



MOVING YOU FURTHER

40-45  
**50B-9**



Some of the photos may include optional equipment.

 **HYUNDAI**  
MATERIAL HANDLING

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# Your satisfaction is our priority!

## Proven AC technology! Hyundai 9-Series battery forklift

Hyundai introduces a new line of 9-series battery forklifts.

The newly designed 4 wheel counterbalance trucks provide every operator comfortable driving, increased productivity and easy maintenance.

- More powerful performance
- Spacious operating space
- Grammer seat as a standard
- 3.5 inch LCD color monitor (including speedometer)
- Curve control system
- Fingertip controlled mini levers (OPT)
- Load weight indicator (OPT)
- Side Battery Remove (OPT)





Power & Performance

# High Efficiency & Optimal Performance

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



Some of the photos may include optional equipment.

## Powerful driving force - Dual drive system

The dual drive system, which consists of two independently operating drive motors on the left- and right-hand sides, ensures excellent drawbar pull and short turning radius. It provides powerful performance when turning on a contaminated road surface. Also, it enhances the efficiency of logistics in a narrow workplace.



**Strong and economical AC motor**

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 reduction maintenance cost.



**Directional & horn switch on lever (OPT)**

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



**Finger tip control lever (OPT)**

The electric control lever reduces operator fatigue, and the ergonomically designed armrests can be adjusted up, down, forward and backward for operator's body types.

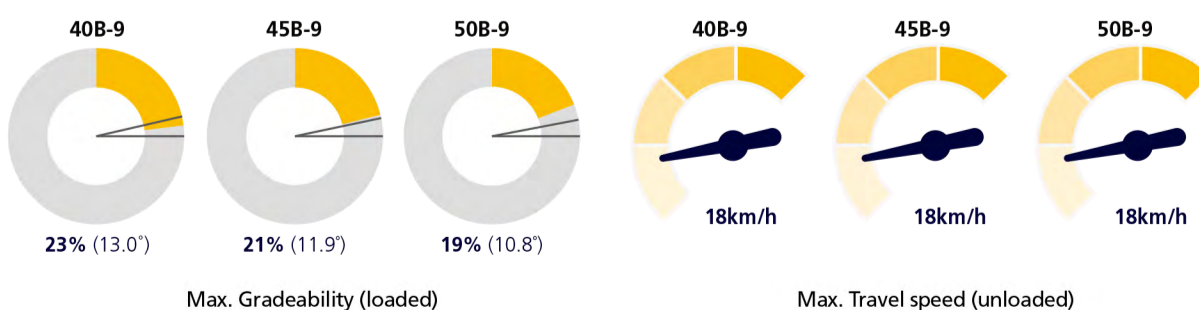


**Curve control**

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

## Excellent gradeability and travel speed

It can perform stable operations and provide excellent gradeability and fast travel speed on any tough terrain or slope.



**Auto fork leveling system (OPT)**

In order to improve productivity the auto fork leveling system by automatically stopping when the forks are level.



**Vehicle Performance optimized for working condition**

This function optimizes the performance of vehicle for the purpose of work, such as speed of operation, maximum working time and operator's proficiency. (High, Normal, Economy Mode)



Easy & Comfort

# Optimized Ergonomics & Fast and Easy Maintenance

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



## Spacious operating space

The ergonomically designed operating space was made for more space, a wider field of view and operator comfort. The smooth lever and pedal operation, adjustable tilting handle, suspension seat and multi-functional large-size cluster provide comfortable and efficient operation. In addition, a 12V power socket is provided as an option.



Some of the photos may include optional equipment.



### Grammer Seat (OPT)

Easily adjustable suspension seat, based on a human engineering design, reduces operator fatigue and provides greater comfort.

- ELR(Emergency Locking Retractor) type seat belt as a standard
- Heat wire and head rest (OPT)

## 3.5 inch LCD color monitor

The LCD color monitor 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 monitor also displays information about operation error, system fault, battery level, hour meter plus other various functions. It enables the operator to maintain the forklift in optimum operating condition.



### Advanced LCD Monitor

- Steering wheel position and travel direction
- Turtle mode
- Speed (Digital)
- Battery discharge indicator
- High temp warning lamp
- Wrench warning light
- Roll up
- ESC
- Menu/Scroll Left
- Performance/Scroll right
- Enter
- Turtle/Scroll down



### Optimized pedal position and floor mat

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



### Steering wheel position

The steering angle sensor can be used to predict the traveling direction of the equipment by displaying the symbol in real time on the large screen of the cluster.



