



MOVING YOU FURTHER

**25-30
33D-9E**

Some of the photos may include optional equipment.



 **HYUNDAI**
MATERIAL HANDLING

Your satisfaction is our priority!

New Diesel Forklift with Proven Quality and Advanced Technology

Hyundai introduces a new line of 9-series diesel forklift trucks.

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

High Efficiency

- Tier 3, High power engine : YANMAR 4TNE92 (33.4kW)
- Reduce inching impact : Clutch protection system
- Wet disc brake

Advanced Safety

- Auto parking brake system
- Hill Start Assist Control
- Operator Presence Sensing System (OPT)
- Machine inclination indication

Best Convenience

- 5.6 inch LCD color monitor
- Auto fork leveling system (OPT)
- Load weight indicator (OPT)
- 4 pieces bolt on cabin (OPT)

Easy Maintenance

- Password starting system
- Consumable item replacement cycle warning
- Rear tire cover & under cover (OPT)





Power & Performance

High Efficiency & Optimal Performance

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



High Power Engine YANMAR 4TNE92

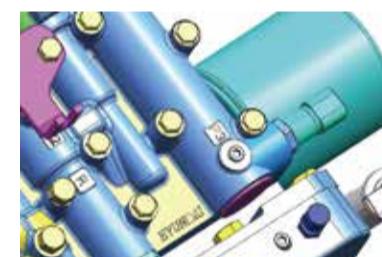
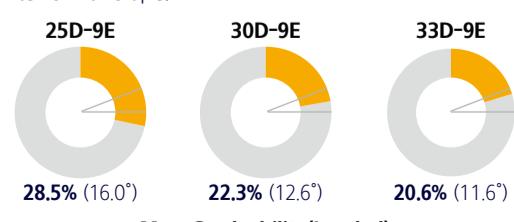
Market approved quality of YANMAR 4TNE92 engine ensures incomparable performance, durability and excellent fuel efficiency. This engine meets EU stage III A emission regulations.



**YANMAR 4TNE92 Engine
33.4kW/2,450rpm**

Faster Travel Speed & Gradeability

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



Clutch Protection System

The clutch protection system prevents excessive use of inching as well as minimizes change-impact.



Boosting type brake valve (OPT)

The boosting type brake valve 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.



Fully hydrostatic power steering

The hydraulic steering system always guarantees smooth and flexible steering, preventing over-run and kick-back.



Oil cooled disc brake

The wet brakes with excellent braking power and durability offer a stable and reliable braking power. Also, an oil cooler has been added to improve durability in working environments where the frequency of brake operation is high.



Easy & Comfort

Best Convenience & Optimized Ergonomics

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

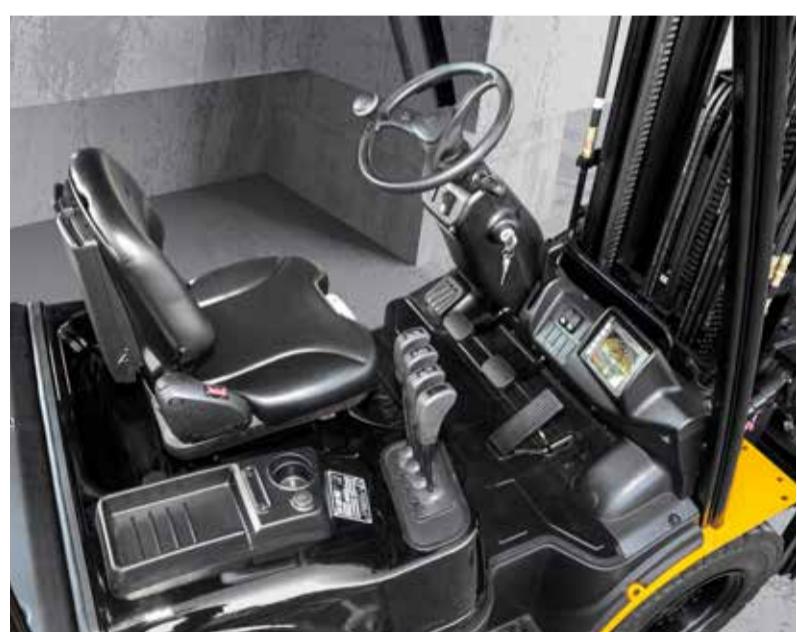


Some of the photos may include optional equipment.



