

MEX50

SPECIFICATIONS

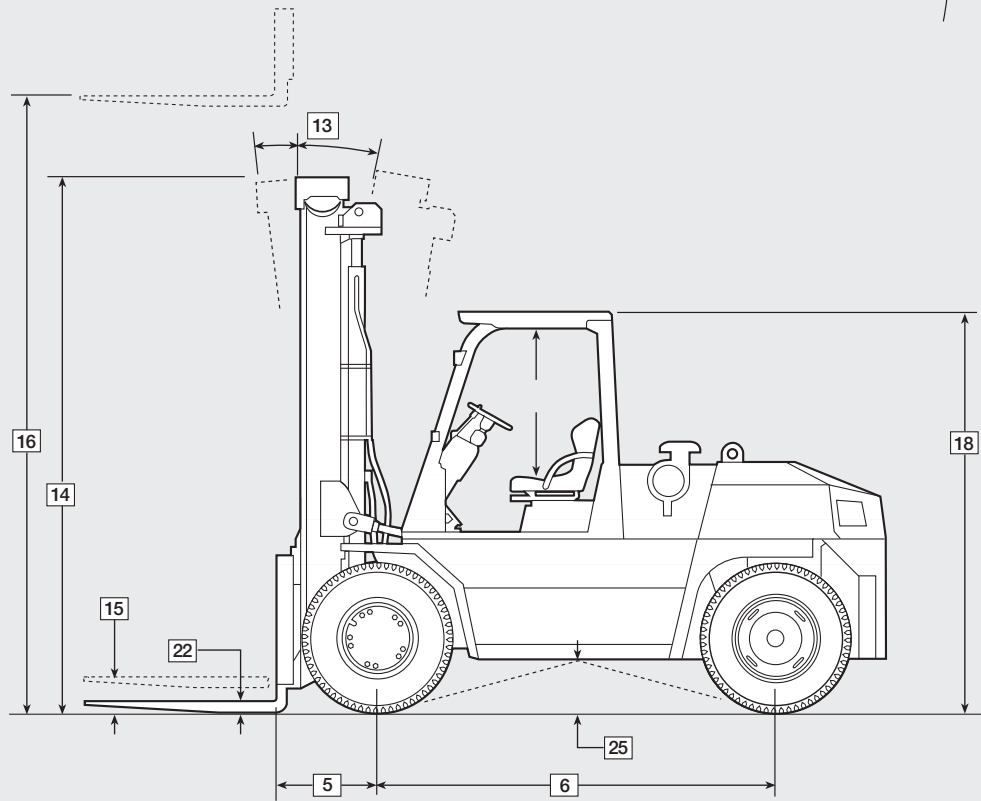
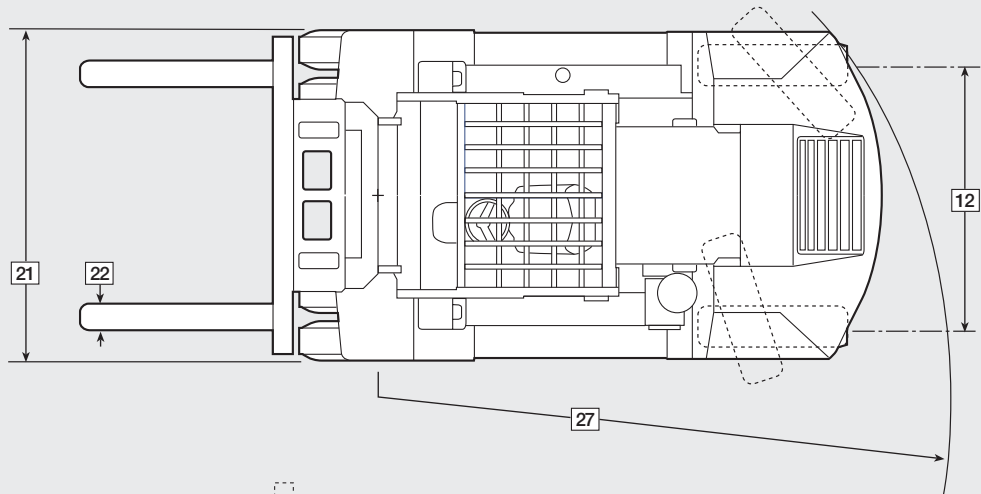
HAMECH