### Adjustable Tilting Handle

The steering column on the right can be easily adjusted by a lever.



### Improved battery maintenance

The battery cover is designed as a full open type to improve the maintenance. Also this is equipped with a gas spring system for safe and easy maintenance.



### Brake oil reservoir with level sensor

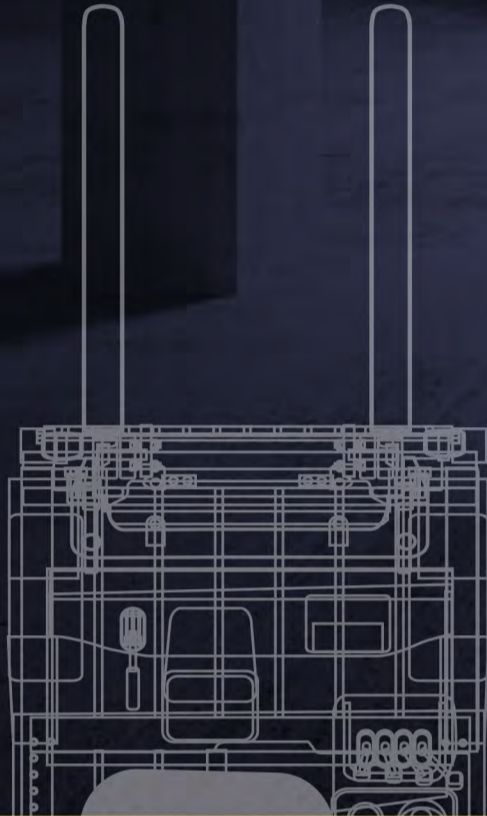
The enhanced brake oil reservoir, located in the upper left dash is equipped with an electronic level sensor and easily visible through the monitor.



Secure & Safety

# Advanced Safety

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



Some of the photos may include optional equipment.

## Wide visibility for Safe Operation

The optimized lift cylinder array design provides a clear, wide field of vision for the operator. The adoption of a panorama mirror and rear camera(OPT) improve the rear side view, further enhancing safety.



### Strong overhead guard

Exceeding the EEC and ANSI regulations, the overhead guard offers great protection combined with excellent all around visibility.



### Panoramic mirror

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

### Maximum travel speed limitation

By considering the working environment, the maximum speed can be set and limited from 10 km/h to 1km/h unit through the cluster.

### Turtle mode

When selecting the turtle mode while working in narrow and congested workplace, the travel speed is reduced at a preset speed.

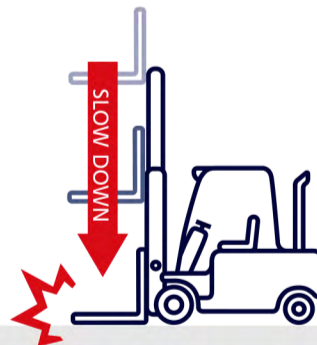
## Safety features

The adoption of a high-sensitivity sensor and advanced safety system can prevent the safety accidents.



### Anti Roll back system

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



### 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.



### Operator Presence Sensing System (OPT)

When operator is not in seat the hydraulic lift and tilt controls and travel are locked out.