Spacious Operator Cabin

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



Grammer Seat (STD)

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
- Heating(STD) and head rest(OPT)



Optimized pedal position

On the 9-series the pedals are mounted to the console to reduce operator fatigue, and noise and dust from the engine compartment.



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.



Low entrance height

The low entrance height ensures easy and safe access for the operator.

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.



Main monitoring features

- Hour-meter
- Fuel level gauge(Warning-Red)
- Signal / Warning light
- Gear (F / N / R)
- Speedometer
- Mast tilting degree(Alarm-Red)
- Clock
- Engine temperature gauge(Warning-Red)
- Odometer

① Load Indicator (OPT)

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

③ Machine inclination indication

The grade (left) and slope (right) sensors are built into the MCU and provide the grade and slope status information of the vehicle connected with the road surface condition in real time.

② Auto Fork Leveling System (OPT)

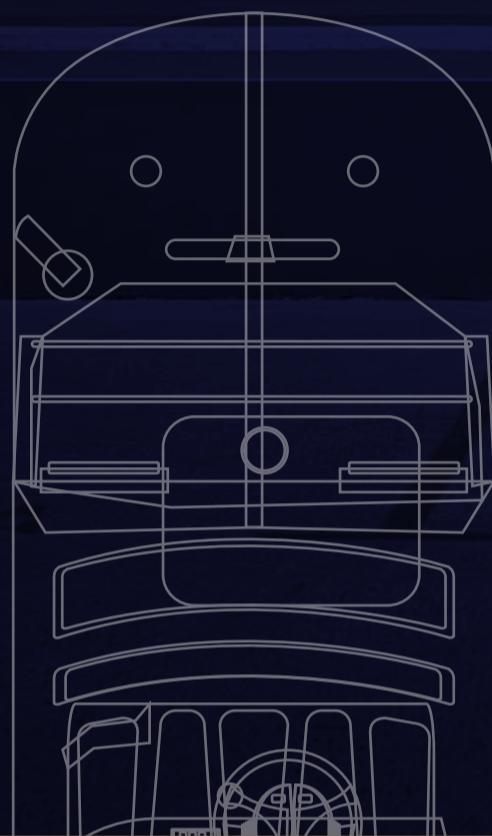
To improve the productivity the auto fork leveling system will automatically stop the tilt movement when the mast is in a straight position.



Secure & Safety

Advanced Safety

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



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.



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.

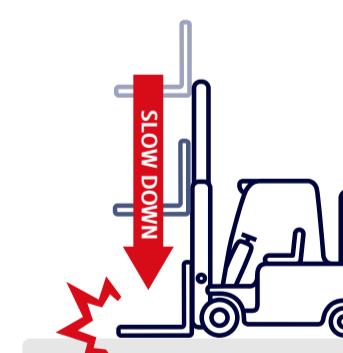
Various Safety System

The adoption of a high-sensitivity sensor and advanced safety system eliminates the risk of safety accidents.



Hill Start Assist Control (HAC)

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



Fork Safety Features

The down-safety valve prevents forks from dropping down in case of sudden damage of hydraulic line.



Operator Presence Sensing System

All mast and drive movements stop functioning when the operator is not in the seat.



