

HYUNDAI MATERIAL HANDLING Applied Tier 3 Engine

70DF-7



www.hyundai-mh.com









High Power & Performance

Powerful Engine

HMC DADD Engine

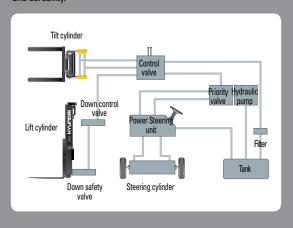
Market approved quality of HMC D4DD engine ensures incomparable performance, durability and excellent fuel efficiency. This engine meets EPA Tier-III and EU stage IIIA emission regulations.



73.6kW//2,300rpm 38kgf.m/1,500rpm

State-of-the-art hydraulic system

The latest large-capacity hydraulic system reacts quickly during operation, and a low-noise control valve increases both efficiency and durability.





Fast and stable performance

Being able to quickly raise and lower the mast, as well as tilt it forward and backward, providing the best operational conditions during unloading. When the truck is fully loaded, mast lowering speed is carefully controlled to ensure safety by the down control valve.

Faster travel speed & gradeability

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





Increased mast tilting angle
The mast tilting angle of 15 degrees forward and 10 degrees backward, the operator can safely and rapidly perform loading and unloading jobs.



Wet disc brake system

The wet disc brake system is virtually maintenance free and is enclosed to protect from dust and water.



Fully hydrostatic power steering A hydraulic steering system always

guarantees smooth and flexible steering, preventing overrun and kick-back.



OPSS (Operator Presence **Sensing System)**

Control of mast tilting, lifting and lowering is not possible through operation of the appropriate control when the operator is not in the normal position.(Option)



Comfortable Operation



Adjustable steering wheel
Steering wheel with horn button can be adjusted by a lever on the right-hand side for the most comfortable operator position.



Easy and safe shift lever

A single lever on the left side of the steering column gives the operator fast and easy controls of the direction.



Multi-function switch lever

Multi-functional switch lever gives easy access to lights and turn sign lamps.



Quick response of operating control levers

Only minimal operator's effort is required for precise, safe and productive control.



Ergonomically positioned pedalsBased on human engineering, the accelerator, brake and inching pedals are optimally positioned for convenience while operating the equipment.



Cup holder & console box

Additional storage spaces are located inside the operating space for operator's convenience.



New high visibility for safe operation

The operator is able to work with increased safety and accuracy due to a wider view

Operator friendly gauges and waterresistant monitor panel



- Water temperature gauge
- 2 Hour meter
- 3 Turn lamp
 4 Fuel gauge
 5 Parking brake lamp
- Fuel empty warning lamp
 Engine oil pressure warnin
- T-mission oil temp warni Battery charging warning lamp
- Air-cleaner warning
- Work lamp

Easily adjustable suspension seat

An attractive and adjustable seat, based on a human engineering design, provides great comfort, safety and



Full floating overhead guard mount The anti-vibration rubber is installed between the guard and truck

frame to reduce the source of vibration and noise while driving. This not only reduces operator's fatigue but also increases safety.





Endurance & Safety

Strong overhead guard

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



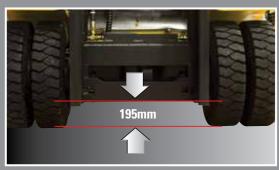
Parking brake

Toggle type parking brake requires less efforts from the



Ground clearance

The engine and transmission are assembled horizontally and positioned high in the frame to protect major components during operation on rugged surface.



Highly durable split type drive axle
The durable drive axle provides fast travel speed and quiet travel under any heavy load condition, and boosts work







Large footboard & hand grip

Wide "open" step offers convenience and safety when entering and exiting truck.





Easy access of electrical **Components**

Various electric parts are centralized in dash board resulting in improvement in maintenance.



Expansion bellows

The expansion bellows absorbs vibration and reduces noise generated from the exhaust gas system and also extends the life cycle of exhaust gas system.



Fuel tank safety valve

Integrated safety check valve shuts off fuel supply in the unlikely condition of a truck overturn.





Bright, protected headlights and rear working light

Bright, protected headlights and rear working light are positioned for exceptional visibility.



Durability **Easy** Maintenance



Electrically monitored air filter

Air cleaner sensor alerts the operator of a restricted air filter and allows replacement before damage.



Visible precleaner
Efficient, accessible pre-cleaner
provides for longer engine life.



Brake fluid reservoir
Highly visible, easily accessible
reservoir makes quicker daily
inspections



An accessible, compact fuse box for easy inspection

Centralized design for easy service!

An ideal arrangement of component parts ensures easy accesses and conveniences for the maintenance.





■ Some of the photos may include optional equipment.



Large open engine hood

Highly accessible engine compartment assures fast and efficient maintenance.



