

# 160X<sub>2</sub>

## specifications

Operating Weight: 37,700 lbs. (17 100 kg)

SAE Net Horsepower: 120 HP (89 kW)

Bucket Range: .50 - 1.14 yd<sup>3</sup> (.38 - .87 m<sup>3</sup>)

### Engine

Isuzu AI-4JJ1X Tier 3 turbocharged diesel engine with electronic fuel control, 4-cylinder, water-cooled, EGR with cooler, air-to-air intercooler, fuel cooler, auto idle-start, neutral safety start, glow plugs, auto warm-up, EPF engine protection, dual stage fuel filtration, remote oil filter, green plug oil drain.

SAE net horsepower ..... 120 HP (89 kW) @ 2,200 rpm  
Displacement ..... 3.0 L  
Maximum torque ..... 288 lbf-ft (391 N-m) @ 1,800 rpm  
Starter ..... 24V-4.0kW  
Alternator ..... 50 amp  
Battery ..... 72 amp hours

### Cab and Controls

Pressurized cab with climate control a/c and heat with defroster, LCD monitor, illuminated soft-touch switches, low-effort controls pre-wired for auxiliary hydraulics, control pattern changer, sliding LEXAN® MARGARD® windows, safety glass front window with automatic locking system and vandal cover, intermittent windshield wiper with washer, emergency rear window exit, polycarbonate roof hatch with sunshade, shockless cab suspension with four fluid mountings, KAB® reclining suspension seat, sliding 4-position tilting control consoles, AM/FM radio, digital clock, dome light, seat belt, coat hook, cup holder, storage compartments, floor mat, footrests, ashtray, 24-volt cigarette lighter, 12-volt outlet, travel alarm, handrail, mirrors.

Four selectable working modes, anti-theft password protection system, on-board self-diagnostic system with memory, auto-idling system, one-touch decelerator, auto power boost, gate lock safety shutoff.

A/C output ..... 18,100 BTU/hr  
Heater output ..... 20,150 BTU/hr  
Sound level (inside cab) ..... 68.4 dB(A)  
Sound level (exterior) ..... 98.0 dB(A)

### Hydraulic System

Open-center system, two variable displacement axial piston pumps and one gear pump for pilot controls, main control valve with one 4-spool valve and one 5-spool valve with auxiliary spool - stackable, oil cooler, auto power boost, boom and arm holding valves, o-ring face seals, 6 micron return filter, firewall.

#### Hydraulic Pumps

Maximum flow ..... 2 x 37.5 gpm (2 x 142 l/min)  
Pilot pump maximum flow ..... 5.8 gpm (22 l/min)

#### Relief Valve Settings

Boom/arm/bucket ..... 4,970 psi (343 bar)  
in Power-Boost Mode ..... 5,260 psi (363 bar)  
Swing circuit ..... 4,050 psi (279 bar)  
Travel ..... 4,970 psi (343 bar)

#### Hydraulic Cylinders

number of cylinders – bore x rod x stroke.  
Boom ..... 2 – 4.5" x 3.1" x 46.4"  
(115 mm x 80 mm x 1 179 mm)  
Arm ..... 1 – 4.9" x 3.5" x 50.4"  
(125 mm x 90 mm x 1 280 mm)  
Bucket ..... 1 – 4.1" x 3.0" x 38.8"  
(105 mm x 75 mm x 985 mm)

#### Hydraulic Oil Filtration

Return filter ..... 6 micron  
Pilot filter ..... 8 micron  
Suction screen ..... 105 micron



### 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. Mechanical disc swing brake. Auto power swing.

Swing speed ..... 0 – 11.5 rpm  
Tail swing ..... 8' 0" (2.45 m)  
Swing torque ..... 33,264 lbf-ft. (45.1 kN•m)

### Undercarriage

X Pattern carbody with 13' 1" (3.99 m) LC long undercarriage by 6' 6" (1.99 m) track gauge, sealed and strutted track chain, sealed rollers and idlers, two-speed independent hydrostatic travel with compact planetary final drive, disc type brakes, adjustable track tension, swivel guard.