Strong overhead guard

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



Auto parking brake

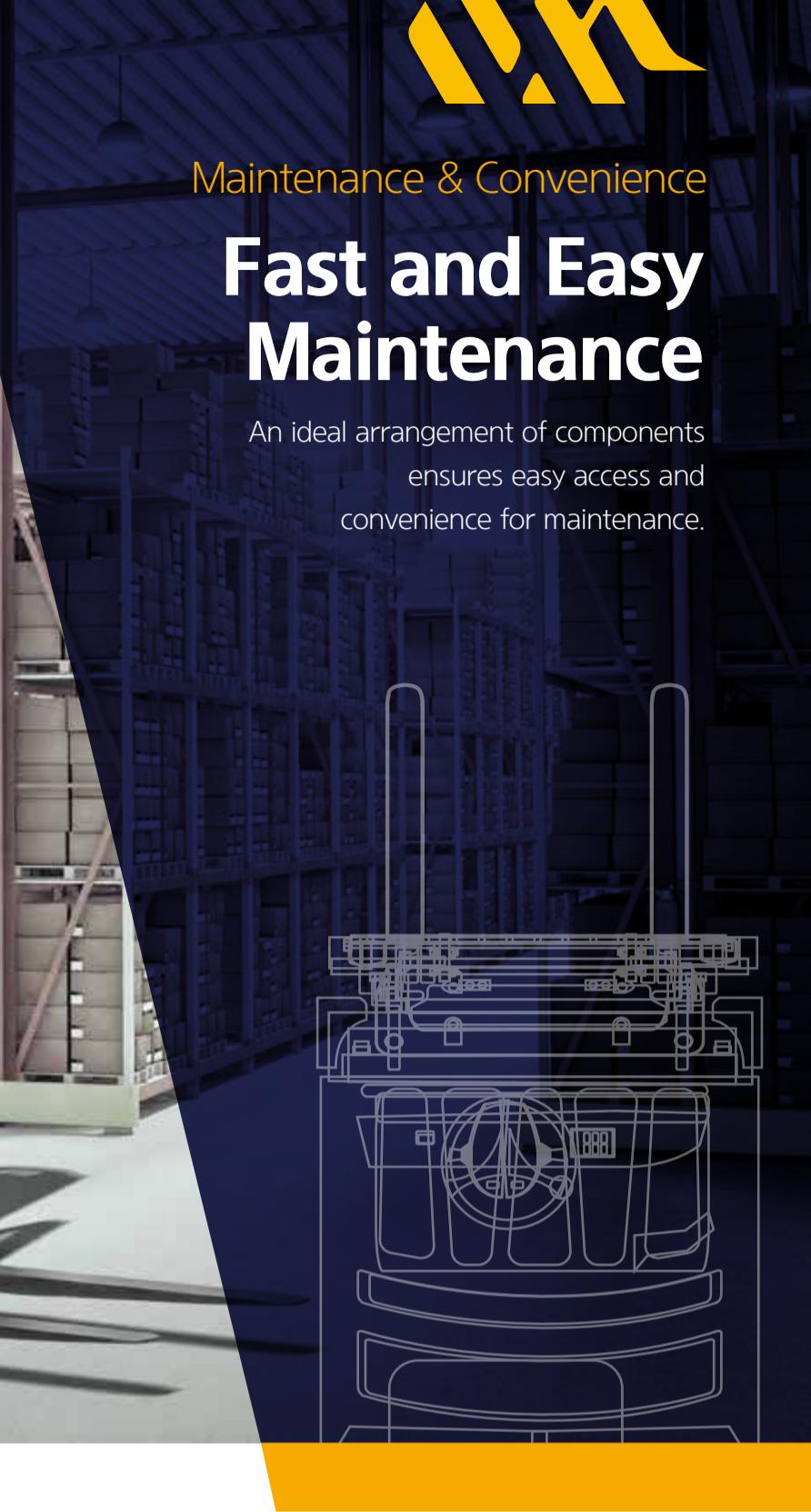
If the operator leaves the seat while the gear lever is in neutral, the parking brake is automatically engaged to secure safety, and released upon the operator's return to the seat.



