40/45D-9S
50D-9SA

Diesel Counterbalance Trucks

MOVING YOU FURTHER

HYUNDAI MATERIAL HANDLING



■ Some of the photos may include optional equipment.

HYUNDAI
MATERIAL HANDLING

Head Office (Sales office)
First tower, 55, Bundang-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, Korea

PLEASE CONTACT

www.hyundai-ce.com 2022. 11 Rev.

Your satisfaction is **our priority!**

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.

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.

40/45D-9S
50D-9SA



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HYUNDAI D4DD Engine
70kW/2,300rpm

High Power Engine - HMC D4DD

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.



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 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.



Integrated Wheel Rim

The integrated wheel rim provides significantly increased service life.



Fully Hydrostatic Power Steering

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



Travel Speed (MAX)

Model	km / h
40D-9S	26.7
45D-9S	26.7
50D-9SA	26.6

Gradeability (MAX)

Model	%
40D-9S	36.9
45D-9S	33.6
50D-9SA	30.7

Faster Travel Speed & 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
provides full support and comfort to the operator.

40/45D-9S
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Advanced LCD Monitor

The 2.0 inch LCD color monitor allows the operator to control the machine with ease.
The monitor features speed, travel direction, battery discharge indicator and hour meter.



Spacious Operator Cabin

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



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.



Low Entrance Height

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



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.



Grammer Seat

- Quick Achievement of the Ergonomically Best Sitting Position
- Practical Document Box
- Backrest Extension (Option)
- Movable Armrests (Option)
- Seat Heating (Option)

Automatic Gear Box

Automatic transmission is speed controlled:
- During acceleration when the speed reaches 7 km/h second gear is selected .
- When decelerating shift down to first speed is done at 5 km/h.

Load Weight Indication System (Optional)

The optional Weight 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.



Advanced **Safety**



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

40/45D-9S
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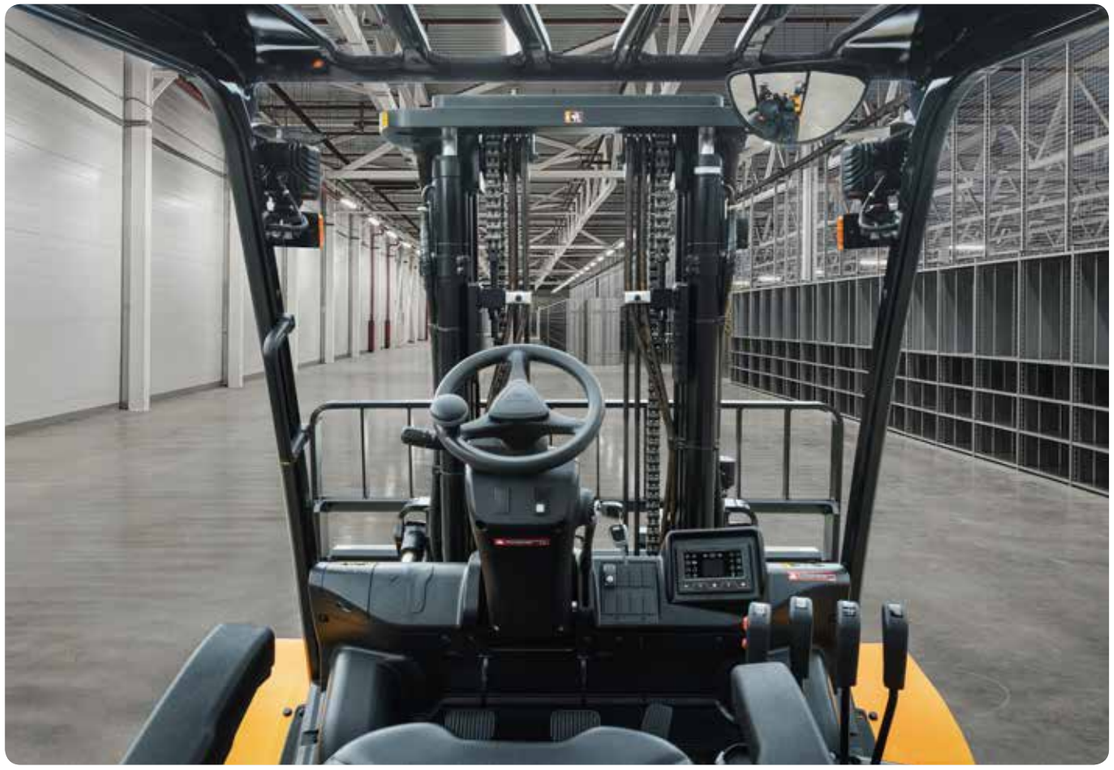

Excellent Visibility for Safe Operation

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)

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

Lift Lock Tilt Lock Drive Lock



*Some of the photos may include optional equipment.



