

Hydrostatic Drive Diesel Trucks 11,000 - 17,500 lb Capacity



H50D
H60D
H70D
H80D

Series 353-03

INTRODUCTION

This truck series offers the following outstanding features:

Design

Designed with the aid of the latest methods - FEM (Finite Element Modeling) and CAD (Computer Assisted Design).

Performance

High productivity at minimal fuel consumption achieved by utilizing high-torque engines in combination with Linde-built hydrostatic drive system.

Maintenance

Dramatically reduced maintenance expense due to high-tech components and long service intervals.

Ergonomics

Full-time, shock-mounted cab featuring Linde twin-pedal directional control system, standard adjustable suspension seat, ample footroom, and sound abatement package.

Earth-friendly

Linde's exclusive automatic engine speed control system ensures that the engine and hydrostatic drive system are constantly operating at the lowest possible rpm. This results in substantial fuel savings, reduced emissions, reduced ambient noise, and extended service intervals (500 hours service for engine oil and filter). The long engine service intervals reduce the accumulation of waste oil.

OPERATOR CONTROLS

Linde's patented vehicle control system combines the truck's travel and hydraulic systems in an operator-friendly design that eliminates the need for an accelerator pedal. Vehicle travel, lift, tilt, and auxiliary speeds plus steering effort are automatically selected by the operator during day-to-day operation.

ENGINES

Liquid-cooled KHD/Deutz Turbo-Diesel engines featuring forged industrial com-

ponents deliver high torque at low rpm. These engines have been designed to operate at peak efficiency with long service intervals, while featuring extremely low emissions.

HYDROSTATIC DRIVE

Linde's exclusive hydrostatic drive is proven reliable, smooth, and efficient. An engine-direct-driven axial piston swash plate pump displaces oil to two axial piston wheel motors attached directly to individual planetary drive units. Hydraulic differential eliminates the need for ring-and-pinion gear reduction and a conventional drive axle. The hydrostatic drive system also eliminates the following additional wear items: mechanical transmission, torque converter, universal joints, drive shafts, and clutch packs.

BRAKES

Multiple brake systems ensure maximum safety. The Linde hydrostatic drive system features wear-free dynamic braking through the drive line. Additional oil disc brakes provide for high-speed emergency stopping and secure parking.

Manufacturer's data and design characteristics

May 2005

Characteristics	1.1	Manufacturer	Abbreviation/Description		Linde
	1.2	Model	Manufacturer designation		H50D
	1.3	Capacity rating	Base capacity	lb (kg)	11,000 (5,000)
	1.4	Load center	Lc	in (mm)	24 (600)
	1.5	Power source	Electric, diesel, LP, other		Diesel
	1.6	Position of operator	Walkie, rider: stand/sitdown		Rider/sitdown
	1.7	Tire type, front/rear	C=Cushion; SE=Super Elastic, P=Pneu		P/P
	1.8	Wheels	Total number (x = driven), front/rear		2x(4x)/2
	1.8	Steering	Power/manual		Power
Dimensions	2.1	Simple mast		in (mm)	See mast table
	2.2	Dual mast		in (mm)	See price list
	2.3	Triple mast		in (mm)	See price list
	2.4	Carriage	Class/width	in (mm)	IV/70.9 (IV/1,800)
	2.5	Fork dimensions	t x l x w3	in (mm)	2.5x48x6 (64x1,219x152)
	2.6	Load backrest height	LBR	in (mm)	55 (1,400)
	2.7	Tilt	Forward/backward	degrees	See mast table
	2.8	Total length	l2 - Length to forkface	in (mm)	133.5 (3,390)
	2.9	Overall width, front	w/w2	in (mm)	73.4/87.8 ²⁾ (1,864/2,230) ²⁾
	2.10	Front overhang	x	in (mm)	23.2 (590)
	2.11	Overall truck height	h6	in (mm)	106.9 (2,714)
	2.12	Seat height		in (mm)	56.4 (1,432)
	2.13	Turning radius	TR	in (mm)	120.5 (3,060)
	2.14	Aisle width	AW	in (mm)	143.5 ¹⁾ (3,645) ¹⁾
Performance	3.1	Travel speed	With/without load	mph (kmh)	13.7/13.7 (22.0/22.0)
	3.2	Lifting speed	With/without load	fpm (mps)	104.3/104.3 (0.53/0.53)
	3.3	Lowering speed	With/without load	fpm (mph)	98.4/98.4 (0.50/0.50)
	3.4	Drawbar pull	With/without load	lb (N)	13,737/6,938 (61,000/31,000)
	3.5	Gradeability	With/without load	%	45/28
Weight	4.1	Weight	Without load	lb (kg)	20,503 (9,300)
	4.2	Axle loading	With load, front/rear	lb (kg)	26,896/4,630 (12,200/2,100)
	4.3	Axle loading	Without load, front/rear	lb (kg)	9,888/10,692 (4,485/4,850)
Chassis	5.1	Tire size	Front	in (mm)	300-15/22PR
	5.2	Tire size	Rear	in (mm)	8.25-15/18PR
	5.3	Wheel base	y	in (mm)	85 (2,160)
	5.4	Track width	Ctw Center line of the tires, front/rear	in (mm)	61.6/63 (1,564/1,600)
	5.5	Ground clearance	m1 with load (mast)	in (mm)	8 (202)
	5.6	Ground clearance	m2 with load (chassis)	in (mm)	9.7 (245)
	5.7	Brake system			Dynamic/hydraulic
	5.8	Parking brake			Foot
Drive	6.1	Voltage		v	12
	6.2	Engine	Manufacturer/model/cylinders		KHD/BF6M2012/6
	6.3	Engine rating		hp (kw)	100 (75)
	6.4	Engine rpm		max. rpm	2,200
	6.5	Engine displacement		cu in (cc)	369 (6,060)
	6.6	Transmission			Hydrostatic
	6.7	Noise level		dBa	78
	6.8	Speed control			Infinitely variable
	6.9	Hydraulic system	Operating pressure		3,771 (260)