Maintenance & Convenience

Fast and Easy Maintenance

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



Some of the photos may include optional equipment.

Large Engine Hood

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



Waterproof & Dustproof cover

Newly developed Waterproof and Dustproof fuse box and relay box for ease of maintenance.



Rear tire & Under cover (OPT)

The rear tire cover and under cover with PE material protect the engine, radiator, and components from dusts caused by ground. Also, these options can be selected separately.



Password starting system

By granting the operation authority only to the designated driver, it is possible to manage the vehicle and prevent theft.



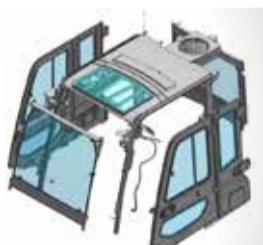
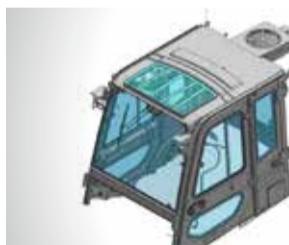
Rear view camera (OPT)

The rear view camera and monitor connected with the reverse switch guarantee a safe working environment.



Parking brake switch (STD) & Emergency switch (OPT)

A button-type switches enables to notify of emergency situations quickly and operate easily.



Bolt on type cabin

The bolt on type cabin consists of front side, door front, door rear, and rear side. It is easy to assemble by bolt and mount parts. Also, cabin can be selected by module or parts and air conditioner and heater are separately available for driver's convenience.

Maintenance Management		
Item	Interval	Elapse Count Alarm
Axle Planetary Ge...	100	2 0 <input checked="" type="checkbox"/>
Transmission Oil	100	2 0 <input checked="" type="checkbox"/>
Transmission Oil F...	100	2 0 <input checked="" type="checkbox"/>
Hydraulic Tank Ai...	250	2 0 <input checked="" type="checkbox"/>
Air Cleaner Comp...	450	2 0 <input checked="" type="checkbox"/>
Engine Oil Filter	500	2 0 <input checked="" type="checkbox"/>

Consumable item replacement cycle warning

This indicator automatically alerts the operator of the replacement cycle of key consumable items before a failure occurs; making managing maintenance easy, and to help extend the life of the machine.

