic		P.S.C./C.	P.S.C./C.
	8	Wheels (x=drive wheel)		Number front/rear		2/1x	2/1x
DIMENSIONS	9	Lifting	h3	Standard lifting	mm	3300	3300
	10	with duplex mast	h2	Normal free lift	mm	100	100
	11		h5	Full free lift	mm	-	-
	12	Standard forks		Length(L) x Width(b) x Thickness(s)	mm	1000 x 100 x 35	1000 x 100 x 35
	13	Forks carrier		FEM rules complying		FEM II A	FEM II A
	14	Tilting		Forward ( $\alpha$ ) / Backwards ( $\beta$ )		3°/8°	3°/8°
	15		L2	Overall length w/out forks	mm	1520	1740
	16		B	Overall width (Twin tyres)	mm	940	940
	17	Dimensions	h1	Min. height with closed mast	mm	2190	2190
	18		h4	Max. height with raised mast	mm	3775	3775
	19		h6	Height of headguard	mm	1990	1990
	20		h7	Height of the seat	mm	980	980
	21	Turning radius	Wa	Outer	mm	1250	1430
	22	Load distance	x	From forks to front wheel axle	mm	330*	330*
23	Gangway width	Ast.4	Pallets 800x1200 / 1200x1200	mm	2580/2980	2760/3160	
PERFORM.	24	Stability		FEM/ISO rules		YES	YES
	25	Drive speed		With/without load	km/h	10,5/11	11/13
	26	Lifting speed		With/without load	m/s	0,20/0,26	0,20/0,26
	27	Lowering speed		With/without load	m/s	0,60/0,40	0,60/0,40
	28	Max. towing capacity		Without load	kg	290	480
	29	Max. gradeability		With/without load	%	9/14	10/15
WEIGHTS	30	Weight with battery		Standard lifting	kg	2330	2640
	31	Axle load-laden		Front/rear axle	kg	2870/460	3300/640
		Axle load-unladen		Front/rear axle	kg	1030/1300	1080/1560
CHASSIS	32			Number: front/rear	N.	2/1	2/1
	33	Wheels		Size: front		16x6-8	18x7-8
	34			Size: rear		413x152x286	413x152x286
	35	Wheel base	Y		mm	970	1170
	36	Track		Front wheels centre	mm	780	780
	37	Ground clearance	m2	Minimum	mm	55	55
	38		m1	Wheel base centre	mm	90	90
	39	Brakes		Pedal service brake		hydraulic	hydraulic
40			Hand parking brake		mechanic	mechanic	
DRIVE UNIT	41			Type		tubular	tubular
	42	Battery		Tension/capacity	V/Ah	48/220	48/330
	43			Minimum weight	kg	500	700
	44			Traction, S2 power	kW	5	6
	45	Electric motors		Lifting, S3 25% power	kW	5,5	5,5
	46			Steering	Type	assisted	assisted
	47	Transmission		Type		electron. var.	electron. var.
	48	Hydraulic system		Max. pressure	bar	150	150

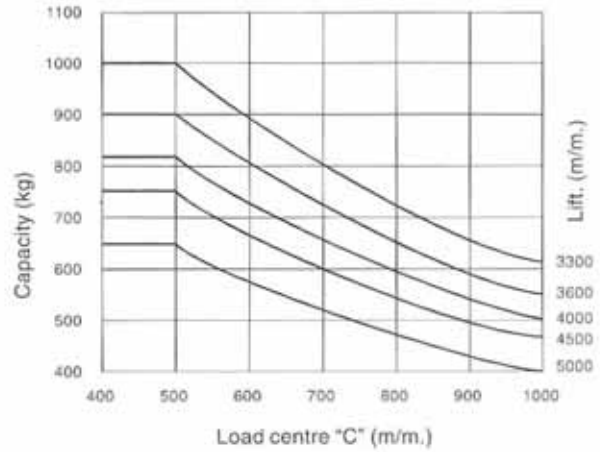
\* with integrated side shifter = +30 mm

\* with TRIPLEX mast = +90 mm

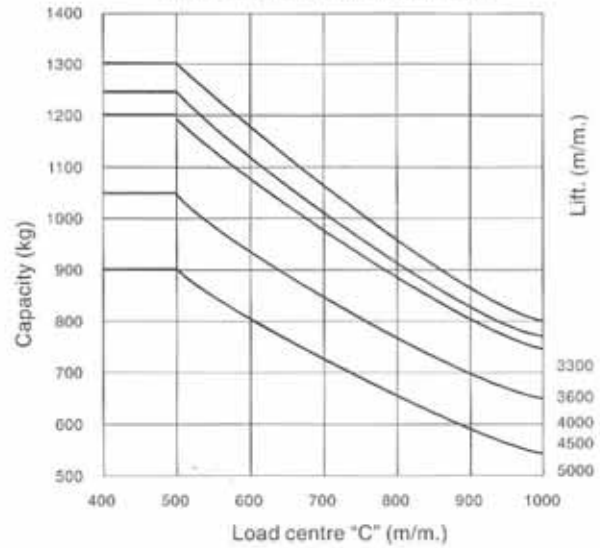
For modifications and improvements, the above data are not binding



**MK 10**  
DUPLEX and DUPLEX F.F.L.



**MK 13**  
DUPLEX and DUPLEX F.F.L.



Type of Mast	H3 Lifting Height	H1 Minimum overall dimension	H2 Free Lift	H4 Maximum overall dimension
DUPLEX	3.300	2.190	100	3.775
	3.600	2.340	100	4.075
	4.000	2.540	100	4.475
	4.500	2.790	100	4.975
	5.000	3.090	100	5.475
DUPLEX F.F.L.	2.900	1.915	1.450	3.470
	3.300	2.125	1.640	3.900
TRIPLEX F.F.L.	4.400	2.010	1.465	4.930
	5.200	2.275	1.730	5.730
	5.600	2.410	1.870	6.130
	6.000	2.540	1.990	6.530