

Quantum
SERIES EXCAVATORS

6000

MATERIAL HANDLER
SPECIFICATIONS

123,108 lbs. (55 841 kg) Operating Weight



Link-Belt
MATERIAL HANDLING EQUIPMENT

6000 Material Handler Specifications

ENGINE

Cummins M11C320-1.5c turbocharged, water cooled, 4-cycle diesel, 6 cylinder, 661 CID (10 800 cc), 4.92" (125 mm) bore x 5.79" (147 mm) stroke.
SAE net horsepower 300 HP (224 kW) @ 2,000 rpm
Maximum torque 910 ft.-lbs. (126 kg-m or 1 234 N-m) @ 1,300 rpm
Starter Electric, 24V
Alternator 70 amp
Air cleaner Double element
Governor Variable speed, mechanical

HYDRAULIC SYSTEM

Two variable displacement axial piston pumps, one gear pump for pilot controls, and one gear pump for attachment rotation. High pressure attachment open/close hydraulic circuit. Remote mounted high ambient/severe duty oil cooler.

Hydraulic Pumps

Two variable volume piston pumps provide power for attachment, swing and travel.

Maximum flow 2 x 90 gpm (2 x 340 l/min)
Pilot pump max. flow 8.2 gpm (31.0 l/min)
Rotor pump max. flow 6.0 gpm (22.7 l/min)

Relief Valve Settings

Boom up/arm/jib/travel 4,620 psi (325 kg/cm²)
Swing circuit 4,050 psi (285 kg/cm²)
Boom down circuit 3,555 psi (250 kg/cm²)

Hydraulic cylinders

(Young 3-piece) – number of cylinders – bore x rod x stroke

Boom 2 – 7.5" x 4.5" x 57.0" (191 mm x 114 mm x 1 448 mm)
Arm 1 – 9.0" x 5.0" x 62.0" (229 mm x 127 mm x 1 575 mm)
Jib 1 – 7.0" x 4.5" x 40.0" (178 mm x 114 mm x 1 016 mm)

(Young 2-piece) – number of cylinders – bore x rod x stroke

Boom 2 – 7.5" x 4.5" x 57.0" (191 mm x 114 mm x 1 448 mm)
Arm 1 – 7.5" x 4.5" x 69.25" (191 mm x 114 mm x 1 759 mm)

Oil Filtration

Nephron filter 1 micron
Return, pilot, drain filter 10 micron
Suction filter 105 micron

Control Valve One 9-spool valve with auxiliary spool.

CAB AND CONTROLS

Cab mounted on six fluid filled mountings. Features include a safety glass front window and LEXAN® MARGARD™ rear and side windows, reclining/sliding cloth upholstered suspension seat with headrest and armrests, heater, oscillating fan, AM/FM radio, cigarette lighter, pop-up skylight window, and intermittent wiper with washer. Front window slides upward for storage and the lower front window is removable. Control levers are located in 4-position tilting control consoles. Analog gauge/warning light service monitor and voltmeter/ammeter keep operator in touch with critical machine functions.

SWING

Planetary reduction powered by axial piston motor. Internal ring gear with grease cavity for swing pinion. Swing bearing is single-row shear type ball bearing. Swing cushion valve and dual stage relief valves for smooth swing deceleration and stops. Mechanical disc swing brake.

Swing speed 0 – 8.7 rpm
Swing torque 102,853 ft.-lbs. (14 215 kg-m)

UNDERCARRIAGE

X-style carbody is integrally welded for strength and durability. Grease cylinder track adjusters with shock absorbing springs. LC undercarriage with sealed track, lubricated rollers and idlers. Triple grouser track shoes.

Carrier rollers 2 per side
Track rollers 9 per side
Shoes 51 per side
Shoe width 30" (750 mm)
Ground pressure (w/o grapple or magnet) 10.8 psi (.76 kg/cm²)

Alternating inner and outer flanged rollers are used to assure proper track rail to roller engagement.

TRAVEL SYSTEM

Three-speed independent hydrostatic travel with compact axial piston motors for increased performance. Hydraulic motor powered output shaft coupled to a planetary reduction unit and track sprocket. All hydraulic components mounted within the width of side frame. Travel speeds selected by floor mounted foot switch.

Automatic Downshift: When operating in difficult travel conditions or on slopes, travel motor automatically downshifts from high speed to mid-range speed for increased tractive effort. Machine will automatically return to high speed after traveling out of difficult terrain.

Single Pedal Travel: Engage both tracks simultaneously.

Max. travel speed 1.3/1.9/3.1 mph (2.1/3.1/5.0 km/h)
Tractive effort 76,990 lbs. (34 922 kg)
Gradeability 70%

Spring applied, hydraulically released disc parking brake built into each motor. Each travel motor equipped with counterbalance valve to prevent overspeeding down an incline and dual stage reliefs for smooth starts and stops.