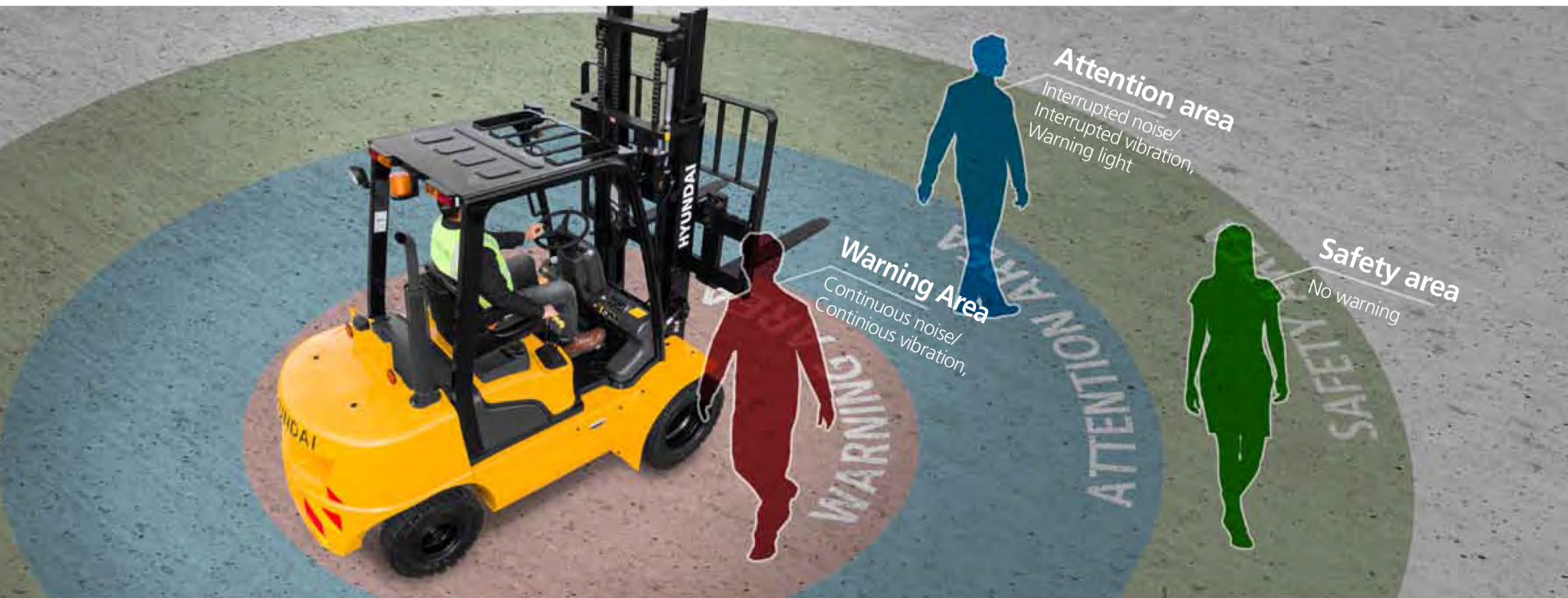
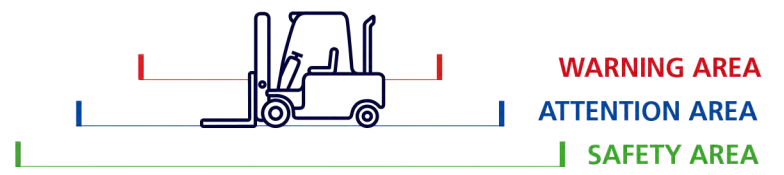


### Safety lamps

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

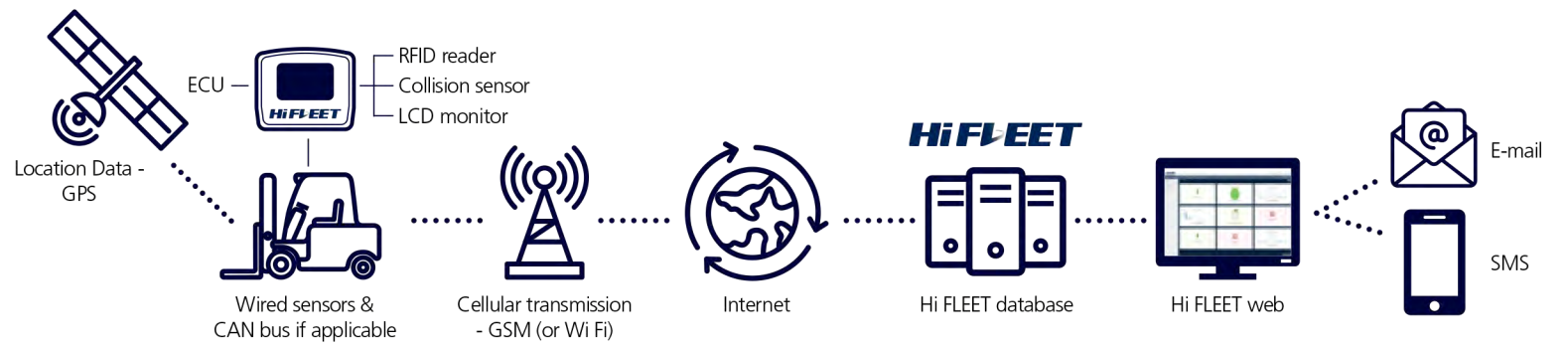
# IPAS: Intelligent Proximity Alert System (OPT)

Emits a warning (vibration, warning noise) in each area by measuring the distance between the forklift and a nearby pedestrian in real time via wireless communication.



