

Large-size Forklift Trucks

25-30 ton

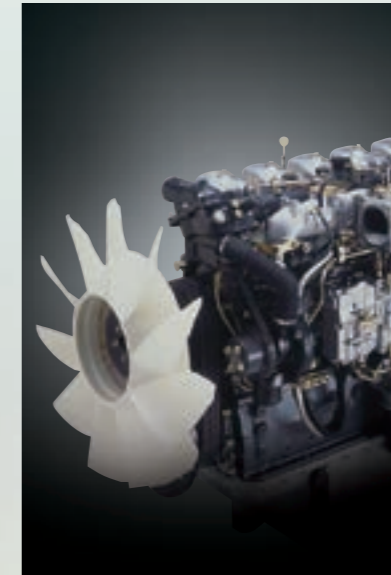
FD250-3 FD300-3



Successor to Our Top Product

The Long-time best-selling products prove the "trust" of users.

The 25-ton TCM forklift truck has been ranked as the best-selling product in its class since its debut in 1989. Our dear customers' affinity for this forklift is due to its undoubtedly superior functionality, durability and industry leading technologies as well as the detailed knowledge and extensive experience at our customer's worksites. We are very proud to release the advanced FD300 following the recently redesigned FD250. The FD250 and FD300 forklifts – equipped with engines compliant with the 2nd stage emission controls, wider front and rear visibility and 4-speed automatic transmission – are indeed the leading "Comfortable Forklift Trucks" for this age of advanced material handling.



Innovative engine, clearing stringent environmental regulations.

The mounted 165kW inter-cooler turbo diesel engine is the largest capacity in its class, with sufficient power able to conduct continued rigorous work.

Total displacement **11,940_{cc}**

Rated horsepower **165_{kW}/2,100_{rpm}**
224_{PS}/2,100_{rpm}

Maximum torque **980_{N-m}/1,400_{rpm}**



Operator-friendly and comfortable cabin space designed with thoughtful consideration of the operator's difficult job.

Forklift Trucks Comfortable for Operators

Superb ride and low vibration in the cabin due to the adoption of a floating cockpit and deluxe seat.

Industry top-class lifting speeds

FD250 360mm/s (without load) 330mm/s (with load)

FD300 280mm/s (without load) 250mm/s (with load)

LIFTING SPEED

FD250
330/360
mm/s
(with load / without load)

FD300
250/280
mm/s
(with load / without load)

Deluxe seat

Pillar-less cabin

Viscous-mount low vibration system (silicon oil filled)



Low-noise, lower vibration cabin

A liquid-filled rubber mount (Viscous-mount) between the driver's seat and the frame. In addition, an integrated rubber mount in the hydraulic part reduces noise and vibration significantly.

Large-capacity air conditioner (standard equipment)

Very pleasant and relaxing space in the cabin due to a large-capacity air conditioner.

Cooling Efficiency **4.7kW**



Pillar-less cabin and compact meter panel

Excellent visibility achieved by absence of front and rear pillars. Compact meter panel further contributes to clean, wider front visibility.

Integrated switch panel board

Recognition of worksites and operating efficiencies is substantially improved due to the compactly integrated layout of all switches on the right side of the operator.



Flat and wider step board

Easier and safer entry and exit.

Improved rear visibility

Rear visibility is largely improved due to reshaping of the counter weight.



Single steering cylinder system

Deluxe multi-functional seat as standard equipment

Well-cushioned deluxe seat with various functions such as reclining, forward/backward sliding, smooth swiveling, upward/downward adjustment, and adjustable armrest position.



Closed wet-disc brakes

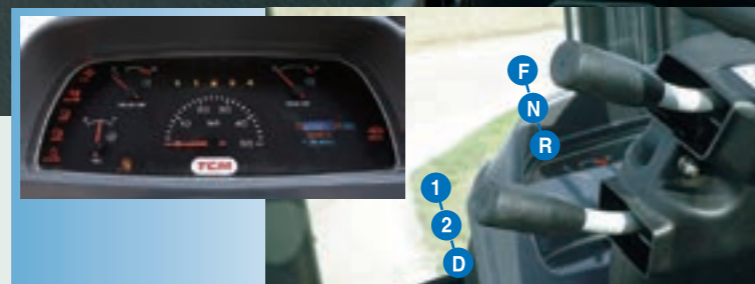




Simpler operation reduces physical fatigue even in harsh working conditions.

Operation with higher work efficiency as well as enhanced safety

These large forklift trucks are capable of quickly, easily, and powerfully performing very heavy load operations such as handling metal materials and marine containers.



4-speed automatic transmission (duo-stick system)

Possible to select either 1st gear → 4th gear, or 2nd gear → 4th gear by automatic transmission, similar to passenger cars. The new duo-stick lever system can perform backward and forward shifting while handling the steering wheel.