¹⁾ Plus load length, plus clearance for 90° stack. ²⁾ (w2) = Chassis width with dual drive tires.



Linde	Linde	Linde	
H60D	H70D	H80D	1.1
13,000 (6,000)	15,000 (7,000)	17,500 (8,000)	1.2
24 (600)	24 (600)	24 (600)	1.3
Diesel	Diesel	Diesel	1.4
Rider/sitdown	Rider/sitdown	Rider/sitdown	1.5
P/P	P/P	P/P	1.6
2x(4x)/2	4x(2x)/2	4x(2x)/2	1.7
Power	Power	Power	1.8
See mast table	See mast table	See mast table	2.1
See price list	See price list	See price list	2.2
See price list	See price list	See price list	2.3
IV/70.9 (IV/1,800)	IV/85.8 (IV/2,180)	IV/85.8 (IV/2,180)	2.4
2.5x48x6 (64x1,219x152)	2.75x48x6 (70x1,219x152)	2.75x48x8 (70x1,219x203)	2.5
55 (1,400)	55 (1,400)	55 (1,400)	2.6
See mast table	See mast table	See mast table	2.7
133.5 (3,390)	133.9 (3,400)	133.9 (3,400)	2.8
75.5/87.8 ²⁾ (1,918/2,230) ²⁾	87.8 ²⁾ (2,230) ²⁾	87.8 ²⁾ (2,230) ²⁾	2.9
23.2 (590)	23.6 (600)	23.6 (600)	2.10
106.9 (2,714)	106.9 (2,714)	106.9 (2,714)	2.11
56.4 (1,432)	56.4 (1,432)	56.4 (1,432)	2.12
120.5 (3,060)	120.5 (3,060)	120.5 (3,060)	2.13
143.5 ¹⁾ (3,645) ¹⁾	143.7 ¹⁾ (3,650) ¹⁾	143.9 ¹⁾ (3,650) ¹⁾	2.14
13.7/13.7 (22.0/22.0)	13.7/13.7 (22.0/22.0)	13.7/13.7 (22.0/22.0)	3.1
104.3/104.3 (0.53/0.53)	82.6/82.6 (0.42/0.42)	82.6/82.6 (0.42/0.42)	3.2
98.4/98.4 (0.50/0.50)	82.6/82.6 (0.42/0.42)	82.6/82.6 (0.42/0.42)	3.3
12,836/7,500 (57,000/33,000)	13,062/7,955 (58,000/35,000)	13,062/7,955 (58,000/35,000)	3.4
35/27	29/28	26/27	3.5
21,054 (9,550)	23,722 (10,760)	25,463 (11,550)	4.1
30,357/3,924 (13,770/1,780)	34,510/4,652 (15,650/2,110)	37,831/5,159 (17,160/2,340)	4.2
9,855/11,200 (4,470/5,080)	10,516/13,206 (4,770/5,990)	10,428/14,925 (4,730/6,770)	4.3
355/65-15/24PR	8.25-15/18PR	8.25-15/18PR	5.1
8.25-15/18PR	300-15/18PR	300-15/18PR	5.2
85 (2,160)	85 (2,160)	85 (2,160)	5.3
61.6/63 (1,564/1,600)	67.6/63 (1,718/1,600)	67.6/63(1,718/1,550)	5.4
8 (202)	8 (202)	8 (202)	5.5
9.7 (245)	9.7 (245)	9.7 (245)	5.6
Dynamic/hydraulic	Dynamic/hydraulic	Dynamic/hydraulic	5.7
Foot	Foot	Foot	5.8
12	12	12	6.1
KHD/BF6M2012/6	KHD/BF6M2012/6	KHD/BF6M2012/6	6.2
100 (75)	100 (75)	100 (75)	6.3
2,200	2,200	2,200	6.4
369 (6,060)	369 (6,060)	369 (6,060)	6.5
Hydrostatic	Hydrostatic	Hydrostatic	6.6
78	78	78	6.7
Infinitely variable	Infinitely variable	Infinitely variable	6.8
3,771 (260)	3,771 (260)	3,771 (260)	6.9

