

# 40/45/50B-9

Electric Counterbalance Trucks

MOVING YOU FURTHER

HYUNDAI HEAVY INDUSTRIES



 **HYUNDAI**

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# Your satisfaction is **our priority!**

Hyundai introduces a new line of 9-series battery forklift trucks. The newly designed 4 wheel counterbalance trucks provide every operator comfortable driving, increased productivity and easy maintenance.

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**Compact forklift with proven AC technology**

**Maximum performance**

**Spacious operator's cab**

**Fingertip controlled mini levers available (optional)**

**Weight indicator (optional)**

**Safety system that prevents over loading (optional)**

**Battery side loading system available**

**Curve control system**

***40/45/50B-9***



# High Efficiency & **Optimal Performance**



## **More efficient operating control levers**

Electronic directional control and secondary horn are mounted to the hydraulic lift lever for quick and precise maneuvering.



## **Finger tip control levers (Optional)**

Fingertip control levers allow more precise control and fatigue-free working. The ergonomically designed armrest can be adjusted up, down, forward and backward for various operator's body type.



## **Advanced drive and lift performance with proven durability and low maintenance**

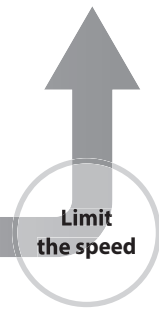
The enclosed drive and pump motor with AC technology combine power, high maintenance intervals and excellent durability. The brushless AC motors offer improved efficiency and reduce maintenance cost.

Efficient, smooth running and powerful performance make your work more productive.

## 40/45/50B-9

### Curve control

Curve Control limits travel speed based on turning radius, reducing speed for a smooth, precise turning operation for the driver.



Driving Speed

Limit the speed



### Dual drive system

Using a dual drive system will minimise aisle width and energy consumption. Plus, the drive units and AC motors integrated in the front axle provide the operator with extremely improved gradient capacity.



### Auto fork leveling system (Optional)

In order to improve productivity the auto fork leveling system will automatically stop the tilt movement when the mast is in a straight position.

### Max. Gradeability (loaded)

Model	%
40B-9	23
45B-9	21
50B-9	19

### Max. Travel Speed (unloaded)

Model	Km / h
40B-9	18
45B-9	18
50B-9	18

### Anti roll back system, travel speed and gradeability

Anti Roll-back system offers protection against the machine rolling back on a ramp in combination with exceptional ramp start capabilities.

# Advanced **Safety**



## **Excellent visibility for safe operation**

Optimized lift cylinder arrangement provides operator with wider visibility. The panoramic mirror expands the driver's view when backing up.



## **Panoramic mirror**

The panoramic mirror expands the driver's view when backing up.

## **Strong overhead guard**

Exceeding CEE and ANSI regulations, the overhead guard offers great protection combined with excellent all-round visibility.

The safely designed driver's space makes your operating more comfortable.

## 40/45/50B-9

### Fork safety features

When the forks are being lowered, a down-control valve maintains the controlled speed. The down-safety valve prevents forks from dropping down in case of sudden damage of hydraulic line.

### OPSS (Operator Presence Sensing System)

When the operator is not in the seat all mast and drive movements are impossible.



### Safety lamps & rear reflectors

Halogen headlights and rear LED combination lights offer the driver visibility in all circumstances. Rear reflectors mounted on the counterweight enhance safety for the driver and the application.

# Optimised Ergonomics & Fast and Easy Maintenance



## Spacious operator cabin

The newly designed cabin was conceived for more space, a wider field of view and operator comfort.



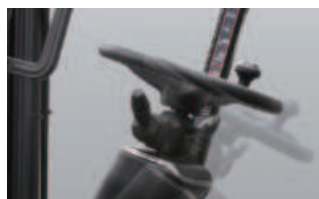
## Optimized pedal position and floor mat

The position of accelerator and throttle have been optimized through human engineering.



## Large entrance step

Wide and non-slip step offers convenience and safety when entering and exiting truck.



## Adjustable steering wheel

To achieve a comfortable drive position, the angle of the steering column can easily be adjusted through a lever on the right-hand side of the steering column.



## Grammer seat

An easily adjustable suspension seat, based on a human engineering design, provides greater comfort reducing operator fatigue.



