

# 35/40/45D-9K 50DA-9K

Diesel Counterbalance Trucks

MOVING YOU FURTHER

HYUNDAI HEAVY INDUSTRIES

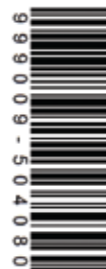


 **HYUNDAI | FORKLIFT**  
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Some of the photos may include optional equipment.

 **HYUNDAI**  
HEAVY INDUSTRIES CO.,LTD.

# Your satisfaction is our priority!

Hyundai introduces a new life of **9series** diesel forklift truck.

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

## New Diesel Forklift with Proven Quality and Advanced Technology

- Maximum performance
- Spacious operator's cab
- 5.6 inch LCD color monitor
- Truck inclination warning system
- Load weight indicator (optional)
- OPSS System for safe operation (optional)
- Easy serviceability



Some of the photos may include optional equipment.



# High Efficiency & Optimal Performance



Powerful engine and high technology systems provide you with enhanced performance and highest productivity

**35/40/45D-9K**  
**50DA-9K**



Some of the photos may include optional equipment.



### Highly Durable Transmission

Powershift transmission of forward 2 stages and reverse 2 stages provides fast travel speed and quiet travel under any heavy load condition, and enhances work efficiency. The clutch protection system prevents excessive use of inching as well as minimizes change-impact.



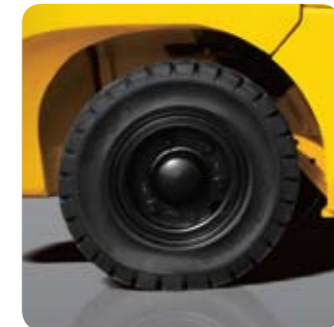
### Boosting type brake valve

The boosting type is applied for strong braking performance.



### Highly Durable Drive Axle

The strengthened drive axle separable from transmission ensures low vibration and easy maintenance. The wet disc type brake is applied for easy operation, smooth response and maintenance free.



### Integrated wheel rim

Integrated wheel rim provides significantly increased service life.



### Fully hydrostatic power steering

A hydraulic steering system always guarantees smooth and flexible steering, preventing overrun and kick-back.



## KUBOTA V3800-CR-T Engine

94.1KW / 2,200rpm

The common rail system has made it possible to optimize combustion and create more durable, quite, and fuel-efficient engine.



### Travel Speed (MAX)

Model	km / h
35D-9K	27.7
40D-9K	26.8
45D-9K	26.2
50DA-9K	26.7

### Gradeability (MAX)

Model	% (degree)
35D-9K	48.2 (25.7)
40D-9K	42.7 (23.1)
45D-9K	38.8 (21.2)
50DA-9K	35.4 (19.5)

### Faster Travel Speed and Gradeability

The powerful high-output engine provides greater acceleration, better gradeability and faster travel speed on any tough terrain or slope.



# Best Convenience & Optimized Ergonomics



The ergonomically designed cabin and the new style LCD color monitor provide full support and comfort to the operator

**35/40/45D-9K**  
**SODA-9K**



Some of the photos may include optional equipment.

## Spacious Operator Cabin

The newly designed cabin provides wide visibility and spacious environment, ensuring all day comfort for the operator.



### Optimized Pedal Position

The pedals are mounted to the console to reduce operator fatigue, and noise and dust from the engine compartment.