Series 353-03

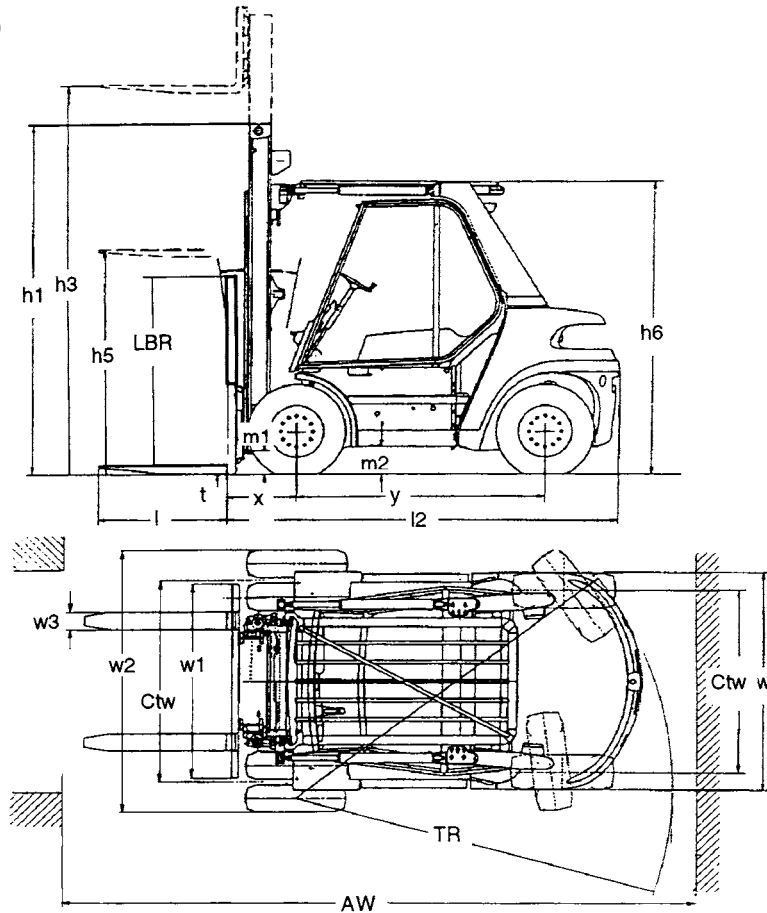


H50D

H60D

H70D

H80D



MAST AND CAPACITY INFORMATION H50D, H60D inch (mm)

Mast Type	Collapsed Height	Maximum* Fork Height	Free Lift		Capacity @ 24" Load Center - lb (kg)		Tilt**	
	h1	h3	With LBR	Without LBR	H50D	H60D	Fwd.	Back
Simple	107.0 (2,718)	140.0 (3,556)	0	0	11,000 (5,000)	13,000 (6,000)	7°	9°
	119.0 (3,023)	163.5 (4,153)	0	0	11,000 (5,000)	13,000 (6,000)	6°	10°
	126.5 (3,213)	179.5 (4,559)	0	0	11,000 (5,000)	13,000 (6,000)	6°	10°
	140.5 (3,569)	207.0 (5,258)	0	0	11,000 (5,000)	13,000 (6,000)	6°	10°
	148.5 (3,772)	222.5 (5,652)	0	0	11,000 (5,000)	13,000 (6,000)	6°	10°
	156.0 (3,962)	238.5 (6,058)	0	0	11,000 (5,000)	13,000 (6,000)	6°	10°
	164.0 (4,166)	254.0 (6,452)	0	0	11,000 (5,000)	13,000 (6,000)	6°	10°