New 9 Series Mast Specifications

25/30/33D-9E

25D-9E



Mast Type		Maximum Fork Height		Overall Height (Lowered)		Free lift height	Tilt Angle		Load capacity w/o side shift	Load capacity w/ side shift	TRUCK WEIGHT (UNLOADED)														
						With Load Backrest	Without Load Backrest	Without Load Backrest (3/4-SPOOL)	Single Tire	Double Tire	Single Tire	Double Tire													
		in	mm	in	mm	in	mm	in	mm	Fwd	Bwd	24 in LC	500mm LC	24 in LC	500mm LC	24 in LC	500mm LC	24 in LC	500mm LC	Single Tire	Double Tire				
2-STAGE LIMITED FREE LIFT	V300	118.3	3005	79.7	2025	4.5	155	4.5	155	6	10	5000	2500	5000	2500	5000	2500	2500	8391	3806	8664	3930			
	*V330	130.1	3305	85.6	2175					6	10	5000	2500	5000	2500	5000	2500	2500	8433	3825	8708	3950			
	V350	138.0	3505	89.6	2275					6	10	5000	2500	5000	2500	5000	2500	2500	8470	3842	8746	3967			
	V370	145.9	3705	95.5	2425					6	10	5000	2500	5000	2500	5000	2460	5000	2500	8496	3854	8774	3980		
	V400	157.7	4005	101.4	2575					6	6	5000	2480	5000	2500	5000	2380	5000	2500	8585	3894	8860	4019		
	V430	169.5	4305	107.3	2725					6	6	5000	2430	5000	2500	5000	2360	5000	2500	8699	3946	8975	4071		
	V450	177.4	4505	113.2	2875					6	6	4960	2390	5000	2500	5000	2470	2270	5000	2380	8781	3983	9054	4107	
	V470	185.2	4705	117.1	2975					6	6	4850	2330	5000	2430	5000	2460	2210	5000	2310	8829	4005	9103	4129	
	V500	197.0	5005	123.0	3125					6	6	4850	2330	5000	2430	5000	2460	2210	5000	2310	8829	4005	9103	4129	
2-STAGE FULL FREE LIFT	VF295	117.2	2976	79.7	2025	33.3	845	54.2	1377	54	1377	6	6	5000	2500	5000	2500	5000	2500	2500	8435	3826	8719	3955	
	VF325	129.0	3276	85.1	2175	38.7	995	60.2	1527	60	1527	6	6	5000	2500	5000	2500	5000	2500	2500	8508	3859	8794	3989	
	VF345	136.9	3476	89.6	2275	43.1	1095	64.1	1627	64	1627	6	6	5000	2500	5000	2500	5000	2500	2500	8560	3883	8865	4021	
3-STAGE FULL FREE LIFT	TF370	145.9	3705	71.9	1825	25.4	645	46.3	1177	43	1081	6	6	5000	2500	5000	2500	5000	2460	5000	2500	8633	3916	8920	4046
	TF400	157.7	4005	75.8	1925	29.3	745	50.3	1277	46	1181	6	6	5000	2500	5000	2500	5000	2380	5000	2500	8686	3940	8973	4070
	TF430	169.5	4305	79.7	2025	33.3	845	54.2	1377	50	1281	6	6	5000	2440	5000	2500	5000	2320	5000	2460	8726	3958	9012	4088
	TF450	177.4	4505	83.7	2125	37.2	945	58.1	1477	56	1431	6	6	5000	2410	5000	2500	5000	2290	5000	2380	8774	3980	9061	4110
	TF470	185.2	4705	85.6	2175	39.2	995	60.1	1527	56	1431	6	6	4920	2360	5000	2450	4700	2240	4860	2330	8805	3994	9090	4123
	TF500	197.0	5005	89.6	2275	43.1	1095	64.1	1627	60	1531	6	6	3836	1880	4940	2400	3810	1850	4720	2280	8854	4016	9138	4145
	TF550	216.7	5505	97.4	2475	51.0	1295	71.9	1827	70	1781	6	6	3240	1550	4780	2310	3020	1430	4560	2190	8940	4055	9224	4184
	TF600	236.4	6005	105.3	2675	58.9	1495	79.8	2027	78	1981	6	6	2930	1400	4590	2210	2710	1280	4370	2090	9083	4120	9367	4249
	TF650	256.1	6505	113.2	2875	66.7	1695	79.4	2016	74	1876	3	3	2840	1350	4540	2180	2620	1230	4320	2060	9184	4166	9471	4296
	TF700	275.8	7005	121.1	3075	74.6	1895	87.2	2216	82	2076	3	3	2430	1150	4370	2100	2210	930	4150	1980	9268	4204	9555	4334
	TS370	145.9	3705	71.9	1825	25.4	645	46.3	1177	37	946	6	6	5000	2500	5000	2500	5000	2460	5000	2500	8633	3916	8920	4046
4-STAGE FULL FREE LIFT	TS400	157.7	4005	75.8	1925	29.3	745	50.3	1277	41	1046	6	6	5000	2500	5000	2500	5000	2380	5000	2500	8686	3940	8973	4070
	TS430	169.5	4305	79.7	2025	33.3	845	54.2	1377	45	1146	6	6	5000	2440	5000	2500	5000	2320	5000	2460	8726	3958	9012	4088
	TS450	177.4	4505	83.7	2125	37.2	945	58.1	1477	53	1346	6	6	5000	2410	5000	2500	5000	2290	5000	2380	8774	3980	9061	4110
	TS470	185.2	4705	85.6	2175	39.2	995	60.1	1527	51	1296	6	6	4920	2360	5000	2450	4700	2240	4860	2330	8805	3994	9090	4123
	TS500	197.0	5005	89.6	2275	43.1	1095	64.1	1627	55	1396	6	6	3836	1880	4940	2400	3810	1850	4720	2280	8854	4016	9138	4145
3-STAGE FULL FREE LIFT	QF610	240.7	6115	85.6	2175	39.2	995	57.0	1449	57															