## Fleet Management System(Hi FLEET)(OPT)

Hi FLEET, Hyundai material handling's fleet management system, is the optimal operation solution for a fleet of forklifts. It connects driver and vehicle in real time.



# Mast Specification of 9 series

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

Mast Type		Maximum Fork Lift height (mm)	Overall Height (Fork Lowered) (mm)	Free lift height (mm)		Tilt Angle (deg)		Load Capacity (500mm LC) w/o side shift (kg)		Load Capacity (500mm LC) with side shift (kg)		Truck Weight (kg)	
				with backrest	w/o backrest	Fwd	wd	Single tire	Dual tire	Single tire	Dual tire	Single tire	Dual tire
				(mm)	(mm)	(deg)	(deg)	(kg)	(kg)	(kg)	(kg)	(kg)	(kg)
2-Stage full free lift	V270	2720	2075	120	120	6	10	4000	4000	4000	4000	6833	7101
	※V300	3020	2225	120	120	6	10	4000	4000	4000	4000	6855	7126
	V330	3320	2375	120	120	6	10	4000	4000	4000	4000	6884	7152
	V350	3520	2525	120	120	6	10	4000	4000	4000	4000	6908	7193
	V370	3720	2625	120	120	6	10	4000	4000	3950	4000	6925	7228
	V400	4020	2835	120	120	6	10	4000	4000	3900	3900	6960	7153
	V450	4520	3085	120	120	6	6	4000	4000	3650	3750	7002	7270
	V500	5020	3335	120	120	6	6	4000	4000	3550	3700	7045	7312
3-Stage full free lift	TF370	3730	2025	1139	812	6	6	4000	4000	3750	3800	7134	7390
	TF400	4030	2125	1239	912	6	6	4000	4000	3700	3800	7160	7416
	TF430	4330	2225	1339	1012	6	6	4000	4000	3650	3750	7185	7441
	TF450	4510	2285	1399	1072	6	6	4000	4000	3600	3650	7201	7457
	TF470	4720	2375	1489	1162	6	6	3950	4000	3550	3600	7224	7480
	TF500	5020	2475	1589	1262	6	6	3900	3900	3500	3550	7250	7506
	TF550	5520	2655	1769	1442	6	6	3750	3800	3400	3450	7301	7557
	TF600	6030	2835	1949	1622	6	6	3650	3650	3300	3300	7341	7596

※ TF-Mast : Wide Visible 3-Stage Full Free Lift Mast with 1 Free Lift Cylinders.

※ : Standard

Mast Type		Maximum Fork Lift height (mm)	Overall Height (Fork Lowered) (mm)	Free lift height (mm)		Tilt Angle (deg)		Load Capacity (500mm LC) w/o side shift (kg)		Load Capacity (500mm LC) with side shift (kg)		Truck Weight (kg)	
				with backrest	w/o backrest	Fwd	wd	Single tire	Dual tire	Single tire	Dual tire	Single tire	Dual tire
				(mm)	(mm)	(deg)	(deg)	(kg)	(kg)	(kg)	(kg)	(kg)	(kg)
2-Stage full free lift	V270	2720	2075	120	120	6	10	4500	4500	4500	4500	7319	7534
	※V300	3020	2225	120	120	6	10	4500	4500	4500	4500	7345	7560
	V330	3320	2375	120	120	6	10	4500	4500	4500	4500	7370	7586
	V350	3520	2525	120	120	6	10	4500	4500	4450	4500	7395	7610
	V370	3720	2625	120	120	6	10	4500	4500	4400	4450	7411	7627
	V400	4020	2835	120	120	6	10	4500	4500	4300	4350	7447	7662
	V450	4520	3085	120	120	6	6	4500	4500	4150	4200	7489	7704
	V500	5020	3335	120	120	6	6	4500	4500	4100	4150	7531	7748
3-Stage full free lift	TF370	3730	2025	1139	812	6	6	4500	4500	4200	4250	7538	7794
	TF400	4030	2125	1239	912	6	6	4500	4500	4150	4200	7564	7820
	TF430	4330	2225	1339	1012	6	6	4500	4500	4100	4150	7590	7846
	TF450	4510	2285	1399	1072	6	6	4450	4450	4050	4050	7605	7861
	TF470	4720	2375	1489	1162	6	6	4400	4400	4000	4000	7629	7885
	TF500	5020	2475	1589	1262	6	6	4300	4350	3900	3900	7655	7911
	TF550	5520	2655	1769	1442	6	6	4200	4200	3800	3850	7707	7963
	TF600	6030	2835	1949	1622	6	6	4050	4050	3650	3700	7746	8002