Carrier rollers ..... 2 per side  
Track rollers ..... 7 per side  
Track link pitch ..... 7.48" (190 mm)  
Shoes ..... 44 per side  
Shoe width ..... 23.6" (600 mm)  
Ground pressure ..... 5.80 psi (.40 bar)

### Lubricant and Coolant Capacity

Fuel tank ..... 79.25 gal. (300 liters)  
Hydraulic tank ..... 23.78 gal. (90 liters)  
Hydraulic system ..... 43.59 gal. (165 liters)  
Final drive (per side) ..... 1.19 gal. (4.5 liters)  
Swing drive ..... 1.32 gal. (5 liters)  
Engine oil ..... 4.49 gal. (17 liters)  
Cooling system ..... 3.96 gal. (15 liters)

### Travel System

Two-speed independent hydrostatic travel with compact axial piston motors. Hydraulic motor powered output shaft coupled to a planetary reduction unit and track sprocket. All hydraulic components mounted within the width of side frame.

Automatic downshift. Spring applied, hydraulically released disc parking brake built into each motor. Each travel motor equipped with counterbalance valve to prevent overspeeding down an incline.

Max. travel speed ..... 1.7 - 3.4 mph (2.8 - 5.4 km/h)  
Drawbar pull ..... 36,194 lbf (161 kN)  
Gradeability ..... 70% (35°)

### Attachment

Boom ..... 16' 11" (5.15 m)  
**Available Arms** ..... **Digging Force\***  
• 8' 7" (2.62 m) ..... 17,760 lbf (79 kN)  
with Auto Power-Boost applied ..... 18,880 lbf (84 kN)  
• 10' 0" (3.05 m) ..... 16,190 lbf (72 kN)  
with Auto Power-Boost applied ..... 17,310 lbf (77 kN)

Bucket Digging Force ..... 25,180 lbf (112 kN)  
with Auto Power-Boost applied ..... 26,530 lbf (118 kN)

\*Digging force ratings are based on ISO 6015, "Earthmoving Machinery – Hydraulic Excavators – Tool Forces."

### Fuel Usage\*

Heavy ..... 3.32 gal / hr (12.56 liter / hr)  
Average ..... 2.90 gal / hr (10.99 liter / hr)  
Light ..... 2.28 gal / hr (8.63 liter / hr)