New 9 Series Mast Specifications

33D-9E

Mast Type		Maximum Fork Height		Overall Height (Lowered)		Free lift height	Tilt Angle		Load capacity w/o side shift	Load capacity w/ side shift	TRUCK WEIGHT (UNLOADED)																						
						With Load Backrest	Without Load Backrest	Without Load Backrest (3/4-SPOOL)	Single Tire	Double Tire	Single Tire	Double Tire																					
		in	mm	in	mm	in	mm	in	mm	Fwd	Bwd	24 in LC	500mm LC	24 in LC	500mm LC	24 in LC	500mm LC	24 in LC	500mm LC	lb	kg	lb	kg	lb	kg								
2-STAGE LIMITED FREE LIFT	V300	118.3	3005	83.1	2110	4.5	155	4.5	155	6	6	6500	3300	6500	3300	6500	3300	6500	3300	9868	4476	10108	4585										
	*V330	130.1	3305	89.0	2260							6500	3300	6500	3300	6500	3300	6500	3300	9921	4500	10161	4609										
	V350	138.0	3505	92.9	2360							6500	3300	6500	3300	6500	3300	6500	3300	9954	4515	10196	4625										
	V370	145.9	3705	98.8	2510							6500	3300	6500	3300	6500	3300	6500	3300	9987	4530	10225	4638										
	V400	157.7	4005	104.7	2660							6500	3300	6500	3300	6500	3300	6500	3300	10077	4571	10317	4680										
	V430	169.5	4305	110.6	2810							6500	3250	6500	3300	6500	3070	6500	3250	10196	4625	10437	4734										
	V450	177.4	4505	116.5	2960							6500	3190	6500	3300	6500	3010	6500	3125	10247	4648	10489	4758										
	V470	185.2	4705	120.5	3060							6500	3140	6500	3240	6500	2960	6500	3065	10282	4664	10523	4773										
	V500	197.0	5005	126.4	3210							6420	3100	6500	3170	6120	2920	6500	2995	10335	4688	10575	4797										
2-STAGE FULL FREE LIFT	VF295	117.2	2976	83.1	2110	36.6	930	54.5	1384	54	1384	6	6	6500	3300	6500	3300	6500	3300	10051	4559	10284	4665										
	VF325	129.0	3276	88.3	2260							41.9	1080	60.1	1534	60	1534	6	6	6500	3300	6500	3210	6500	3300	10130	4595	10364	4701				
	VF345	136.9	3476	89.0	2260							46.5	1180	64.3	1634	64	1634	6	6	6500	3300	6500	3120	6500	3250	10207	4630	10439	4735				
3-STAGE FULL FREE LIFT	TF370	145.9	3705	75.2	1910	28.7	730	43.9	1114	44	1114	6	6	6500	3300	6500	3300	6500	3120	6500	3250	10366	4702	10600	4808								
	TF400	157.7	4005	79.1	2010							32.7	830	47.8	1214	48	1214	6	6	6500	3250	6500	3300	6500	3070	6500	3125	10414	4724	10648	4830		
	TF430	169.5	4305	83.1	2110							36.6	930	51.7	1314	52	1314	6	6	6500	3180	6500	3280	6500	3000	6500	3105	10461	4745	10694	4851		
	TF450	177.4	4505	87.0	2210							40.6	1030	55.7	1414	56	1414	6	6	6500	3120	6500	3220	6500	2940	6500	3045	10507	4766	10743	4873		
	TF470	185.2	4705	89.0	2260							42.5	1080	57.6	1464	58	1464	6	6	6350	3080	6500	3170	6050	2900	6290	2995	10538	4780	10772	4886		
	TF500	197.0	5005	92.9	2360							46.5	1180	61.6	1564	62	1564	6	6	5130	2500	6390	3110	4930	2390	6090	2935	10586	4802	10820	4908		
	TF550	216.7	5505	100.8	2560							54.3	1380	69.4	1764	69	1764	6	6	4560	2200	6170	2990	4260	2020	5870	2815	10683	4846	10917	4952		
	TF600	236.4	6005	108.7	2760							62.2	1580	77.3	1964	77	1964	6	6	3130	1500	5950	2870	2830	1320	5650	2695	10844	4919	11078	5025		
	TF650	256.1	6505	116.5	2960							70.1	1780	85.2	2164	81	2061	3	3	3060	1450	5910	2830	2760	1280	5610	2655	10950	4967	11184	5073		
	TF700	275.8	7005	124.4	3160							78.0	1980	93.1	2364	88	2233	3	3	2650	1250	5710	2730	2350	1080	5410	2555	11041	5008	11274	5114		
4-STAGE FULL FREE LIFT	QF610	240.7	6115	87.6	2225	41.1	1045	57.0	1449	57	1449	3	3	3750	1800	5930	2870	3450															

