

CX80 EXCAVATOR – SWING BOOM TIER 4 INTERIM CERTIFIED

ENGINE

Model	Isuzu AU-4LE2X, Tier 4 Interim Certified
Туре	Water-cooled, 4-cycle. Turbo-charged with air-cooled intercooler
Cylinders	4-cylinder in-line
Displacement	133 in³ (2.2 L)
Bore/Stroke	3.35 in x 3.78 in (85 x 96 mm)
Fuel injection	Direct injection (electronic control)
Fuel filter	Replaceable, full flow spin-on cartridge
Air filter	Dry type element w/ warning indicator
Oil filter	Replaceable, full flow spin-on cartridge
Engine oil operating a	
Side-to-side Fore and aft	Rated 35° Rated 35°
Net Horsepower	SAE J1349
54	hp (40 kW) @ 2000 rpm
Net Maximum Torque	e SAE J1349
155 lbf-	ft (210 N·m) @ 1500 rpm
Cooling 110° F to	-13° F (43° C to -25° C) at 55% concentration

SERVICE CAPACITIES

Fuel tank	26.0 gal (100 L)
Hydraulic system Hydraulic tank	26.0 gal (100 L) 13.0 gal (50 L)
Engine oil w/ filter	9.5 qt (9.0 L)
Swing drive	10.3 qt (9.7 L)
Final drive (each side)	1.2 qt (1.1 L)
Cooling system	10.8 qt (10.2 L)

ELECTRICAL

Voltage	24 Volts
Alternator rating	50 amp
Batteries Reserve capacity	1 x 24 Volt 64 Ah / 5 hour
Work lights (2)	12 Volt / 70 & 55 watt (1 x boom @ 70 watt; 1 x upper @ 55 watt)

SWING MECHANISM

Swing speed	0 - 9.5 RPM
Swing torque	12,250 lb·ft (17,000 N·m)
Swing brake	Mechanical disc
Boom swing	Left: 50° / Right: 80°

UNDERCARRIAGE

Undercarriage le	ngth	9 ft 4 in (2.85 m)
Track gauge		6 ft 6 in (1.99 m)
Carrier rollers		1 per side
Track rollers		5 per side
Shoes - triple gro	ouser	39 per side
Show width (std)		17.7 in (450 mm)
Link pitch		6.1 in (154 mm)
Track		
Chain	Greas	e lubricated / strutted
Adjustment		Hydraulic

DOZER BLADE

Dozer blade width	7 ft 7 in (2.32 m)
Dozer blade height	17.7 in (450 mm)
Blade raise height	16.3 in (415 mm)
Blade dig depth	8.0 in (205 mm)

GROUND PRESSURE

Triple semi-grouser sho	es
17.7 in (450 mm)	5.5 psi (.38 bar)
	@ standard op. wgt.

Open center

HYDRAULICS

System design

Main pumps	Two varia	ble displacement
		/ axial piston
Max rated flow		2 x 18.0 GPM
		(2 x 68.1 L/min)
System pressures	5	
Boom, arm & bu	icket 4	,264 psi (294 bar)
Travel circuits	4	,264 psi (294 bar)
Swing circuits	3	,278 psi (226 bar)
Pilot pump		1 x gear design
Max capacity	5.7	GPM (21.4 L/min)
Controls Wit	h boom /	arm holding valve
Right track travel,	bucket,	•
boom and arm ac	celeration	Four-spool
		section
Left track travel, a	auxiliary,	
swing, boom acce	eleration	Five-spool
		section

	00011011
Swing motor	Fixed displacement
	axial
Swing final drive	Planetary gear reduction
Travel motor	Two-speed independent travel / axial piston

HYDRAULIC CYLINDERS

1 (One)
4.3 in (110 mm)
2.8 in (70 mm)
35.9 in (911 mm)
1 (One)
3.7 in (95 mm)
2.4 in (60 mm)
31.4 in (797 mm)
1 (One)
3.3 in (85 mm)
2.2 in (55 mm)
26.2 in (665 mm)

DRIVETRAIN

Travel control	Dual stage relief / counter
	•
	balance design
Brakes	Mechanical disc
Service brakes	SAHR disc (each motor)
	, ,
Two speed travel	
Max high speed	3.2 mph (5.1 kph)
Max low speed	2.1 mph (3.3 kph)
	Automatic downshift
	, (0.1011) 0.111
Drawbar pull	13,309 lbf (59.2 kN)
	.,
Gradeability	70% (35°)
	, . (,

