

Quantum
SERIES EXCAVATORS

4300

MATERIAL HANDLER
SPECIFICATIONS

91,040 lbs. (41 295 kg) Operating Weight



Link-Belt
MATERIAL HANDLING EQUIPMENT

4300 Material Handler Specifications

ENGINE

Cummins M11-C265 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	240 HP (186 kW) @ 1,700 rpm
Maximum torque	900 ft.-lbs. (124.5 kg-m or 1 178 N-m) @ 1,300 rpm
Starter	Electric, 24V, 4.5 kW
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 grapple rotation, with Link-Belt Intelligent Quantum (IQ) Control. Link-Belt IQ Control includes: two selectable working modes, free swing, power up mode, boom priority mode, selectable cushion attachment control, and three safety lockout switches including gate lock.

Hydraulic Pumps

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

Maximum flow	2 x 71 gpm (2 x 269 l/min)
Pilot pump max. flow	7.4 gpm (27.9 l/min)
Rotate pump max. flow	10 gpm (37.8 l/min)

Relief Valve Settings

Boom up/arm/jib/travel	4,620 psi (325 kg/cm ²)
in Power Up Mode	5,050 psi (355 kg/cm ²)
Swing circuit	4,050 psi (285 kg/cm ²)
Boom down circuit	3,555 psi (250 kg/cm ²)

Hydraulic Cylinders

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

Boom	2 – 7.0" x 4.0" x 52.0" (178 mm x 102 mm x 1 321 mm)
Arm	1 – 8.0" x 4.5" x 54.0" (203 mm x 114 mm x 1 372 mm)
Jib	1 – 6.0" x 4.0" x 36.0" (152 mm x 102 mm x 914 mm)

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

Boom	2 – 7.0" x 4.5" x 52.0" (178 mm x 114 mm x 1 321 mm)
Arm	1 – 6.5" x 4.5" x 53.5" (165 mm x 114 mm x 1 359 mm)

Oil Filtration

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

Control Valve One 4-spool valve and one 5-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, circulating 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. Reliable soft-touch switches. Easy-to-read illuminated LCD service monitor keeps 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, four-point contact ball bearing. Swing cushion valve and dual stage relief valves for smooth swing deceleration and stops. Mechanical disc swing brake.

Swing speed	0 – 10.5 rpm
Tail swing	11.5" (3.35 m)
Swing torque	73,700 ft.-lbs. (10 189 kg-m)

UNDERCARRIAGE

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

Carrier rollers	2 per side
Track rollers	8 per side
Shoes	49 per side
Shoe width	27.5" (700 mm)

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	1.2/1.8/3.1 mph (2.0/2.8/ 4.9 km/h)
Tractive effort	66,650 lbs. (30 230 kg)
Gradeability	70%

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

LUBRICANT & COOLANT CAPACITY

Hydraulic tank	40.2 gal. (152 liters)
Hydraulic system	84.5 gal. (320 liters)
Final drive (per side)	2.2 gal. (8.5 liters)
Swing drive	3.4 gal. (12.5 liters)
Engine	9 gal. (34 liters)
Fuel tank	153.3 gal. (580 liters)
Cooling system	15 gal. (56.8 liters)

ATTACHMENTS

Available Attachments

- Young 46' 0" (14.02 m) 3-piece attachment
- Young 46' 0" (14.02 m) 2-piece attachment

DIMENSIONS

Max. Tailswing Radius	11' 0" (3.36 m)
Ground clearance	27.8" (.71 m)
Track length	16' 8" (5.07 m)
Overall width w/27.5" (700 mm) shoes	11' 11.5" (3.64 m)

OPERATING WEIGHT

Working weight with 27.5" (700 mm) 3 bar shoes, 3-piece attachment, 6' riser and 57" (1.45 m) deep field magnet

Working weight with 27.5" (700 mm) 3 bar shoes, 2-piece attachment, 6' riser and 57" (1.45 m) deep field magnet