D(P)	First ⇔ Second ⇔ Third ⇔ Fourth
D(E)	Second ⇔ Third ⇔ Fourth
First gear	Fixed at the first speed
Second gear	Fixed at the second speed

(P)Power mode drive (E)Economy mode drive

Steering wheel with smaller turning radius

Possible to change cargo-handling modes very easily due to the light and sharp hydraulic steering system.



Reduced steering operation force **1.0kg**

3.8 turns

(for FD250)

Hydraulic pilot-type control valves newly adopted for operation levers

Possible to operate and control the vehicle with light touches of the hydraulic assist lever and armrest. Difficult operations can be performed by fingertip maneuvers, as well.

Lever-handling force reduced by **8.2% - 0.7kg**

- ① Lifting ② Tilting ③ Side Shifter(optional)
- ④・⑤ Fork Positioner(optional)

Electronic parking system



Easy to apply parking brake electronically. In addition, the electronic brake is automatically switched on when the engine halts, avoiding negligent braking when the vehicle stops.

Larger fuel tank

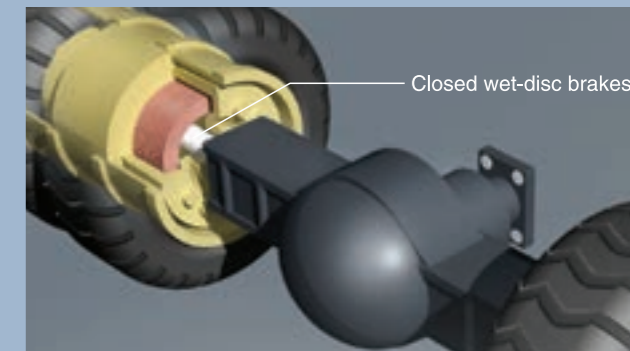
Extended refueling interval contributes to work efficiency.

600 liters



Easier vehicle inspection and maintenance

Both inspection and maintenance of the engine can be easily performed, as the hood opens widely and the side panels open three ways. Moreover, a centralized oil supply system for the mast and a hinged wide cover for the battery box were adopted. Furthermore, inspection and cleaning of the air-cleaner, attached to the upper part of the hood, can be accomplished conveniently.

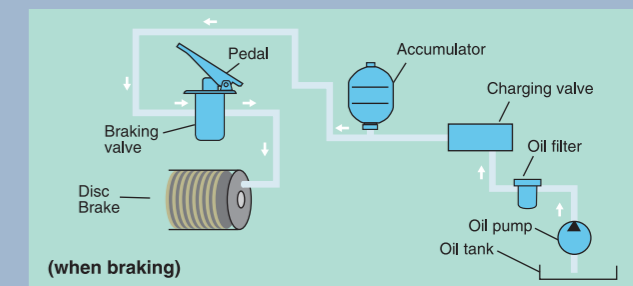


Closed wet-disc brakes

A newly adopted brake with compulsory cooling system. Stable braking and reduced maintenance cost compared to the lining friction loss of a drum braking system.

Full-power braking system

A full-power braking system has been adopted, eliminating the need for air pressure circuit and brake oil, thereby improving maintenance costs dramatically.



Single steering cylinder system

The single steering cylinder system makes stationary steering easy, resulting in comfortable steering maneuverability.





- UniCarriers Corporation retains the right to change these products and specifications without incurring any obligation relating to such changes.
- These products and specifications are subject to change without notice.
- Photos and illustrations may or may not include optional equipment and accessories
- Produced in ISO certified factory.

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SPECIFICATIONS

FD250-3 FD300-3



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STANDARD SPECIFICATIONS

Characteristics		UNICARRIERS		UNICARRIERS	
1	Manufacturer			UNICARRIERS	UNICARRIERS
2	Model			FD250-3	FD300-3
3	Load Capacity	kg		25000	30500
4	Load Center	mm		1220	1220
5	Power Type			Diesel	Diesel
6	Operator Position			Seated	Seated
7	Tire Type	Front/Rear		Pneumatic	Pneumatic
8	Wheels(x=driven)	Front/Rear		4x / 2	4x / 2

Dimensions				UNICARRIERS		UNICARRIERS	
9	Maximum Fork Height	mm	A	3000		3000	
10	Free Lift	mm		0		0	
12	Overall length : with forks	mm	C	8750		9135	
13	Fork Size	L x W x T		2440 x 310 x 105		2440 x 330 x 108	
	Fork Spread(Outside)	Max. / Min.	B	2750 / 950		2750 / 1250	
14	Tilt Angle	Fwd. / Bwd.	deg	6 / 12		6 / 12	
15	Overall length : without forks	mm		6300		6685	
16	Overall Width	mm	D	3070		3460	
17	Mast Lowered Height	mm	T	3750		3565	
18	Mast Extended Height	mm	E	5250		5265	
19	Cabin Height	mm	M	3590		3670	
	Overhead Guard Height	mm		-		-	
20	Operator's Seat Height	mm		2400		2475	
21	Turning Radius(Outside)	mm	R	5900		6310	
22	Fork Overhang(Centerline of front axle to front face of forks)	mm		985		1070	
	Rear Overhang	mm		925		1025	
23	Intersectina Aisle	mm		5000		5330	

