

SPECIFICATIONS

HX520L

Tier 4 Final Engine

Net Power
SAE J1349 / 424 HP
(316 kW) at 1,900 rpm

Bucket Range
1.37 - 3.2 m³
(1.8 - 4.19 yd³)
Standard Bucket
2.19 m³ (2.87 yd³)

Operating Weight
53,680 kg / 118,340 lb

ENGINE		
Make / model		Scania DC13 084A
Type		4-cycle air-cooled, charge air-cooled, diesel engine
Rated flywheel horse-power	J1995 (gross)	444 HP (331 kW) at 1,900 rpm
	SAE J1349 (net)	424 HP (316 kW) at 1,900 rpm
Max. torque		232 kgf·m (1,678 lbf·ft) at 1250 rpm
Bore X stroke		130×160 mm (5.12"×6.3")
Piston displacement		12,700 cc (775 in ³)
Batteries		2×12 V×200 Ah
Starting motor		24 V×6 kW
Alternator		24 V×100 A

HYDRAULIC SYSTEM

MAIN PUMP

Type	Variable-displacement tandem axis piston pumps
Max. flow	2×380.0 lpm (100.4 gpm)
Sub-pump for pilot circuit	Gear pump

CROSS-SENSING AND FUEL-SAVING PUMP SYSTEM

HYDRAULIC MOTORS

Travel	Two-speed axial piston motor with brake motor with automatic brake
Swing	Axial piston motor with automatic brake

RELIEF VALVE SETTING

Implement circuits	330 kgf/cm ² (4,690 psi)
Travel	330 kgf/cm ² (4,690 psi)
Power boost (boom, arm, bucket)	360 kgf/cm ² (5,120 psi)
Swing circuit	285 kgf/cm ² (4,050 psi)
Pilot circuit	40 kgf/cm ² (569 psi)
Service valve	Installed

HYDRAULIC CYLINDERS

No. of cylinders bore X stroke	Boom: 0170 x 1,570 mm (06.7×61.8 in)
	Arm: 0190 x 1,820 mm (07.5×71.7 in)
	Bucket: 0170 x 1,370 mm (06.7×53.9 in)

DRIVES & BRAKES

Drive method	Fully hydrostatic type
Drive motor	Axial piston motor, in-shoe design
Reduction system	Planetary reduction gear
Max. drawbar pull	34,100 kgf (75,180 lbf)
Max. travel speed (high / low)	5.3 km/hr (3.29 mph) / 3.3 km/hr (2.05 mph)
Gradeability	35° (70%)
Parking brake	Multi wet disc brake

CONTROL

Pilot pressure operated joysticks and pedals provide very-low-effort operation.

Pilot control	Two joysticks with one safety lever (LH): Swing and arm (RH): Boom and bucket (ISO)
Traveling and steering	Two levers with pedals
Engine throttle	Electric, Dial type



OPERATING WEIGHT (APPROXIMATE)

Operating weight, including 7,060 mm (23' 2") boom, 3,380 mm (11' 1") arm, SAE heaped 1.27 m³ (1.66 yd³) bucket, lubricant, coolant, full fuel tank, full hydraulic tank, 10,700 kg (23,590 lb) counterweight and all standard equipment.

OPERATING WEIGHT

Shoes		Operating weight		Ground pressure
Type	Width mm (in)		kg (lb)	kgf/cm ² (psi)
Triple grouser	700 (28")	HX520 L	53,420 (117,770)	0.80 (11.38)
	800 (32")	HX520 L	53,680 (118,340)	0.75 (10.67)

SWING SYSTEM

Swing motor	Fixed displacement axial piston motor
Swing reduction	Planetary gear reduction
Swing bearing lubrication	Grease-bathed
Swing brake	Multi wet disc brake
Swing speed	8.6 rpm

SERVICE REFILL CAPACITIES

	liters	US gal
Refilling		
Fuel tank	610	161
Engine coolant	50	13.2
Engine oil	38	10
Swing device	7	1.8
Final drive (each)	12	3.2
Hydraulic system (including tank)	480	127
Hydraulic tank	262	74
DEF/AdBlue®	69	18.2

UNDERCARRIAGE

The X-leg type center frame is integrally welded with reinforced box-section track frames. The undercarriage includes lubricated rollers, idlers, track adjusters with shock-absorbing springs and sprockets, and a track chain with double or triple grouser shoes.