STANDARD EQUIPMENT

- Cummins M11-C265 diesel engine
- 70 amp alternator
- Double element air filter
- 24-volt starting system, battery lighting system, sealed heavy duty electrical connectors
- Ether starting aid
- Intelligent Quantum (IQ) Control with manual backup system
- Self-diagnostic system
- Nephron filtration system
- Swing-out oil cooler
- Two selectable working modes
- Auto engine warm up
- Cushion attachment control
- Boom and arm holding valves
- Quick disconnects in hydraulic system for easy pressure checking
- Free swing control
- 3-speed hydrostatic travel
- Power up mode
- Boom priority mode
- Voltmeter and ammeter
- Single pedal travel
- Travel alarm
- Spare accessory valve
- Sliding/reclining, suspension cloth upholstered seat and sliding/4-position tilting consoles
- Illuminated LCD service monitor
- Heater, fan, seat belt, horn, dome light, AM/FM radio, digital clock, floor mat, cigarette lighter
- Safety glass front window with automatic lock and intermittent windshield wiper and washer, large LEXAN® rear/side windows
- Catwalks
- Vandalism locks/guarding
- Hand grab rails, both sides
- Upper and lower undercovers
- LC undercarriage
- 18,500 lbs. (8 391 kg) counterweight

4300 Material Handler Lifting Capacities

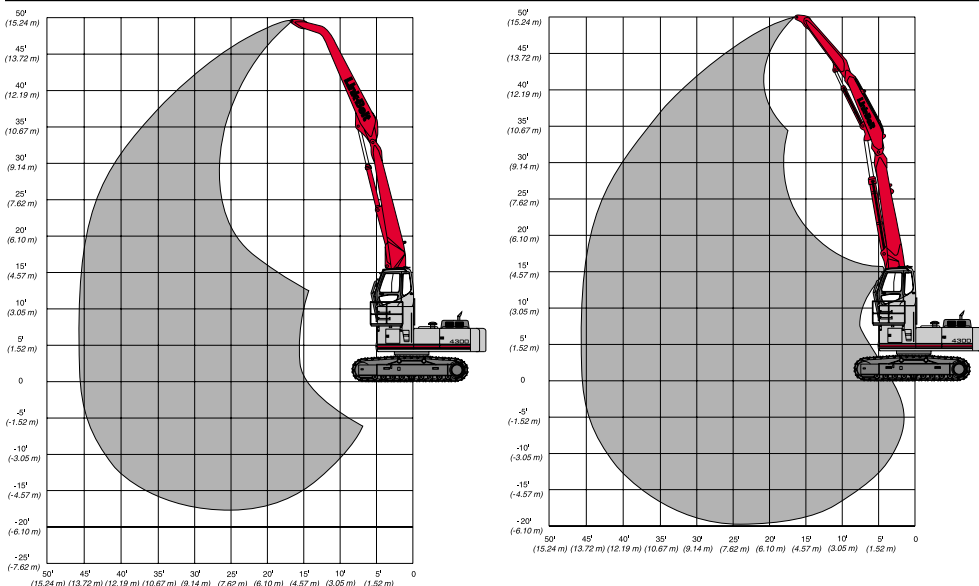
EQUIPPED WITH 2-PIECE YOUNG ATTACHMENT

Grapple Pin Height	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)		
	End	Side	End	Side	End	Side	End	Side	End	Side	End	Side	End	Side	End	Side	
+45' 0" (13.72 m)	lbs.							12,800*	12,800*								
	kg							5 800*	5 800*								
+40' 0" (12.19 m)	lbs.									12,200*	12,200*						
	kg									5 530*	5 530*						
+35' 0" (10.67 m)	lbs.									13,900*	13,900*	11,100*	11,100*				
	kg									6 300*	6 300*	5 030*	5 030*				
