

# HYDRAULIC EXCAVATORS

E215C - E215C LC



**POWERFUL  
AND VERSATILE**



# MAIN REASONS TO CHOOSE THE C-SERIES

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High performance and smooth control. The Intelligent Hydraulics System is the result of research in the pursuit of excellence. New Holland is known in the market for the fast cycle times, outstanding energy-efficient performance and smooth control.

Heavy Duty structure with a 33% increase in plate thickness providing more strength, durability and longevity, reducing your Total Cost of Ownership.

Up to 4% more fuel efficiency due to hydraulic system control and 6% better efficiency from FPT engine. 5 energy saving controls & ECO gauge function enable the continuous monitoring of fuel consumption.

Wide offering of buckets and attachments for every application.

Robust heavy-duty structure and attachments for greater durability and lower Total Cost of Ownership.





Auto Power Boost delivers up to 10% more digging force. 3 working modes (A/H/SP) provide the perfect balance of power and speed for any jobsite.

Safe and fast operations. More comfort. Ample glazed area.

Powered by our robust FPT 6 cylinder engine delivering 159 hp.

Cooling packages capable of working at ambient temperatures of 50° C.

Spacious and safe cab. Low noise and vibrations. Ergonomic workstation. Real time parameters monitoring. Newly designed cab, fully adjustable seat, joysticks and 7" LCD monitor.

The perfect machine with 10 auxiliary hydraulic settings option. Advanced monitor with fault finding and diagnostic functions.

# C-SERIES HYDRAULIC EXCAVATORS

## PRECISION AND CONTROLLABILITY

High efficiency hydraulics supply a high flow at low rpm, maximizing fuel efficiency and optimizing the performance of machine. The hydraulic system is governed by a Machine Control Unit which collects input from pressure sensors located on pumps, main valve and pilot lines.

The Machine Control Unit is in continuous communication with the Engine Control Unit to optimize machine output at all times and in all conditions.

Two variable displacement axial piston pumps with regulating system are combined with the New Holland main valve, designed in Japan for fine, precise and efficient operations. The electronically governed hydraulic system delivers impressive machine control with unrivalled energy and fuel savings in all cycle time phases.



## HIGH EFFICIENCY

New Holland's advanced energy management consists of **5 Energy Saving Controls**

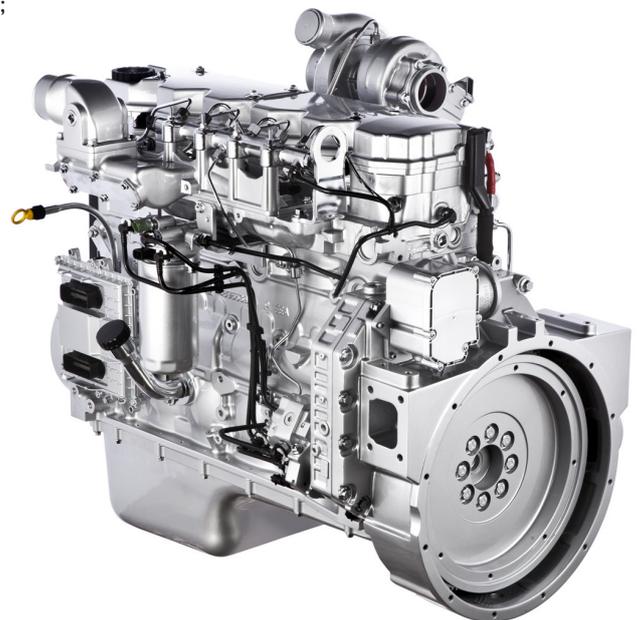
- **Automatic Economy control (AEC):** improves fuel efficiency with a drop in engine rpm when the joystick is in neutral position.
- **Boom Economy Control (BEC):** increased fuel efficiency in boom lowering/swinging operations.
- **Swing Relief Control (SWC):** optimized hydraulic power distribution in slewing operations to deliver the most efficient flow and pressure.
- **Spool Stroke Control (SSC):** pressure and flow control during digging and leveling operations
- **Idle functions**
  - **Auto Idle:** lowers engine rpm after 5 seconds of joystick inactivity;
  - **Idle Shutdown:** shuts the engine down after a pre-set time.
  - **Regenerative:** hydraulic circuit for boom, arm & bucket operations for better productivity.

The E215C model is powered by a **fuel efficient FPT Engine**, designed to boost machine performance and optimize fuel economy.