Pneumatic Tire Lift Trucks

DIESEL
22,000 – 35,500 LB CAPACITIES



MEX50 PNEUMATIC TIRE LIFT TRUCKS



MEX50 PNEUMATIC TIRE LIFT TRUCK SPECIFICATIONS

GENERAL			D100-8	D115-8	D135-8		
1	Power Type		Diesel	Diesel	Diesel		
2	Operation Type		Sit-Down	Sit-Down	Sit-Down		
3	Rated Capacity*	lbs. (kg)	22,000 (10000)	25,000 (11500)	30,000 (13500)		
4	Rated Load Center	in. (mm)	24 (600)	24 (600)	24 (600)		
5	Load Distance (Front Axle Center to Fork Face)	in. (mm)	27.4 (695)	28.1 (715)	29.1 (740)		
6	Wheelbase	in. (mm)	110.2 (2800)	110.2 (2800)	122.0 (3100)		
WEIGHT							
7	Service Weight	lbs. (kg)	28,620 (12980)	31,660 (14360)	34,130 (15480)		
8	Axle Loading	Loaded	Front	lbs. (kg)	45,990 (20860)	51,790 (23490)	58,310 (36450)
			Rear	lbs. (kg)	4,670 (2120)	5,220 (2370)	5,580 (2530)
		Unloaded	Front	lbs. (kg)	13,730 (6230)	14,530 (6590)	15,670 (7110)
			Rear	lbs. (kg)	14,880 (6750)	17,130 (7770)	18,450 (8370)
TIRES							
9	Tire Type		Pneumatic	Pneumatic	Pneumatic		
10	Tire Size	Front	9.00-20-14PR (I)	10.00-20-14PR (I)	11.00-20-14PR (I)		
		Rear	9.00-20-14PR (I)	10.00-20-14PR (I)	11.00-20-14PR (I)		
11	Number of Wheel - Front/Rear (x=driven)		4x/2	4x/2	4x/2		
12	Tread, (center of tires)	Front	in. (mm)	66.9 (1700)	66.9 (1700)	69.7 (1770)	
		Rear	in. (mm)	74.8 (1900)	74.4 (1890)	74.4 (1890)	
DIMENSIONS							
13	Tilting Angle (Forward/Backward)	degree	6/12	6/12	6/12		
14	Mast Height, Lowered with Std. Mast	in. (mm)	113.8 (2890)	124.4 (3160)	124.8 (3170)		
15	Std. Free Lift with Std. Mast from Ground	in. (mm)	0.0 (0)	0.0 (0)	0.0 (0)		
16	Maximum Fork Height**	in. (mm)	118 (3000)	118 (3000)	118 (3000)		
17	Mast Height, Extended with Std. Mast	in. (mm)	173.2 (4400)	183.9 (4670)	184.3 (4680)		
18	Height, Overhead Guard	in. (mm)	109.4 (2780)	110.2 (2800)	110.6 (2810)		
19	Length, with Std. Forks	in. (mm)	215.2 (5465)	216.7 (5505)	230.7 (5860)		
20	Length, to fork face	in. (mm)	167.1 (4245)	168.7 (4285)	182.7 (4640)		
21	Width, at tire	in. (mm)	89.8 (2280)	90.9 (2310)	94.9 (2410)		
22	Forks (Thickness x Width x Length)	in. (mm)	3.0x6.7x48.0 (75x170x1220)	3.0x7.3x48.0 (75x185x1220)	3.1x7.3x48.0 (80x185x1220)		