Strong Overhead Guard

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









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.

Fast and Easy
Maintenance

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

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Large Engine Hood

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





Password Starting System
(Anti-theft system)



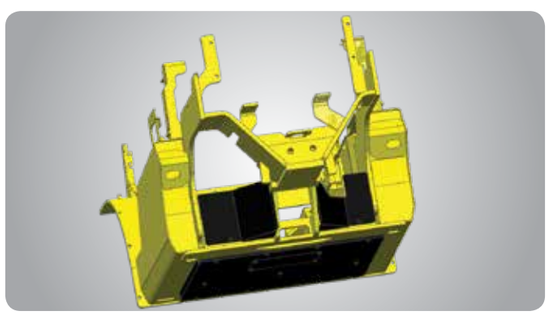
Emergency Switch
(Optional)

*Some of the photos may include optional equipment.



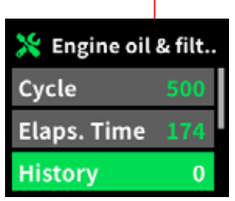
Waterproof & Dustproof Cover

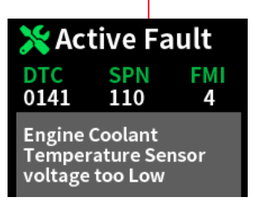
Newly developed Waterproof and Dustproof fuse box and relay box for ease of maintenance.



Rear Tire Cover / Under Cover Option

The rear tire cover is well-suited to prevent clogging of the radiator from foreign substances.





Maintenance Management Display



Fuel Cap with Key

New 9 Series

40/45D-9S
50D-9SA

Mast Specification (40D-9S)

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)	
									Single Tire	Double Tire	Single Tire	Double Tire		
			Single Tire	Double Tire	With Load Backrest	Without Load Backrest	Fwd	Bwd	600mm LC	600mm LC	600mm LC	600mm LC	Single Tire	Double Tire
		mm	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	6301	6407
	*V300	3020	2235	2220	120	120	8	10	4000	4000	4000	4000	6331	6437
	V330	3320	2385	2370	120	120	8	10	4000	4000	4000	4000	6369	6475
	V350	3520	2535	2520	120	120	8	10	4000	4000	4000	4000	6392	6498
	V370	3720	2635	2620	120	120	8	10	4000	4000	3950	3950	6412	6518
	V400	4020	2845	2830	120	120	8	10	4000	4000	3900	3900	6454	6561
	V430	4320	2995	2980	120	120	8	10	4000	4000	3850	3850	6483	6590
	V450	4520	3095	3080	120	120	8	6	4000	4000	3800	3800	6567	6673
	V500	5020	3345	3330	120	120	8	6	3900	4000	3700	3700	6618	6724
2-STAGE FULL FREE LIFT	VF280	2805	2135	2120	916	1243	8	8	4000	4000	4000	4000	6342	6445
	VF300	3005	2235	2220	1016	1343	8	8	4000	4000	4000	4000	6368	6471
	VF315	3155	2325	2310	1106	1433	8	8	4000	4000	4000	4000	6387	6490
3-STAGE FULL FREE LIFT	TF/TS370	3730	2035	2020	807	1134	8	8	4000	4000	3900	3950	6558	6629
	TF/TS400	4030	2135	2120	907	1234	8	8	4000	4000	3850	3850	6588	6659
	TF/TS430	4330	2235	2220	1007	1334	8	8	4000	4000	3800	3800	6619	6690
	TF/TS450	4510	2295	2280	1067	1394	8	8	4000	4000	3800	3800	6638	6709
	TF/TS470	4720	2385	2370	1157	1484	8	8	4000	4000	3700	3750	6674	6745
	TF/TS500	5020	2485	2470	1257	1584	8	6	3900	3900	3600	3650	6697	6768
	TF/TS550	5520	2665	2650	1437	1764	8	6	3700	3800	3350	3500	6758	6829
	TF/TS600	6030	2845	2830	1617	1944	8	6	3600	3600	2950	3400	6827	6898
	TF/TS650	6540	3025	3010	1797	2124	8	6	3500	3500	2850	3300	6868	6939