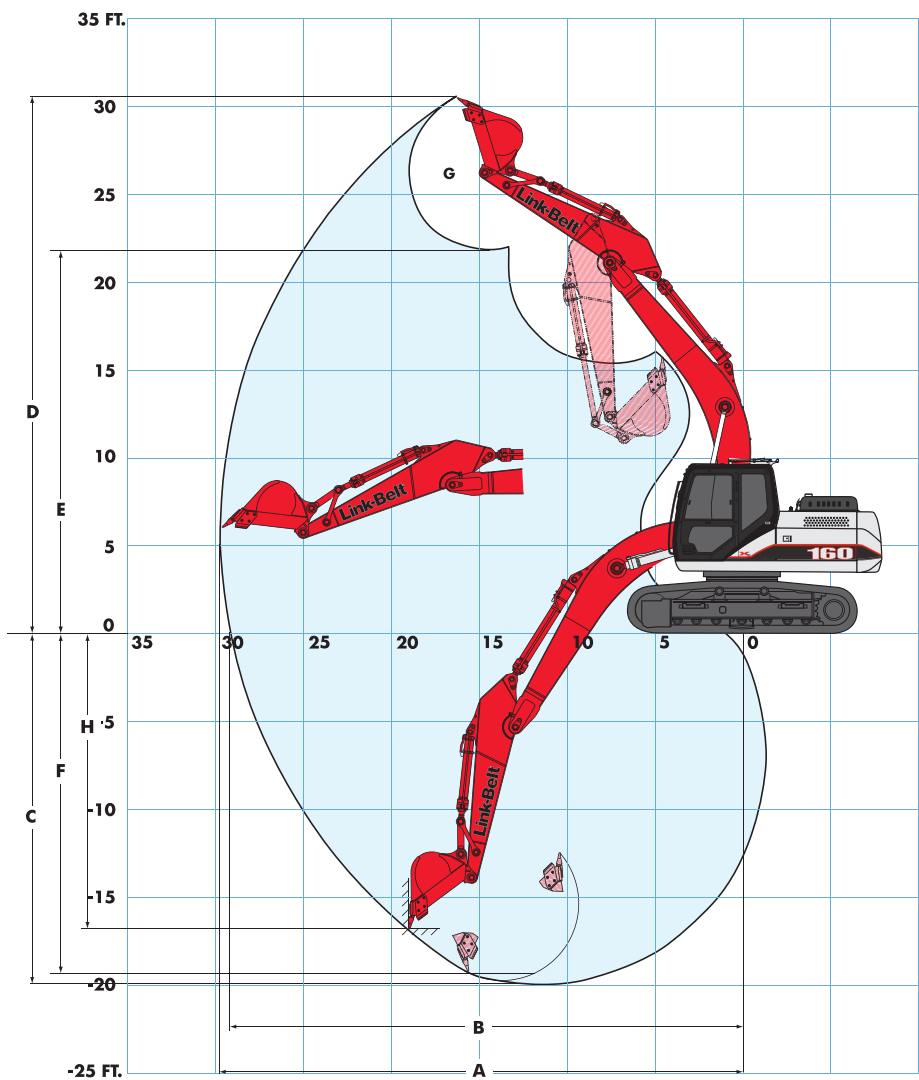
\*Fuel economy varies widely depending on application. "Heavy" represents nearly continuous operation in tough digging applications in SP Mode. "Light" represents easy digging applications utilizing the machine about 50% of the time in SP Mode.

### Operating Weight

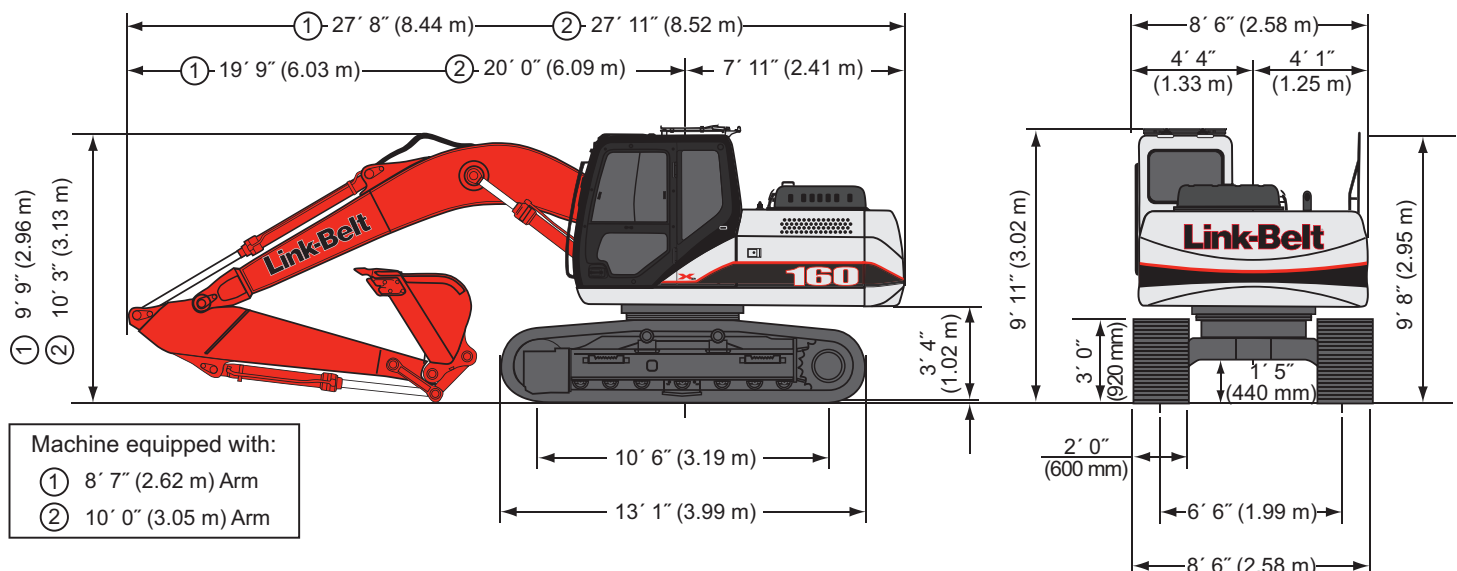
Working weight with 23.6" (600 mm) shoes, 16' 11" (5.15 m) boom, 8' 7" (2.62 m) arm, 1,110 lb. (484 kg) bucket  
..... 37,700 lbs (17,100 kg)