Engine oil condition check



Easy-to-access reservoir tank



Maintenance free battery



Easy-to-change radiator



Mechanic friendly fuel filter replacement



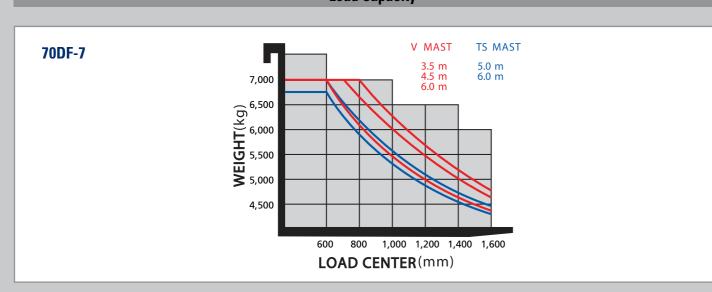
Specification

Mast Specification

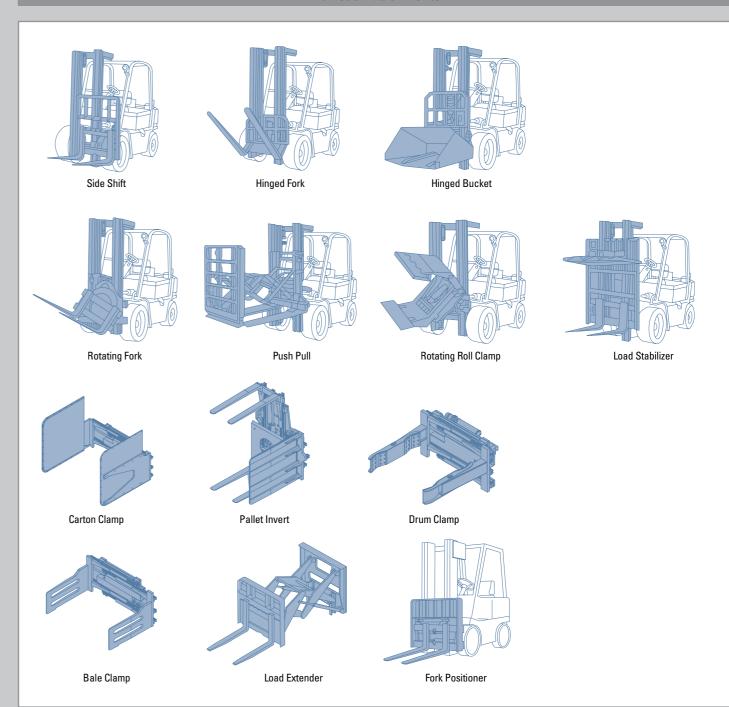
Model	Mast Type		Maximum Fork Height (mm)	Overall Height(mm)			Free Lift (mm)						
					Extended				Tilt Angle (deg)		Load Capacity without	Load Capacity with	Truck Weight
				Lowered	W/o Load Backrest	W/Std Load Backrest	Without Load Backrest	With Std Load Backrest			side shift at 600mm LC(kg)	side shift at 600mm LC(kg)	(Unloaded)(kg)
									Fwd	Bwd	. •		
70DF-7	2 Stage limited free lift	*V300	3,030	2,515	4,211	4,320	140	140	15	10	7,000	7,000	9,871
		V330	3,330	2,665	4,511	4,620	140	140	15	10	7,000	7,000	9,918
		V350	3,530	2,765	4,711	4,820	140	140	15	10	7,000	7,000	9,950
		V370	3,730	2,865	4,911	5,020	140	140	15	10	7,000	7,000	9,982
		V400	4,030	3,015	5,211	5,320	140	140	15	10	7,000	7,000	10,038
		V450	4,530	3,315	5,711	5,820	140	140	15	10	7,000	7,000	10,266
		V500	5,030	3,565	6,211	6,320	140	140	15	10	7,000	6,850	10,345
		V550	5,530	3,815	6,711	6,820	140	140	15	10	7,000	6,650	10,425
		V600	6,030	4,065	7,211	7,320	140	140	15	10	6,900	6,500	10,503
	3 Stage full free lift	TF450/TS450	4,560	2,565	5,765	5,805	1,360	1,275	15	10	7,000	6,750	10,474
		TS500	5,060	2,765	6,265	6,305	1,560	1,475	15	10	7,000	6,600	10,566
		TS560	5,600	2,965	6,805	6,845	1,760	1,675	15	10	6,700	6,400	10,677
		TS600	6,060	3,165	7,265	7,305	1,960	1,875	15	10	6,500	6,200	10,765

*Standard

Load Capacity



Various Attachments



Optional Items

· FORK (LxWxT)(ı	1
Hool	k Tyne	

70DF-7

· 1,350 X 150 X 65 . 1,500 X 150 X 65 . 1,800 X 150 X 65

· 2,000 X 150 X 65 . 2,400 X 150 X 65

Shaft Type

70DF-7

 \cdot 2,000 X 180 X 70 $\,\cdot$ 2,300 X 180 X 70 $\,\cdot$ 2,400 X 180 X 70 $\,$ $\,$ \cdot HAZARD SWITCH