Center frame	X-leg type
Track frame	Pentagonal box type
No. of shoes on each side	53 ea
No. of carrier rollers on each side	3 ea
No. of track rollers on each side	9 ea
No. of rail guards on each side	2 ea

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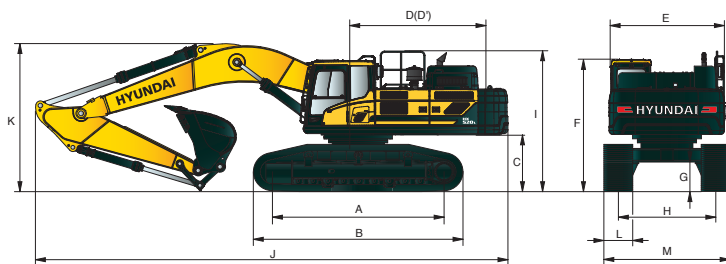
HX520 L DIMENSIONS

Unit: mm (ft-in)

6.55 m (21' 6"), 7.06 m (23' 2"), 9.0 m (29' 6") boom and 2.4 m (7' 10"), 2.9 m (9' 6"), 3.38 m (11' 1"), 4.0 m (13' 1"), 6.0 m (19' 8") arm

A	Tumbler distance	4,470 (14' 8")
B	Overall length of crawler	5,460 (17' 11")
C	Ground clearance of counterweight	1,445 (4' 9")
D	Tail-swing radius	3,940 (12' 11")
D'	Rear-end length	3,885 (12' 9")
E	Overall width of upper structure	2,980 (9' 9")
F	Overall height of cab	3,340 (10' 11")
G	Min. ground clearance	770 (2' 6")
H	Track gauge	Extended
		Retracted
I	Overall height of guardrail	3,595 (11' 8")

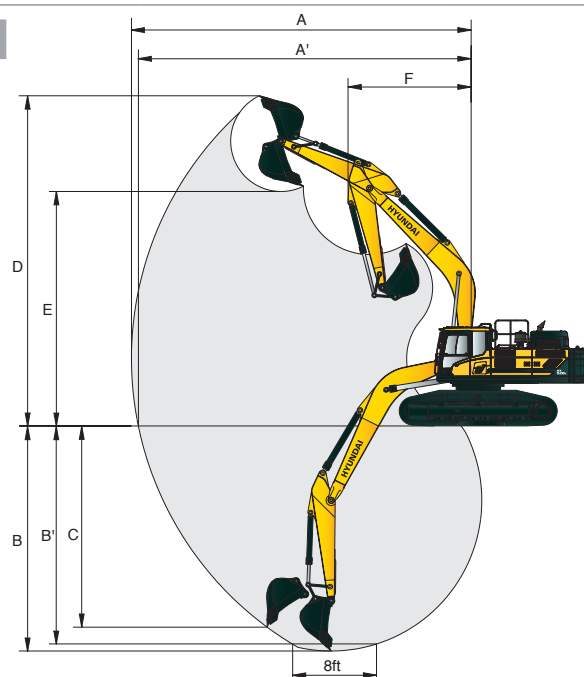
Boom length		6,550 (21' 6")		7,060 (23' 2")		9,000 (29' 6")	
Arm length		2,400 (7' 10")	2,900 (9' 6")	2,400 (7' 10")	2,900 (9' 6")	3,380 (11' 1")	4,000 (13' 8")
J	Overall length	12,000 (39' 4")	11,870 (38' 11")	12,510 (41' 1")	12,380 (40' 7")	12,260 (40' 3")	12,250 (40' 2")
K	Overall height of boom	4,190 (13' 9")	4,080 (13' 5")	4,070 (13' 4")	3,920 (12' 10")	3,790 (12' 5")	4,090 (13' 5")
L	Track shoe width	600 (24")	700 (28")	750 (30")	800 (32")		
M	Overall width	Extended	3,540 (11' 7")	3,640 (11' 11")	3,690 (12' 1")	3,740 (12' 3")	
		Retracted	2,980 (9' 10")	3,080 (10' 1")	3,130 (10' 3")	3,180 (10' 5")	