# 160 X2 Specifications

## Working Ranges



Machine equipped with 16' 11" (5.15 m) boom	8' 7" Arm (2.62 m)	10' 0" Arm (3.05 m)
A. Maximum reach	29' 8" (9.04 m)	30' 9" (9.38 m)
B. Maximum reach @ ground level	29' 1" (8.87 m)	30' 3" (9.22 m)
C. Maximum dig depth	19' 11" (6.06 m)	21' 4" (6.49 m)
D. Maximum dig height	30' 4" (9.24 m)	30' 6" (9.29 m)
E. Maximum dump height	21' 8" (6.61 m)	21' 11" (6.69 m)
F. Digging depth - 8' (2.44 m) level bottom	19' 2" (5.85 m)	20' 8" (6.29 m)
G. Bucket rotation	178°	178°
H. Maximum vertical wall depth	16' 8" (5.08 m)	17' 2" (5.22 m)



# 160 X2 Specifications

## Lifting Capacities

8' 7" (2.62 m) Arm with 16' 11" (5.15 m) Boom and 1,067 lb. (484 kg) Bucket with Power-Boost Applied

Radius of Load											
		10´ 0´´ (3.05 m)		15´ 0´´ (4.57 m)		20´ 0´´ (6.10 m)		25´ 0´´ (7.62 m)		Cap. at Max. Reach	
		End	Side	End	Side	End	Side	End	Side	End	Side
+25´ 0´´	lbs / (kg)									3,900*/(1 769*)	3,900*/(1 769*)
+20´ 0´´	lbs / (kg)					6,800*/(3 084*)	6,800/(3 084)			3,550*/(1 610*)	3,550*/(1 610*)
+15´ 0´´	lbs / (kg)					9,200*/(4 173)	6,750/(3 062)			3,450*/(1 565*)	3,450*/(1 565*)
+10´ 0´´	lbs / (kg)	18,100*/(8 210*)	18,100*/(8 210*)	12,650*/(5 738*)	10,200/(4 627)	10,300*/(4 672*)	6,400/(2 903)	7,100/(3 221)	4,350/(1 973)	3,500*/(1 588*)	3,400/(1 542)
+5´ 0´´	lbs / (kg)	22,550*/(10 228*)	17,150/(7 779)	15,750/(7 144)	9,350/(4 241)	9,900/(4 491)	6,000/(2 722)	6,900/(3 130)	4,150/(1 882)	3,700*/(1 678*)	3,300/(1 497)
Ground	lbs / (kg)	17,800*/(8 074*)	15,900/(7 212)	15,050/(6 827)	8,700/(3 946)	9,550/(4 332)	5,700/(2 586)	6,750/(3 062)	4,000/(1 814)	4,150*/(1 882*)	3,400/(1 542)
-5´ 0´´	lbs / (kg)	22,250*/(10 092*)	16,050/(7 280)	14,750/(6 691)	8,450/(3 833)	9,350/(4 241)	5,500/(2 495)	6,150*/(2 789*)	3,950/(1 792)	4,850*/(2 200*)	3,850/(1 746)
-10´ 0´´	lbs / (kg)	27,850*/(12 632*)	16,400/(7 439)	14,800/(6 713)	8,500/(3 856)	9,350/(4 241)	5,550/(2 517)			6,350*/(2 880*)	5,050/(2 291)
-15´ 0´´	lbs / (kg)	22,450*/(10 183*)	16,950/(7 689)	15,050*/(6 826*)	8,850/(4 014)						