### Large entrance step

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



### Adjustable Steering Wheel

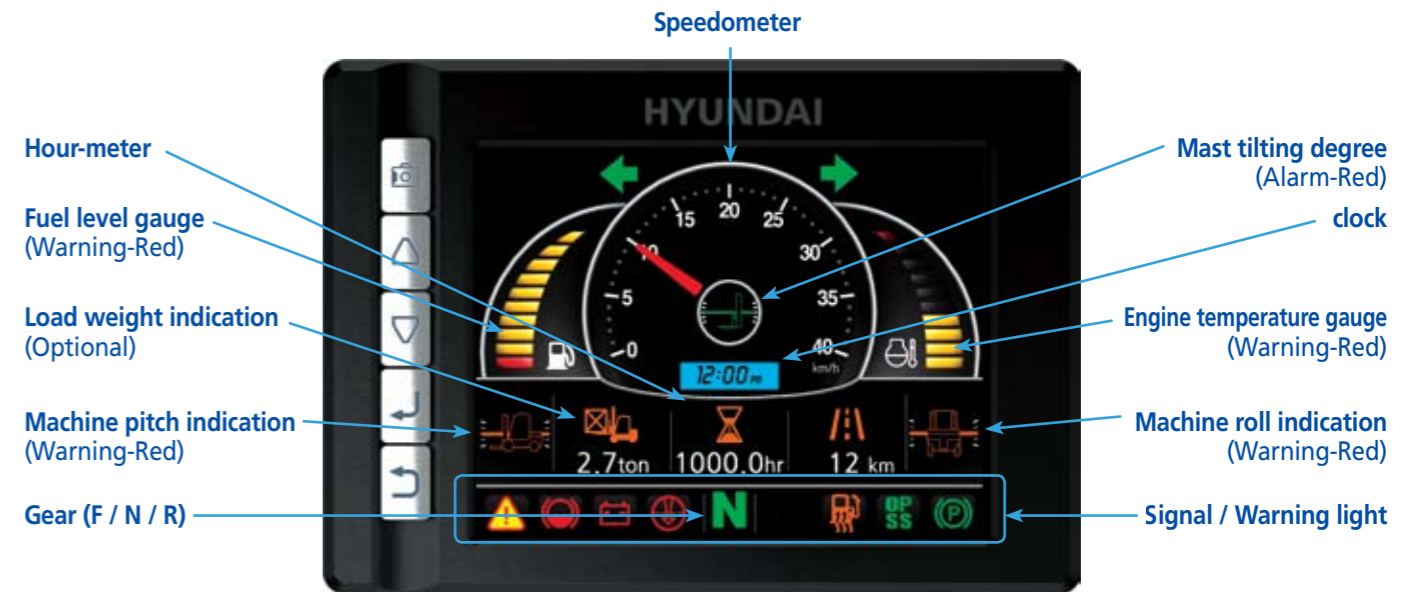
To achieve a comfortable drive position, the angle of the steering column can easily be adjusted by a lever on the right-hand side of the steering column.



### KAB Seat (STD)

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

- \*ELR (Energy Locking Retractor) Type Seat Belt
- \*Grammer Seat (OPT)
- \*Heating (OPT), Head-rest (OPT with Grammer Seat)



### Advanced LCD Monitor

The 5.6 inch wide screen LCD color monitor allows the operator to control the machine with ease. The monitor features speed, travel direction, battery discharge indicator and hour meter. The operator can easily check the A/S information through Maintenance Management Display.

**F<sub>1</sub> ↔ F<sub>2</sub>**

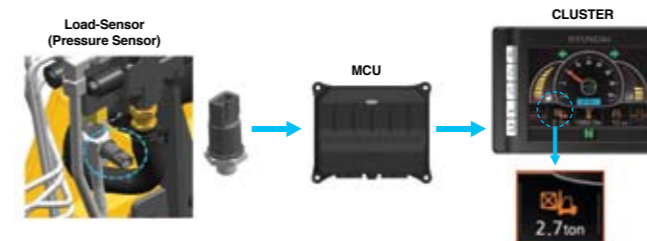
### Automatic Gear Box

- The automatic gear box provides smooth and fast gear change ensuring maximum torque at any speed.
- 1) The second gear is selected when the travel speed reaches 5 km/h during acceleration.
  - 2) The first gear is selected when the travel speed is at 3 km/h during deceleration.



### Truck Inclination Warning System

To improve the productivity and safety, the truck inclination warning system will monitor and indicate forward/backward, right / left degree of the forklift. The alarm alerts the operator when the forklift degree is over the ISO standard.