Specification

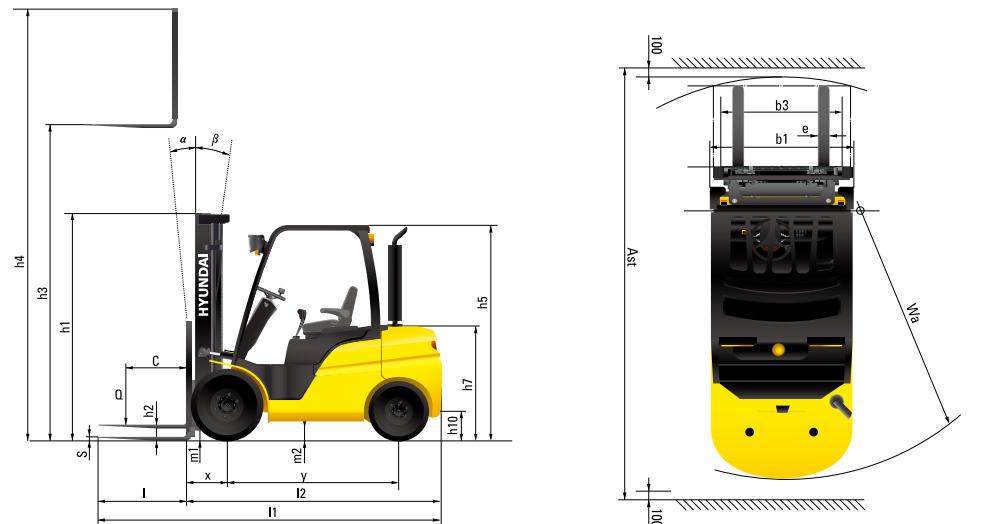


Distinguishing mark				
1.1	Manufacturer	Hyundai		
1.2	Manufacturer's model designation	25D-9E	30D-9E	33D-9E
1.3	Drive: electric (battery or mains),diesel,petrol,fuel gas,manual	DIESEL	DIESEL	DIESEL
1.4	Type of operation:hand,pedestrian,standing,seated,order-picker	seated	seated	seated
1.5	Load capacity / Rated load	kg	2500	3000
1.6	Load center distance	c mm	500	500
1.8	Load distance, center of drive axle to fork	x mm	468	468
1.9	Wheelbase	y mm	1650	1700
Weight				
2.1	Service weight	kg	3825	4219
2.2	Axle loading, loaded front/rear	kg	5549 / 776	6355 / 863
2.3	Axle loading, unloaded front/rear	kg	1582 / 2243	1647 / 2572
Tires, chassis				
3.1	Tires : Pneumatic(P), Solid(S), Non-marking(N)	P	P	P
3.2	Tires size, front		7.00-12-12PR	8.15-15-14PR
3.3	Tires size, rear		6.50-10-12PR	6.50-10-12PR
3.4	Number of wheels front / rear (x=driven wheels)		2x / 2	2x / 2
3.5	Track width, front	mm	999	1005
3.6	Track width, rear	mm	980	980
Dimension				
4.1	Mast / fork carriage tilt forward / backward (/)	degrees	6 / 10	6 / 10
4.2	Lowered mast height	h1 (mm)	2175	2190
4.3	Free lift	h2 (mm)	155	155
4.4	Lift height	h3 (mm)	3305	3305
4.5	Extended mast height	h4 (mm)	4485	4485
4.7	Overhead guard height (cabin)	h5 (mm)	2160 (2170)	2180 (2190)
4.8	Seat height / standing height rel. to SIP	h7 (mm)	1187	1212
4.12	Coupling height	h10 (mm)	295	320
4.19	Overall length	l1 (mm)	3657	3726
4.20	Length to face of forks	l2 (mm)	2607	2676
4.21	Overall width	b1 (mm)	1200	1228
4.22	Fork dimensions(hook type)	l / e / s (mm)	1050 x 100 x 45	1050 x 122 x 45
