

TCM

**RELIABLE.
POWERFUL.
ENVIRONMENT-FRIENDLY.**



3.5-5t
3500-5000kg

**DIESEL POWERED
PNEUMATIC TIRE TRUCKS**

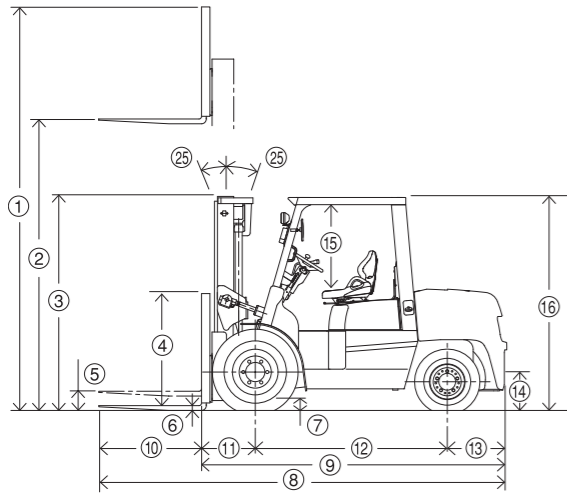
FD35T9·C9 | 3500kg
600mm

FD40T9·C9 | 4000kg
600mm

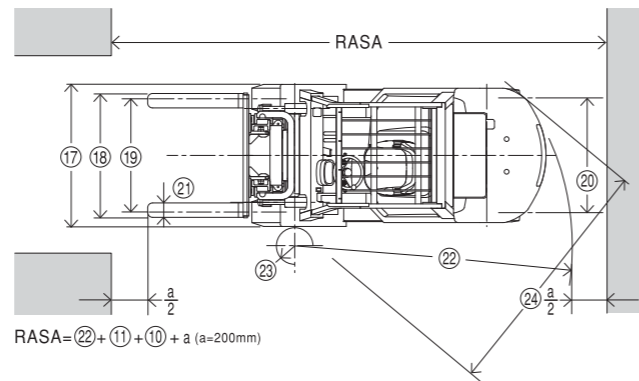
FD45T9·C9 | 4500kg
600mm

FD50T9 | 5000kg
600mm

STANDARD DIMENSIONS



GROUND CLEARANCE	FD35T9 · C9	FD40T9 · C9	FD45T9 · C9	FD50T9
	mm	mm	mm	mm
Mast	155	155	140	140
Frame	185	185	185	185
Front axle	185	185	185	185
Rear axle	195	195	195	195
Counter weight	205	205	205	205



STANDARD DIMENSIONS

Model	FD35T9 · C9	FD40T9 · C9	FD45T9 · C9	FD50T9
	mm	mm	mm	mm
① Overall height, fork raised (with backrest)	4265	4265	4265	4420
② Maximum fork height	3000	3000	3000	3000
③ Mast height, fork lowered	2230	2230	2235	2360
④ Backrest height	1220	1220	1215	1370
⑤ Free lift	150	150	155	160
⑥ Fork thickness	50	50	55	60
⑦ Minimum ground clearance	155	155	140	140
⑧ Overall length (with forks)	4150	4180	4260	4610
⑨ Length to fork face	3080	3110	3190	3390
⑩ Fork length	1070	1070	1070	1220
⑪ Load distance	560	560	590	590
⑫ Wheelbase	2000	2000	2000	2200
⑬ Rear overhang	520	550	600	600
⑭ Drawbar Pin Center Height	320	320	320	320
⑮ Overhead guard clearance (from face of seat)	1020	1020	1020	1020
⑯ Overall height (overhead guard)	2250	2250	2250	2250
⑰ Overall width	1480	1480	1480	1480
⑱ Fork spread (outside)	300~1290	300~1290	300~1290	300~1290
⑲ Tread (front)	1180	1180	1180	1180
⑳ Tread (rear)	1195	1195	1195	1195
㉑ Fork width	150	150	150	150
㉒ Outside turning radius	2790	2820	2860	3040
㉓ Inside turning radius	200	200	200	200
㉔ Minimum intersecting aisle	2650	2650	2700	2850
㉕ Tilt angles (forward-backward)	6°-12°	6°-12°	6°-12°	6°-12°

DIMENSIONS WITH FRONT DUAL DRIVE WHEELS (option)