### Load indicator (optional)

The optional load indicator displays the load weight in the monitor. The load sensor reduces the time to check loaded weight and the alarm alerts the driver when overloaded.



# Advanced Safety



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

**35/40/45D-9K**  
**50DA-9K**



## 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.

Some of the photos may include optional equipment.

## 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.

- Lift Lock
- Tilt Lock
- Drive Lock
- Parking



Some of the photos may include optional equipment.



## Strong overhead guard

The safety overhead guard exceeds EEC and ANSI regulations and protects the operator during hazardous jobs.



## Steel side cover

The strengthened steel side cover provides enhanced durability.



## Safety lamps & rear reflectors

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.



# Fast and Easy Maintenance

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

**35/40/45D-9K**  
**SODA-9K**



## Large Engine Hood

Highly accessible engine compartment assures fast and efficient maintenance. The enlarged air cleaner(8") extended service time of engine.

Some of the photos may include optional equipment.



Rear view camera (optional)

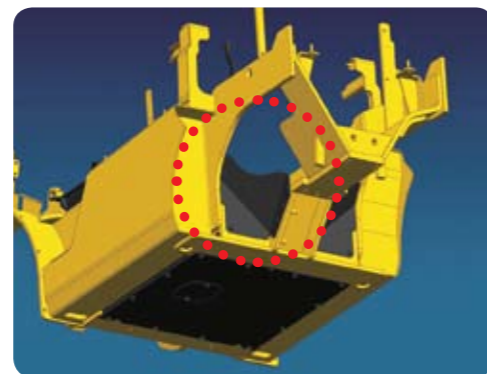
Emergency switch

Some of the photos may include optional equipment.



## Waterproof and Dustproof Cover

Newly developed Waterproof and Dustproof fuse box and relay box are mounted in one place for ease of maintenance.



## Rear Tire Cover

The rear tire cover with PE material is equipped to prevent clogging of the radiator from foreign substances.



Maintenance Management display



Password starting system (Anti-theft system)



Key-locking fuel filler

# New 9 Series

**35/40/45D-9K**  
**50DA-9K**

## Mast Specification (35D-9K)

Mast Type	Maximum Fork Height	Overall Height (Lowered)		Free Lift Height		Tilt Angle		Load Capacity W/O side shift (600mm LC)		Load Capacity w/side shift (600mm LC)		Truck Weight (Unloaded)		
		Single Tire	Double Tire	With Load Backrest	Without Load Backrest	Fwd	Bwd	Single Tire	Double Tire	Single Tire	Double Tire	Single Tire	Double Tire	
		(mm)	(mm)	(mm)	(mm)	deg	deg	(kg)	(kg)	(kg)	(kg)	(kg)	(kg)	
2-Stage Limited free lift	V270	2720	2085	2070	120	120	8	10	3500	3500	3500	3500	5861	6016
	* V300	3020	2235	2220	120	120	8	10	3500	3500	3500	3500	5892	6046
	V330	3320	2385	2370	120	120	8	10	3500	3500	3500	3500	5929	6084
	V350	3520	2535	2520	120	120	8	10	3500	3500	3500	3500	5952	6107
	V370	3720	2635	2620	120	120	8	10	3500	3500	3500	3500	5972	6127
	V400	4020	2845	2830	120	120	8	10	3500	3500	3500	3500	6015	6170
	V430	4320	2995	2980	120	120	8	10	3500	3500	3500	3500	6045	6199
	V450	4520	3095	3080	120	120	8	6	3500	3500	3500	3500	6128	6282
2-Stage full free lift	V500	5020	3345	3330	120	120	8	6	3500	3500	3500	3500	6178	6333
	VF280	2805	2135	2120	931	1258	8	8	3500	3500	3500	3500	5902	6055
3-Stage full free lift	VF300	3005	2235	2220	1031	1358	8	8	3500	3500	3500	3500	5929	6081
	VF315	3155	2325	2310	1121	1448	8	8	3500	3500	3500	3500	5948	6100
	TF/TS370	3730	2035	2020	822	1149	8	8	3500	3500	3500	3500	6118	6273
	TF/TS400	4030	2135	2120	922	1249	8	8	3500	3500	3500	3500	6148	6303
	TF/TS430	4330	2235	2220	1022	1349	8	8	3500	3500	3500	3500	6179	6334
	TF/TS450	4510	2295	2290	1082	1409	8	8	3500	3500	3500	3500	6198	6353
	TF/TS470	4720	2385	2390	1172	1499	8	8	3500	3500	3500	3500	6235	6389
	TF/TS500	5020	2485	2470	1272	1599	8	6	3500	3500	3500	3500	6258	6412
	TF/TS550	5520	2665	2650	1452	1779	8	6	3500	3500	3400	3400	6319	6474
	TF/TS600	6030	2845	2830	1632	1959	8	6	3400	3500	3300	3300	6387	6542
TF/TS650	6540	3025	3010	1812	2139	8	6	3300	3400	3200	3200	6429	6584	