CAB AND CONTROLS

Air-conditioner output	13,490 BTU/hr
Heater output	12,900 BTU/hr
Sound level (inside cab) (ISO6395)	75.0 dBa
Electrical outlet	12 Volt
Cab interior light (1)	6 watt
Seat	Mech. suspension

ATTACHMENT

Boom	11 ft 6 in (3.50 m)				
Arm options	5 ft 7 in (1.71 m) 6 ft 11 in (2.12 m)				
Bucket digging force*	12,790 lbf (56.9 kN)				
* Digging force ratings based on ISO6015					

OPERATING WEIGHT

Operating weight	18,585 lb (8430 kg)
w/ Shoes	17.7 in (450 mm)
w/ Boom	11 ft 6 in (3.87 m)
w/ Arm	5 ft 7 in (1.71 m)
w/ Bucket	460 lb (210 kg)
w/ Dozer blade	7 ft 7 in (2.32 m)
w/ Counterweight	2,727 lb (1237 kg)
w/ Operator / Full fuel	/ Standard equipment

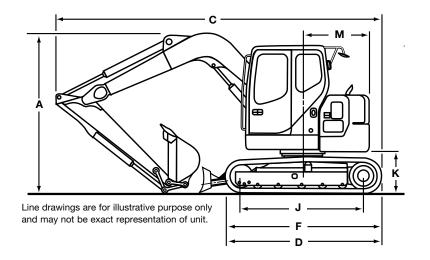
5 ft 7 in (1.71 m) Arm Lift capacities calculated using a 460 lb (209 kg) bucket, counterweight operating in "Standard" Mode, blade down.

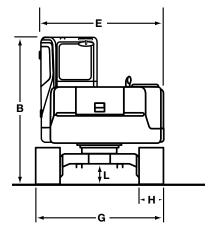
Load (Lift Point)	5 (1.5)	ft 2 m)	10 (3.0	ft 5 m)	I	5 ft 57 m)	1) ft 0 m)		MAXIMU	M REACH
Height	END (1.52	SIDE	END (5.6)	SIDE	END (5.5	SIDE	END (0.1	SIDE	@	END	SIDE
+15 ft (4.57 m)					2,902 lb* (1316 kg*)	2,902 lb* (1316 kg*)			19 ft 3 in (5.86 m)	3,002 lb* (1362 kg*)	2,502 lb (1135 kg)
+10 ft (3.05 m)					3,552 lb* (1611 kg*)	3,552 lb* (1611 kg*)			21 ft 8 in (6.60 m)	3,152 lb* (1430 kg*)	2,002 lb (908 kg)
+5 ft (1.52 m)			8,952 lb* (4060 kg*)	6,452 lb (2926 kg)	5,052 lb* (2291 kg*)	3,502 lb (1588 kg)	4,052 lb* (1838 kg*)	2,202 lb (999 kg)	22 ft 4 in (6.80 m)	3,402 lb* (1543 kg*)	1,852 lb (840 kg)
Ground- line			9,152 lb* (4151 kg*)	6,002 lb (2722 kg)	6,452 lb* (2926 kg*)	3,302 lb (1498 kg)	4,502 lb* (2042 kg*)	2,102 lb (953 kg)	21 ft 5 in (6.52 m)	4,052 lb* (1838 kg*)	1,902 lb (863 kg)
-5 ft (-1.52 m)			12,102 lb* (5489 kg*)	6,052 lb (2745 kg)	6,802 lb* (3085 kg*)	3,202 lb (1452 kg)			18 ft 6 in (5.63 m)	4,702 lb* (2133 kg*)	2,402 lb (1089 kg)
-10 ft (-3.05 m)			9,902 lb* (4491 kg*)	6,202 lb (2813 kg)							

6 ft 11 in (2.12 m) Arm Lift capacities calculated using a 420 lb (191 kg) bucket, counterweight operating in "Standard" Mode, blade down.