23	Fork Carriage Class		Pin Mount	Pin Mount	Pin Mount		
24	Width, Fork Carriage	in. (mm)	84.3 (2140)	84.3 (2140)	86.6 (2200)		
25	Ground Clearance	Under the Mast	in. (mm)	9.8 (250)	9.8 (250)	10.2 (260)	
		at the center of wheelbase	in. (mm)	12.8 (325)	13.6 (345)	13.8 (350)	
26	Right Angle Stacking Aisle plus load length †	in. (mm)	240.7 (6115)	241.9 (6145)	254.3 (6460)		
27	Turning Radius	in. (mm)	157.5 (4000)	157.9 (4010)	169.3 (4300)		
PERFORMANCE							
28	Travel Speed (FWD)	Loaded, 1st/2nd/3rd	mph (km/h)	5.3/11.2/17.4 (8.5/18/28)	5.3/11.8/17.4 (8.5/19/28)	5.6/12.1/17.1 (9/19.5/27.5)	
		Unloaded, 1st/2nd/3rd	mph (km/h)	5.6/12.4/19.9 (9/20/32)	5.6/13.0/19.9 (9/21/32)	5.9/13.0/20.2 (9.5/21/32)	
29	Lifting Speed (Loaded/Unloaded)	fpm (mm/s)	93/98 (470/500)	85/89 (430/450)	69/74 (350/375)		
30	Lowering Speed (Loaded/Unloaded)	fpm (mm/s)	78.7/98.4 (400/500)	78.7/98.4 (400/500)	78.7/98.4 (400/500)		
31	Max. Drawbar Pull (Loaded)	lbs. (kN)	23,800 (105)	23,300 (103)	22,700 (101)		
32	Max. Gradeability (Loaded 1.5km/h, 3min rating)	%	38	32	27		
33	Service Brake (Operation/Control)		Foot/Hydraulic, Powered	Foot/Hydraulic, Powered	Foot/Hydraulic, Powered		
34	Parking Brake (Operation/Control)		Hand/Mechanical	Hand/Mechanical	Hand/Mechanical		
35	Steering (Type)		Hydraulic Power Steering	Hydraulic Power Steering	Hydraulic Power Steering		
DRIVE							
36	Make/Model		Komatsu SAA6D107E-1	Komatsu SAA6D107E-1	Komatsu SAA6D107E-1		
37	Rated Output, SAE net	HP (kW)	164 (122)	164 (122)	164 (122)		
38	Rated Speed	min-1	2200	2200	2200		
39	Max Torque, SAE net	lb.- ft. (N-m) @ min-1	424 (575)@1600	424 (575)@1600	424 (575)@1600		
40	No. of Cylinder/Displacement	cu.in (cm ³)	6/408 (6690)	6/408 (6690)	6/408 (6690)		
OTHER							
41	Fuel Tank Capacity	US gal (Ltr)	68.7 (260)	68.7 (260)	74.0 (280)		
42	Relief Pressure for Attachment	psi (bar)	3,118 (215)	3,118 (215)	3,118 (215)		
43	Hydraulic Tank Capacity	US gal (Ltr)	48 (180)	48 (180)	55 (210)		
44	Clutch		Torque Converter	Torque Converter	Torque Converter		
45	Battery (Voltage/Capacity at 5-hour rating)	V/Ah	24/80	24/80	24/80		