The 6-cylinder engine **delivers** outstanding power and torque.

The short transient time means the hydraulic system is immediately reactive to any load.

Fuel consumption can be constantly monitored by the operator with the **new ECO gauge** function, which displays in real time the energy saving level utilized.



# QUALITY YOU CAN TRUST

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## STABILITY AND FIRST-CLASS RELIABILITY

### Accurate, robust and simple design for high durability.

- The E215C delivers leading design solutions.
- The boom and arm thickness has been increased by 33% and the upper structure has been reinforced in all high stress areas to increase durability.
- The boom has high strength casting parts joined with thicker hinge flanges to reduce stress on the structures.
- The arm design features a thicker, single-side lateral plate, with extra reinforcement plates and grid on the lower section.
- The bucket linkage has a fortified structure and reduced tolerances for increased component life and reduced downtime.
- The anti-friction resin shims in the boom foot and head reduce noise and free play, increasing durability and reliability for the customer.

### New undercarriage structure, designed to last!

#### Thicker structural plates and new design:

- The 'sloped' lower frame design reduces the time needed to clean the undercarriage.
- Reinforced idler guards protect from stones.
- Larger pin diameter reduces contact surface pressure and increases component life.
- Travel motor frame with thicker plate improves durability.
- Recoil spring increase stroke ensures better cushion performance.
- Track guards keep chain on rollers in all conditions.

# C-SERIES HYDRAULIC EXCAVATORS

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## FAST CYCLES

The advanced hydraulic system offers higher breakout forces, improved swing speeds and greater swing torque, resulting in **faster cycle times and a 5% increase in productivity**.

The power boost function is automatically engaged. The electronic management of speed and power lowers fuel consumption and delivers considerable productivity benefits in terms of outputs.



## HIGH VERSATILITY

3 power modes to match any customer need:

- A AUTO:** for normal digging, grading, lifting and precision work. Power Boost always engaged.
- H HEAVY:** for heavy operations always ensuring the best the best balance between productivity and fuel economy. Power Boost automatically engaged.
- SP SUPER POWER:** extra speed and power for the most demanding jobs that require maximum productivity. Power Boost automatically engaged.

Operators can store up to **10 auxiliary hydraulic flow and pressure settings** to easily switch different attachments with no need for any mechanical adjustment.

## LOW TOTAL COST OF OWNERSHIP

- All filters and regular check points are grouped and easily accessible from the ground.
- Easy access and centralised lubrication points.
- Battery disconnect switch accessible from the ground while servicing the machine.
- Radiator and cooler are mounted side by side for more efficient cooling and easy access for cleaning.
- Machine can be supplied suitable for Tropical climate (from -15°C to +50°C).
- Optional refueling pump with auto cut off reduces downtime for regular refueling.

# COMFORTABLE OPERATIONS

## COMFORT AND SAFETY

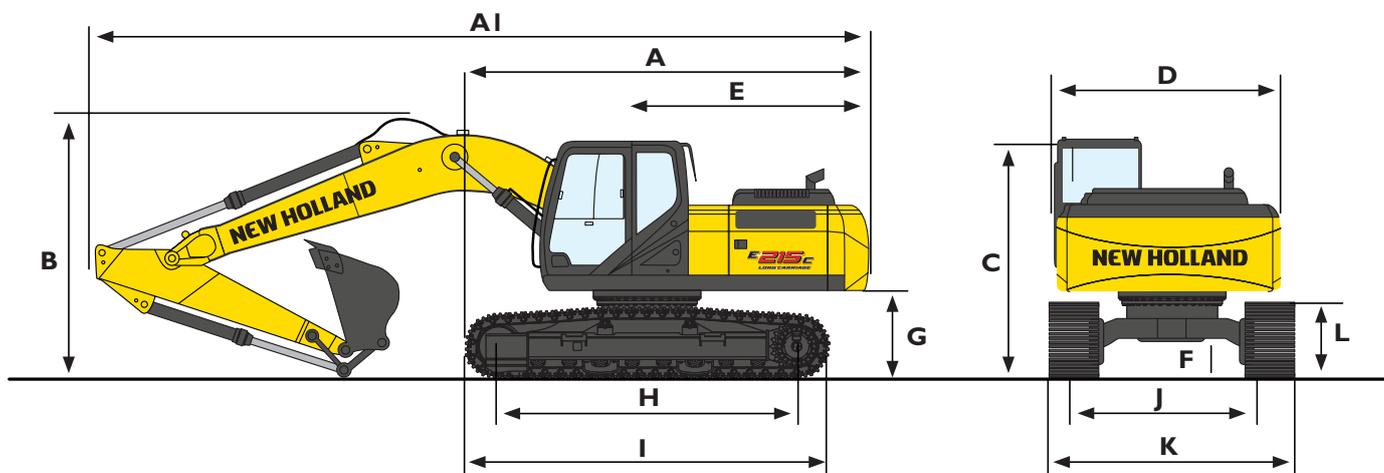
- Superior wide and spacious cab with ample legroom, provides a secure and safe working environment.
- Ergonomically designed seat with 8 different adjustments enhances operator comfort and hence productivity.
- Vibration dampening protects against whole body fatigue for all-day productivity.
- Openable roof window provides better visibility on top.
- Fully adjustable right hand console includes advanced engine throttle control, with working mode selection. The console is equipped with a luminosity switch to ensure that the graphics are clear and easily readable in bright sunlight.
- The new cab has thinner pillars and wide glass areas, including side, for improved visibility all round. Longer seat slides, a fully reclining one-piece window on the right-hand foot space, and air conditioning with 8 outlet vents ensure that any operator is comfortable throughout the working day. A clock is included. Storage is provided, with a large box behind the driver's seat and bottle or can holders on front right side.
- A radio slot, speakers and antenna are standard for easy radio installation.
- Telematics ready for easy plug in.