## Mast Specification (45D-9K)

Mast Type	Maximum Fork Height	Overall Height (Lowered)		Free Lift Height		Tilt Angle		Load Capacity W/O side shift (600mm LC)		Load Capacity w/side shift (600mm LC)		Truck Weight (Unloaded)		
		Single Tire	Double Tire	With Load Backrest	Without Load Backrest	Fwd	Bwd	Single Tire	Double Tire	Single Tire	Double Tire	Single Tire	Double Tire	
		(mm)	(mm)	(mm)	(mm)	deg	deg	(kg)	(kg)	(kg)	(kg)	(kg)	(kg)	
2-Stage Limited free lift	V270	2720	2085	2070	120	120	8	10	4500	4500	4500	4500	6718	6827
	* V300	3020	2235	2220	120	120	8	10	4500	4500	4500	4500	6748	6857
	V330	3320	2385	2370	120	120	8	10	4500	4500	4500	4500	6786	6895
	V350	3520	2535	2520	120	120	8	10	4500	4500	4500	4500	6809	6918
	V370	3720	2635	2620	120	120	8	10	4500	4500	4500	4500	6829	6938
	V400	4020	2845	2830	120	120	8	10	4500	4500	4500	4500	6872	6980
	V430	4320	2945	2980	120	120	8	10	4500	4500	4500	4500	6901	7010
	V450	4520	3095	3080	120	120	8	6	4500	4500	4500	4500	6984	7093
2-Stage full free lift	V500	5020	3345	3330	120	120	8	6	4500	4500	4500	4500	7035	7144
	VF280	2805	2135	2120	853	1442	8	8	4500	4500	4500	4500	6754	6863
3-Stage full free lift	VF300	3005	2235	2220	953	1542	8	8	4500	4500	4500	4500	6780	6889
	VF315	3155	2325	2310	1043	1602	8	8	4500	4500	4500	4500	6800	6908
	TF/TS370	3730	2035	2020	796	1114	8	8	4500	4500	4500	4500	6976	7086
	TF/TS400	4030	2135	2120	896	1214	8	8	4500	4500	4500	4500	7006	7116
	TF/TS430	4330	2235	2220	996	1314	8	8	4500	4500	4500	4500	7037	7148
	TF/TS450	4510	2295	2290	1056	1374	8	8	4500	4500	4500	4500	7056	7166
	TF/TS470	4720	2385	2390	1145	1484	8	8	4500	4500	4500	4500	7092	7203
	TF/TS500	5020	2485	2470	1246	1564	8	6	4500	4500	4400	4500	7115	7226
	TF/TS550	5520	2665	2650	1426	1744	8	6	4500	4500	4300	4400	7176	7287
	TF/TS600	6030	2845	2830	1606	1924	8	6	4400	4400	4200	4300	7245	7355
TF/TS650	6540	3025	3010	1786	2104	8	6	4200	4300	4100	4200	7286	7397	