10' 0" (3.04 m) Arm with 16' 11" (5.15 m) Boom and 970 lb. (440 kg) Bucket with Power-Boost Applied

Radius of Load											
		10´ 0´´ (3.05 m)		15´ 0´´ (4.57 m)		20´ 0´´ (6.10 m)		25´ 0´´ (7.62 m)		Cap. at Max. Reach	
		End	Side	End	Side	End	Side	End	Side	End	Side
+25´ 0´´	lbs / (kg)									3,650*/((1 656*))	3,650*/((1 656*))
+20´ 0´´	lbs / (kg)					7,000*/((3 175*))	7,000/((3 175))			3,350*/((1 520*))	3,350*/((1 520*))
+15´ 0´´	lbs / (kg)					8,400*/((3 810*))	6,900/((3 130))	5,200*/((2 358*))	4,550/((2 064))	3,300*/((1 497*))	3,300*/((1 497*))
+10´ 0´´	lbs / (kg)			11,450*/((5 193*))	10,450/((4 740))	9,850*/((4 467*))	6,550/((2 971))	7,200/((3 266))	4,400/((1 996))	3,400*/((1 542*))	3,200/((1 452))
+5´ 0´´	lbs / (kg)	23,950*/((10 863*))	17,650/((8 006))	15,100*/((6 849*))	9,500/((4 309))	10,000/((4 536))	6,100/((2 767))	6,950/((3 153))	4,200/((1 905))	3,600*/((1 633*))	3,100/((1 406))
Ground	lbs / (kg)	20,250*/((9 185*))	16,150/((7 326))	15,150/((6 872))	8,800/((3 992))	9,600/((4 355))	5,750/((2 608))	6,750/((3 062))	4,000/((1 814))	4,050*/((1 837*))	3,150/((1 429))
-5´ 0´´	lbs / (kg)	23,150*/((10 500*))	15,950/((7 235))	14,700/((6 668))	8,450/((3 833))	9,350/((4 241))	5,500/((2 495))	6,650/((3 016))	3,900/((1 769))	4,800*/((2 177*))	3,550/((1 610))
-10´ 0´´	lbs / (kg)	28,750*/((13 041*))	16,150/((7 326))	14,700/((6 668))	8,400/((3 810))	9,300/((4 218))	5,450/((2 472))			6,200*/((2 812*))	4,450/((2 019))
-15´ 0´´	lbs / (kg)	24,500*/((11 113*))	16,600/((7 530))	15,000/((6 804))	8,650/((3 924))						

### Notes: Excavator lifting capacities

- Lifting capacities shown should not be exceeded. Weight of all lifting accessories must be deducted from the above 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.
- Operator should be fully acquainted with the Operator's Manual & Operating Safety Booklet, furnished by LBX before operating the machine.
- Capacities apply only to the machine as originally manufactured and normally equipped by LBX Company, LLC.
- Lift capacity ratings are based on SAE J/ISO 10567, "Earthmoving Machinery – Hydraulic Excavators – Lift Capacity".

# 160 X2 Specifications

## Bucket Sizes

Bucket Type	SAE Heaped Capacity		Width Outside Lip		Bucket Weight		Number of Teeth	Arm Length	
	(yd³)	(m³)	(in)	(mm)	(lbs)	(kg)		8'-7" 2.62 m	10'-0" 3.05 m
STDP	0.58	0.44	24	610	913	415	4	H	H
	0.76	0.58	30	762	1016	462	4	H	H
	0.95	0.73	36	914	1139	518	5	M	L
	1.14	0.87	42	1067	1245	566	6	L	L
HDP	0.57	0.44	24	610	1203	547	4	H	H
	0.76	0.58	30	762	1336	607	4	H	M
	0.95	0.73	36	914	1468	667	5	M	L
POWER	0.50	0.38	24	610	1623	737	4	H	H
	0.65	0.50	30	762	1726	784	4	M	M
	0.81	0.62	36	914	1855	843	5	L	L
DITCH	0.95	0.73	60	1524	1050	477	-	M	M
	1.06	0.81	66	1676	1124	511	-	L	L