HX520 L WORKING RANGE

Unit : mm (ft-in)

Boom length		6,550 (21' 6")		7,060 (23' 2")		9,000 (29' 6")	
Arm length		2,400 (7' 10")	2,900 (9' 6")	2,400 (7' 10")	2,900 (9' 6")	3,380 (11' 1")	4,000 (13' 1")
A	Max. digging reach	10,690 (35' 1")	11,130 (36' 6")	11,200 (36' 9")	11,620 (38' 1")	12,040 (39' 6")	12,600 (41' 4")
A'	Max. digging reach on ground	10,430 (34' 3")	10,870 (35' 8")	10,950 (35' 11")	11,380 (37' 4")	11,810 (38' 9")	12,380 (40' 7")
B	Max. digging depth	6,240 (20' 6")	6,740 (22' 1")	6,630 (21' 9")	7,130 (23' 5")	7,610 (25' 0")	8,230 (27' 0")
B'	Max. digging depth (8' level)	6,060 (19' 11")	6,580 (21' 7")	6,460 (21' 2")	6,980 (22' 11")	7,470 (24' 6")	8,110 (26' 7")
C	Max. vertical wall digging depth	4,370 (14' 4")	5,420 (17' 9")	4,650 (15' 3")	5,660 (18' 7")	5,770 (18' 11")	6,320 (20' 9")
D	Max. digging height	10,390 (34' 1")	10,660 (35' 0")	10,750 (35' 3")	10,980 (36' 0")	11,060 (36' 3")	11,280 (37' 0")
E	Max. dumping height	7,040 (23' 1")	7,210 (23' 8")	7,410 (24' 4")	7,540 (24' 9")	7,690 (25' 3")	7,910 (25' 11")
F	Min. swing radius	4,870 (16' 0")	4,540 (14' 11")	5,160 (16' 11")	4,890 (16' 1")	4,850 (15' 11")	4,710 (15' 5")



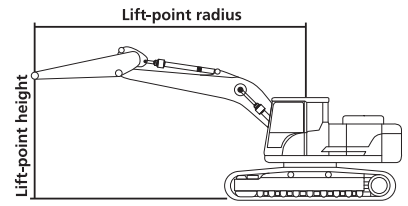
DIGGING FORCE

Boom	Length	mm (ft-in)	6,550 (21' 6")		7,060 (23' 2")				9,000 (29' 6")	Remark
	Weight	kg (lb)	4,340 (9,570)		4,370 (9,630)				5,130 (11,310)	
Arm	Length	mm (ft-in)	2,400 (7' 10")	2,900 (9' 6")	2,400 (7' 10")	2,900 (9' 6")	3,380 (11' 1")	4,000 (13' 1")	6,000 (19' 8")	
	Weight	kg (lb)	2,430 (5,360)	2,630 (5,800)	2,430 (5,360)	2,630 (5,800)	2,670 (5,890)	2,760 (6,080)	3,290 (7,250)	
Bucket digging force	SAE	kN	241.2 [263.2]	241.2 [263.2]	241.2 [263.2]	241.2 [263.2]	241.2 [263.2]	241.2 [263.2]	184.4	[]: Power Boost
		kgf	24600 [26840]	24600 [26840]	24600 [26840]	24600 [26840]	24600 [26840]	24600 [26840]	18800	
		lbf	54230 [59170]	54230 [59170]	54230 [59170]	54230 [59170]	54230 [59170]	54230 [59170]	41450	
	ISO	kN	280.5 [306.0]	280.5 [306.0]	280.5 [306.0]	280.5 [306.0]	280.5 [306.0]	280.5 [306.0]	213.8	
		kgf	28600 [31200]	28600 [31200]	28600 [31200]	28600 [31200]	28600 [31200]	28600 [31200]	21800	
		lbf	63050 [68780]	63050 [68780]	63050 [68780]	63050 [68780]	63050 [68780]	63050 [68780]	48060	
Arm crowd force	SAE	kN	278.5 [303.8]	225.6 [246.1]	278.5 [303.8]	225.6 [246.1]	192.2 [209.7]	171.6 [187.2]	103.0	
		kgf	28400 [30980]	23000 [25090]	28400 [30980]	23000 [25090]	19600 [21380]	17500 [19090]	10500	
		lbf	62610 [68300]	50710 [55310]	62610 [68300]	50710 [55310]	43210 [47130]	38580 [42090]	23150	
	ISO	kN	291.3 [317.7]	235.4 [256.7]	291.3 [317.7]	235.4 [256.7]	200.1 [218.2]	177.5 [193.7]	105.9	
		kgf	29700 [32400]	24000 [26180]	29700 [32400]	24000 [26180]	20400 [22250]	18100 [19750]	10800	
		lbf	65480 [71430]	52910 [57720]	65480 [71430]	52910 [57720]	44970 [49050]	39900 [43540]	23810	