NOTE: Most values shown in this publication are rounded. Therefore, direct conversion between metric and English or Imperial may be slightly different from those shown. The performance of machines is affected by the condition of the truck and how it is equipped, as well as the nature and condition of the operating area. If these specifications are critical or if you needs exceed the specifications shown here, discuss the proposed application with your authorized dealer.

*Optional masts, attachments, longer load dimensions, and higher lifting heights may result in downrating of the capacity. Contact your authorized dealer.

**Other mast heights available. See MAST DATA chart for other standard mast heights. Contact your authorized dealer.

†Add load distance and clearance. Contact your authorized dealer.

MEX50 PNEUMATIC TIRE LIFT TRUCK SPECIFICATIONS

GENERAL				D150E-8	D160E-8
1	Power Type			Diesel	Diesel
2	Operation Type			Sit-Down	Sit-Down
3	Rated Capacity*	lbs. (kg)		33,000 (15000)	35,000 (16000)
4	Rated Load Center	in. (mm)		24 (600)	24 (600)
5	Load Distance (Front Axle Center to Fork Face)	in. (mm)		29.5 (750)	29.5 (750)
6	Wheelbase	in. (mm)		122.0 (3100)	122.0 (3100)
WEIGHT					
7	Service Weight			36,530 (16570)	37,920 (17200)
8	Loaded	Front	lbs. (kg)	63,360 (28740)	66,450 (30140)
		Rear	lbs. (kg)	6,240 (2830)	6,750 (3060)
	Unloaded	Front	lbs. (kg)	15,900 (7210)	15,810 (7170)
		Rear	lbs. (kg)	20,640 (9360)	22,110 (10030)
TIRES					
9	Tire Type			Pneumatic	Pneumatic
10	Tire Size	Front		11.00-20-16PR (I)	12.00-20-16PR (I)
		Rear		11.00-20-16PR (I)	12.00-20-16PR (I)
11	Number of Wheel - Front/Rear (x=driven)			4x/2	4x/2
12	Tread, (center of tires)	Front	in. (mm)	69.7 (1770)	69.7 (1770)
		Rear	in. (mm)	74.4 (1890)	73.6 (1870)
DIMENSIONS					
13	Tilting Angle (Forward/Backward)			6/12	6/12
14	Mast Height, Lowered with Std. Mast			128.7 (3270)	129.5 (3290)
15	Std. Free Lift with Std. Mast from Ground			0.0 (0)	0.0 (0)
16	Maximum Fork Height**			118 (3000)	118 (3000)
17	Mast Height, Extended with Std. Mast			188.2 (4780)	189.0 (4800)
18	Height, Overhead Guard			110.6 (2810)	111.4 (2830)
19	Length, with Std. Forks			233 (5920)	237 (6020)
20	Length, to fork face			185 (4700)	189 (4800)
21	Width, at tire			94.9 (2410)	97.6 (2480)
22	Forks (Thickness x Width x Length)			3.3x7.5x48.0 (85x190x1220)	3.3x8.3x48.0 (85x210x1220)
23	Fork Carriage Class			Pin Mount	Pin Mount
24	Width, Fork Carriage			86.6 (2200)	86.6 (2200)
25	Ground Clearance	Under the Mast	in. (mm)	9.8 (250)	10.6 (270)
		at the center of wheelbase	in. (mm)	13.8 (350)	14.6 (370)
26	Right Angle Stacking Aisle plus load length †			256.7 (6520)	262.6 (6670)
27	Turning Radius			171.3 (4350)	177.2 (4500)
PERFORMANCE					
28	Travel Speed (FWD)	Loaded, 1st/2nd/3rd	mph (km/h)	5.6/12.1/17.1 (9/19.5/27.5)	5.9/12.4/17.4 (9.5/20/28)
		Unloaded, 1st/2nd/3rd	mph (km/h)	5.9/13.0/20.2 (9.5/21/32)	6.2/13.4/20.5 (10/21.5/32)
29	Lifting Speed (Loaded/Unloaded)		fpm (mm/s)	64/69 (325/350)	63/68 (320/345)
30	Lowering Speed (Loaded/Unloaded)		fpm (mm/s)	79/79 (400/400)	79/79 (400/400)
31	Max. Drawbar Pull (Loaded)		lbs. (kN)	21,350 (94)	21,170 (94)
32	Max. Gradeability (Loaded 1.5km/h, 3min rating)		%	23	22
33	Service Brake (Operation/Control)			Foot/Hydraulic, Powered	Foot/Hydraulic, Powered
34	Parking Brake (Operation/Control)			Hand/Mechanical	Hand/Mechanical
35	Steering (Type)			Hydraulic Power Steering	Hydraulic Power Steering
DRIVE					
36	Maker/Model			Komatsu SAA6D107E-1	Komatsu SAA6D107E-1
37	Rated Output, SAE net		HP (kW)	164 (122)	164 (122)
38	Rated Speed		min-1	2200	2200
39	Max Torque, SAE net		lb.- ft. (N-m) @ min-1	424 (575)@1600	424 (575)@1600
40	No. of Cylinder/Displacement		cu.in (cm ³)	6/408 (6690)	6/408 (6690)
OTHER					
41	Fuel Tank Capacity		US gal (Ltr)	74.0 (280)	74.0 (280)
42	Relief Pressure for Attachment		psi (bar)	3,118 (215)	3,118 (215)
43	Hydraulic Tank Capacity		US gal (Ltr)	55 (210)	55 (210)
44	Clutch			Torque Converter	Torque Converter
45	Battery (Voltage/Capacity at 5-hour rating)		V/Ah	24/80	24/80