An ideal arrangement of components ensures easy access and convenience for maintenance.

## 40/45/50B-9



### Easy battery replacement

The battery compartment is equipped with a side battery removal assembly for easy removal and replacement.



### Advanced LCD Monitor

This tool is available in 12 different languages. The LCD monitor with 3.5 inch graphic smart display allows the operator to easily and efficiently control the machine.

The monitor provides information about speed & accelerator level, steer angle & travel direction, battery discharge indicator, hour meter & working mode. The optional load indicator displays the load weight in the monitor. The operator can select various performance modes to meet all working conditions.

**H** (High) mode

**N** (Normal) mode

**E** (Economic) mode

**Turtle mode** (maintain 7 km/h travel speed when lifting)



### Brake oil reservoir with level sensor

The enhanced brake oil reservoir, located in the upper left dash, is equipped with an electronic level sensor and easily visible through the monitor.

# New 9 Series

## Mast Specification (40B-9)

Mast Type		Maximum Fork Height (mm)	Overall Height (Lowered) (mm)	Free Lift Height (mm)		Tilt Angle Forward / Backward (deg)	Load Capacity without side shift at (500mm LC) (kg)	Load Capacity with side shift at (500mm LC) (kg)	Truck Weight (Unloaded) (kg)
				With Load Backrest	Without Load Backrest				
		40B-9	40B-9	40B-9	40B-9	40B-9	40B-9	40B-9	40B-9
2-Stage Limited free lift	V270	2720	2075	120	120	6 / 10	4000	4000	6833
	* V300	3020	2225	120	120	6 / 10	4000	4000	6858
	V330	3320	2375	120	120	6 / 10	4000	4000	6884
	V350	3520	2525	120	120	6 / 10	4000	4000	6908
	V370	3720	2625	120	120	6 / 10	4000	3950	6925
	V400	4020	2835	120	120	6 / 10	4000	3900	6960
	V450	4520	3085	120	120	6 / 6	4000	3650	7002
V500	5020	3335	120	120	6 / 6	4000	3550	7045	
3-Stage full free lift	TF370	3730	2025	1139	812	6 / 6	4000	3750	7134
	TF400	4030	2125	1239	912	6 / 6	4000	3700	7160
	TF430	4330	2225	1339	1012	6 / 6	4000	3650	7185
	TF450	4510	2285	1399	1072	6 / 6	4000	3600	7201
	TF470	4720	2375	1489	1162	6 / 6	3950	3550	7224
	TF500	5020	2475	1589	1262	6 / 6	3900	3500	7250
	TF550	5520	2655	1769	1442	6 / 6	3750	3400	7301
TF600	6030	2835	1949	1622	6 / 6	3650	3300	7341	

## Mast Specification (45B-9)

Mast Type		Maximum Fork Height (mm)	Overall Height (Lowered) (mm)	Free Lift Height (mm)		Tilt Angle Forward / Backward (deg)	Load Capacity without side shift at (500mm LC) (kg)	Load Capacity with side shift at (500mm LC) (kg)	Truck Weight (Unloaded) (kg)
				With Load Backrest	Without Load Backrest				
		45B-9	45B-9	45B-9	45B-9	45B-9	45B-9	45B-9	45B-9
2-Stage Limited free lift	V270	2720	2075	120	120	6 / 10	4500	4500	7319
	* V300	3020	2225	120	120	6 / 10	4500	4500	7345
	V330	3320	2375	120	120	6 / 10	4500	4500	7370
	V350	3520	2525	120	120	6 / 10	4500	4450	7395
	V370	3720	2625	120	120	6 / 10	4500	4400	7411
	V400	4020	2835	120	120	6 / 10	4500	4300	7447
	V450	4520	3085	120	120	6 / 6	4500	4150	7489
V500	5020	3335	120	120	6 / 6	4500	4100	7531	
3-Stage full free lift	TF370	3730	2025	1139	812	6 / 6	4500	4200	7538
	TF400	4030	2125	1239	912	6 / 6	4500	4150	7564
	TF430	4330	2225	1339	1012	6 / 6	4500	4100	7590
	TF450	4510	2285	1399	1072	6 / 6	4450	4050	7605
	TF470	4720	2375	1489	1162	6 / 6	4400	4000	7629
	TF500	5020	2475	1589	1262	6 / 6	4300	3900	7655
	TF550	5520	2655	1769	1442	6 / 6	4200	3800	7707
TF600	6030	2835	1949	1622	6 / 6	4050	3650	7746	