Performance				UNICARRIERS		UNICARRIERS		
24	Speeds	Travel speed (Fwd. / Rvs.)	1st	km/h	7.5	7.0	6.0	5.5
			2nd	km/h	13.0	12.0	10.0	9.0
			3rd	km/h	21.0	19.5	16.0	15.0
			4th	km/h	34.0	32.0	26.0	24.5
25	Lifting	Full Load	mm/sec	330		250		
		No Load	mm/sec	360		280		
26	Lowering	Full load	mm/sec	400 - 600		400 - 600		
		No Load	mm/sec	400 - 600		400 - 600		
28	Max. Drawbar Pull	Full Load	kN	163		197		
		No Load	kN	118		148		
30	Max. Gradeability*	Full Load	%	22		20		
		No Load	%	27		26		

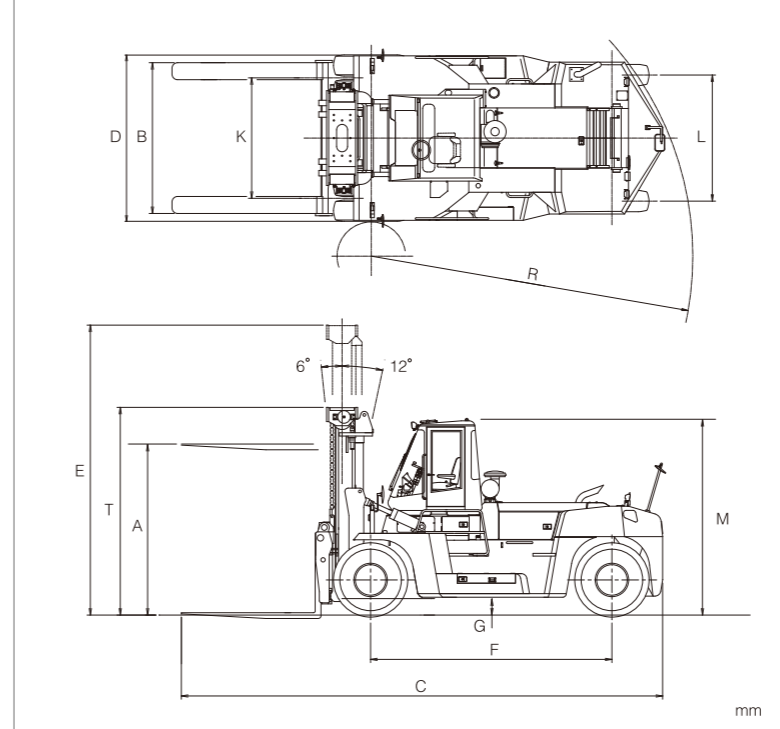
Weight				UNICARRIERS		UNICARRIERS		
32	Total Weight		kg	34330		43310		
33	Weight Distribution	Full Load	Front	kg	55000		67330	
			Rear	kg	4330		6480	
34	Weight Distribution	No Load	Front	kg	17330		21470	
			Rear	kg	17000		21840	

Chassis & Wheels				UNICARRIERS		UNICARRIERS	
35	Tires	Number	Front / Rear	4 / 2		4 / 2	
36	Tires	Size	Front		14.00 - 24 - 24PR(ID)		16.00 - 25 - 32PR(ID)
37			Rear		14.00 - 24 - 24PR(ID)		16.00 - 25 - 32PR(ID)
38	Wheelbase		mm	F	4400		4600
39	Tread	Front	mm	K	2200		2440
		Rear	mm	L	2300		2530
	Overhead Clearance		mm		1115		1115
	Hood Height		mm		2050		2150
	Drawbar Height		mm		780		870
	Step Height / Floor Height		mm		-		-
40	Underclearance	Min. without Load	mm		300		315
41		Center of Wheelbase	mm	G	330		385
42	Brake	Service(Foot)			Built in axle - multiple wet disc		Built in axle - multiple wet disc
43		Parking			Built in mission - wet disc		Built in mission - wet disc