LUBRICANT & COOLANT CAPACITY

Hydraulic tank 55.5 gal. (210 liters)
Hydraulic system 119 gal. (450 liters)
Final drive (per side) 1.9 gal. (7 liters)
Swing drive 5.5 gal. (21 liters)
Engine 9 gal. (34 liters)
Fuel tank 172 gal. (650 liters)
Cooling system 7.1 gal. (27 liters)

ATTACHMENTS

Available Attachments

- **Young 2-Piece** – 30' 10" (9.4 m) boom x 24' 6" (7.47 m) arm Max. reach – 55' 0" (16.76 m)
- **Young 3-Piece** – 25' 0" (7.62 m) boom x 15' 0" (4.57 m) arm x 13' 8.5" (4.18 m) jib Max. reach – 54' 0" (16.46 m)

DIMENSIONS

Tailswing 12' 0" (3.66 m)
Ground clearance 21.8" (.55 m)
Track length 17' 3" (5.26 m)
Overall width w/30" (750 mm) shoes 12' 9 1/2" (3.9 m)

OPERATING WEIGHT

Working weight with Young 2-piece attachment, 30" (750 mm) shoes, 6' 0" (1.83 m) riser and 66" (1.68 m) deep field magnet .. 123,108 lbs. (55 841 kg)

Working weight with Young 3-piece attachment, 30" (750 mm) shoes, 6' 0" (1.83 m) riser and 66" (1.68 m) deep field magnet .. 124,280 lbs. (56 373 kg)

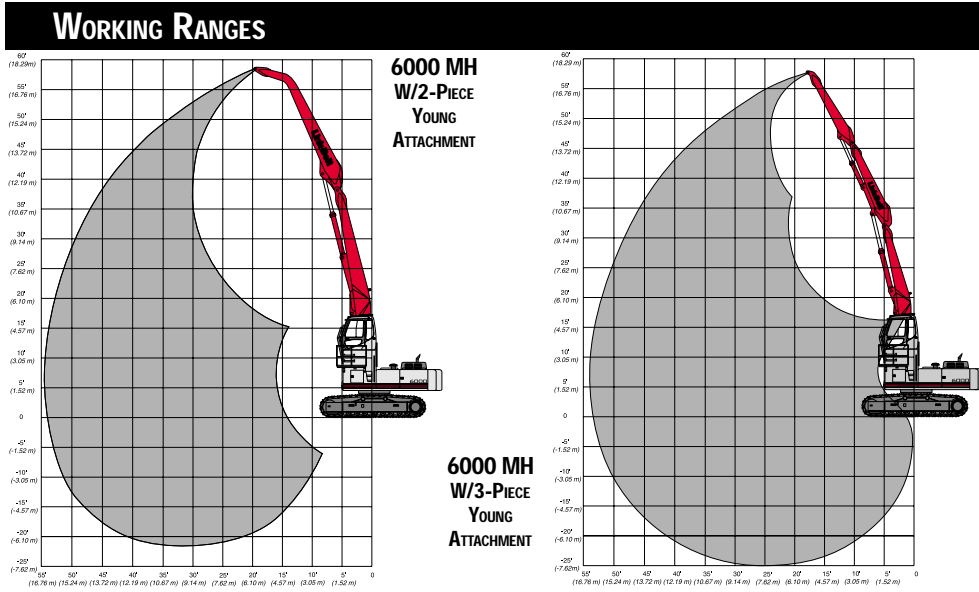
STANDARD EQUIPMENT

- Cummins M11C320-1.5c diesel
- 70 amp alternator
- Double element air filter
- 24-volt starting system, battery lighting system, sealed heavy duty electrical connectors
- High pressure hydraulic system
- Nephron filtration system
- Remote mounted oil cooler
- Cushion attachment control
- Boom and arm holding valves
- Quick disconnects in hydraulic system for easy pressure checking
- Free swing control
- 3-speed hydrostatic travel
- Single pedal travel
- Travel alarm
- Analog gauge/warning light service monitor
- Voltmeter and ammeter
- Sliding/reclining, suspension cloth upholstered KAB515 seat with 4-position tilting consoles and sliding platform
- Heater, fan, seat belt, horn, dome light, AM/FM radio, floor mat, cigarette lighter
- Safety glass front window with automatic lock and intermittent windshield wiper and washer, large LEXAN® rear/side windows
- 6' 0" (1.83 m) manual tilt cab riser
- Elevated platform, stairs, safety railing
- Catwalks
- Hand grab rails, both sides
- Vandalism locks/guarding
- Upper and lower undercovers
- 10' 4" (3.15 m) gauge by 17' 3" (5.26 m) long lower with 30" (750 mm) 3-bar grouser track shoes
- 28,000 lbs. (12 700 kg) counterweight