Model	FD35T9 · C9	FD40T9 · C9	FD45T9 · C9	FD50T9
Tire size (front dual)	7.50-16-8PR	7.50-16-8PR	7.50-16-8PR	7.50-16-8PR
Service weight	+20kg	+20kg	+20kg	+20kg
	mm	mm	mm	mm
⑰ Overall width	1830	1830	1830	1830
⑲ Tread (front)	1340	1340	1340	1340
㉒ Outside turning radius	2890	2950	2950	3125
㉓ Inside turning radius	200	200	200	200
㉔ Minimum intersecting aisle	2600	2600	2600	2750
Tire size (front dual)	8.25-15-14PR	8.25-15-14PR		
Service weight	+80kg	+80kg		
	mm	mm		
③ Mast height, fork lowered	2245	2245		
⑰ Overall width	1950	1950		
⑲ Tread (front)	1435	1435		
㉒ Outside turning radius	2920	2950		
㉓ Inside turning radius	200	200		
㉔ Minimum intersecting aisle	2600	2650		

STANDARD EQUIPMENT AND ACCESSORIES

[Equipment]

- Asbestos-free brake shoe material
- Centrifugal air cleaner
- Coolant recovery system
- Cylinder type bonnet latch with locking function
- Deluxe suspension seat with seat-belt
- Drawbar device
- Engine after glow system
- Engine auto glow system
- Fuel water sedimenter
- Full hydraulic power steering
- Heavy duty overhead guard
- Hi-visibility, wide view mast (VM300)
- Hydraulic oil dipstick
- ITA Class III & IV carriage
- J-lug long life tires
- Lift circuit cut-off valve
- Load backrest
- Overhead air intake system
- Power-assisted brake
- Power-assisted oil clutch (manual shift T/M)
- Retaining rollers
- Return hydraulic filter
- Suction hydraulic strainer
- Tilt lock valve
- Transmission oil dipstick (power shift T/M)
- Transmission oil filter (power shift T/M)
- 1070mm forks (1220mm for 5 ton)
- 2-spool control valve with pressure relief

[Controls]

- Electric shift control lever (power shift T/M)
- Lift and tilt levers
- Multi-function switch lever (lighting and turn-signal) with self-cancelling mechanism
- Parking brake lever with inter-lock
- Tilt adjustable steering post

[Accessories]

- Access-assisted hand grip
- Back-up alarm buzzer
- Back-up lights
- Deluxe non-slip floor mat
- Documents clip
- Documents holder
- Electric horn
- Front combination lights (turn signal, clearance)
- Glove compartment / Pen holder
- Head lights traffic purposes
- High-mounted rear combination lights (tail, brake, back-up, turn signal and reflector)
- Operator tool kit
- Overhead guard canvas
- Side view mirrors
- Tilt cylinder covers

[Instruments and Switch]

- Charge indicator
- Engine oil pressure warning indicator
- Fuel gauge
- Fuel sedimenter indicator
- Glow indicator
- Hourmeter
- Ignition key engine stop
- Neutral safety switch
- Water temperature gauge

OPTIONAL LOADING ATTACHMENT

- Alternative fork lengths
- Bale clamp
- Carton clamp (on request)
- Crane arm (on request)
- Drum clamp (on request)
- Fork clamp (on request)
- Fork extension sleeves
- Fork positioner (hydraulic type)
- Fork positioner (manual type)
- High, wide type load backrest
- Hinged forks, bucket
- Load push-pull (on request)
- Load stabilizer (on request)
- Ram
- Rotating bale clamp
- Rotating forks (hook-on, integral type)
- Rotating paper roll clamp (hook-on, integral type)
- Side shift
- Sleeve-in hook (on request)
- Wide type fork carriage
- Wide view full free 2-stage (VFM) mast
- Wide view full free 3-stage (VFHM) mast

OPTIONAL EQUIPMENT AND ACCESSORIES

[Equipment]