## Mast Specification (40D-9K)

Mast Type	Maximum Fork Height	Overall Height (Lowered)		Free Lift Height		Tilt Angle		Load Capacity W/O side shift (600mm LC)		Load Capacity w/side shift (600mm LC)		Truck Weight (Unloaded)		
		Single Tire	Double Tire	With Load Backrest	Without Load Backrest	Fwd	Bwd	Single Tire	Double Tire	Single Tire	Double Tire	Single Tire	Double Tire	
		(mm)	(mm)	(mm)	(mm)	deg	deg	(kg)	(kg)	(kg)	(kg)	(kg)	(kg)	
2-Stage Limited free lift	V270	2720	2085	2070	120	120	8	10	4000	4000	4000	4000	6305	6411
	* V300	3020	2235	2220	120	120	8	10	4000	4000	4000	4000	6335	6441
	V330	3320	2385	2370	120	120	8	10	4000	4000	4000	4000	6373	6479
	V350	3520	2535	2520	120	120	8	10	4000	4000	4000	4000	6396	6502
	V370	3720	2635	2620	120	120	8	10	4000	4000	4000	4000	6416	6522
	V400	4020	2845	2830	120	120	8	10	4000	4000	4000	4000	6459	6565
	V430	4320	2995	2980	120	120	8	10	4000	4000	4000	4000	6488	6595
	V450	4520	3095	3080	120	120	8	6	4000	4000	4000	4000	6571	6678
2-Stage full free lift	V500	5020	3345	3330	120	120	8	6	4000	4000	4000	4000	6622	6728
	VF280	2805	2135	2120	916	1243	8	8	4000	4000	4000	4000	6346	6449
3-Stage full free lift	VF300	3005	2235	2220	1016	1343	8	8	4000	4000	4000	4000	6372	6475
	VF315	3155	2325	2310	1106	1433	8	8	4000	4000	4000	4000	6392	6494
	TF/TS370	3730	2035	2020	807	1134	8	8	4000	4000	4000	4000	6562	6633
	TF/TS400	4030	2135	2120	907	1234	8	8	4000	4000	4000	4000	6592	6663
	TF/TS430	4330	2235	2220	1007	1334	8	8	4000	4000	4000	4000	6623	6694
	TF/TS450	4510	2295	2290	1067	1394	8	8	4000	4000	4000	4000	6642	6713
	TF/TS470	4720	2385	2390	1157	1484	8	8	4000	4000	4000	4000	6678	6749
	TF/TS500	5020	2485	2470	1257	1584	8	6	4000	4000	4000	4000	6702	6772
	TF/TS550	5520	2665	2650	1437	1764	8	6	4000	4000	3900	3900	6763	6834
	TF/TS600	6030	2845	2830	1617	1944	8	6	3900	3900	3800	3800	6831	6902
TF/TS650	6540	3025	3010	1797	2124	8	6	3800	3800	3700	3700	6873	6944	