Load (Lift Point)		ft 2 m)		ft 5 m)	l	5 ft 57 m)	1	0 ft 0 m)		MAXIMU	M REACH
Height	END	SIDE	END	SIDE	END	SIDE	END	SIDE	@	END	SIDE
+15 ft (4.57 m)									20 ft 9 in (6.32 m)	2,703 lb* (1266 kg*)	2,253 lb* (1022 kg*)
+10 ft (3.05 m)					2,903 lb* (1,317 kg*)	2,903 lb* (1,317 kg*)	3,203 lb* (1453 kg*)	2,302 lb (1044 kg)	22 ft 11 in (6.98 m)	2,803 lb* (1271 kg*)	1,802 lb (817 kg)
+5 ft (1.52 m)			7,303 lb* (3312 kg*)	6,602 lb (2995 kg)	4,503 lb* (2042 kg*)	3,502 lb (1589 kg)	3,703 lb* (1679 kg*)	2,202 lb (999 kg)	23 ft 7 in (7.18 m)	3,053 lb* (1385 kg*)	1,652 lb (749 kg)
Ground- line			9,803 lb* (4446 kg*)	6,002 lb (2723 kg)	6,103 lb* (2768 kg*)	3,252 lb (1475 kg)	4,353 lb* (1974 kg*)	2,102 lb (954 kg)	22 ft 8 in (6.90 m)	3,553 lb* (1611 kg*)	1,752 lb (795 kg)
-5 ft (-1.52 m)			12,203 lb* (5535 kg*)	5,902 lb (2677 kg)	6,753 lb* (3063 kg*)	3,152 lb (1430 kg)	4,503 lb* (2042 kg*)	2,052 lb (931 kg)	20 ft 1 in (6.12 m)	4,353 lb* (1974 kg*)	2,102 lb (954 kg)
-10 ft (-3.05 m)			10,803 lb* (4900 kg*)	6,052 lb (2745 kg)	6,053 lb* (2745 kg*)	3,252 lb (1475 kg)					

^{*}Lift capacities do not exceed 75% of the minimum tipping load or 87% of the hydraulic lift capacity. Capacities that are marked with an asterisk are hydraulic limited.

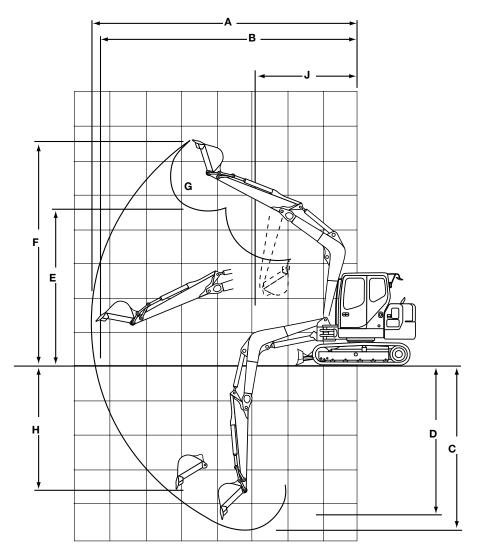




DIMENSIONS

		5 ft 7 in (1.71 m) Arm	6 ft 11 in (2.12 m) Arm
Α.	Overall height (w/ attachment)	8 ft 10 in (2.70 m)	8 ft 10 in (2.70 m)
B.	Cab height	8 ft 10 in (2.70 m)	8 ft 10 in (2.70 m)
C.	Overall length (w/ attachment)	21 ft 10 in (6.65 m)	22 ft 1 in (6.74 m)
D.	Overall length (w/o attachment)	10 ft 9 in (3.28 m)	10 ft 9 in (3.28 m)
E.	Width of upperstructure	7 ft 4 in (2.23 m)	7 ft 4 in (2.23 m)
F.	Track overall length	9 ft 4 in (2.85 m)	9 ft 4 in (2.85 m)
G.	Track overall width w/ 17.7 in (450 mm) shoes	7 ft 7 in (2.32 m)	7 ft 7 in (2.32 m)
Н.	Track shoe width	17.7 in (450 mm)	17.7 in (450 mm)
J.	Center to center (idler to sprocket)	7 ft 3 in (2.21 m)	7 ft 3 in (2.21 m)
K.	Upperstructure ground clearance	2 ft 5 in (0.75 m)	2 ft 5 in (0.75 m)
L.	Minimum ground clearance	1 ft 2 in (360 mm)	1 ft 2 in (360 mm)
М.	Rear tail swing radius	5 ft 5 in (1.66 m)	5 ft 5 in (1.66 m)
Ор	erating weight*	18,585 lb (8430 kg)	18,915 lb (8580 kg)
Gro	und pressure	5.51 psi (.38 bar)	5.53 psi (.38 bar)

^{*}With 17.7 in (460 mm) track shoe, 460 lb (210 kg) bucket, 165 lb (75 kg) operator, full fuel and standard equipment.