- Air-conditioner (steel cabin) (SCBAC)
- Auxiliary hydraulic valve modules
- Central greasing system (CL)
- Color tire (white, green) (TUW · G)
- Dual element aircleaner (ADE)
- Engine air precleaner (CAKB)
- Exhaust purify catalytic muffler (EPM)
- Front dual drive wheels (DD/SDD)
- Heater (HR)
- Heater & defroster (steel cabin) (DEF)
- High profile overhead guard (2400mm) (HGH)
- Hydraulic oil cooler (CRH)
- Low profile overhead guard (2130mm) (HGL)
- Overhead exhaust system (TUE)
- Plate fin radiator (RAD PF)
- Radiator dust screen (fine, medium mesh) (DSR)
- Semi-integral type power steering
- Smoke reduction/spark arrester muffler (CBM)
- Solid tires (Unique cushion tires) (SE)
- Steel cabin (SCB001)
- Windshield with wiper (AW071)

[Accessories]

- Custom paint-work
- Fire extinguisher (FE)
- Rear working light (RWL)
- Rotating warning light (Beacon) (RLY/RLR)
- Steering cylinder boot (PSB)
(This applies to the semi-integral type power steering only.)
- Tilt cylinder covers (TLB)

[Instruments and Switch]

- Air cleaner clogging warning indicator
- Ammeter (AM)
- O.K. monitor (OKM)
(battery electrolyte level, coolant level, parking brake, air-cleaner)
- Speedometer (SM)
- Torque converter oil pressure gauge (TPM)
- Torque converter oil temperature gauge (TTM)
(power shift T/M)

Others on request

NOTES : ●Meets following major standards and code:

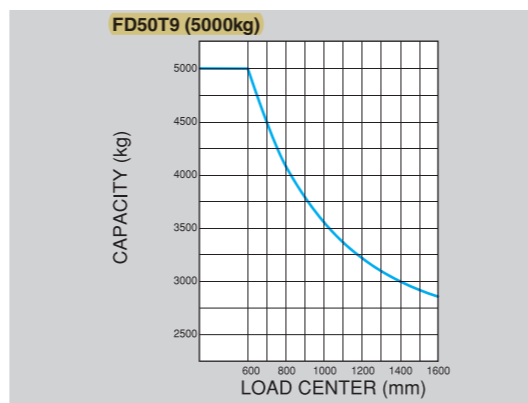
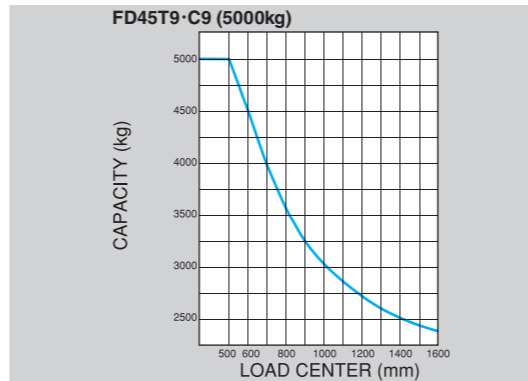
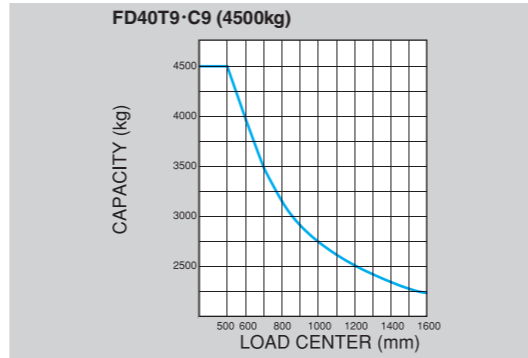
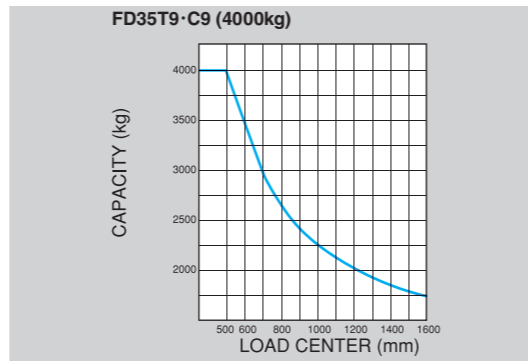
- ISO22915-2 Counter Balanced Lift Trucks, Stability & Safety Test (Int'l)
- JIS D6001 Industrial Lift Trucks (Japan)
- ISO D6011 Stability & Safety Test (Japan)
- Overhead guard meets ISO 6055, JIS D6021