## Mast Specification (50DA-9K)

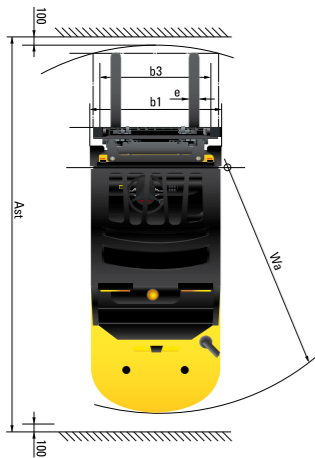
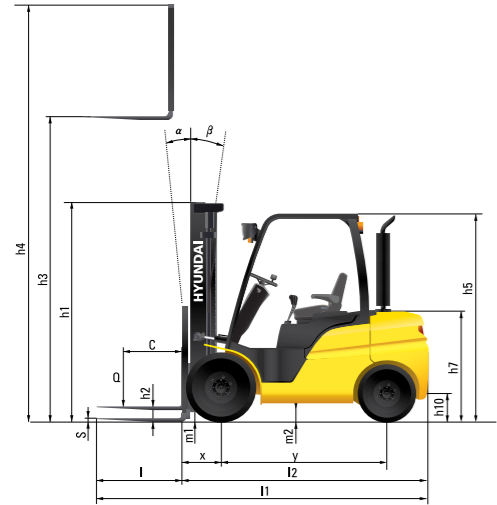
Mast Type	Maximum Fork Height	Overall Height (Lowered)		Free Lift Height		Tilt Angle		Load Capacity W/O side shift (600mm LC)		Load Capacity w/side shift (600mm LC)		Truck Weight (Unloaded)		
		Single Tire	Double Tire	With Load Backrest	Without Load Backrest	Fwd	Bwd	Single Tire	Double Tire	Single Tire	Double Tire	Single Tire	Double Tire	
		(mm)	(mm)	(mm)	(mm)	deg	deg	(kg)	(kg)	(kg)	(kg)	(kg)	(kg)	
2-Stage Limited free lift	V260	2630	2085	2070	120	120	8	10	5000	5000	5000	5000	7143	7259
	* V290	2930	2235	2220	120	120	8	10	5000	5000	5000	5000	7219	7335
	V320	3230	2385	2370	120	120	8	10	5000	5000	5000	5000	7193	7309
	V340	3430	2535	2520	120	120	8	10	5000	5000	5000	5000	7218	7334
	V360	3630	2635	2620	120	120	8	10	5000	5000	5000	5000	7234	7350
	V390	3930	2845	2830	120	120	8	10	5000	5000	4900	5000	7270	7386
	V440	4430	3095	3080	120	120	8	6	5000	5000	4800	4900	7373	7489
	V490	4930	3345	3330	120	120	8	6	5000	5000	4700	4800	7415	7531
2-Stage full free lift	VF270	2702	2135	2120	905	1223	8	8	5000	5000	5000	5000	7202	7314
	VF290	2902	2235	2220	1005	1323	8	8	5000	5000	4900	4900	7227	7339
	VF305	3052	2325	2310	1095	1413	8	8	5000	5000	4800	4800	7245	7357
3														