NOTE: Most values shown in this publication are rounded. Therefore, direct conversion between metric and English or Imperial may be slightly different from those shown. The performance of machines is affected by the condition of the truck and how it is equipped, as well as the nature and condition of the operating area. If these specifications are critical or if your needs exceed the specifications shown here, discuss the proposed application with your authorized dealer.

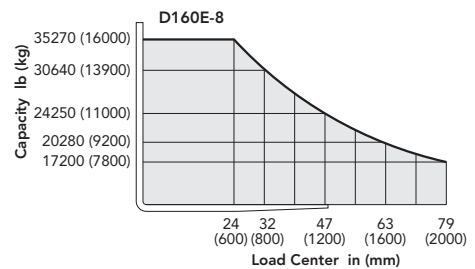
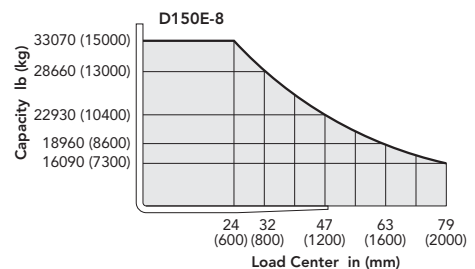
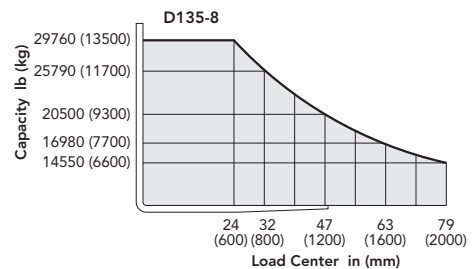
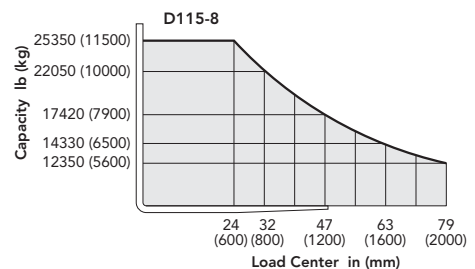
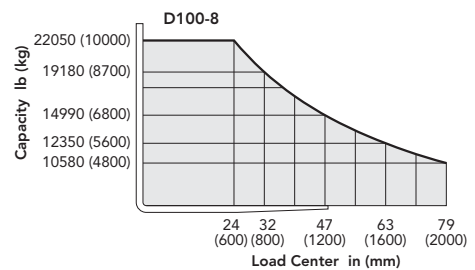
*Optional masts, attachments, longer load dimensions, and higher lifting heights may result in downrating of the capacity. Contact your authorized dealer.

**Other mast heights available. See MAST DATA chart for other standard mast heights. Contact your authorized dealer.

†Add load distance and clearance. Contact your authorized dealer.