※ TF-Mast : Wide Visible 3-Stage Full Free Lift Mast with 1 Free Lift Cylinders.

※ : Standard

## 50B-9



Mast Type	Maximum Fork Lift height (mm)	Overall Height (Fork Lowered) (mm)	Free lift height		Tilt Angle		Load Capacity (500mm LC) w/o side shift		Load Capacity (500mm LC) with side shift		Truck Weight		
			with backrest	w/o backrest	Fwd	wd	Single tire	Dual tire	Single tire	Dual tire	Single tire	Dual tire	
			(mm)	(mm)	(deg)	(deg)	(kg)	(kg)	(kg)	(kg)	(kg)	(kg)	
2-Stage full free lift	V260	2620	2080	120	120	6	10	4990	4990	4990	4990	7780	7924
	*V290	2920	2230	120	120	6	10	4990	4990	4990	4990	7805	7950
	V320	3220	2380	120	120	6	10	4990	4990	4990	4990	7831	7975
	V340	3420	2530	120	120	6	10	4990	4990	4990	4990	7856	8000
	V360	3620	2630	120	120	6	10	4990	4990	4990	4990	7873	8016
	V390	3920	2840	120	120	6	10	4990	4990	4990	4990	7908	8052
	V440	4420	3090	120	120	6	6	4990	4990	4900	4900	7950	8094
	V490	4920	3340	120	120	6	6	4990	4990	4800	4850	7993	8137
3-Stage full free lift	TF360	3662	2030	1074	807	6	6	4990	4990	4900	4900	7942	8138
	TF390	3962	2130	1174	907	6	6	4990	4990	4900	4900	7968	8164
	TF420	4262	2230	1274	1007	6	6	4990	4990	4800	4800	7994	8190
	TF440	4442	2290	1334	1067	6	6	4990	4990	4750	4750	8010	8205
	TF460	4652	2380	1424	1157	6	6	4900	4950	4700	4650	8033	8229
	TF490	4952	2480	1524	1257	6	6	4800	4850	4600	4500	8059	8255
	TF540	5452	2660	1704	1437	6	6	4700	4700	4400	4400	8110	8306
	TF590	5962	2840	1884	1617	6	6	4550	4550	4250	4250	8150	8346

\* TF-Mast : Wide Visible 3-Stage Full Free Lift Mast with 1 Free Lift Cylinders.

\* : Standard

## New 9 Series

## Optional Items



- Mast : Refer to the Mast Specification
- Fork (mm)  
40B-9 : 1070, 1220(STD), 1370, 1520, 1670, 1820, 1970, 2120, 2400  
45B-9 : 1070, 1220(STD), 1370, 1520, 1670, 1820, 1970, 2200, 2400  
50B-9 : 1070, 1220(STD), 1370, 1670, 1820, 1970, 2200, 2400
- Side shift
- TIRE : Solid(standard) / Non-marking / Pneumatic / Double tire
- Finger Tip Control
- Cold Storage (for -30° cold working environments)
- M. C. V : 2-Spool(STD), 3-Spool, 4-Spool
- Auto Fork Leveling
- Load Indicator
- Side Battery Remove
- Direction Switch on Lever
- Side mirror
- Cabin (one door specification)
  - ① FRONT + ROOF
  - ② FRONT + ROOF + REAR
  - ③ FRONT + ROOF + REAR + DOOR
  - ④ FRONT + ROOF + REAR + DOOR + HEATER
  - ⑤ FRONT + ROOF + REAR + DOOR + HEATER + AUDIO