Mast Specification (45D-9S)

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)	
									Single Tire	Double Tire	Single Tire	Double Tire		
			Single Tire	Double Tire	With Load Backrest	Without Load Backrest	Fwd	Bwd	600mm LC	600mm LC	600mm LC	600mm LC	Single Tire	Double Tire
		mm	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	6719	6828
	*V300	3020	2235	2220	120	120	8	10	4500	4500	4500	4500	6749	6858
	V330	3320	2385	2370	120	120	8	10	4500	4500	4500	4500	6787	6895
	V350	3520	2535	2520	120	120	8	10	4500	4500	4500	4500	6810	6919
	V370	3720	2635	2620	120	120	8	10	4500	4500	4400	4400	6830	6939
	V400	4020	2845	2830	120	120	8	10	4500	4500	4350	4350	6872	6981
	V430	4320	2945	2980	120	120	8	10	4500	4500	4300	4300	6902	7011
	V450	4520	3095	3080	120	120	8	6	4500	4500	4200	4200	6985	7094
	V500	5020	3345	3330	120	120	8	6	4400	4400	4050	4050	7036	7145
2-STAGE FULL FREE LIFT	VF280	2805	2135	2120	853	1442	8	8	4500	4500	4500	4500	6755	6864
	VF300	3005	2235	2220	953	1542	8	8	4500	4500	4500	4500	6781	6890
	VF315	3155	2325	2310	1043	1602	8	8	4500	4500	4500	4500	6800	6909
3-STAGE FULL FREE LIFT	TF/TS370	3730	2035	2020	796	1114	8	8	4500	4500	4350	4350	6976	7087
	TF/TS400	4030	2135	2120	896	1214	8	8	4500	4500	4300	4300	7006	7117
	TF/TS430	4330	2235	2220	996	1314	8	8	4500	4500	4200	4200	7037	7148
	TF/TS450	4510	2295	2280	1056	1374	8	8	4500	4500	4150	4150	7056	7167
	TF/TS470	4720	2385	2370	1145	1484	8	8	4400	4400	4100	4100	7092	7203
	TF/TS500	5020	2485	2470	1246	1564	8	6	4300	4300	4000	4000	7115	7227
	TF/TS550	5520	2665	2650	1426	1744	8	6	4200	4200	3850	3850	7176	7288
	TF/TS600	6030	2845	2830	1606	1924	8	6	4000	4000	3250	3750	7245	7356
	TF/TS650	6540	3025	3010	1786	2104	8	6	3900	3900	3150	3650	7286	7398

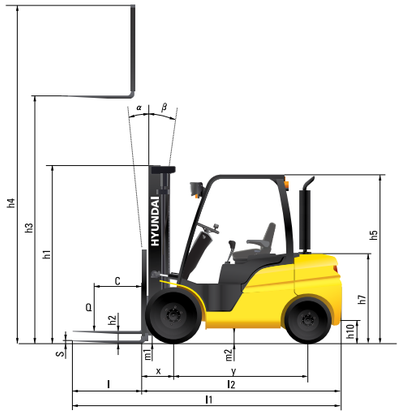
Mast Specification (50D-9SA)