MEX50 TRUCK DATA AND FEATURES

Maximum Fork Height in. (mm)	Overall Height Lowered in. (mm)	Overall Height Extended in. (mm)	Load Capacity lbs. (kg)	Free Lift in. (mm)	Back Tilt Restriction
D100-8 2-STAGE VIEW MAST					
118 (3000)	113.8 (2890)	173.2 (4400)	22,000 (10000)	0 (0)	12°
130 (3300)	119.7 (3040)	185.0 (4700)	22,000 (10000)		
138 (3500)	123.6 (3140)	192.9 (4900)	22,000 (10000)		
146 (3700)	127.6 (3240)	200.8 (5100)	22,000 (10000)		
157 (4000)	133.5 (3390)	212.6 (5400)	22,000 (10000)		
177 (4500)	147.2 (3740)	236.2 (6000)	22,000 (10000)		
197 (5000)	163.0 (4140)	261.8 (6650)	22,000 (10000)		
217 (5500)	174.8 (4440)	283.5 (7200)	19,800 (9000)		
236 (6000)	184.6 (4690)	303.1 (7700)	17,600 (8000)		
D115-8 2-STAGE VIEW MAST					
118 (3000)	124.4 (3160)	183.9 (4670)	25,000 (11500)	0 (0)	12°
130 (3300)	130.3 (3310)	195.7 (4970)	25,000 (11500)		
138 (3500)	134.3 (3410)	203.5 (5170)	25,000 (11500)		
146 (3700)	138.2 (3510)	211.4 (5370)	25,000 (11500)		
157 (4000)	148.0 (3760)	219.3 (5770)	25,000 (11500)		
177 (4500)	157.9 (4010)	246.8 (6270)	25,000 (11500)		
197 (5000)	175.6 (4460)	274.4 (6970)	25,000 (11500)		
217 (5500)	185.4 (4710)	294.1 (7470)	22,000 (10000)		
236 (6000)	195.3 (4960)	313.8 (7970)	19,800 (9000)		
D135-8 2-STAGE VIEW MAST					
118 (3000)	124.8 (3170)	184.3 (4680)	30,000 (13500)	0 (0)	12°
130 (3300)	130.7 (3320)	196.1 (4980)	30,000 (13500)		
138 (3500)	134.6 (3420)	203.9 (5180)	30,000 (13500)		
146 (3700)	138.6 (3520)	211.8 (5380)	30,000 (13500)		
157 (4000)	148.4 (3770)	227.6 (5780)	30,000 (13500)		
177 (4500)	158.3 (4020)	247.2 (6280)	30,000 (13500)		
197 (5000)	176.0 (4470)	274.8 (6980)	30,000 (13500)		
217 (5500)	185.8 (4720)	294.5 (7480)	26,500 (12000)		
236 (6000)	195.7 (4970)	314.2 (7980)	24,300 (11000)		
D150E-8 2-STAGE VIEW MAST					
118 (3000)	128.7 (3270)	188.2 (4780)	33,000 (15000)	0 (0)	12°
130 (3300)	134.6 (3420)	200.0 (5080)	33,000 (15000)		
138 (3500)	138.6 (3520)	207.9 (5280)	33,000 (15000)		
146 (3700)	142.5 (3620)	215.7 (5480)	33,000 (15000)		
157 (4000)	148.4 (3770)	227.6 (5780)	33,000 (15000)		
177 (4500)	158.3 (4020)	247.2 (6280)	33,000 (15000)		
197 (5000)	176.0 (4470)	274.8 (6980)	33,000 (15000)		
217 (5500)	185.3 (4720)	294.5 (7480)	29,800 (13500)		
236 (6000)	195.7 (4970)	314.2 (7980)	26,500 (12000)		
D160E-8 2-STAGE VIEW MAST					
118 (3000)	129.5 (3290)	189.0 (4800)	35,300 (16000)	0 (0)	12°
130 (3300)	135.4 (3440)	200.8 (5100)	35,300 (16000)		
138 (3500)	139.4 (3540)	208.7 (5300)	35,300 (16000)		
146 (3700)	143.3 (3640)	216.5 (5500)	35,300 (16000)		
157 (4000)	149.2 (3790)	228.3 (5800)	35,300 (16000)		
177 (4500)	159.1 (4040)	248.0 (6300)	35,300 (16000)		
197 (5000)	176.8 (4490)	275.6 (7000)	35,300 (16000)		
217 (5500)	186.6 (4740)	295.3 (7500)	32,000 (14500)		
236 (6000)	196.5 (4990)	315.0 (8000)	28,700 (13000)		



Standard mast is shown in broad frame.