## Attachments



Side shift



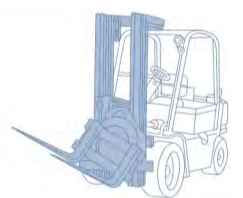
Hinged fork



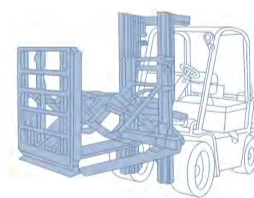
Hinged bucket



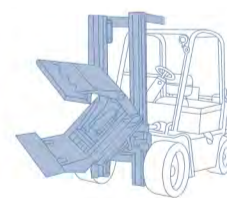
Rotating fork



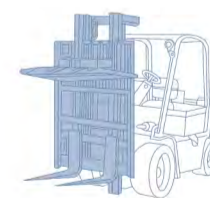
Push Pull



Rotating roll clamp



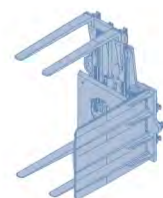
Load stabilizer



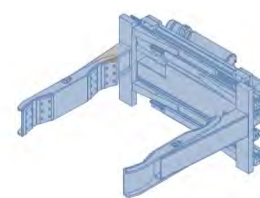
Carton clamp



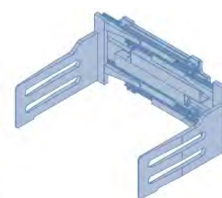
Pallet inverter



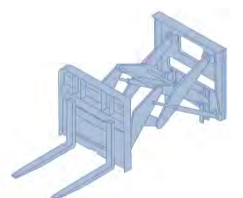
Drum clamp



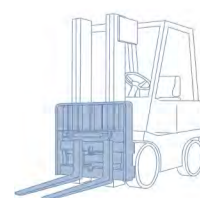
Bale clamp



Load extender

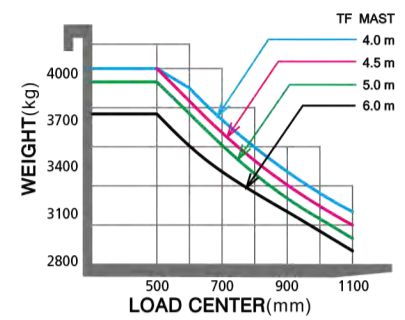
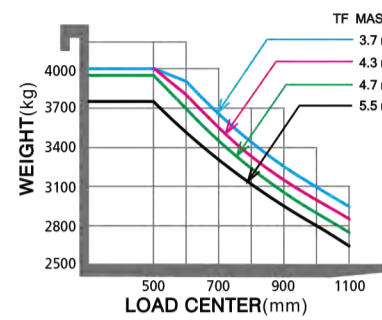
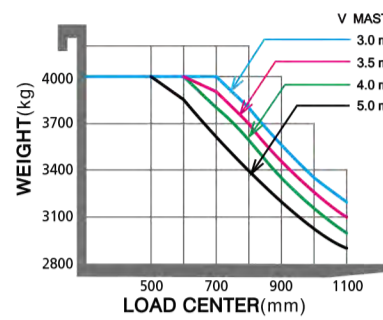
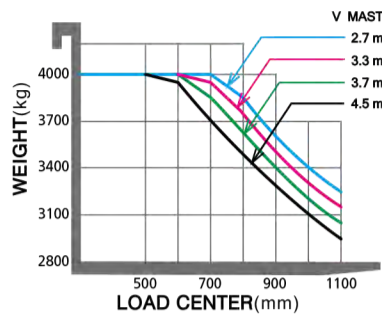


Fork positioner

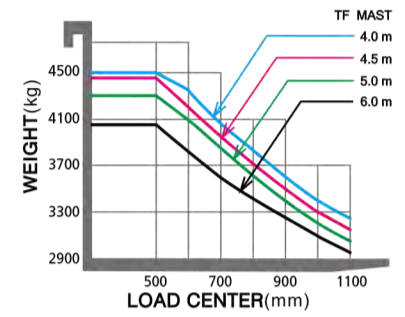
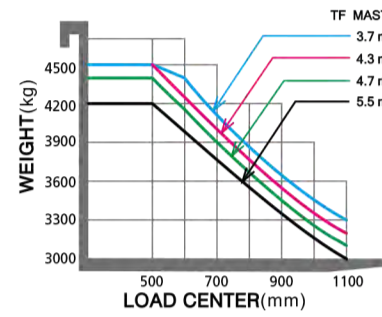
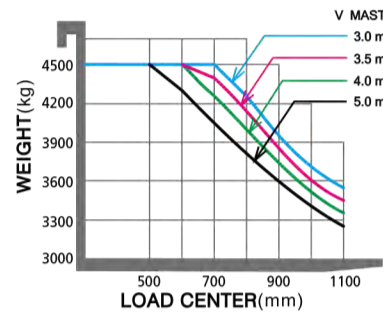
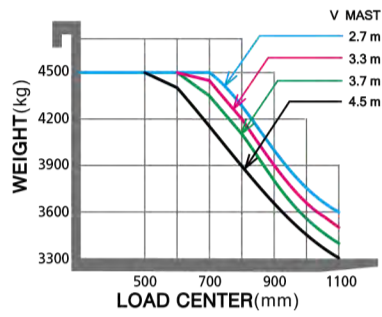