STANDARD SPECIFICATIONS

Characteristics	1 Manufacturer		UNICARRIERS				
	2 Model	Power shift T/M Manual shift T/M	FD35T9 FD35C9	FD40T9 FD40C9	FD45T9 FD45C9	FD50T9	
3 Load Capacity	Load Center 500mm	kg	4000	4500	5000	5000	
	Load Center 600mm	kg	3500	4000	4500	5000	
5 Power Type			Diesel	Diesel	Diesel	Diesel	
6 Operator Position			Sit Down Rider Type	Sit Down Rider Type	Sit Down Rider Type	Sit Down Rider Type	
7 Tire Type	Front / Rear		Pneumatic	Pneumatic	Pneumatic	Pneumatic	
8 Wheels (x-driven)	Front / Rear		2 X / 2	2 X / 2	2 X / 2	2 X / 2	
9 Maximum Fork Height		mm	3000	3000	3000	3000	
10 Free Lift		mm	150	150	155	160	
13 Fork Size	L X W X T	mm	1070 X 150 X 50	1070 X 150 X 50	1070 X 150 X 55	1220 X 150 X 60	
14 Fork Spread (Outside)	Max. / Min.	mm	1290 / 300	1290 / 300	1290 / 300	1290 / 300	
14 Tilt Angle	Fwd. / Bwd.	deg	6 / 12	6 / 12	6 / 12	6 / 12	
15 Length to Fork Face		mm	3080	3110	3190	3390	
16 Overall Width		mm	1480	1480	1480	1480	
17 Mast Height Fork Lowered		mm	2230	2230	2235	2360	
18 Mast Height Fork Raised		mm	4265	4265	4265	4420	
19 Overhead Guard Height		mm	2250	2250	2250	2250	
21 Turning Radius (Outside)		mm	2790	2820	2860	3040	
22 Load Distance (Centerline of front axle to front face of forks)		mm	560	560	590	590	
22 Rear Overhang		mm	520	550	600	600	
23 Basic Right Angle Stacking Aisle Width		mm	4750	4780	4850	5030	
24	Travel Max.	Power shift T/M fwd/drvs	26.0 / 19.5	26.0 / 19.5	26.0 / 19.0	26.0 / 19.0	
		Manual shift T/M fwd/drvs	19.5 / 19.0	19.5 / 19.0	19.5 / 19.0	19.5 / 19.0	
		Full load	540	540	480	480	
		No load	580	580	520	520	
25	Lifting	Power shift T/M	500	500	450	450	
		Manual shift T/M	550	550	500	500	
		Full load	500	500	450	450	
		No load	550	550	500	500	
26	Lowering	Power shift T/M	33.3 / 17.6	33.3 / 17.6	34.3 / 18.6	34.3 / 18.6	
		Manual shift T/M	21.1 / 17.6	21.1 / 17.6	21.1 / 18.6	21.1 / 18.6	
		Full load	33 / 20	30 / 20	27 / 20	25 / 20	
		No load	18 / 20	16 / 18	15 / 16	15 / 16	
28	Max. Drawbar Pull	Power shift T/M	33.3 / 17.6	33.3 / 17.6	34.3 / 18.6	34.3 / 18.6	
		Manual shift T/M	21.1 / 17.6	21.1 / 17.6	21.1 / 18.6	21.1 / 18.6	
29	Max. Gradeability*	Power shift T/M	33 / 20	30 / 20	27 / 20	25 / 20	
		Manual shift T/M	18 / 20	16 / 18	15 / 16	15 / 16	
32	Total Weight	Power shift T/M	6100	6450	6960	7260	
		Manual shift T/M	6060	6410	6920	7260	
33	Weight Distribution (Powershift T/M)	Full load	Front	8410	9140	10130	10980