4.23	Fork carriage ISO 2328, class / type A,B		2A	3A
4.24	Fork-carriage width	b3 (mm)	1102	1102
4.31	Ground clearance, loaded, under mast	m1(mm)	130	145
4.32	Ground clearance, centre of wheelbase	m2(mm)	157	181
4.33	Aisle width for pallets 1,000x1,200 crossways (LxW)	Ast(mm)	4010	4081
4.34	Aisle width for pallets 800x1,200 lengthways (WxL)	Ast(mm)	4210	4281
4.35	Turning radius	Wa(mm)	2342	2413
4.36	Smallest pivot point distance	b13 (mm)	714	731

Performance data

5.1	Travel speed, unloaded	km/h	17.1	18.4	18.4
5.2	Lift speed, loaded/ unloaded	mm/s	520 / 590	440 / 490	430 / 490
5.3	Lowering speed, loaded/unloaded	mm/s	500 / 450	500 / 450	500 / 450
5.5	Drawbar pull, loaded	kg	1959	1772	1772
5.7	Gradient performance, loaded	%	28.5	22.3	20.6
5.9	Acceleration time, loaded/ unloaded(10m)	sec	-	-	-
5.10	Service brake		FOOT	FOOT	FOOT
Engine					
6.1	Engine manufacturer / type		Yanmar 4TNE92	Yanmar 4TNE92	Yanmar 4TNE92
6.2	Engine power acc. to ISO 1585	kW/rpm	33.4(45.4ps) / 2450	33.4(45.4ps) / 2450	33.4(45.4ps) / 2450
6.3	Maximum Torque	kgf.m/rpm	14.7 / 1600	14.7 / 1600	14.7 / 1600
6.4	No. of cylinder / cubic capacity	EA/cc	4 / 2659	4 / 2659	4 / 2659
6.5	Fuel consumption acc. To VDI cycle	l / h	3.2	3.4	3.6
Addition data					
8.1	Type of drive control		PowerShift	PowerShift	PowerShift
8.2	Operating pressure, system / attach	bar	182 / 162	196 / 162	196 / 162
8.3	Attach oil volume	l / min	54	54	54
8.4	Sound pressure level (at driver's ear according to DIN 12053)	dB(A)	80	80	80
8.5	Trailer coupling, type DIN		PIN	PIN	PIN

Dimension



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