# New 9 Series

# 35/40/45D-9K 50DA-9K

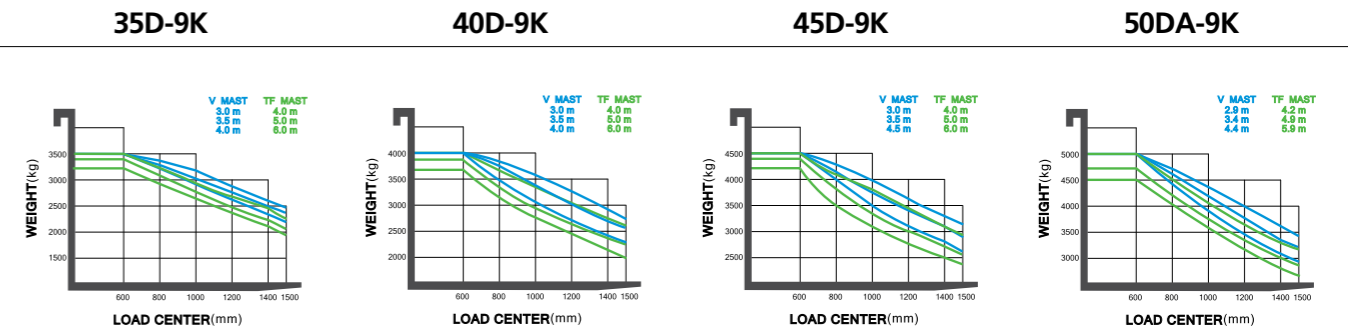
## Dimension



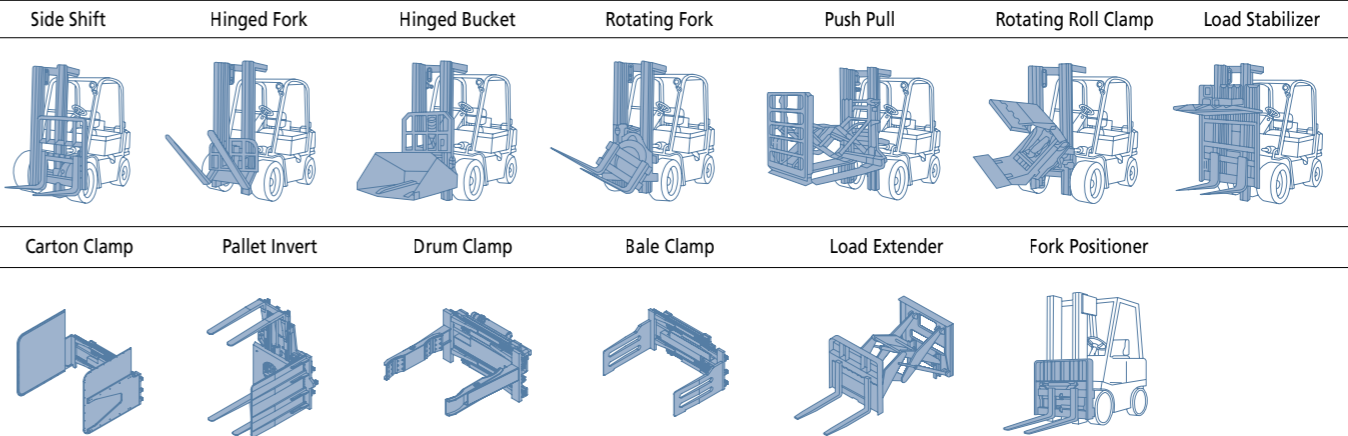
## Specification

Identification					
1.1	Manufacturer	Hyundai	Hyundai	Hyundai	Hyundai
1.2	Manufacturer's type designation	35D-9K	40D-9K	45D-9K	50DA-9K
1.3	Drive : electric (battery or mains), diesel, petrol, fuel gas, manual	Diesel	Diesel	Diesel	Diesel
1.4	Type of operation : hand, pedestrian, standing, seated, order-picker	Seated	Seated	Seated	Seated
1.5	Load capacity / rated load	kg 3,500	4,000	4,500	5,000
1.6	Load center distance	c mm 600	600	600	600
1.8	Load distance, center of front axle to fork	x mm 561	561	561	576
1.9	Wheelbase	y mm 2,000	2,000	2,000	2,000
Weights					
2.1	Service weight	cg 5,892	6,441	6,857	7,335
2.2	Axle loading, loaded front / rear	cg 8,220 / 1,172	9,136 / 1,305	9,922 / 1,435	10,780 / 1,555
2.3	Axle loading , unloaded front / rear	cg 2,686 / 3,204	2,814 / 3,627	2,810 / 4,047	2,813 / 4,522
Wheels, Chassis					
3.1	Tires : Pneumatic(P) / Solid(S) / Non-marking(N)	P, S, N	P, S, N	P, S, N	P, S, N
3.2	Tires size, front	8.25-15-14PR	7.50-16-12PR	7.50-16-12PR	7.50-16-12PR
3.3	Tires size, rear	7.00-12-12PR	7.00-12-12PR	7.00-12-14PR	7.00-12-14PR
3.5	Wheels, number front rear(x = driven wheels)	2 x 2	4 x 2	4 x 2	4 x 2
3.6	Track width, front	mm 1,132	1,282	1,282	1,282
3.7	Track width, rear	mm 1,140	1,140	1,140	1,140
Basic Dimensions					
4.1	Mast / fork carriage tilt forward / backward	degrees 8 / 10	8 / 10	8 / 10	8 / 10
4.2	Lowered mast height	h1 (mm) 2,220	2,220	2,220	2,220
4.3	Free lift height	h2 (mm) 120	120	120	120
4.4	Lift height	h3 (mm) 3,020	3,020	3,020	2,930
4.5	Extended mast height	h4 (mm) 4,234	4,234	4,234	4,147
4.7	Overhead guard (cab) height	h5 (mm) 2,220	2,210	2,210	2,210
4.8	Seat height / Standing height	h7 (mm) 1,070	1,070	1,070	1,070
4.12	Coupling height	h10 (mm) 364	364	364	364
4.19	Overall length	l1 (mm) 4,180	4,235	4,455	4,500
4.20	Length to face of forks	l2 (mm) 3,110	3,165	3,235	3,300
4.21	Overall width	b1 (mm) 1,370	1,740	1,740	1,740
4.22	Fork dimensions	x e x s (mm) 1,070 x 122 x 50	1,220 x 150 x 50	1,220 x 150 x 50	1,200 x 150 x 60
4.23	Fork carriage ISO 2328, class / type A, B	III / A	III / A	IV / A	IV / A