			Rear	1190	1310	1330	1280
		No load	Front	2880	2820	2950	3270
			Rear	3220	3630	4010	3990
33	Weight Distribution (Manual shift T/M)	Full load	Front	8370	9100	10090	10980
			Rear	1190	1310	1330	1280
		No load	Front	2840	2780	2910	3270
			Rear	3220	3630	4010	3990
35	Tires	Number	2 / 2	2 / 2	2 / 2	2 / 2	
		Size	300-15-18PR (I)	300-15-18PR (I)	300-15-18PR (I)	300-15-18PR (I)	
37	Wheelbase	Front	7.00-12-12PR (I)	7.00-12-12PR (I)	7.00-12-14PR (I)	7.00-12-14PR (I)	
		Rear	2000	2000	2200	2200	
39	Tread	Front	1180	1180	1180	1180	
		Rear	1195	1195	1195	1195	
40	Backrest Height	mm	1220	1220	1215	1370	
		mm	1020	1020	1020	1020	
		mm	1320	1320	1320	1320	
		mm	320	320	320	320	
		mm	845	845	845	845	
		mm	155	155	140	140	
41	Center of wheelbase	mm	185	185	185	185	
		mm	185	185	185	185	
42	Service (Foot)	mm	185	185	185	185	
		mm	185	185	185	185	
43	Parking	mm	185	185	185	185	
		mm	185	185	185	185	
45	Battery	V/AH	2x 12V / 60AH	2x 12V / 60AH	2x 12V / 60AH	2x 12V / 60AH	
		V/AH	2x 12V / 60AH	2x 12V / 60AH	2x 12V / 60AH	2x 12V / 60AH	
49	Make / Model		MITSUBISHI / S6S	MITSUBISHI / S6S	MITSUBISHI / S6S	MITSUBISHI / S6S	
			MITSUBISHI / S6S	MITSUBISHI / S6S	MITSUBISHI / S6S	MITSUBISHI / S6S	
50	Rated Output / r.p.m		64.7KW / 2300r.p.m. : 88PS / 2300r.p.m.	64.7KW / 2300r.p.m. : 88PS / 2300r.p.m.	64.7KW / 2300r.p.m. : 88PS / 2300r.p.m.	64.7KW / 2300r.p.m. : 88PS / 2300r.p.m.	
			64.7KW / 2300r.p.m. : 88PS / 2300r.p.m.	64.7KW / 2300r.p.m. : 88PS / 2300r.p.m.	64.7KW / 2300r.p.m. : 88PS / 2300r.p.m.	64.7KW / 2300r.p.m. : 88PS / 2300r.p.m.	
51	Max Torque / r.p.m.		284N·m / 1600r.p.m. : 29kgf·m / 1600r.p.m.	284N·m / 1600r.p.m. : 29kgf·m / 1600r.p.m.	284N·m / 1600r.p.m. : 29kgf·m / 1600r.p.m.	284N·m / 1600r.p.m. : 29kgf·m / 1600r.p.m.	
			284N·m / 1600r.p.m. : 29kgf·m / 1600r.p.m.	284N·m / 1600r.p.m. : 29kgf·m / 1600r.p.m.	284N·m / 1600r.p.m. : 29kgf·m / 1600r.p.m.	284N·m / 1600r.p.m. : 29kgf·m / 1600r.p.m.	
52	Number of Cylinders		6	6	6	6	
			6	6	6	6	
			4996	4996	4996	4996	
			115	115	115	115	
55	Transmission	Power shift T/M	2/1 - Automatic Power-shift T/M	2/1 - Automatic Power-shift T/M	2/1 - Automatic Power-shift T/M	2/1 - Automatic Power-shift T/M	
		Manual shift T/M	2/2 - Manual shift T/M	2/2 - Manual shift T/M	2/2 - Manual shift T/M	2/2 - Manual shift T/M	
57	Operating Pressure		180	180	180	180	
			180	180	180	180	