Load capacity at 24in. (600mm) load center.

Capacities shown are for trucks equipped with 2-stage view mast up through 197in. (5000mm) maximum fork.

Performance specifications are affected by the conditions of the vehicle and how it is equipped as well as the nature and conditions of the operating area. If these specifications are critical, please discuss the proposed application with your distributor or dealer.

FEATURES AND EQUIPMENT

SPECIAL FEATURES

- The Komatsu SAA6D102E-1 diesel industrial engine delivers exceptional power, emission control, and reliable operation for enhanced productivity and fuel efficiency.
- Full floating operator compartment (HSC) greatly reduces operator fatigue by isolating the compartment from engine and traveling vibrations.
- Wide slip resistant steps and assist hand grip makes entry and exit easier.
- Dash display provides easy to read information to the operator and maintenance personnel.

STANDARD EQUIPMENT

- Dash Display – Fuel, Water Temperature, Torque Converter oil temperature and Hour Meter Gauges
- Drawbar Pin
- Electronic Ignition; Anti-Restart Ignition Switch
- Engine Oil Pressure and Charge Warning Lamps
- Fully Hydrostatic Power Steering
- Headlights
- Horn
- Deluxe full suspension vinyl seat and Operator Restraint System with Lap Belts
- Overhead Guard

- Sedimeter warning light (Diesel Units)
- Tilting Steering Column
- Torque Converter Oil Cooler
- Turn Signal, Back-up, Stop and Tail Lights

OPTIONAL EQUIPMENT

- Warning Devices – Audible
- Warning Devices – Visual
- Rear View Mirrors
- Wet disc brakes
- Additional Length Forks
- Attachments
- Auxiliary Hydraulic Valve
- External Hydraulic Hosing

TECHNICAL DATA

ENGINE

SAA6D107E-1 diesel, 6.7 liter turbo-charged engine adopts the latest engine technologies, and dramatically reduces NOx and PM in exhaust. Also, each system usefully interacts for better fuel efficiency and lower noise levels. Reliable fuel filters keep system performance high and protect components. The engine offers full performance and power even in severe conditions.

- Electronic Control System
The center control unit quickly processes signals from various sensors on the vehicle in order to produce a maximum power in any condition, eliminating possible loss of engine performance.
- Heavy duty High Pressure Common Rail (HPCR) System High pressure compressed fuel stored in an accumulator chamber (common rail) is injected into each cylinder sufficiently at a proper timing by an electronic controlled unit (ECU). This HPCR system promises optimized fuel burning and reduced fuel consumption.
- Piston Head Combustion System
A unique shape of the combustion chamber on the top surface of each piston facilitates complete fuel burning by optimizing conditions, timings and amounts of fuel injection, which helps reduce NOx and PM in exhaust, as well as fuel consumption.
- Air to Air Charge Air Cooling System
This system cools high temperature air blown by the turbocharger and supplies into the cylinders. As a result, the system maximizes combustion efficiency and emission performance, facilitating high output while reducing NOx and fuel consumption.

FUEL SYSTEM

Diesel fuel system.

- Large capacity (68.7-74 gal) Integral diesel fuel tank reduces fueling frequency and enables extended non-stop operation.
- Easy to see inspection window mounted on the fuel tank permits reliable checking of fuel levels.

ELECTRICAL SYSTEM

Standard operator conveniences that are optional on most, such as a complete light package, horn and hour meter, are standard on Hamech.

- 12-volt electrical system.
- Warning lights for engine oil pressure, battery charging, brake fluid level, ECCS monitor and operation fault indicator.
- Electrically controlled forward-reverse lever operates at the touch of a finger.

HYDRAULIC SYSTEM

- Large capacity reservoir
- Easy to see inspection window mounted on the oil tank permits reliable checking of oil levels as well as the degree of oil contamination.