6000 Material Handler Lifting Capacities

Grapple Pin Height		EQUIPPED WITH 2-PIECE YOUNG ATTACHMENT																	
		Radius of Load																	
		10' 0" (3.05 m)		15' 0" (4.57 m)		20' 0" (6.10 m)		25' 0" (7.62 m)		30' 0" (9.14 m)		35' 0" (10.67 m)		40' 0" (12.19 m)		45' 0" (13.72 m)		50' 0" (15.24 m)	
End	Side	End	Side	End	Side	End	Side	End	Side	End	Side	End	Side	End	Side	End	Side		
+55' 0" (16.76 m)	lbs. 19,200*	kg. 8 700*																	
+50' 0" (15.24 m)	lbs. 18,800*	kg. 8 520*																	
+45' 0" (13.72 m)	lbs. 20,500*	kg. 9 290*																	
+40' 0" (12.19 m)	lbs. 19,900*	kg. 9 020*																	
+35' 0" (10.67 m)	lbs. 21,300*	kg. 9 660*																	
+30' 0" (9.14 m)	lbs. 23,000*	kg. 10 430*																	
+25' 0" (7.62 m)	lbs. 24,600*	kg. 11 150*																	
+20' 0" (6.10 m)	lbs. 25,800*	kg. 11 700*																	
+15' 0" (4.57 m)	lbs. 31,300*	kg. 14 200*	21,300*	21,300*	29,600*	29,600*	33,100*	32,200*	29,800*	24,500*	25,600*	25,200*	20,100*	21,300*	16,900*	17,800*	13,800*	14,400*	
+10' 0" (3.05 m)	lbs. 46,400*	kg. 21 040*	9 660*	9 660*	13 420*	13 420*	15 010*	14 600*	13 510*	11 110*	11 610*	10 430*	9 570*	9 660*	7 390*	8 020*	6 070*	6 750*	
+5' 0" (1.52 m)	lbs. 48,800*	kg. 22 130*																	
Ground Line	lbs. 8,300*	kg. 3 760*																	
-5' 0" (-1.52 m)	lbs. 10,300*	kg. 4 670*																	
-10' 0" (-3.05 m)	lbs. 13,400*	kg. 6 070*																	
-15' 0" (-4.57 m)	lbs. 17,000*	kg. 7 710*																	
-20' 0" (-6.10 m)	lbs. 18,100*	kg. 8 200*																	
	lbs. 3 580*	kg. 1 620*																	

Grapple Pin Height		EQUIPPED WITH 3-PIECE YOUNG ATTACHMENT																	
		Radius of Load																	
		10' 0" (3.05 m)		15' 0" (4.57 m)		20' 0" (6.10 m)		25' 0" (7.62 m)		30' 0" (9.14 m)		35' 0" (10.67 m)		40' 0" (12.19 m)		45' 0" (13.72 m)		50' 0" (15.24 m)	
End	Side	End	Side	End	Side	End	Side	End	Side	End	Side	End	Side	End	Side	End	Side		
+50' 0" (15.24 m)	lbs. 20,900*	kg. 9 480*																	
+45' 0" (13.72 m)	lbs. 19,300*	kg. 8 750*																	
+40' 0" (12.19 m)	lbs. 21,400*	kg. 9 700*																	
+35' 0" (10.67 m)	lbs. 25,300*	kg. 11 470*																	
+30' 0" (9.14 m)	lbs. 29,700*	kg. 13 470*																	
+25' 0" (7.62 m)	lbs. 38,000*	kg. 17 230*																	
+20' 0" (6.10 m)	lbs. 40,000*	kg. 18 140*																	
+15' 0" (4.57 m)	lbs. 40,900*	kg. 18 550*	17,000*	17,000*	40,000*	40,000*	40,900*	40,900*	34,700*	28,600*	28,200*	21,100*	22,800*	16,700*	19,300*	14,200*	16,400*		
+10' 0" (3.05 m)	lbs. 42,600*	kg. 19 320*	7 710*	7 710*	53,100*	53,100*	42,600*	41,000*	35,400*	28,000*	26,000*	20,400*	22,700*	16,700*	19,100*	14,100*	16,600*		
+5' 0" (1.52 m)	lbs. 44,700*	kg. 20 270*	14 190*	14 190*	57,600*	57,600*	44,700*	39,900*	36,300*	27,200*	26,000*	20,400*	23,000*	16,900*	19,700*	14,700*	16,300*		
Ground Line	lbs. 46,800*	kg. 21 220*	10 880*	10 880*	60,000*	60,000*	46,800*	38,500*	37,000*	26,800*	29,800*	22,100*	23,500*	17,400*	19,100*	14,100*	15,900*		
-5' 0" (-1.52 m)	lbs. 48,400*	kg. 21 950*	8 340*	8 340*	62,000*	62,000*	48,400*	37,800*	37,600*	27,300*	28,600*	21,000*	22,800*	16,700*	18,600*	13,700*	15,600*		
-10' 0" (-3.05 m)	lbs. 46,700*	kg. 21 180*	7 570*	7 570*	58,000*	58,000*	46,700*	35,900*	36,300*	26,100*	27,700*	20,200*	22,200*	16,200*	18,300*	13,300*	15,400*		
-15' 0" (-4.57 m)	lbs. 44,800*	kg. 20 100*	16 700*	16 700*	55,000*	55,000*	44,800*	34,900*	34,700*	25,400*	27,200*	19,600*	21,800*	15,800*	18,100*	13,100*	15,200*		
-20' 0" (-6.10 m)	lbs. 42,500*	kg. 19 300*	6 890*	6 890*	51,000*	51,000*	42,500*	33,200*	32,200*	25,000*	23,600*	19,300*	21,700*	15,700*	17,900*	13,000*	15,100*		
	lbs. 6 750*	kg. 3 080*																	



