# L-1150 GENERATION2

LeTourneau MINING PRODUCTS



ENGINE PAYLOAD

STANDARD

HIGH LIFT
BUCKET CAPACITY

TRUCK MATCH

1205 hp

899 kW

76000 lb

34473 kg

70000 lb

31751 kg

sized to material density

150 - 200 ton

136 - 181 tonne



## POWER MODULE

#### **DIESEL POWER OPTIONS**

#### MTU DETROIT DIESEL ENGINE

Model Tier Two
Model 16V Series 2000
16 cylinders

Type 4-cycle turbocharged Rated Power 1205 hp (899 kW) @ 1800 rpm

#### **CUMMINS DIESEL ENGINE**

Tier Two
Standard Model QSK 38 V12

12 cylinders

Type Single stage turbocharged Rated Power 1205 hp (899 kW) @ 1800 rpm

The independent power module mounting system, consisting of the engine coupled to the SR generator, is cradled within the rear frame by a three-point isolation system.

#### RADIATOR/OIL COOLER MODULE

- Replaceable tube type, side-by-side split flow
- Thermostatically controlled, variable speed hydraulic motor-driven, radiator-mounted fan
- · Auxiliary oil cooler available for high ambient conditions

#### **EXHAUST SYSTEM**

Dual low restriction mufflers with vertical, mid-hood discharge

#### AIR FILTRATION

#### **PRIMARY**

LeTourneau Self Cleaning KLENZ™ Filtration System 99.9% Efficiency Removing to 0.3 Microns (nominal)

- Extends maintenance intervals
- Filtered air for engine, drive system cooling and pressurized cab

## **SECONDARY**

Dual safety filters for engine

# CONTROL SYSTEM – LINCS II™

#### LeTOURNEAU INTEGRATED NETWORK CONTROL SYSTEM-LINCS II™

Next generation microprocessor based modular design Vehicle Control Unit with monitoring and diagnostics including integrated data logging and storage.

LINCS II™ uses a dash mounted full color touch screen display as the operator interface. Out of range conditions will cause an audible alarm along with a message screen that is color coded to indicate severity.

In addition, the touch-screen display provides repair technicians with operational data and fault messages.

#### LINCS II™ LOAD WEIGH

Displays real-time load per pass, per truck and total loads

- Memory capable of retaining months of production information
- Capable of interfacing with radio dispatch systems for real-time monitoring

## PROPULSION SYSTEM

LeTourneau Switched Reluctance (SR) Hybrid Technology Propulsion System

- Digital microprocessor controlled traction drive
- Switched Reluctance (SR) drive advantages include:
  - No commutator, brushes or rotor windings on SR motors or generator
  - Hybrid regenerative energy storage for improved fuel economy
  - Parts commonality power conversion module identical for motor and generator

## TRAVEL SPEED

Forward and reverse 0-12 mph (0-19.31 km/h)

#### **GENERATOR**

- LeTourneau G100 SR generator
- Switched Reluctance (SR)

#### TRACTION MOTORS

- · LeTourneau B40A SR motor
- SR all wheel drive (independent SR motor for each wheel)

#### **DRIVE GEARING**

#### Model

LeTourneau 45

- In-line gear train mounted within the rim of the tire, transmitting power from the traction motor through the tire/rim assembly.
- · A four-stage planetary drive unit in each position
- Total reduction 92:1

## BRAKING SYSTEM

#### PRIMARY BRAKE SYSTEM

Electric dynamic braking system is controlled from the accelerator pedal and can bring the loader to a full stop without application of mechanical brakes.

#### SECONDARY BRAKE SYSTEM

Air modulated traction motor speed disc brakes

- Single disc and caliper on each traction motor
- Emergency fail safe brakes are spring applied in the event of air pressure loss

## PARKING BRAKE SYSTEM

Spring applied, air release traction motor speed disc brakes

## STEERING AND HOISTING SYSTEM

#### **STEERING**

Steering function is controlled by a single joystick. LeTourneau's constant engine rpm assures full hydraulic steering response.

• Articulation angle 42°

Turning radius

• Standard Lift 34 ft 5 in 10.49 m • High Lift 35 ft 11 in 10.95 m

## HOIST AND BUCKET CONTROL

Hoist and bucket control functions are incorporated into a single joystick control. The proportional electro-hydraulic controlled hoist and bucket system is independent of the steering system.