+30' 0" (9.14 m)	lbs.									14,900*	14,900*	13,200*	13,200*	8,700*	8,700*		
	kg									6 750*	6 750*	5 980*	5 980*	3 940*	3 940*		
+25' 0" (7.62 m)	lbs.									15,900*	15,900*	14,600*	13,200*	11,500*	10,500*		
	kg									7 210*	7 210*	6 620*	5 980*	5 210*	4 760*		
+20' 0" (6.10 m)	lbs.							16,900*	16,900*	17,400*	16,700*	16,200*	13,000*	13,300*	10,400*		
	kg							7 660*	7 660*	7 890*	7 570*	7 340*	5 890*	6 030*	4 710*		
+15' 0" (4.57 m)	lbs.					17,600*	17,600*	19,900*	19,900*	20,000*	16,100*	16,800*	12,700*	13,700*	10,200*	8,900*	8,400
	kg					7 980*	7 980*	9 020*	9 020*	9 070*	7 300*	7 620*	5 760*	6 210*	4 620*	4 030*	3 810
+10' 0" (3.05 m)	lbs.					28,800*	28,200*	27,200*	20,200*	20,700*	15,500*	16,400*	12,300*	13,400*	10,000*	10,200*	8,300
	kg					13 060*	12 790*	12 330*	9 160*	9 380*	7 030*	7 430*	5 570*	6 070*	4 530*	4 620*	3 760
+5' 0" (1.52 m)	lbs.					36,700*	26,300*	26,200*	19,200*	20,000*	14,800*	16,000*	11,900*	13,200*	9,800*	10,600*	8,200
	kg					16 640*	11 920*	11 880*	8 700*	9 070*	6 710*	7 250*	5 390*	5 980*	4 440*	4 800*	3 710
Ground Line	lbs.																
	kg																
-5' 0" (-1.52 m)	lbs.	3,500*	3,500*	9,400*	9,400*	35,100*	24,900*	25,200*	18,300*	19,400*	14,300*	15,600*	11,500*	12,900*	9,500*	9,900*	8,100
	kg	1 580*	1 580*	4 260*	4 260*	15 920*	11 290*	11 430*	8 300*	8 790*	6 480*	7 070*	5 210*	5 850*	4 300*	4 490*	3 670
-10' 0" (-3.05 m)	lbs.	6,100*	6,100*	11,400*	11,400*	28,900*	24,000*	24,500*	17,700*	19,000*	13,900*	15,300*	11,300*	12,800*	9,400*		
	kg	2 760*	2 760*	5 170*	5 170*	13 100*	10 880*	11 110*	8 020*	8 610*	6 300*	6 940*	5 120*	5 800*	4 260*		
-15' 0" (-4.57 m)	lbs.					28,500*	23,500*	23,600*	17,300*	18,700*	13,600*	14,400*	11,100*	12,700*	9,400*		
	kg					12 920*	10 650*	10 700*	7 840*	8 480*	6 160*	6 530*	5 030*	5 760*	4 260*		