·SOLID

 $\boldsymbol{\cdot} \, \textbf{SEAT} : \textbf{SEAT BELT, ARM REST}$

· INTERNAL PIPING

· CABIN & HEATER

CABIN, AIRCON, HEATER

· MUFFLER: HORIZONTAL

· MASTER SWITCH

· MCV: 4-SPOOL / 5-SPOOL

· INTEGRAL FORK POSITIONER CARRIAGE

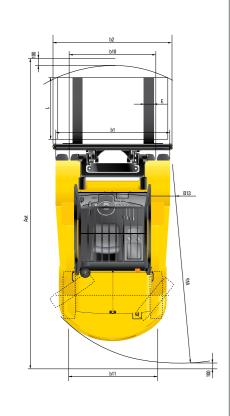
· INTEGRAL SIDE SHIFT CARRIAGE



Specification MEMO

Dimension





8.3 Oil volume (hydraulic) 8.4 Noise (at driver's ear according to DIN 12 053)

		Sp	ecification				
Iden	tification						
1.1	Manufacturer		Hyundai				
1.2	Manufacturer's type designation		70DF-7				
1.3	Drive: electric (battery or mains),diesel,petrol,fuel gas		DIESEL				
1.4	Type of operation:hand,pedestrian,standing,seated,o		seated				
1.5	Load capacity / rated load	kg	7,000				
1.6	Load center distance	c(mm)	600				
1.8	Load distance, center of drive axle to fork Wheelbase	x(mm)	615 2,300				
_		y(mm)	2,300				
Weig 2.1		ka	9,871				
2.1	Service weight Axle loading, loaded front/rear	kg kg	14,964 / 1,907				
2.3	Axle loading, unloaded front/rear	kg	4,260 / 5,604				
_	els, Chassis	ng	TIEST OF T				
3.1	Tires:solid rubber, superelastic, pneumatic, poly	urethane	pneumatic				
3.2	Tires size, front(Φx width)	urcululio	8.25 - 15 - 14PR				
3.3	Tires size, rear(Φ x width)		8.25 - 15 - 14PR				
3.5	Wheels, number front x rear (x=driven wheels)		4 x 2				
3.6	Track width, front	mm	1,578				
3.7	Track width, rear	mm	1,602				
Basi	c Dimensions						
4.1	Mast / fork carriage tilt forward / backward (α/β)	degrees	15/10				
4.2	Lowered mast height	h1 (mm)	2,515				
4.3	Free lift	h2 (mm)	140				
4.4	Lift height	h3 (mm)	3,030				
4.5	Extended mast height	h4 (mm)	4,320				
4.7	Overhead guard height	h5 (mm)	2,578				
4.8	Seat height / standing height	h7 (mm)	1,464				
4.12	Coupling height	h10 (mm)	514				
4.19	Overall length	l1 (mm)	4,815				
4.20	Length to face of forks	12 (mm)	3,618				
4.21	Overall width	b1 (mm)	2,088				
4.22	Fork dimensions(hook type)	s/e/I(mm)	65 x 150 x 1,200				
4.23	Fork carriage ISO 2328, class / type A,B		Class IV				
4.24	Fork-carriage width	b2 (mm)	2,068				
4.31	Ground clearance, loaded, under mast	m1(mm)	195				
4.32	Ground clearance, centre of wheelbase	m2(mm)	207				
4.33	Aisle width for pallets 1,000x1,200 crossways (LxW)	Ast(mm)	5,257				
4.34	Aisle width for pallets 800x1,200 lengthways (WxL)	Ast(mm)	5,457				
4.35	Turning radius	Wa(mm)	3,442				
4.36	Smallest pivot point distance	mm	1,224				
	ormance Data						
5.1	Travel speed, unloaded	km/h	22.7				
5.2	Lift speed, loaded / unloaded	mm/s	420 / 460				
5.3	Lowering speed, loaded / unloaded	mm/s	500 / 450				
5.6	Max. Drawbar pull, loaded	N n/	65,921				
5.7	Gradient performance, loaded / unloaded	%	38.5 / 23.6				
5.9	Acceleration time, loaded / unloaded(10m) Service brake		FOOT (Hydraulic)				
_		_	1001 (Hydraulic)				
7.1	Engine manufacturer / type		HMC D4DD				
7.1	Engine manufacturer / type Engine power acc. to ISO 1585	kW	73.6				
7.3	Maximum torque	kgf-m/rpm	38/1,600				
7.4	No. of cylinder / cubic capacity	kgi-myrpm cm²	36/1,000				
7.5	Fuel consumption acc. To VDI cycle	Q/h	4.35				
_	er Details	2111					
8.1	Type of drive control		Power shift				
8.2	Operating pressure (system / attach)	bar	185/150				
8.3	Oil volume (hydraulic)	l / m	76				