Standard/High Lift Cycle Times:

Hoist 13 Seconds
Dump 3 Seconds
Float 5 Seconds



## HYDRAULIC SYSTEM

#### **HPD DRIVE BOX**

- Wet spline design with pressurized, cooled, and filtered lubrication
- Ratio 1:1

## PUMPS (Maximum flow rate at 1800 rpm)

Main	Piston (3)	309 gpm	1170 L/min
Steering	Vane	108 gpm	407 L/min
Fan/Blower Drive	Tandem Piston	45/45 gpm	171/171 L/min
Accessory	Piston	21 gpm	81 L/min
Cooling System			
Circulating Pump	Vane	108 gpm	407 L/min
Aux. Cooling (optional)	Piston	17 gpm	64 L/min
VALVES			
Main	Three (3)	185 gpm	700 L/min
	Pump Pressure	4000 psi	27579 kPa
Steering	One (1)	90 gpm	341 L/min
-	Pump Pressure	3000 psi	20684 kPa

#### **CYLINDERS**

Double-acting, single-stage (diameter and stroke), (standard and high lift)

• Hoist

• Bucket

• Bucket

• Steering

7.5 in x 30 in

190 mm x 762 mm

# **STRUCTURAL**

LeTourneau frames are fabricated from high strength, low-alloy steel with excellent weld characteristics and extreme low temperature properties. The front axle is an integral, fixed part of the front frame. The rear axle center oscillates 11 degrees.

Unique LeTourneau forged ball and socket joints are utilized in multiple pivot locations (lift arms, rear axle, frame articulation, hoist cylinders). These joints are superior in absorbing and distributing multi-directional stresses. Features easily replaceable brass liners for long life and easy maintenance.

High strength castings are used in key areas of fabricated structures to reduce stress and improve structural life.

# STANDARD FEATURES

#### TIRES/RIMS

• Tires 50/65-51 L-5

• Rims 40 x 51 with 4.5" flange

## STANDARD EQUIPMENT

- Access Ladder Lights
- · Air Clean-Out Hose In Cab
- Air Conditioning / Heater-Defroster (Filtered and Pressurized)
- Air Dryer System
- · Air Horn
- Air Tank Bleed System
- · Adjustable Automatic Lift Height Cut Off
- Automatic Bucket Leveling Control
- Automatic Electrical Cabinet Lights
- Automatic Lubrication System
- Back-up Alarm, Audible
- Battery Disconnect Switch
- Brake Lights
- Central Air Regulator Box
- Data Analysis and Viewing Software
- Data Logging Downloadable Production and Maintenance Logs
- Door Interlock on Electrical Cabinet
- · Drawbar with tow points
- Emergency Stop Buttons (Cab and Remote Mounted)

- Engine Compartment Lights
- Fire Extinguisher, Manual, 20 lb (9.07 kg)
- FOPS Falling Object Protection System
- Idle Timer
- Interior Lights
- Isolation Monitor
- Joystick Hoist and Bucket Control
- Joystick Steering Control
- Jump Start
- Ladder Walkway (Rear Access w/Retracting Ladder)
- LED Working Lights (10 Forward, 2 Rear)
- LINCS II™ Alarms
- LINCS II<sup>™</sup> Load Weigh & Monitoring
- Mirrors, Rearview (Parabolic)(2)
- Operator Seat (11-Way Adjustable)
- Overspeed Alarm
- Parking Brake
- Retractable Lap Belt with Shoulder Harness
- Rock Deflectors (Bucket)
- ROPS Rollover Protection Structure
- Selectable Throttle Switch
- Starter Disconnect Switch
- Sun Visor
- Tinted Safety Glass Throughout
- Turn Signals
- Twelve (12) Volt Power Supply In Cab
- Twelve (12) Volt Power Port (2)
- Walk Around Catwalk for Cab
- Windshield Washer Reservoir (2.6 gal)
- Windshield Wiper and Washer (Front & Rear)

## **OPTIONAL FEATURES**

- Auxiliary Hydraulic Oil Cooler
- Auxiliary Steering
- Beacon Light Kit
- Bucket GET Options Available
- Central Service with Fast Fuel
- Cold Weather Package- including:
  - Battery Heater
  - Engine Heating System (Oil and Water)
  - · Grease Reservoir Heater
  - Hydraulic Tank Heater
- Fast Fuel
- Fire Detection and Suppression System (Manual)
- Fire Suppression System (Manual)
- Fluid Sampling Kit
- Lift Arms High Lift
- Training Seat (with Lap Belt)
- · Video Camera (Rear Mount)

# BUCKETS

STANDARD, ISO-RATED CAPACITY: 76000 lb / 34473 kg

HIGH LIFT, ISO-RATED CAPACITY: 70000 lb / 31751 kg

Both rock and coal bucket configurations are available Buckets sized to material density

## **BUCKET HARDWARE OPTIONS**

- Skid Plates (Replaceable)
- Lip Wear Protection
- Wear Liner Kits

For actual bucket configuration and sizing, consult your dealer representative.