PERFORMANCE SPECS

	5 ft 7 in (1.71 m) Arm	6 ft 11 in (2.12 m) Arm
A. Maximum dig radius	23 ft 1 in (7.03 m)	24 ft 3 in (7.40 m)
B. Dig radius at groundline	22 ft 7 in (6.89 m)	23 ft 10 in (7.27 m)
C. Maximum dig depth	13 ft 9 in (4.18 m)	15 ft 1 in (4.59 m)
D. Dig depth – 8 ft 0 in (2.44 m) level bottom	12 ft 5 in (3.78 m)	13 ft 11 in (4.23 m)
E. Dump height	14 ft 5 in (4.39 m)	15 ft 1 in (4.60 m)
F. Overall reach height	21 ft 0 in (6.39 m)	21 ft 8 in (6.60 m)
G. Bucket rotation	177°	177°
H. Vertical straight wall dig depth	10 ft 1 in (3.08 m)	11 ft 8 in (3.55 m)
J. Minimum swing radius	9 ft 0 in (2.75 m)	9 ft 7 in (2.91 m)
Arm digging force	8,610 lb (38.3 kN)	7,644 lb (34.0 kN)
Bucket digging force	12,792 lb (56.9 kN)	12,792 lb (56.9 kN)
Dozer blade cutting edge		
Max. height	1 ft 4 in (0.42 kN)	1 ft 4 in (0.42 kN)
Dozer blade cutting edge		
Max. depth	8 in (0.21 kN)	8 in (0.21 kN)

STANDARD EQUIPMENT

ENGINE

Isuzu four-cylinder turbo-charged diesel

Certified Tier 4 Interim

Electronic fuel injection

Neutral safety start

Auto-engine warm up

Glow-plug pre-heat

One-touch idle

Dual-stage fuel filtration

Dual element air filter

Remote oil filter

Green plug oil drain

500-hour engine oil change interval

24-Volt system

HYDRAULIC

ISO pattern controls

5000 hour hydraulic oil change interval 1000 hour hydraulic filter change interval

SAHR brake

UPPERSTRUCTURE

Right and left side mirrors

Isolation mounted cab (fluid)

Common key vandal locks

Upper mounted work light (55 watt)

Swivel guard belly pan

UNDERCARRIAGE

17.7 in (450 mm) steel shoes,

triple semi-grouser

Full overlap turntable bearing tub

Front track chain guides

Hydraulic track adjustment

X-pattern carbody

FRONT BLADE

Hydraulically controlled front blade

7 ft 7 in width

1 ft 6 in height

ATTACHMENT

Boom - 11 ft 6 in (3.87 m)

Arm - 5 ft 7 in (1.71 m)

Boom mounted work light (70 watt)

Attachment cushion valve

OPERATOR STATION

FOPS cab top guard (Level 1)

Pressurized cab

One-touch lock front window

AC/heat/defrost w/ auto climate control

Interior dome light

Mechanical-suspension seat (cloth)

Adjustable armrests

Low-effort joystick controls

Controls pre-wired for auxillary

Blade control lever

AM/FM radio w/ antenna and 2 speakers

Anti-theft system (start code system)

Rubber floormat

12-Volt electric socket

24-Volt cigarette lighter

External rear view mirrors

Windshield wiper / washer

Cup holder

Storage compartments

Travel alarm with cancel switch

One key start & lock-up

OPTIONAL EQUIPMENT

HYDRAULICS

Auxiliary hydraulics

Single acting

Double acting

Double acting bi-directional

ATTACHMENT

Arm 6 ft 11 in (2.12 m)

Coupler / Case multi-pin grabber

Buckets: Heavy duty

OPERATOR STATION

Control pattern selector

FOPS cab top guard (Level 2)

Front grill guard - 2 x 2 screen mesh

Front rock guard - vertical bars (fixed / one piece) / OPG 2

UNDERCARRIAGE

23.6 in (600 mm) steel shoes, triple semi-grouser *

17.7 in (450 mm) rubber pads bolted to standard rail

* Note: blade will not fully cover 23.6" shoe

BUCKETS / CASE COUPLER

Application	Width	SAE Heaped Capacity
Pin On / Heavy Duty	18 in (457 mm) to 42 in (1067 mm)	0.21 yd³ to 0.57 yd³
Coupler / Heavy Duty	18 in (457 mm) to 42 in (1067 mm)	0.24 yd³ to 0.59 yd³
Case Multi-fit Coupler		

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NOTE: All specifications are stated in accordance with SAE Standards or Recommended Practices, where applicable.

NOTE: All engines meet current EPA emissions requirements.

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