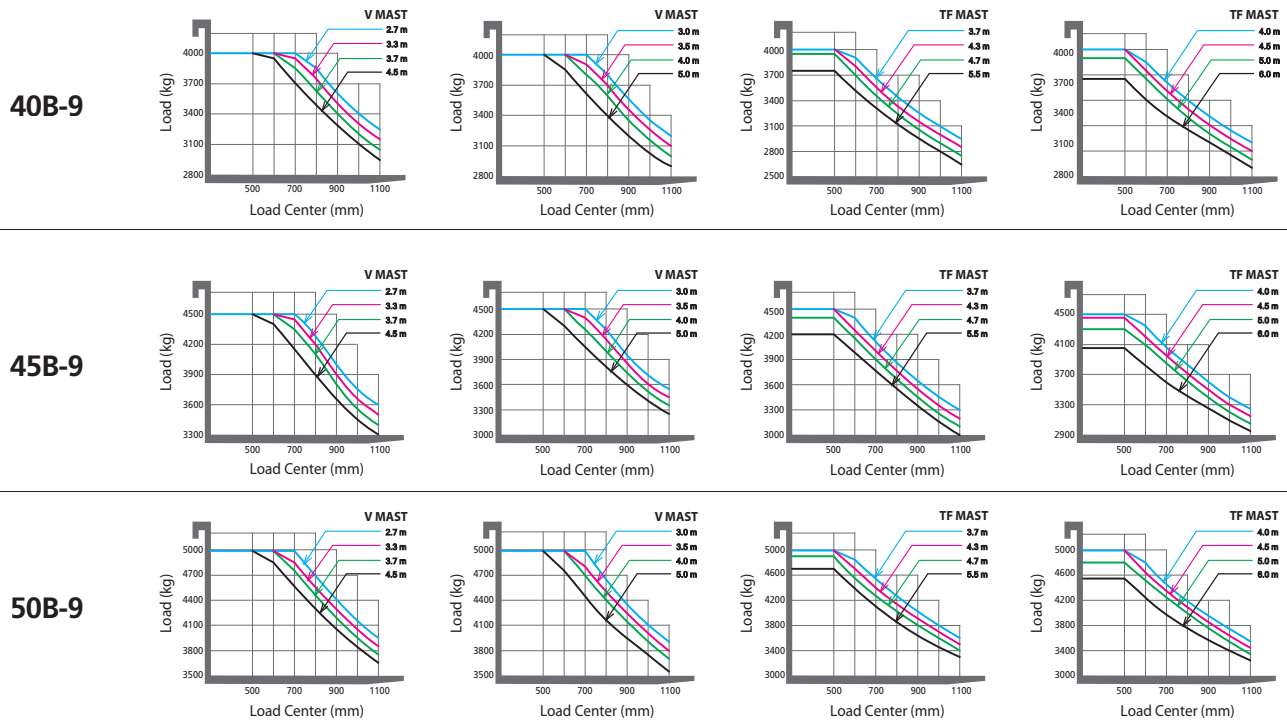
## Mast Specification (50B-9)

Mast Type		Maximum Fork Height (mm)	Overall Height (Lowered) (mm)	Free Lift Height (mm)		Tilt Angle Forward / Backward (deg)	Load Capacity without side shift at (500mm LC) (kg)	Load Capacity with side shift at (500mm LC) (kg)	Truck Weight (Unloaded) (kg)
				With Load Backrest	Without Load Backrest				
		50B-9	50B-9	50B-9	50B-9	50B-9	50B-9	50B-9	50B-9
2-Stage Limited free lift	V260	2620	2080	120	120	6 / 10	4990	4990	7780
	* V290	2920	2230	120	120	6 / 10	4990	4990	7806
	V320	3220	2380	120	120	6 / 10	4990	4990	7831
	V340	3420	2530	120	120	6 / 10	4990	4990	7856
	V360	3620	2630	120	120	6 / 10	4990	4990	7873
	V390	3920	2840	120	120	6 / 10	4990	4990	7908
	V440	4420	3090	120	120	6 / 6	4990	4900	7950
V490	4920	3340	120	120	6 / 6	4990	4800	7993	
3-Stage full free lift	TF360	3662	2030	1074	807	6 / 6	4990	4900	7942
	TF390	3962	2130	1174	907	6 / 6	4990	4800	7968
	TF420	4262	2230	1274	1007	6 / 6	4990	4750	7994
	TF440	4442	2290	1334	1067	6 / 6	4990	4700	8010
	TF460	4652	2380	1424	1157	6 / 6	4990	4600	8033
	TF490	4952	2480	1524	1257	6 / 6	4800	4400	8059
	TF540	5452	2660	1704	1437	6 / 6	4700	4400	8110
TF590	5962	2840	1884	1617	6 / 6	4550	4250	8150	

