

# SPECIFICATIONS

## HX480L

Tier 4 Final Engine

<b>Net Power</b> SAE J1349 / 424 HP (316 kW) at 1,900 rpm	<b>Bucket Range</b> 1.8 yd <sup>3</sup> - 4.19 yd <sup>3</sup> <b>Standard Bucket</b> 2.87 yd <sup>3</sup>	<b>Operating Weight</b> 49,500 kg / 109,130 lbs
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ENGINE			
Maker / Model	Scania DC13 084A		
Type	4-cycle turbocharged, charge air cooled, diesel engine		
Rated flywheel horse power	SAE	J1995 (gross)	444 HP (331 kW) at 1,900 rpm
		J1349 (net)	424 HP (316 kW) at 1,900 rpm
	DIN	6271/1 (gross)	450 PS (331 kW) at 1,900 rpm
		6271/1 (net)	430 PS (316 kW) at 1,900 rpm
Max. torque	232 kgf·m (1,678 lbf·ft) at 1250 rpm		
Bore X stroke	130x160 mm (5.12"x6.3")		
Piston displacement	12,700 cc (775 in <sup>3</sup> )		
Batteries	24 Vx200 Ah		
Starting motor	24 Vx6 kW		
Alternator	24 Vx100 A		

HYDRAULIC SYSTEM	
MAIN PUMP	
Type	Variable displacement tandem axis piston pumps
Max. flow	2x380.0 lpm (100.4 gpm)
Sub-pump for pilot circuit	Gear pump

Cross-sensing and fuel saving pump system

HYDRAULIC MOTORS	
Travel	Two speed axial pistons motor with brake valve and parking brake
Swing	Axial piston motor with automatic brake

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

HYDRAULIC CYLINDERS	
No. of cylinder bore X stroke	Boom: Ø6.7x61.8 in
	Arm: Ø7.5x71.7 in
	Bucket: Ø6.3x53.9 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 with detachable lever for minimal operator fatigue.	
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 7,060mm (23' 2") boom, 3,380mm (11' 1") arm, SAE heaped 2.2m <sup>3</sup> (2.88 yd <sup>3</sup> ) bucket, lubricant, coolant, full fuel tank, full hydraulic tank, and all standard equipment.	

OPERATING WEIGHT				
Shoes		Operating weight		Ground pressure
Type	Width mm (in)	kg (lb)		kgf/cm <sup>2</sup> (psi)
Triple grouser	600 (24")	HX480L	49,500 (109,130)	0.86 (12.23)
	700 (28")	HX480L	50,020 (110,280)	0.75 (10.67)
	750 (30")	HX480L	50,280 (110,850)	0.70 (9.95)
	800 (32")	HX480L	50,540 (111,420)	0.66 (9.35)
	900 (36")	HX480L	51,060 (112,570)	0.59 (8.39)
Double grouser	600 (24")	HX480L	49,315 (108,720)	0.86 (12.23)
	700 (28")	HX480L	49,835 (109,870)	0.74 (10.52)
Heavy duty grouser	600 (24")	HX480HD	49,680 (109,530)	0.86 (12.23)
	700 (28")	HX480HD	50,230 (110,740)	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
Re-filling		
Fuel tank	610	161
Engine coolant	50	13.2
Engine oil	38	10
Swing device (each)	7	1.8
Final drive (each)	12	3.2
Hydraulic system (including tank)	486	128
Hydraulic tank	262	74
DEF/AdBlue®	69	18.2

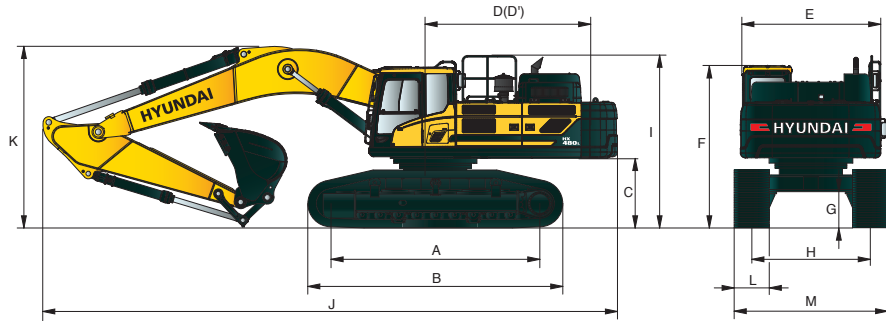
UNDERCARRIAGE	
The X-leg type center frame is integrally welded with reinforced box-section track frames. The undercarriage includes lubricated rollers, idlers, track adjusters with shock absorbing springs and sprockets, and a track chain with double or triple grouser shoes.	
Center frame	X - leg type
Track frame	Pentagonal box type
No. of shoes on each side	53 EA
No. of carrier roller on each side	2 EA
No. of track roller on each side	9 EA
No. of rail guard on each side	2 EA