4.24	Fork - carriage width	b3 (mm) 1,300	1,600	1,600	1,600
4.31	Ground clearance, loaded, under mast	m1 (mm) 170	155	155	155
4.32	Ground clearance, centre of wheelbase	m2 (mm) 215	205	205	200
4.33	Aisle width for pallets 1,000 x 1,200 crossways	Ast (mm) 4,629	4,676	4,726	4,771
4.34	Aisle width for pallets 800 x 1,200 lengthways	Ast (mm) 4,829	4,876	4,926	4,971
4.35	Turning radius	Wa (mm) 2,868	2,915	2,965	3,010
4.36	Smallest pivot point distance	1,009	1,009	1,009	1,009
Performance Data					
5.1	Travel speed, unloaded (1/2)	km/h 27.7	26.8	26.2	26.7
5.2	Lift speed, loaded/ unloaded	mm/s 520 / 540	510 / 540	500 / 540	430 / 460
5.3	Lowering speed, loaded/unloaded	mm/s 500 / 500	500 / 500	500 / 500	500 / 500
5.5	Drawbar pull, loaded	kg 4,526	4,553	4,565	4,573
5.7	Gradient performance, loaded	% 48.2	42.7	38.8	35.4
5.9	Acceleration time, loaded/ unloaded(10m)	sec -	-	-	-
5.10	Service brake	Hydraulic	Hydraulic	Hydraulic	Hydraulic
Engine					
6.1	Engine manufacturer / type	KUBOTA V3800-CR-T			
6.2	Engine power acc. to ISO 1585	kW/rpm 94.1/2,200	94.1/2,200	94.1/2,200	94.1/2,200
6.3	Maximum Torque	kgf.m/rpm 33.6/1,500	33.6/1,500	33.6/1,500	33.6/1,500
6.4	No. of cylinder / cubic capacity	anz/cm3 4 / 3,769	4 / 3,769	4 / 3,769	4 / 3,769
Other Details					
8.1	Type of drive control	Power shift 2/2	Power shift 2/2	Power shift 2/2	Power shift 2/2
8.2	Operating pressure (system / attach)	kgf/cm <sup>2</sup> 210 / 150	210 / 150	210 / 150	210 / 150
8.3	Oil volume for attachments	ℓ 65	65	65	65

## Load Capacity



## Various Attachments



## Optional Items

- Fork(mm)
  - 35/40D-9K : 1220, 1370, 1520, 1670, 1820, 1970
  - 45D-9K : 1070, 1370, 1520, 1670, 1820, 1970
  - 50DA-9K : 1350, 1500, 1800, 2000, 2400
- Overshoe(mm)
  - 1600, 1800, 2000, 2200
- Integral Sideshift
- Tire : Pneumatic(STD) / Solid / Non-marking /
  - Double Tire(Front tire) 35D-9K : 7.50-16-12
  - Single Tire(Front tire) 40D-9K/45D-9K/50DA-9K : 300-15-18
- Seat : Grammer
- M.C.V : 2-Spool(STD), 3-Spool, 4-Spool, 5-Spool
- Load Indicator
- Beacon Lamp
- Work Lamp
- OPSS : Travel + Mast
- Cabin (Heater & Air Conditioner)
- Rear View Camera
- High OHG (2,340mm)
- 45D-9K : Class III Fork Carriage