## Load Capacity

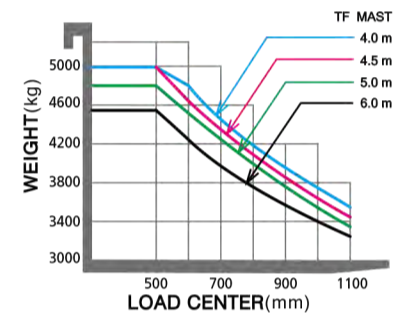
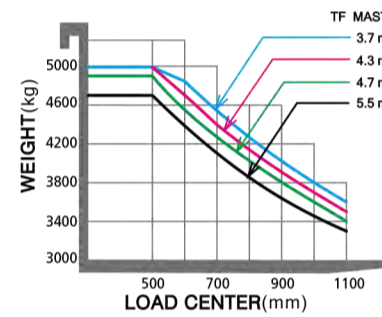
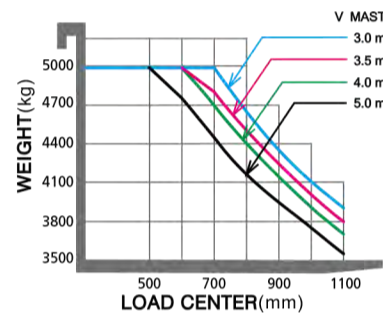
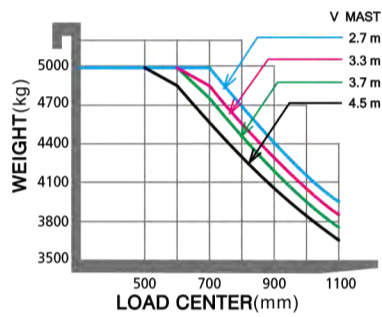
40B-9