STDP - Standard duty plate  
HDP - Heavy duty plate  
XDP - Extreme duty plate  
POWER - HDP for use with ESCO multi-pin grabber only

### Approval Code For Arm/Bucket Combinations

H..... Heavy material  
(up to 3,370 lbs./yd³)  
M..... Medium material  
(up to 2,700 lbs./yd³)  
L..... Light material  
(up to 2,020 lbs./yd³)  
N/A..... Not applicable

## Standard Equipment

- KAB 815 sliding/reclining suspension seat with adjustable 4-inch armrests, lumbar support and retractable seat belt
- Safety glass front window with auto lock, windshield wiper and washer with intermittent speeds, Lexan® side and rear tinted windows
- 4-position tilting consoles with memory position and hydraulic lock-out
- Auto climate control a/c and heat
- AM/FM stereo with mute button, horn, interior light, digital clock, hour meter, floor mat, cup holder, sun shade, storage, LH and RH rear view mirrors
- Travel alarm with cancel switch
- Vandal guarding with bolt-on FOG capability
- EPA Tier III Isuzu diesel engine
- Common rail fuel injection
- Turbocharger with intercooler
- Neutral safety start
- Idle start
- Glow plug pre-heat
- Auto engine warm-up
- Auto idling system
- One-touch idle
- Dual remote fuel filters with water separation
- Double element air filter with in-cab restriction indicator
- External fuel gauge
- Remote, full-flow engine oil filter
- Green plug engine oil drain
- EPF Engine Protection
- Emergency engine stop
- Open-center hydraulic system
- Four selectable work modes including attachment mode
- Auto power boost
- Auto swing priority
- Pre-set auxiliary pump settings - 10
- Auxiliary valve
- Stackable main control valve
- Auxiliary pipe brackets
- Control levers pre-wired for auxiliary
- Control pattern changer
- Long undercarriage
- Sealed and lubricated track chain
- Two-speed with auto shift and straight travel
- Planetary drive
- Spring-applied, hydraulic release brake
- Hydraulic track adjust
- Swivel guard belly pan
- Track guides
- Vandal locks with common key
- 7,538 lb (3,419 kg) counterweight with lifting eyes
- Hand rail
- Tool box
- 16-ft 11-in boom
- EMS (Extended Maintenance System) 1,000 hour service interval throughout entire attachment except bucket
- Attachment cushion valve
- Arm and boom speed assistance
- Arm and boom regeneration
- Arm and boom holding valves
- Cylinder cushion
- Centralized lube bank
- Bucket anti-clatter device
- Illuminated LCD service monitor
- On-board diagnostic system
- Anti-theft device
- 12-volt accessory outlet
- 70-watt work lights on boom and upper

## Options

- Arms  
8-ft 7-in (2.62 m)  
10-ft 0-in (3.05 m)
- Tracks  
23.6-in (600 mm) 3-bar grouser  
27.5-in (700 mm) 3-bar grouser
- Hydraulics  
Single-acting with switch or pedal activation  
Multi-function with switch or pedal activation and in-cab flow direction control  
Thumb hydraulics with switch activation  
2<sup>nd</sup> and 3<sup>rd</sup> auxiliary with pedal activation
- Couplers  
ESCO multi-pin grabber  
Hendrix hydraulic coupler
- Thumbs  
ESCO Universal rigid  
ESCO Hydraulic non-link  
ESCO Hydraulic non-link for coupler  
ESCO Hydraulic link  
ESCO Hydraulic link for coupler
- Cab lights - exterior
- Air-suspension seat
- Free Swing
- FOG guard
- Front guard - mesh or bars
- Vandal cover for left window
- HD bucket linkage



LBX Company is the proud maker of quality Link-Belt excavators and is located in Lexington, KY.  
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