Notes: Material Handler lifting capacities

- Lifting capacities shown should not be exceeded. Weight of magnet, grapple or bucket must be deducted from the lifting capacities.
- Lifting capacities are based on machine standing on firm, uniform supporting surface. User must make allowances for job conditions such as soft or uneven ground.
- Lifting capacities shown do not exceed 75% of minimum tipping loads or 87% of hydraulic capacities. Capacities marked with an asterisk (*) are limited by hydraulic capacities.
- Least stable position is over the side.
- Lifting capacities are in compliance with SAE J1097. Operator should be fully acquainted with the Operator's Manual & Operating Safety Booklet, furnished by manufacturer before operating the machine.
- Capacities apply only to the machine as originally manufactured and normally equipped by LBX Company LLC.

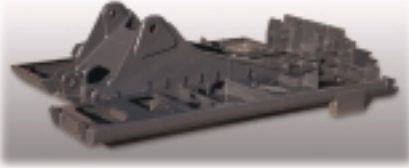
Quantum Added Value Features

Attachment Flexibility For machine flexibility, the Material Handler can be equipped with two or three piece attachment configurations. Shears, magnets, buckets or grapples can be utilized depending on job application.

Service Monitor The analog gauge/warning light service monitor, advises the operator on all critical machine functions at a glance, this is ideal for duty cycle applications.

Upper Frame

Designed for duty cycle applications. Its high tensile strength material, thicker plating and added reinforcement stand up to the rigors of material handling applications.

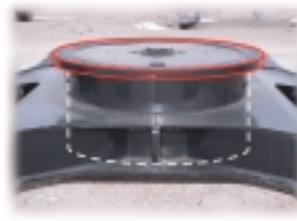


Operator's Cab Designed with the operator in mind, the new style cab is mounted to the frame on six fluid mountings for minimal vibration. Features include cloth upholstered suspension seat with armrests, heater with 3-speed fan, and intermittent windshield wiper with washer. Maximum comfort is obtained through a multiple adjustable seat and control consoles.

Single Pedal Travel To provide safety and ease in loading/unloading the machine for transport, a single pedal travel system allows the operator to engage both tracks at the same time by pressing only one foot pedal.

Free Swing To provide precise control and added safety when swinging a load, the standard free swing feature allows the operator to disengage the swing brake.

Cushioned Attachment Control Push-button cushioned attachment control can be selected for the boom and arm hydraulic circuits which incorporate a cushion valve to further reduce shock and vibration.



capacity turntable bearing. Rollers and idlers are filled with synthetic oil for long term reliability.



Elevated Cab For optimum operator visibility, an elevated cab with guarding is available in 4' 0" (1.22 m), 6' 0" (1.83 m), or 8' 0" (2.44 m) heights. All elevated cabs manually tilt for maximum serviceability and transportability. Extra-wide catwalks are standard. Hydraulically tilting cabs are available.

Nephron Filtration System

Less wear and tear on the hydraulic components mean you get more years of reliable performance from your Quantum Material Handler. The Nephron filter eliminates contaminants of 1 micron or more in size. This significantly reduces hydraulic system breakdown and maintenance costs.



Remote Oil Cooler For all-day efficient operation, a severe duty hydraulic oil cooler is hard at work. This remote mounted, high ambient cooler is driven by a spare hydraulic pump and does not affect the other hydraulic functions of the Material Handler.



Company LLC

Lexington, Kentucky

Litho in USA 2/00 #LBX2019

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