Note : Boom weight includes arm cylinder, piping, and pin
Arm weight includes bucket cylinder, linkage, and pin

SPECIFICATIONS HX520L

Tier 4 Final Engine



Lifting Capacity

Boom: 7.06 m (23'2")

Arm: 3.38 m (11'1")

Bucket: 2.20 m³ (2.88yd³) SAE heaped

Shoe 800 mm (32") triple grouser, CWT 10,700 kg (23,590 lb)













Capacities based on North American Standard Configuration in accordance with ISO condition 2 standard.



Rating over-front



Rating over-side or 360 degree

Load point height (m / ft)		Load radius										At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		7.5 m (24.6 ft)		9.0 m (29.5 ft)		Capacity		Reach
														m (ft)
7.5 m	kg							*12,320	*12,320			*8,520	*8,520	8.69
24.6 ft	lb							*27,160	*27,160			*18,790	*18,790	(28.5)
6.0 m	kg							*13,110	12,850	*10,380	9,610	*8,440	*8,440	9.43
19.7 ft	lb							*28,900	28,330	*22,890	21,180	*18,610	*18,610	(31.0)
4.5 m	kg			*22,420	*22,420	*16,970	*16,970	*14,180	12,420	*12,540	9,410	*8,610	8,090	9.90
14.8 ft	lb			*49,440	*49,440	*37,410	*37,410	*31,260	27,390	*27,640	20,750	*18,980	17,820	(32.5)
3.0 m	kg			*24,650	*24,650	*19,160	16,450	*15,350	11,950	*13,110	9,160	*9,020	7,670	10.11
9.8 ft	lb			*54,350	*54,350	*42,230	36,260	*33,830	26,340	*28,890	20,190	*19,880	16,920	(33.2)
1.5 m	kg			*18,980	*18,980	*20,690	15,740	*16,260	11,530	*13,550	8,930	*9,720	7,560	10.10
4.9 ft	lb			*41,850	*41,850	*45,610	34,700	*35,850	25,420	*29,880	19,680	*21,420	16,660	(33.1)
0.0 m	kg			*22,300	*22,300	*21,180	15,330	*16,650	11,250	13,450	8,760	*10,100	7,730	9.86
0.0 ft	lb			*49,160	*49,160	*46,680	33,800	*36,700	24,800	29,660	19,310	*22,280	17,040	(32.4)
-1.5 m	kg	*16,590	*16,590	*25,980	23,510	*20,580	15,190	*16,290	11,120	*13,070	8,700	*10,820	8,250	9.38
-4.9 ft	lb	*36,590	*36,590	*57,280	51,820	*45,380	33,480	*35,910	24,510	*28,800	19,180	*23,860	18,190	(30.8)
-3.0 m	kg	*24,940	*24,940	*23,920	23,720	*18,840	15,250	*14,890	11,160			*12,160	9,330	8.60
-9.8 ft	lb	*54,980	*54,980	*52,730	52,290	*41,540	33,620	*32,820	24,600			*26,820	20,570	(28.2)
-4.5 m	kg	*23,780	*23,780	*19,490	*19,490	*15,500	*15,500					*11,590	11,550	7.45
-14.8 ft	lb	*52,430	*52,430	*42,960	*42,960	*34,180	*34,180					*25,550	25,470	(24.4)

NOTES:

- Lifting capacities are based on ISO 10567.
- Lifting capacity of the HX Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
- The Lift-point is bucket pivot mounting pin on the arm (without bucket mass).
- (*) indicates load limited by hydraulic capacity.