# SPECIFICATIONS HX480L

Tier 4 Final Engine

## HX480L DIMENSIONS

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' 8"), 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	1,295 (4' 3")
D	Tail swing radius	3,940 (12' 11")
D'	Rear-end length	3,885 (12' 9")
E	Overall width of upperstructure	2,980 (9' 9")
F	Overall height of cab	3,240 (10' 6")
G	Min. ground clearance	560 (1' 8")
H	Track gauge	2,740 (9' 0")
I	Overall height of guardrail	3,450 (11' 3")

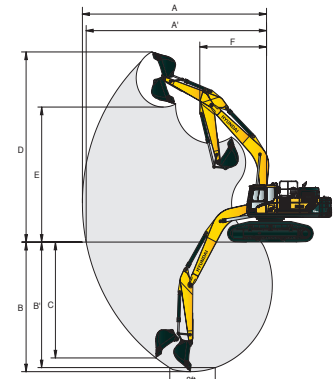
Unit : mm (ft-in)

	6,550 (21' 6")		7,060 (23' 2")		9,000 (29' 6")	
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")
J Overall length	11,990 (39' 4")	11,870 (38' 11")	12,510 (41' 1")	12,390 (40' 8")	12,260 (40' 3")	12,230 (40' 1")
K Overall height of boom	4,130 (13' 7")	4,050 (13' 3")	4,010 (13' 2")	3,900 (12' 10")	3,790 (12' 5")	4,110 (13' 6")
L Track shoe width	600 (24")	700 (28")	750 (30")	800 (32")	900 (36")	
M Overall width	3,340 (10' 11")	3,440 (11' 3")	3,490 (11' 5")	3,540 (11' 7")	3,640 (11' 11")	

## HX480L WORKING RANGE

Unit : mm (ft-in)

	6,550 (21' 6")		7,060 (23' 2")		9,000 (29' 6")	
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	10,470 (34' 4")	10,910 (35' 10")	10,980 (36' 0")	11,410 (37' 5")	11,840 (38' 10")	12,410 (40' 9")
B Max. digging depth	6,390 (21' 0")	6,890 (22' 7")	6,780 (22' 3")	7,280 (23' 11")	7,760 (25' 6")	8,380 (27' 6")
B' Max. digging depth (8' level)	6,210 (20' 4")	6,730 (22' 1")	6,600 (21' 8")	7,120 (23' 4")	7,620 (25' 0")	8,250 (27' 1")
C Max. vertical wall digging depth	4,510 (14' 10")	5,550 (18' 3")	4,790 (15' 9")	5,800 (19' 0")	5,920 (19' 5")	6,470 (21' 3")
D Max. digging height	10,240 (33' 7")	10,510 (34' 6")	10,600 (34' 9")	10,830 (35' 6")	10,910 (35' 10")	11,130 (36' 6")
E Max. dumping height	6,890 (22' 7")	7,060 (23' 2")	7,260 (23' 10")	7,390 (24' 3")	7,540 (24' 9")	7,760 (25' 6")
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")	Remark
	Weight	kg (lb)	2,390 (5,270)	2,590 (5,710)	2,390 (5,270)	2,590 (5,710)	2,630 (5,800)	2,760 (6,080)	
Bucket digging force	SAE	kN	220.7 [240.8]	220.7 [240.8]	220.7 [240.8]	220.7 [240.8]	220.7 [240.8]	220.7 [240.8]	184.4
		kgf	22500 [24550]	22500 [24550]	22500 [24550]	22500 [24550]	22500 [24550]	22500 [24550]	18800
		lbf	49600 [54120]	49600 [54120]	49600 [54120]	49600 [54120]	49600 [54120]	49600 [54120]	41450
	ISO	kN	255.0 [278.1]	255.0 [278.1]	255.0 [278.1]	255.0 [278.1]	255.0 [278.1]	255.0 [278.1]	213.8
		kgf	26000 [28360]	26000 [28360]	26000 [28360]	26000 [28360]	26000 [28360]	26000 [28360]	21800
		lbf	57320 [62520]	57320 [62520]	57320 [62520]	57320 [62520]	57320 [62520]	57320 [62520]	48060
Arm crowd force	SAE	kN	276.6 [301.7]	224.6 [245.0]	276.6 [301.7]	224.6 [245.0]	191.2 [208.6]	170.6 [186.1]	103.0
		kgf	28200 [30760]	22900 [24980]	28200 [30760]	22900 [24980]	19500 [21270]	17400 [18980]	10500
		lbf	62170 [67810]	50490 [55070]	62170 [67810]	50490 [55070]	42990 [46890]	38360 [41840]	23150
	ISO	kN	290.3 [316.7]	234.4 [255.7]	290.3 [316.7]	234.4 [255.7]	199.1 [217.2]	176.5 [192.6]	105.9
		kgf	29600 [32290]	23900 [26070]	29600 [32290]	23900 [26070]	20300 [22150]	18000 [19640]	10800
		lbf	65260 [71190]	52690 [57470]	65260 [71190]	52690 [57470]	44750 [48830]	39680 [43300]	23810

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

[ ] : Power Boost

# SPECIFICATIONS

## HX480L

Tier 4 Final Engine

 Rating over-front  Rating over-side or 360 degree

### HX480L LIFTING CAPACITY - 7.06 m (23' 2") boom equipped with 2.20 m<sup>3</sup> (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 9,200 kg (20,280 lbs) counterweight