Engine & Transmission				UNICARRIERS		UNICARRIERS	
45	Battery	Voltage / Capacity(5HR)	V / Ah	2 x 12 / 108		2 x 12 / 108	
49	Internal Combustion Engine	Make / Model		MITSUBISHI FUSO 6D24T with turbo-charger / inter-cooler		MITSUBISHI FUSO 6D24T with turbo-charger / inter-cooler	
50		Rated Output / Engine Speed	kW/r.p.m.	165 / 2100		165 / 2100	
51		Maximum Torque / Engine Speed	N-m/r.p.m.	980 / 1400		980 / 1400	
		Number of Cylinder		6		6	
		Piston Displacement	lit.	11.940		11.940	
		Alternator output	A	50		50	
	Fuel Tank Capacity	Liter	600		600		
52	Transmission	Type		Power - shift		Power - shift	
55		Stage	Fwd. / Rvs.	4 - 4		4 - 4	
57	Operating Pressure	For Attachments	MPa(psi)	20.6		20.6	

Note : *Computed values

Dimensions



Mast Model	Capacity		Max. Fork Height	Overall Mast Height (lowered)		Overall Mast Height (raised)		Tilt Angle	Service Weight	
	FD250-3	FD300-3		FD250-3	FD300-3	FD250-3	FD300-3		FD250-3	FD300-3
	kg	kg	mm	mm	mm	mm	mm	degree	kg	kg
VM300	25000	30500	3000	3750	3765	5250	5265	6 / 12	34330	43310
VM350	25000	30500	3500	4000	4015	5750	5765	6 / 12	34530	43560
VM400	25000	30500	4000	4250	4265	6250	6265	6 / 12	34740	43810
VM450	25000	30500	4500	4500	4515	6750	6765	6 / 12	35230	44470
VM500	25000	30500	5000	4750	4765	7250	7265	6 / 12	35430	44670
VM550	24000	30500	5500	5000	5015	7750	7765	6 / 12	35640	44980
VM600	20000	30500	6000	5250	5265	8250	8265	6 / 12	35830	45230

Standard Equipment and Accessories

Equipment

- Automatic 4-speed powershift transmission
- Bonnet gas dumper with locking stay
- Brake cooling oil level view gauge
- Cartridge type filters; engine fuel, engine oil, mission oil & hydraulic oil
- Coolant reservoir tank
- Cyclopack type double element air cleaner
- Delux suspension seat
- Drawbar device in counter weight
- Electrically-controlled parking brake
- Engine oil dipstick
- Fork positioner(manual type)
- Front dual drive wheels
- Full hydrostatic power steering
- Heavy duty pneumatic tires
- Hydraulic oil level view gauge
- Large capacity fuel tank(600 liters)
- Load check valve
- Steel cabin with air-conditioner
- Tilt adjustable steering column
- Tilt cylinder lock valve
- Transmission oil dipstick
- Wet disc brake
- Wide view 2-stage mast
- 2440mm length forks

Accessories

- Buck-up buzzer
- Deluxe floor mat
- Electric horn
- Front combination lights turn signal & clearance
- Head lights
- Operator tool kit
- Rear combination lights, turn signal, tail, stop, back-up
- Rear reflectors
- Rear under-view mirror
- Room mirror
- Side view mirrors
- Turn signal lights(front)
- Working lights(front, rear)

Switch & Controls

- Automatic transmission mode select switch power mode & economy mode
- Electrically-controlled direction change lever inc. neutral safety lock device
- Electrically-controlled parking brake switch
- Lift lever
- Lighting switch
- Speed change hold switch (1st fixed / 2nd fixed / automatic speed shift)
- Starter switch inc. pre-heating & main switch
- Tilt lever
- Turn signal switch

Instruments

- Air cleaner clogging warning indicator
- Brake oil pressure warning indicator
- Brake oil temperature warning light
- Charge indicator
- Engine diagnosis monitor lamps
- Engine oil pressure warning indicator inc. engine oil filter clogging warning
- Engine pre-heating lamp
- Engine thermometer
- Fuel meter
- Hi-beam indicator(head lights)
- Hourmeter
- Parking brake indicator
- Speedometer
- Transmission oil temperature warning indicator
- Turn signal indicator
- Working light indicator

Optional Equipment and Accessories

Equipment

- Alternative fork length
- Alternative mast height
- Central greasing system
- Delux suspension seat with seat belt
- Detachable Ram / Fork attachment
- Fork positioner(hydraulic cylinder type)
- Fork positioner(hydraulic motor type)
- Fork positioner(hyd. cylinder) with side shifter
- Fork positioner(hyd. motor) with side shifter

- Heater & defroster
- Large capacity alternator
- Large capacity battery
- Load weight indicator
- Overhead guard type cab. with wide rubber floor mat
- Ram attachment
- Side shifter
- Split ram attachment

Accessories

- Custom paint-works
- Fire extinguisher
- Rotating warning yellow light(beacon)

Others on request

Load charts