SPECIFICATIONS HX520L

Tier 4 Final Engine

ENGINE	STD	OPT
Scania DC13 084A engine	●	
HYDRAULIC SYSTEM	STD	OPT
Intelligent Power Control (IPC)		
3-power mode, 2-work mode, user mode	●	
Variable power control	●	
Pump flow control	●	
Attachment mode flow control	●	
Engine auto idle	●	
Engine auto shutdown control		●
CAB & INTERIOR	STD	OPT
ISO standard cabin		
Rise-up type windshield wiper	●	
Radio / USB player	●	
Bluetooth / hands-free mobile phone system with USB	●	
Miracast	●	
12-volt power outlet (24V DC to 12V DC converter)	●	
Electric horn	●	
All-weather steel cab with 360° visibility	●	
Safety glass windows	●	
Sliding fold-in front window	●	
Sliding side window (LH)	●	
Lockable door	●	
Hot and cool box	●	
Storage compartment and ashtray	●	
Transparent cabin roof-cover	●	
Sun visor	●	
Door and cab locks, one key	●	
Mechanical suspension seat with heater	●	
Pilot-operated slidable joystick	●	
Console box height adjust system	●	
Automatic climate control		
Air conditioner and heater	●	
Defroster	●	
Starting aid (air grid heater) for cold weather	●	
Centralized monitoring		
8" LCD display	●	
Engine speed or trip meter / accel.	●	
Engine coolant temperature gauge	●	
Max. power	●	
Low speed / high speed	●	
Auto idle	●	
Overload	●	
Check engine	●	
Air cleaner clogging	●	
Indicators	●	
ECO gauges	●	
Fuel level gauge	●	
Hyd. oil temperature gauge	●	
Fuel warmer	●	
Warnings	●	
Communication error	●	
Low battery	●	
Clock	●	
Cabin lights	●	
Cabin front window rain guard		●
Cabin roof-steel cover		●

CAB & INTERIOR	STD	OPT
Seat		
Adjustable air suspension seat with heater	●	
Cabin FOPS/FOG		
FOG ISO 10262 Level 2	Front and top guard	●
(FOPS ISO 3449 Level 2)	Top guard	●
Cabin ROPS		
ROPS ISO 12117-2	●	
SAFETY	STD	OPT
Battery master switch	●	
Rearview camera	●	
AAVM (All-Around View Monitoring)		●
Four front working lights	●	
Dual boom working lights	●	
Travel alarm	●	
Rear work lamp		●
Beacon lamp		●
Automatic swing brake	●	
Boom holding system	●	
Arm holding system	●	
Safety lock valve for boom cylinder with overload warning device		●
Safety lock valve for arm cylinder		●
Three outside rearview mirrors	●	
OTHER	STD	OPT
Booms		
6.55 m, 21' 6"		●
7.06 m, 23' 2"	●	
9.00 m, 29' 6"		●
Arms		
2.4 m, 7' 10"		●
2.9 m, 9' 6"		●
3.38 m, 11' 1"	●	
4.0 m, 13' 1"		●
6.0 m, 19' 8"		●
Removable clean-out dust net for cooler	●	
Removable reservoir tank	●	
Fuel pre-filter with fuel warmer	●	
Rain cap	●	
Pre-cleaner		●
Self-diagnostics system	●	
Hi-mate remote management system	Mobile	●
	Satellite	
Batteries (2 x 12V x 200 AH)	●	
Fuel-filler pump (50 lpm / 13 gpm)		●
Single-acting piping kit (breaker, etc.)		●
Double-acting piping kit (clamshell, etc.)	●	
Rotating Piping Kit		●
Quick coupler piping		●
Quick coupler		●
Boom float control		●
Pilot accumulator	●	
Pattern-change valve (SAE and ISO)	●	
Tool kit		●
UNDERCARRIAGE	STD	OPT
Lower frame under cover (additional)		●
Lower frame under cover (normal)	●	
Track shoes		
Triple grouser shoes (700 mm, 28")		●
Triple grouser shoes (800 mm, 32")	●	
Track rail guard	●	
Full track rail guard		●

NOTE: Standard and optional equipment may vary. Materials and specifications are subject to change without advance notice. Contact your Hyundai dealer for more information.



HYUNDAI

CONSTRUCTION EQUIPMENT

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