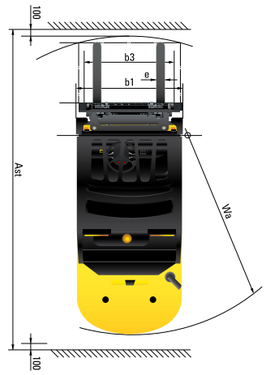
Mast Type		Maximum Fork Height	Overall Height (Lowered)		Free lift height		Tilt Angle		Load capacity w/o side shift		Load capacity w/side shift		TRUCK WEIGHT (UNLOADED)	
									Single Tire	Double Tire	Single Tire	Double Tire		
			Single Tire	Double Tire	With Load Backrest	Without Load Backrest	Fwd	Bwd	600mm LC	600mm LC	600mm LC	600mm LC	Single Tire	Double Tire
		mm	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	7188	7290
	*V290	2930	2235	2220	120	120	8	10	5000	5000	5000	5000	7213	7329
	V320	3230	2385	2370	120	120	8	10	5000	5000	5000	5000	7238	7340
	V340	3430	2535	2520	120	120	8	10	5000	5000	4950	4950	7263	7365
	V360	3630	2635	2620	120	120	8	10	5000	5000	4900	4900	7279	7381
	V390	3930	2845	2830	120	120	8	10	5000	5000	4800	4800	7315	7417
	V440	4430	3095	3080	120	120	8	6	4900	5000	4650	4650	7418	7520
	V490	4930	3345	3330	120	120	8	6	4800	4900	4500	4500	7460	7562
2-STAGE FULL FREE LIFT	VF270	2702	2135	2120	905	1223	8	8	5000	5000	4700	4750	7247	7308
	VF290	2902	2235	2220	1005	1323	8	8	5000	5000	4650	4700	7272	7333
	VF305	3052	2325	2310	1095	1413	8	8	5000	5000	4550	4600	7290	7351
3-STAGE FULL FREE LIFT	TF/TS360	3672	2035	2020	807	1074	8	8	5000	5000	4700	4800	7431	7484
	TF/TS390	3972	2135	2120	907	1174	8	8	5000	5000	4650	4700	7458	7510
	TF/TS420	4272	2235	2220	1007	1274	8	8	4900	5000	4550	4600	7482	7535
	TF/TS440	4452	2295	2280	1067	1334	8	8	4800	5000	4500	4550	7499	7552
	TF/TS460	4662	2385	2370	1157	1424	8	8	4700	4900	4450	4500	7522	7575
	TF/TS490	4962	2485	2470	1257	1524	8	6	4600	4800	4350	4450	7548	7600
	TF/TS540	5462	2665	2650	1437	1704	8	6	4500	4700	4250	4300	7600	7652
	TF/TS590	5972	2845	2830	1617	1884	8	6	4400	4600	4100	4200	7640	7693
	TF/TS640	6482	3025	3010	1797	2064	8	6	4300	4500	4000	4100	7681	7734

New 9 Series

40/45D-9S
50D-9SA

Dimension





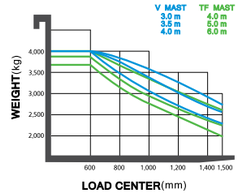
Specification

Identification					
1.1	Manufacturer		Hyundai	Hyundai	Hyundai
1.2	Manufacturer's type designation		40D-9S	45D-9S	50D-9SA
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	4,000	4,500	5,000
1.6	Load center distance	c mm	600	600	600
1.8	Load distance, center of drive axle to fork	x mm	561	561	576
1.9	Wheelbase	y mm	2,000	2,000	2,000
Weights					
2.1	Service weight	kg	6,437	6,858	7,329
2.2	Axle loading, loaded front/rear	kg	9,212 / 1,225	9,998 / 1,360	10,831 / 1,498
2.3	Axle loading, unloaded front/rear	kg	2,892 / 3,545	2,888 / 3,970	2,931 / 4,398
Wheels, Chassis					
3.1	Tires:solid rubber, superelastic, pneumatic, polyurethane		pneumatic	pneumatic	pneumatic
3.2	Tires size, front		7.50-16x12PR	7.50-16x12PR	7.50-16x12PR
3.3	Tires size, rear		7.00-12x14PR	7.00-12x14PR	7.00-12x14PR
3.5	Wheels, number front x rear (x=driven wheels)		4 x 2	4 x 2	4 x 2
3.6	Track width, front	mm	1,282	1,282	1,282
3.7	Track width, rear	mm	1,140	1,140	1,140
Basic Dimensions					
4.1	Mast / fork carriage tilt forward / backward (α / β)	degrees	8 / 10	8 / 10	8 / 10
4.2	Lowered mast height	h1 (mm)	2,220	2,220	2,220
4.3	Free lift	h2 (mm)	120	120	120
4.4	Lift height	h3 (mm)	3,020	3,020	2,930
4.5	Extended mast height	h4 (mm)	4,234	4,234	4,147
4.7	Overhead load guard (cab) height	h5 (mm)	2.210 (2,350)	2,210 (2,350)	2,210 (2,350)
4.8	Seat height / standing height	h7 (mm)	1,299	1,299	1,299
4.12	Coupling height	h10 (mm)	373	373	372
4.19	Overall length	l1 (mm)	4,235	4,455	4,500
4.20	Length to face of forks	l2 (mm)	3,165	3,235	3,300
4.21	Overall width	b1 (mm)	1,746	1,746	1,746
4.22	Fork dimensions(hook type)	ℓ / e / s(mm)	1,070 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	IV / A	IV / A
4.24	Fork-carriage width	b3 (mm)	1,600	1,600	1,600
4.31	Ground clearance, loaded, under mast	m1 (mm)	155	155	155
4.32	Ground clearance, centre of wheelbase	m2 (mm)	209	206	204
4.33	Aisle width for pallets 1,000x1,200 crossways (LxW)	Ast (mm)	4,676	4,726	4,786
4.34	Aisle width for pallets 800x1,200 lengthways (WxL)	Ast (mm)	4,876	4,926	4,986
4.35	Turning radius	Wa (mm)	2,915	2,965	3,010
4.36	Smallest pivot point distance		1,009	1,009	1,009
Performance Data					
5.1	Travel speed, unloaded	km/h	26.7	26.7	26.6
5.2	Lift speed, loaded/ unloaded	mm/s	540 / 570	530 / 570	460 / 490
5.3	Lowering speed, loaded/unloaded	mm/s	500 / 500	500 / 500	500 / 500
5.6	Max. Drawbar pull, loaded	N	39,417	39,470	39,540
5.7	Gradient performance, loaded	%	36.9	33.6	30.7
5.9	Acceleration time, loaded/ unloaded(10m)	sec	-	-	-
5.10	Service brake		hydraulic	hydraulic	hydraulic
Engine					
7.1	Engine manufacturer / type		HMC D4DD	HMC D4DD	HMC D4DD
7.2	Engine power acc. to ISO 1585	kW/rpm	70 / 2,300	70 / 2,300	70 / 2,300
7.3	Maximum Torque	kgf.m/rpm	35 / 1,600	35 / 1,600	35 / 1,600
7.4	No. of cylinder / displacement	EA/cc	4 / 3,907	4 / 3,907	4 / 3,907
Other Details					
8.1	Type of drive control		Power shift 2/2	Power shift 2/2	Power shift 2/2
8.2	Operating pressure (system / attach)	kgf/cm²	206 / 147	206 / 147	206 / 147
8.3	Oil volume for attachment	ℓ /min	66	66	66
8.4	Sound level at driver's ear according to DIN 12 053	db(A)	84	84	84