Load point height m (ft)	Load radius																								At max. reach		
	3.0 m (10 ft)				4.5 m (15 ft)				6.0 m (20 ft)				7.5 m (25 ft)				9.0 m (30 ft)				Capacity		Reach				
	2.40 m (7' 10")	2.40 m (7' 10")	2.90 m (9' 6")	2.90 m (9' 6")	2.40 m (7' 10")	2.40 m (7' 10")	2.90 m (9' 6")	2.90 m (9' 6")	2.40 m (7' 10")	2.40 m (7' 10")	2.90 m (9' 6")	2.90 m (9' 6")	2.40 m (7' 10")	2.40 m (7' 10")	2.90 m (9' 6")	2.90 m (9' 6")	2.40 m (7' 10")	2.40 m (7' 10")	2.90 m (9' 6")	2.90 m (9' 6")	2.40 m (7' 10")	2.40 m (7' 10")	2.90 m (9' 6")	2.90 m (9' 6")	2.40 m (7' 10")	2.90 m (9' 6")	
7.5 m (25 ft)	kg																										
6.0 m (20 ft)	kg																										
4.5 m (15 ft)	kg																										
3.0 m (10 ft)	kg																										
1.5 m (5 ft)	kg																										
Ground	kg																										
Line	kg																										
-1.5 m (-5 ft)	kg																										
-3.0 m (-10 ft)	kg																										
-4.5 m (-15 ft)	kg																										

Load point height m (ft)	Load radius																								At max. reach				
	3.0 m (10 ft)				4.5 m (15 ft)				6.0 m (20 ft)				7.5 m (25 ft)				9.0 m (30 ft)				10.5m (35ft)				Capacity		Reach		
	3.38 m (11' 1")	3.38 m (11' 1")	4.00 m (13' 1")	4.00 m (13' 1")	3.38 m (11' 1")	3.38 m (11' 1")	4.00 m (13' 1")	4.00 m (13' 1")	3.38 m (11' 1")	3.38 m (11' 1")	4.00 m (13' 1")	4.00 m (13' 1")	3.38 m (11' 1")	3.38 m (11' 1")	4.00 m (13' 1")	4.00 m (13' 1")	3.38 m (11' 1")	3.38 m (11' 1")	4.00 m (13' 1")	4.00 m (13' 1")	3.38 m (11' 1")	3.38 m (11' 1")	4.00 m (13' 1")	4.00 m (13' 1")	3.38 m (11' 1")	3.38 m (11' 1")	4.00 m (13' 1")	4.00 m (13' 1")	3.38 m (11' 1")
7.5 m (25 ft)	kg																												
6.0 m (20 ft)	kg																												
4.5 m (15 ft)	kg																												
3.0 m (10 ft)	kg																												
1.5 m (5 ft)	kg																												
Ground	kg																												
Line	kg																												
-1.5 m (-5 ft)	kg																												
-3.0 m (-10 ft)	kg																												
-4.5 m (-15 ft)	kg																												
-6.0 m (-20 ft)	kg																												

- Lifting capacity are based on SAE J1097 and 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 load point is a hook located on the back of the bucket.
- (\*) indicates load limited by hydraulic capacity.
- Additional lifting capacity charts are available upon request.

# SPECIFICATIONS

## HX480L

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 / Handsfree mobile phone system	●	
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 & cool box	●	
Storage compartment & Ashtray	●	
Transparent cabin roof-cover	●	
Sun visor	●	
Door and cab locks, one key	●	
Mechanical suspension seat with heater	●	
Pilot-operated adjustable joystick	●	
Console box height adjust system	●	
Automatic climate control		
Air conditioner & heater	●	
Defroster	●	

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		●
Seat		
Adjustable air suspension seat with heater	●	
Cabin FOPS/FOG		
FOPS (Falling Object Protective Structures) ISO 3449 Level 2		●
FOG (Falling Object Guard) Front & Top Guard		●
ISO/DIS 10262 Level 2 Top Guard		●
Cabin ROPS		
ROPS (Roll Over Protective Structures) 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)			●
Lower wiper moter			●
Single-acting piping kit (breaker, etc.)			●
Double-acting piping kit (clamshell, etc.)			●
Quick coupler piping			●
Quick coupler			●
Boom floating control			●
Accumulator for lowering work equipment		●	
Pattern change valve (2 patterns)		●	
Tool kit			●
UNDERCARRIAGE		STD	OPT
Lower frame under cover (Additional)			●
Lower frame under cover (Normal)		●	
Track shoes			
Triple grousers shoes (600mm, 24")			●
Triple grousers shoe (700 mm, 28")			●
Triple grousers shoe (750 mm, 30")			●
Triple grousers shoe (800 mm, 32")		●	
Triple grousers shoe (900 mm, 36")			●
Double grousers shoe (600 mm, 24")			●
Double grousers shoe (700 mm, 28")			●
Heavy duty grousers shoe (600 mm, 24")			●
Heavy duty grousers shoe (700 mm, 28")			●
Track rail guard		●	
Full track rail guard			●
3-piece type track rail guard			●



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