45B-9



50B-9



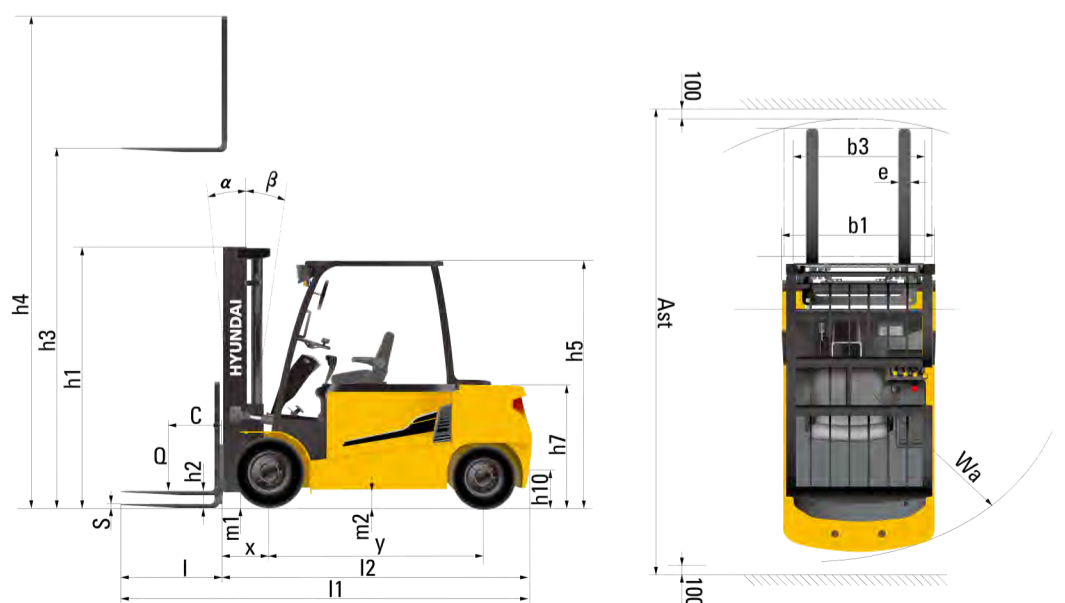
## New 9 Series

## Specification

Distinguishing mark					
1.1	Manufacturer (abbreviation)		Hyundai		
1.2	Manufacturer's type designation	40B-9	45B-9	50B-9	
1.3	Drive : electric (battery or mains), diesel, petrol, fuel gas	Electric	Electric	Electric	
1.4	Type of operation: hand, pedestrian, standing, seated, order-picker	Seat type	Seat type	Seat type	
1.5	Load capacity / rated load	Q kg	4,000	4,500	4,990
1.6	Load center distance	c mm	500	500	500
1.8	Load center distance	x mm	535	535	540
1.9	Wheelbase	y mm	2,025	2,025	2,025
Weight					
2.1	Service weight (Includes the battery)	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
Tires, chassis					
3.1	타이어 : 솔리드(V), Superelastic(SE), 공기식(P), 폴리우레탄(PE)		SE, P	SE, P	SE, P
3.2	Tire size, front		250-15	250-15	28X12.5-15
3.3	Tire size, rear		23X9-10	23X9-10	23X9-10
3.5	Wheels, number front / rear (x = driven wheels)		2x/2	2x/2	2x/2
3.6	Tread, front	mm	1141	1141	1114
3.7	Tread, rear	mm	1098	1098	1098
Dimensions					
4.1	Tilt Angle(forward/backward)	deg	6/10	6/10	6/10
4.2	Height, mast lowered	h1 (mm)	2,225	2,225	2,230
4.3	Free lift	h2 (mm)	120	120	120
4.4	Lift height	h3 (mm)	3,020	3,020	2,920
4.5	Height, mast extended	h4 (mm)	4,224	4,224	4,135
4.7	Height of overhead guard (cabin)	h5 (mm)	2,320	2,320	2,320
4.8	Seat height	h7 (mm)	1,176	1,176	1,176
4.12	Coupling height	h10 (mm)	460	460	460
4.19	Overall length	l1 (mm)	4,215	4,215	4,260
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 ( l x w x t )	l x e x s (mm)	50x122x1070	50x150x1070	50x150x1070
4.23	Fork carriage iso 2328		III/A	III/A	III/A
4.24	Fork-carriage width	b3 (mm)	1,376	1,376	1,376
4.31	Ground clearance, below mast	m1 (mm)	160	160	165
4.32	Ground clearance, center of vehicle	m2 (mm)	150	150	155
4.33	Cross-passage width (pallet 1000x1200)	Ast (mm)	4,405	4,405	4,445
4.34	Aisle width of pallets 800 x 1200 crossways (w x l)	Ast (mm)	4,605	4,605	4,645
4.35	Turning radius	Wa (mm)	2,670	2,670	2,705

Performance data					
5.1	Travel speed, loaded / unloaded (80V)	km/h	18 / 18	18 / 18	18 / 18
5.2	Fort lift speed, loaded / unloaded(80V)	mm/s	360 / 520	330 / 500	320 / 450
5.3	Fork descending speed, loaded / unloaded	mm/s	500 / 450	500 / 450	500 / 420
5.6	Max. drawbar pull, loaded / unloaded	N	28,185 / 29,075	28,662 / 29,003	28,558 / 28,469
5.8	Gradeability, loaded	% (°)	23 (13.0)	21 (11.9)	19 (10.8)
5.10	Service brake		Hydraulic	Hydraulic	Hydraulic
Motor					
6.1	Drive Motor, 60 Min Rating (80V)	kW	10.0x2	10.0x2	10.0x2
6.2	Hydraulic Motor, 15% Rating (80V)	kW	28	28	28
6.4	Battery voltage (80V)	Ah	700	700	700
6.5	Battery weight	kg	2,095	2,095	2,095
	Battery compartment dimensions (LengthXWidthXHeight)	mm	1,033 / 1,004 / 790	1,033 / 1,004 / 790	1,033 / 1,004 / 790
Addition data					
8.1	Type of drive control		AC	AC	AC

## Dimension



\* All specifications in this catalog are subject to change according to the optional items.