EQUIPPED WITH 3-PIECE YOUNG ATTACHMENT

Grapple Pin Height	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)		
	End	Side	End	Side	End	Side	End	Side	End	Side	End	Side	End	Side	End	Side	
+45' 0" (13.72 m)	lbs.							17,200*	17,200*								
	kg							7 800*	7 800*								
+40' 0" (12.19 m)	lbs.							18,500*	18,500*	16,000*	16,000*						
	kg							8 390*	8 390*	7 250*	7 250*						
+35' 0" (10.67 m)	lbs.					19,500*	19,500*	19,600*	19,600*	17,800*	17,000*	14,600*	12,900				
	kg					8 840*	8 840*	8 890*	8 890*	8 070*	7 710*	6 620*	5 850				
+30' 0" (9.14 m)	lbs.					25,100*	25,100*	21,800*	21,800*	19,700*	17,000*	16,800*	13,100				
	kg					11 380*	11 380*	9 880*	9 880*	8 930*	7 710*	7 620*	5 940				
+25' 0" (7.62 m)	lbs.					32,600*	28,900*	24,900*	21,200*	21,400*	16,900*	17,300*	13,100	13,800	10,300		
	kg					14 780*	13 100*	11 290*	9 610*	9 700*	7 660*	7 840*	5 940	6 250*	4 670*		
+20' 0" (6.10 m)	lbs.			24,800*	24,800*	36,200*	27,900*	26,900*	19,800*	21,300*	16,000*	17,100*	12,900	13,700	10,200		
	kg			11 240*	11 240*	16 420*	12 650*	12 200*	8 980*	9 660*	7 250*	7 750*	5 850	6 210*	4 620*		
+15' 0" (4.57 m)	lbs.	14,600*	14,600*	43,200*	43,200*	36,800*	27,600*	25,900*	19,000*	19,700*	14,500*	16,500*	12,300	13,500	10,100	11,100	8,200
	kg	6 620*	6 620*	19 590*	19 590*	16 690*	12 510*	11 740*	8 610*	8 930*	6 570*	7 480*	5 570*	6 120*	4 580*	5 030*	3 710
+10' 0" (3.05 m)	lbs.	28,700*	28,700*	47,300*	44,100*	37,400*	27,000*	25,500*	18,600*	19,200*	14,100*	15,800*	11,700	13,300	9,900	11,000	8,100
	kg	13 010*	13 010*	21 450*	20 000*	16 960*	12 240*	11 560*	8 430*	8 700*	6 390*	7 160*	5 300*	6 030*	4 490*	4 980*	3 670
+5' 0" (1.52 m)	lbs.	18,100*	18,100*	51,600*	42,500*	36,600*	26,200*	25,100*	18,200*	19,500*	14,300*	16,100*	11,900	13,100	9,600	10,900	8,000
	kg	8 210*	8 210*	23 400*	19 270*	16 600*	11 880*	11 380*	8 250*	8 840*	6 480*	7 300*	5 390*	5 940*	4 350*	4 940*	3 620
Ground Line	lbs.	14,500*	14,500*	37,400*	37,400*	35,600*	25,400*	25,800*	18,900*	19,700*	14,500*	15,700*	11,500	12,800	9,400	10,800	7,500
	kg	6 570*	6 570*	16 960*	16 960*	16 140*	11 520*	11 700*	8 570*	8 930*	6 570*	7 120*	5 210*	5 800*	4 260*	4 890*	3 400
-5' 0" (-1.52 m)	lbs.	12,900*	12,900*	21,800*	21,800*	34,800*	24,600*	24,800*	17,900*	19,100*	14,000*	15,300*	11,200	12,700	9,300		
	kg	5 850*	5 850*	9 880*	9 880*	15 780*	11 150*	11 240*	8 110*	8 660*	6 350*	6 940*	5 080*	5 760*	4 210*		
-10' 0" (-3.05 m)	lbs.	12,200*	12,200*	17,400*	17,400*	33,900*	23,800*	24,300*	17,500*	18,700*	13,600*	15,100*	11,000	12,600	9,200		
	kg	5 530*	5 530*	7 890*	7 890*	15 370*	10 790*	11 020*	7 930*	8 480*	6 160*	6 840*	4 980*	5 710*	4 170*		
-15' 0" (-4.57 m)	lbs.	12,300*	12,300*	16,400*	16,400*	29,900*	23,500*	24,000*	17,200*	18,600*	13,500*	15,100*	11,000	12,600	9,200		
	kg	5 570*	5 570*	7 430*	7 430*	13 560*	10 650*	10 880*	7 800*	8 430*	6 120*	6 840*	4 980*	5 710*	4 170*		

WORKING RANGES



4300 MH W/2-PIECE YOUNG ATTACHMENT

4300 MH W/3-PIECE YOUNG ATTACHMENT

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.

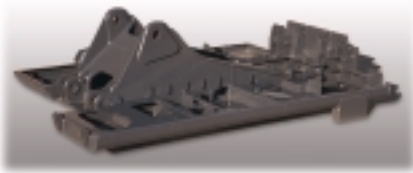
Quantum Added Value Features

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 Easy to read illuminated monitor can display up to 19 messages including work modes, power up, free swing, engine idling, auto warm up, engine preheat...and several other audio visual caution and warning messages which keep the operator in touch with critical machine functions. A bar graph display section constantly monitors the water temperature, hydraulic oil temperature and fuel level. Also continuously displayed on the monitor are selected travel speed, swing lock on/off, working mode and a digital clock.

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.

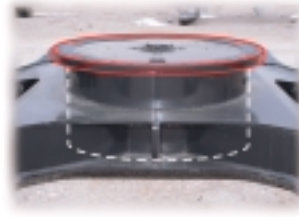


Operator's Cab Designed with the operator in mind, the new style cab is mounted to the frame on six fluid mountings for minimal vibration. Features include cloth upholstered suspension seat with armrests, heater with 3-speed fan, and intermittent windshield wiper with washer. Maximum comfort is obtained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



To provide superior lift capacities and long service life, the undercarriage has been reinforced for the material handling industry. The undercarriage contains an extra-wide heavy duty carbody and high 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.