MAST AND CAPACITY INFORMATION H70D, H80D inch (mm)

Mast Type	Collapsed Height	Maximum* Fork Height	Free Lift		Capacity @ 24" Load Center - lb (kg)		Tilt**	
	h1	h3	With LBR	Without LBR	H70D	H80D	Fwd.	Back
Simple	107.0 (2,718)	124.5 (3,162)	0	0	15,000 (7,000)	17,500 (8,000)	6°	7.5°
	119.0 (3,023)	148.0 (3,759)	0	0	15,000 (7,000)	17,500 (8,000)	6°	10°
	126.5 (3,213)	163.5 (4,153)	0	0	15,000 (7,000)	17,500 (8,000)	6°	10°
	140.5 (3,569)	191.0 (4,851)	0	0	15,000 (7,000)	17,500 (8,000)	6°	10°
	148.5 (3,772)	207.0 (5,258)	0	0	15,000 (7,000)	17,500 (8,000)	6°	10°
	156.0 (3,962)	222.5 (5,652)	0	0	15,000 (7,000)	17,500 (8,000)	6°	10°
	164.0 (4,166)	238.5 (6,058)	0	0	15,000 (7,000)	16,665 (7,559)	6°	10°

For dual and triple mast capacity information, contact factory.

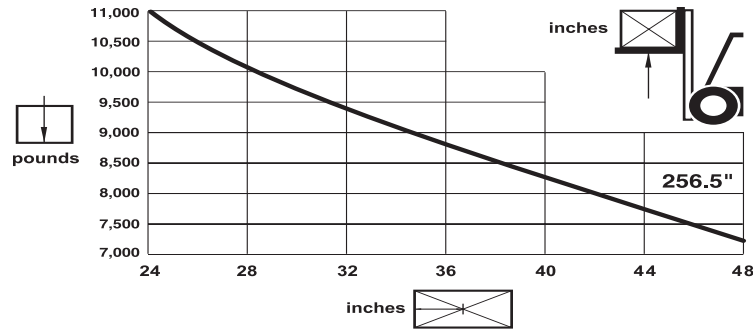
* For overall raised height with LBR, add 55 in (1,400 mm).