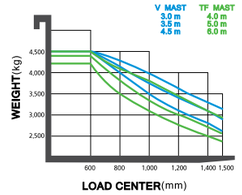
*Specifications and designs are subject to change without advance notice.

Load Capacity

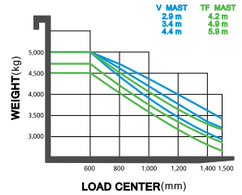
40D-9S



45D-9S



50D-9SA



Various Attachments

Side Shift



Hinged Fork



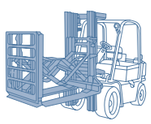
Hinged Bucket



Rotating Fork



Push Pull



Rotating Roll Clamp



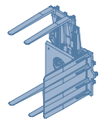
Load Stabilizer



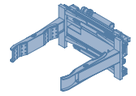
Carton Clamp



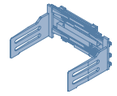
Pallet Invert



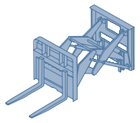
Drum Clamp



Bale Clamp



Load Extender



Fork Positioner



Optional Items

- **Fork(mm)**
  - 40D-9S : 1220, 1370, 1520, 1670, 1820, 1970, 2120, 2400
  - 45D-9S : 1070, 1370, 1520, 1670, 1820, 1970, 2200, 2400
  - 50D-9SA : 1350, 1500, 1800, 2000, 2400
- **Tire :** Pneumatic(STD)/ Solid / Non-marking/
  - Double Tire(Front tire) 35D-9S : 7.50-16-12PR
  - Single Tire(Front tire) 40D-9S/45D-9S/50D-9SA : 300-15-18PR
- **Seat :** Arm Rest, Heat, Buckle SW, Backrest Ext
- **M.C.V :** 2-Spool(STD), 3-Spool, 4-Spool, 5-Spool
- **Load Weight Indcator**
- **Beacon Lamp**
- **Rear Work Lamp**
- **OPSS : Travel, Travel + Mast**
- **Cabin (Heater)**
- **Rear View Camera**
- **High OHG (2,340mm)**
- **45D-9S : Class III Fork Carriage**
- **Rear View Camera**
- **High OHG (2,340mm)**
- **45D-9S : Class III Fork Carriage**
- **Under Cover**
- **Side Mirror (LH&RH)**
- **Shaft type Carriage**
- **Rain Cover**
- **Extinguisher**