FRAME

All welded assembly of heavy gauge steel with integral fuel tank.

- Mainframe structure includes single thick steel plate providing rigidity against twisting caused by static steering, turning, or uneven road surfaces, thus achieving excellent vehicle durability and load handling performance.

TRANSMISSION

The transmission is three speed and is built to exacting specifications. It is specially designed for use in industrial lift trucks. The three speed "Powershift" transmission is also available as an optional automatic with forward / reverse lever.

BRAKES

Hydraulic assisted service brakes with master cylinder booster are self-adjusting and self-centering.

- High friction, large diameter brake linings are housed in the drive axle.
- Enlarged brake covers prevent dirt and water from entering the linings.
- Mechanical parking brake is actuated from adjustable toggle handle on dash allowing for more legroom in the operator's compartment.
- Optional wet disc braking system

MAST, CARRIAGE, LBR & FORKS

High-visibility mast assembly with 4-roller carriage available in 2-Stage Free-View type.

- Sealed bearings for reduced maintenance on carriage.
- Equipped with pin type IV carriage and forks
- Single and double function external hosing is available for operating attachments.

TECHNICAL DATA

OPERATOR COMPARTMENT

A unique full-floating operator compartment (HSC) designed to isolate the operator from fatigue producing vibration.

- Deluxe full suspension seat with retractable seat belt, lateral restraint system, and adjustable seat travel and reclining is standard.
- Hydraulic control levers within easy reach of the operator.
- Tilting steering console positions instrument panel in full view of operator at all times.
- Floor mounted automotive-type pedals with large ribbed pads for comfort and safe operation.
- Full width floor mat provides large non-slip surface, reduces noise, vibration, and heat.

- Large open steps and convenient assist handgrip provides easy entry and exit for the operator.
- Separate inching and braking pedals provide positive control while reducing wear on the drive train.
- Trucks come standard with an integral headlight/turn indicator control. Turn indicator has automatic return to neutral.
- The overhead guard is full width and offers excellent visibility for stacking high loads.
- Rear visibility is enhanced with the shape of the back portion of the rear counterweight.

COMPLIANCE & APPROVALS

Meets or exceeds American National Standards Institute, ASME B56.1 – Part III Safety Standards for Powered Industrial Trucks.

Compliant with UL 558 for the appropriate truck type. Contact your authorized dealer for application specifics. Meets or Exceeds EPA emissions standards

Expect solid support nationwide

Hamech, a brand of Crown Equipment Corporation, offers a comprehensive service support network for Hamech LPG, gas or diesel lift trucks.

You can expect ongoing value with the comprehensive services available from your Hamech dealer. See it for yourself in state-of-the-art facilities stocked with products and parts inventories, advanced processes, equipment and tools. It's also apparent in the professionally trained service technicians and well-stocked service vans.

In addition, you can count on Hamech for operator and service technician training, flexible maintenance programs, fleet management and financial services. Hamech's association with Crown also assures you of access to industry-leading electric lift trucks for complete application flexibility.

Visit hamech.com for more information on the full line of Hamech IC lift trucks.



Hamech Lift Trucks
New Bremen, Ohio 45869 USA
Tel 419-629-2311
Fax 419-629-3796

Hamech is a brand of Crown Equipment Corporation.

Because Hamech is continually improving its products, specifications are subject to change without notice.

Hamech and the Hamech logo are trademarks of Crown Equipment Corporation.

Copyright 2008 Crown Equipment Corporation
SF14902 03/08
Printed in U.S.A.

Free Manuals Download Website

<http://myh66.com>

<http://usermanuals.us>

<http://www.somanuals.com>

<http://www.4manuals.cc>

<http://www.manual-lib.com>

<http://www.404manual.com>

<http://www.luxmanual.com>

<http://aubethermostatmanual.com>

Golf course search by state

<http://golfingnear.com>

Email search by domain

<http://emailbydomain.com>

Auto manuals search

<http://auto.somanuals.com>

TV manuals search

<http://tv.somanuals.com>