** Tilt requirements may change, depending on options added.

Downrating charts

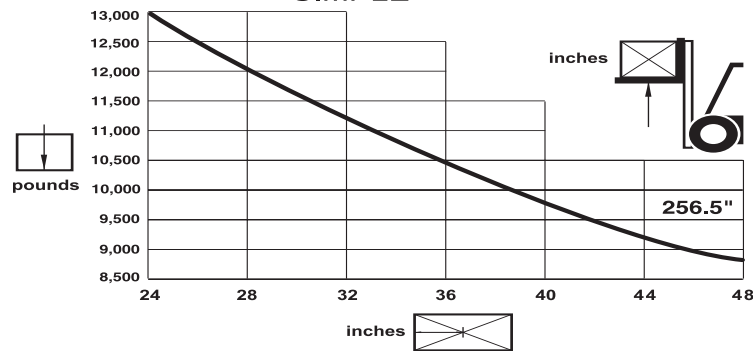
Downrating Chart H50

SIMPLE



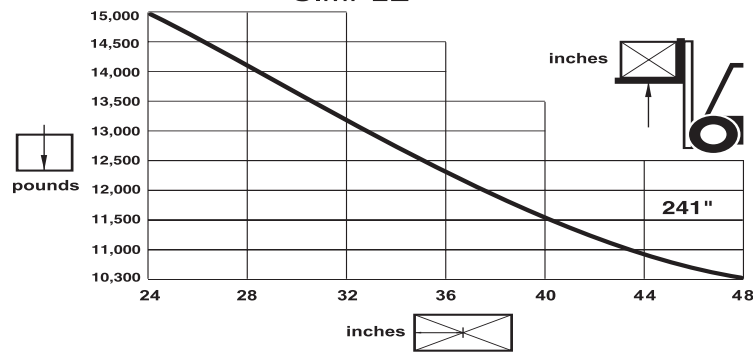
Downrating Chart H60

SIMPLE



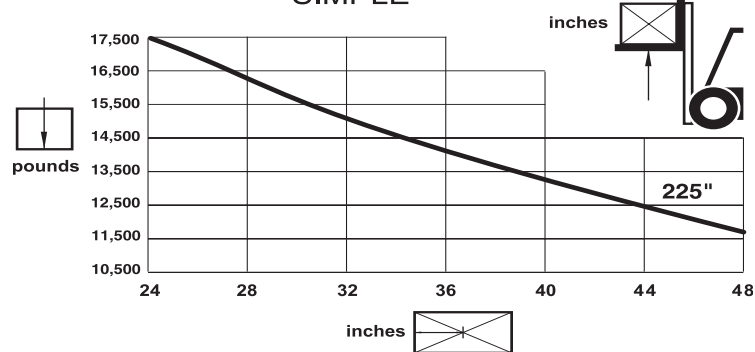
Downrating Chart H70

SIMPLE



Downrating Chart H80

SIMPLE



Contact manufacturer for additional downrating information.

POWER STEERING:

Full-time hydrostatic power steering provides low-effort steering response under all operating conditions.

FRAME:

Truck frames feature complete seam-welded belly pans for maximum component protection as standard equipment.

STEERING AXLE:

Rugged single-piece cast steering axles provide 82° interior wheel turning for maximum maneuverability. Large-diameter, specially formulated synthetic rubber mounting blocks guarantee excellent shock absorption and a wear-free lifetime mounting. Tapered roller bearings in the kingpin assemblies; grease zerks; a large-diameter, double-acting steering cylinder; and forged compact steering arms result in a highly durable axle design.

TRU-VIEW® MASTS:

A wide selection of masts featuring rolled alloy I-beam construction for maximum strength is available. H50D/H60D mast assemblies feature heavy-duty six-roller carriage construction. H70D/H80D utilize eight roller carriages.

HYDRAULIC SYSTEM:

Linde's exclusive sealed and pressurized hydraulic system eliminates potential hydraulic oil contamination. Even in the most severe applications, abrasives are stopped from entering the system due to the elimination of an oil reservoir breather. Dual full-flow micronic filters are provided as standard equipment.

INSTRUMENTATION:

An easy-to-read combination instrument cluster displays vehicle systems' status at a glance. Standard status indicators include: engine oil pressure, hydraulic oil temperature, engine coolant temperature, alternator charging, low fuel, and air filter restriction. Combi instrument also features integral hourmeter.

OPERATOR COMPARTMENT:

A four-point elastic mounting secures the operator compartment to the truck frame. A separate service compartment in the right staircase houses the truck's starter battery.

TILT CYLINDERS & OVERHEAD GUARD:

Dual overhead chrome-plated tilt cylinders provide maximum load support and stability. The patented Linde LTS (Linde Torsion Support) System incorporates a moving overhead guard for unmatched operator protection.

FUEL TANK CAPACITY:

18.5 gallons

SAFETY SYSTEM:

- Standard dynamic braking
- Automatic brake engagement when engine is shut off
- Starter lock-out. Truck won't start unless parking brake is applied.

STANDARD EQUIPMENT:

- Hydrostatic drive with dual pedal control
- 12-volt electrical system
- Cold weather start system
- Single pneumatic drive tires (H50D/H60D)
- Dual pneumatic drive tires (H70D/H80D)
- Combination instrument
- Horn
- Electric ignition/shut down
- Stacked exhaust
- 3-function hydraulic valve
- Parking brake
- Hydrostatic power steering
- Load backrest and 48" forks
- Towing pin
- Weight adjustable suspension seat
- Overhead guard
- Air pre-cleaner and two-stage air filter
- Sound abatement package (78dBa)
- Headlights

OPTIONAL EQUIPMENT:

- Dual and Triple masts (contact factory)
- Additional hydraulic functions
- Enclosed cab with heater, defroster, and wipers
- Air conditioning
- Working lights (additional)
- SE tires
- Backup alarm
- Catalytic muffler
- Road lights
- Special paint

Check with dealer/factory for additional equipment availability.

**** NOTES ****

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ANSI CLASSIFICATION: Standard truck meets all applicable mandatory requirements of ANSI/ASME B56.1 standards for powered industrial trucks.
NOTE: Performance data may vary due to motor and system efficiency tolerances. The performance depicted represents nominal values obtained under typical operating conditions. Metric dimensions are in millimeters unless otherwise specified. All metric dimensions are not direct equivalents due to rounding data. The descriptions and specifications included on this data sheet were in effect at the time of printing. Linde Lift Truck Corporation reserves the right to make improvements and changes in specification or design without notice and without incurring obligation. Please check with your authorized Linde dealer for information on possible updates or revisions.