NOTE : * Computed Values & subject to load condition

LOAD CHART



NOTE : Capacities shown are computed with upright in vertical position. Load center are determined front face of forks. Capacities are based on a 1000mm cube load configuration with the center of gravity (C.G.) at the true center of the cube, and standard forks. Truck capacities with upright in forward tilt position will be less. Long forks, and unusually wide or tall loads may also reduce capacity. Contact TCM representative for capacity information on irregular loads. Specific capacities are shown on truck nameplates. TCM Industrial Trucks are equipped with certain safety devices as standard equipment.

UniCarriers Corporation will not assume any liability for injuries or damage arising from or caused by the removal of any safety devices from any of its products.

STANDARD SPECIFICATIONS

Wide View Mast VM

Mast Model	Rated Capacity								Max. Fork Height	Overall Mast Height					Tilting Angle F/B	Service Weight			
	FD35T9 · C9		FD40T9 · C9		FD45T9 · C9		FD50T9			Lowered		Raised with Backrest				FD35T9(C9)	FD40T9(C9)	FD45T9(C9)	FD50T9
	Load Center		Load Center		Load Center		Load Center			FD35T9 · C9 FD40T9 · C9	FD45T9 · C9	FD50T9	FD35T9 · C9 FD40T9 · C9	FD45T9 · C9					
	500mm	600mm	500mm	600mm	500mm	600mm	500mm	600mm								mm	mm	mm	mm
VM250	4000	3500	4500	4000	5000	4500	5000	4500	2500	1980	1985	2110	3765	3920	6/10	6040 (6000)	6390 (6350)	6890 (6850)	7190
VM300	4000	3500	4500	4000	5000	4500	5000	4500	3000	2230	2235	2360	4265	4420	6/12	6100 (6060)	6450 (6410)	6960 (6920)	7260
VM350	4000	3500	4500	4000	5000	4500	5000	4500	3300	2380	2385	2510	4565	4720	6/12	6130 (6090)	6480 (6440)	7000 (6960)	7300
VM375	4000	3500	4500	4000	5000	4500	5000	4500	3500	2480	2485	2610	4765	4920	6/12	6150 (6110)	6500 (6460)	7020 (6980)	7320
VM400	4000	3500	4500	4000	5000	4500	5000	4500	3750	2605	2610	2735	5015	5170	6/6 *6/12	6220 (6180)	6570 (6530)	7060 (7020)	7360
VM425	4000	3500	4500	4000	5000	4500	5000	4500	4000	2785	2785	2910	5265	5420	6/6 *6/12	6270 (6230)	6620 (6580)	7160 (7120)	7460
VM450	4000	3500	4500	4000	5000	4500	5000	4500	4250	2905	2910	3035	5515	5670	6/6 *6/12	6300 (6260)	6650 (6610)	7190 (7150)	7490
VM475	3500 *4000	3500	4000 *4500	4000	4800	4500	5000	4500	4500	3030	3035	3160	5765	5920	6/6 *6/12	6320 (6280)	6670 (6630)	7210 (7170)	7510
VM500	3500 *3700	3500	4000 *4300	4000	4500 *4600	4500	5000	4500	5000	3280	3285	3410	6265	6420	6/6	6400 (6360)	6750 (6710)	7280 (7240)	7580
VM550	2800 *3300	2800 *3300	3200 *3900	3200 *3900	4000 *4400	4000 *4400	4000 *4800	4000 *4800	5500	3580	3585	3710	6765	6920	3/6	6480 (6440)	6830 (6790)	7420 (7380)	7720
VM600	2200 *3200	2200 *3200	2500 *3700	2500 *3700	3350 *4000	3350 *4000	3350 *4000	3350 *4000	6000	3830	3835	3960	7265	7420	3/6	6530 (6490)	6880 (6840)	7480 (7440)	7780

Wide View Full-Free 2-stage Mast VFM

Mast Model	Rated Capacity								Max. Fork Height	Overall Mast Height					Tilting Angle F/B	Service Weight						
	FD35T9 · C9		FD40T9 · C9		FD45T9 · C9		FD50T9			Lowered		(1) Raised with Backrest				(2) Free lift with Backrest			FD35T9(C9)	FD40T9(C9)	FD45T9(C9)	FD50T9
	Load Center		Load Center		Load Center		Load Center			FD35T9 · C9 FD40T9 · C9	FD45T9 · C9	FD50T9	FD35T9 · C9 FD40T9 · C9	FD45T9 · C9		FD50T9	FD35T9 · C9 FD40T9 · C9	FD45T9 · C9				
	500mm	600mm	500mm	600mm	500mm	600mm	500mm	600mm											mm	mm	mm	mm
VFM250	4000	3500	4500	4000	5000	4500	5000	4500	2500	1985	1985	2110	3765	3920	6/10	6240 (6200)	6590 (6550)	6970 (6930)	7280			
VFM300	4000	3500	4500	4000	5000	4500	5000	4500	3000	2185	2235	2360	4265	4420	6/12	6290 (6250)	6640 (6600)	7040 (7000)	7350			
VFM350	4000	3500	4500	4000	5000	4500	5000	4500	3300	2385	2385	2510	4565	4720	6/12	6						

FD Series

FD35 / FD40 / FD45 / FD50

- 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 slightly differ from the actual trucks.
- Photos and illustrations may or may not include optional equipment and accessories.
- Features and specifications may vary depending on markets.
- Performance data and dimensions are nominal and subject to tolerances.
- Produced in ISO certified factory.