\* TS-Mast : Wide Visible 3-Stage Full Free Lift Mast with 2 Free Lift Cylinders.

\* Standard

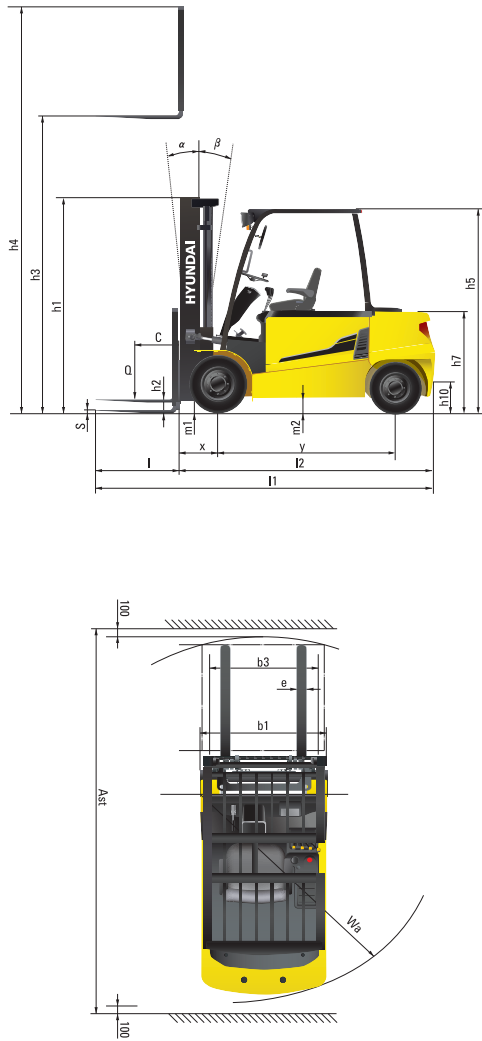
## Load Capacity



## Optional Items

- **Fork (mm)**
  - 40B-9 : 1070 (Standard), 1220, 1370, 1520, 1670, 1820, 1970, 2120, 2400
  - 45B-9 : 1070 (Standard), 1220, 1370, 1520, 1670, 1820, 1970, 2120
  - 50B-9 : 1070 (Standard), 1220, 1370, 1670, 1820, 1970, 2200
- **Side shift**
- **Tire** : Solid (Standard) / Pneumatic / Non-marking / Double Tire
- **Seat** : KAB
- **Finger Tip Control**
- **Cold storage** (for -30° cold working environments)
- **M.C.V** : 2-Spool (Standard), 3-Spool, 4-Spool
- **Auto Fork Leveling**
- **Beacon Lamp**
- **Load Indicator**
- **Work Lamp**
- **Cabin**

## Dimensions



## Specifications

### Identification

		HYUNDAI			
1.1	Manufacturer	HYUNDAI			
1.2	Type	40B-9	45B-9	50B-9	
1.3	Drive: Electric, Diesel, LPG Gas	electric	electric	electric	
1.4	Type of operation: hand, pedestrian, standing, seated, order-picker	seated	seated	seated	
1.5	Load capacity (standard)	Q (kg)	4,000	4,500	4,990
1.6	Load center distance	c (mm)	500	500	500
1.8	Load distance, center of drive axle to forks	x (mm)	535	535	540
1.9	Wheelbase	y (mm)	2,025	2,025	2,025