# OPERATING CAPACITIES, WEIGHTS AND DIMENSIONS

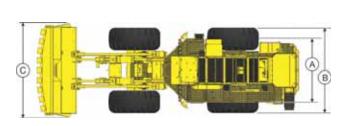
		STANDARD LIFT		HIGI	HIGH LIFT	
Bucket Capacity**		25 yd³	19.11 m <sup>3</sup>	23 yd³	17.58 m³	
Operating Payload		76000 lb	34473 kg	70000 lb	31751 kg	
Static Tipping Loads	Straight	179204 lb	81285 kg	159103 lb	72168 kg	
	Full 42° Turn	156976 lb	71203 kg	140653 lb	63799 kg	
Breakout Force		219260 lb	975 kN	199874 lb	889 kN	
Operating Weight		310000 lb	140614 kg	313000 lb	141974 kg	

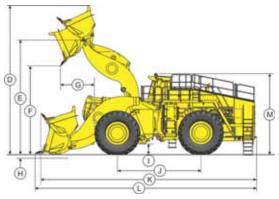
<sup>\*\*</sup> Standard Rock Bucket based on a material density of 3000 lb/yd³ (1780 kg/m³)

# **FLUID CAPACITIES**

Fuel	630 gal	2384 L
Hydraulic	260 gal	984 L
SR Converter Cooling System	30 gal	114 L
Engine Cooling System	88 gal	333 L
Crankcase (includes filters)		
Detroit	25 gal	94 L
Cummins	23 gal	87 L
Gearbox	5 gal	19 L
Drivers (each)	20 gal	76 L

## OPERATING DIMENSIONS





		STANDARD LIFT		HIGH	HIGH LIFT	
(A)	Tread	12 ft 7 in	3.84 m	12 ft 7 in	3.84 m	
(B)	Width Outside Tires	16 ft 9 in	5.11 m	16 ft 9 in	5.11 m	
(C1)	Rock Bucket Without Deflectors	18 ft 0 in	5.49 m	18 ft 0 in	5.49 m	
(C2)	Rock Bucket With Deflectors	19 ft 5 in	5.92 m	19 ft 5 in	5.92 m	
(C3)	Coal Bucket	21 ft 0 in	6.40 m	21 ft 0 in	6.40 m	
(D)	Height Bucket Fully Raised	34 ft 6 in	10.52 m	35 ft 11 in	10.95 m	
(E)	Hinge – Pin Height	25 ft 8 in	7.82 m	27 ft 7 in	8.41 m	
(F)	Dump Clearance	18 ft 6 in	5.64 m	20 ft 7 in	6.27 m	
(G)	Reach at Full Lift	9 ft 3 in	2.82 m	9 ft 5 in	2.87 m	
(H)	Digging Depth	0 ft 5 in	0.13 m	0 ft 9 in	0.24 m	
(I)	Ground Clearance	2 ft 4 in	0.71 m	2 ft 4 in	0.71 m	
(J)	Wheelbase	20 ft 2 in	6.15 m	20 ft 2 in	6.15 m	
(K)	Overall Length Carry Position	52 ft 5 in	15.98 m	54 ft 11 in	16.74 m	
(L)	Overall Length Bucket Down	53 ft 5 in	16.28 m	53 ft 11 in	16.43 m	
(M)	Height Over Cab	19 ft 1 in	5.82 m	19 ft 1 in	5.82 m	

<sup>\*</sup> All dimensions are based on standard tires and standard rock bucket with GET unless otherwise noted.



P.O. Box 2307 • Longview, TX 75606 • phone (903) 237-7000 • fax (903) 236-6552 • www.letourneautechnologies.com Meets the following SAE and ISO Standards:

Braking Systems of Rubber Tired Machines SAE J/ISO 3450 • Loader Buckets Volumetric Ratings ISO 7546 • Sound Measurement Off Road Work Machines - Exterior SAE J 88

Earth Moving Machinery FOPS ISO 3449 • Sound Measurement Off Road Work Machines - Operator SAE J 919 • Rated Operating Load for Loaders SAE J 818

Earth Moving Machinery ROPS ISO 3471 • Earth Moving Machinery Steering Requirements ISO 5010

Please Note: Standard/Optional Equipment, Features and Performance conform to U.S. and International Standards as Required. LeTourneau Technologies, Inc. has made every effort to make these specifications as accurate as possible at the time of printing. However, we reserve the right to make changes and improvements at any time without notice, in equipment, materials and specifications. To ensure the most current information, please contact your dealer representative.