### Weights

2.1	Service weight	kg	6,855	7,345	7,805
2.2	Axle loading, loaded front / rear	kg	9,548 / 1,307	10,456 / 1,389	11,332 / 1,463
2.3	Axle loading, unloaded front / rear	kg	3,504 / 3,351	3,656 / 3,689	3,779 / 4,026

### Wheels, chassis

3.1	Tires : solid rubber (V), superelastic (SE), pneumatic (P), polyurethane (PE)		SE, P	SE, P	SE, P
3.2	Tires size, front (Ø x width)		250-15	250-15	28 x 12.5-15
3.3	Tires size, rear (Ø x width)		23 x 9-10	23 x 9-10	23 x 9-10
3.5	Wheels, number front rear (x = driven wheels)		2 x / 2	2 x / 2	2 x / 2
3.6	Track width, front	b10 (mm)	1,141	1,141	1,114
3.7	Track width, rear	b11 (mm)	1,098	1,098	1,098

### Basic dimensions

4.1	Mast / fork carriage tilt forward / backward	degrees	6 / 10	6 / 10	6 / 10
4.2	Lowered mast height (standard)	h1 (mm)	2,225	2,225	2,230
4.3	Free lift	h2 (mm)	120	120	120
4.4	Lift height (standard)	h3 (mm)	3,020	3,020	2,920
4.5	Extended mast height (standard)	h4 (mm)	4,224	4,224	4,146
4.7	Overhead load guard (cab) height	h5 (mm)	2,320	2,320	2,320
4.8	Seat height / standing height	h7 (mm)	1,176	1,176	1,176
4.12	Coupling height	h10 (mm)	460	460	460
4.19	Overall length	l1 (mm)	4,065	4,065	4,110
4.20	Length to face of forks	l2 (mm)	2,995	2,995	3,040
4.21	Overall width	b1 (mm)	1,370	1,370	1,424
4.22	Fork dimensions (hook type) LxWxT	s / e / l (mm)	50 x 122 x 1,070	50 x 150 x 1,070	50 x 150 x 1,070
4.23	Fork carriage ISO 2328, class / type A,B		III/A	III/A	III/A
4.24	Fork carriage width	b3 (mm)	1,376	1,376	1,376
4.31	Ground clearance, loaded, under mast	m1 (mm)	160	160	165
4.32	Ground clearance, centre of wheelbase	m2 (mm)	150	150	155
4.33	Aisle width for pallets 1000 x 1200 crossways (L x W)	Ast (mm)	4,405	4,405	4,445
4.34	Aisle width for pallets 800 x 1200 lengthways (W x L)	Ast (mm)	4,605	4,605	4,645
4.35	Turning radius	Wa (mm)	2,670	2,670	2,705
4.36	Internal turning radius	b13 (mm)			

### Performance data

5.1	Travel speed, loaded / unloaded (80V)	km/h	18 / 18	18 / 18	18 / 18
5.2	Lift speed, loaded / unloaded (80V)	mm/s	360 / 520	330 / 500	320 / 450
5.3	Lowering speed, loaded / unloaded	mm/s	500 / 450	500 / 450	500 / 420
5.6	Drawbar pull, loaded / unloaded S2 5min	N	28,185 / 29,075	28,662 / 29,003	28,558 / 28,469
5.8	Gradient performance, loaded / unloaded S2 5min	%	23 / 25	21 / 23	19 / 22
5.10	Service brake		Hydraulic	Hydraulic	Hydraulic

### E - Motor

6.1	Drive motor rating S2 60 min (80V)	kW	10.0 x 2	10.0 x 2	10.0 x 2
6.2	Pump motor rating at S3 - 15 % (80V)	kW	28	28	28
6.4	Battery voltage, nominal capacity K5 (80V)	V/Ah	700	700	700
6.5	Battery weight	kg	2,095	2,095	2,095
	Battery compartment dimensions L / W / H	mm	1,033 / 1,004 / 790	1,033 / 1,004 / 790	1,033 / 1,004 / 790

### Other details

8.1	Type of drive control		AC	AC	AC
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\* Standard and optional equipment may vary per country. Contact your Hyundai dealer for more information.

\* The photos may include attachments and optional equipment that are not available in your area.

\* Materials and specifications are subject to change without advance notice.

\* All imperial measurements rounded off to the nearest pound or inch.

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