## OUTSTANDING VISIBILITY AND CONTROLLABILITY

- Wider glazed surface with two-piece door window.
- Improved front, top and side visibility - Openable roof window provides better visibility on top.
- New 7" LED cluster to constantly monitor the main machine parameters.

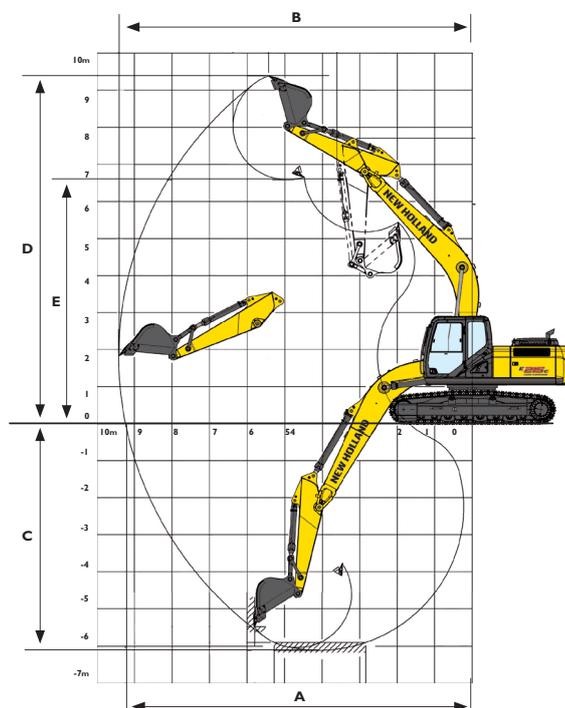
# SPECIFICATION



DIMENSIONS			E215C			E215C LC		
			Arm 1.90 m	Arm 2.40 m	Arm 2.94 m	Arm 1.90 m	Arm 2.40 m	Arm 2.94 m
A	Overall length (without attachment)	mm	4840	4840	4840	4985	4985	4985
AI	Overall length (with attachment)	mm	9520	9510	9430	9520	9510	9430
B	Overall height (with attachment)	mm	3008	3198	2980	3008	3198	2980
C	Cab height	mm	2950	2950	2950	2950	2950	2950
D	Upper structure overall width	mm	2770	2770	2770	2770	2770	2770
E	Swing (rear end radius)	mm	2780	2780	2780	2780	2780	2780
F	Minimum ground clearance	mm	440	440	440	440	440	440
G	Clearance height under upper structure	mm	1040	1040	1040	1040	1040	1040
H	Wheel base (Center to center of wheels)	mm	3370	3370	3370	3660	3660	3660
I	Crawler overall length	mm	4180	4180	4180	4470	4470	4470
L	Crawler tracks height	mm	920	920	920	920	920	920
J	Track gauge	mm	2200	2200	2200	2390	2390	2390
K	Undercarriage overall width (with 600 mm shoes)	mm	2800	2800	2800	2990	2990	2990

\*Breakout forces estimated considering both tip and hydraulic limits.

PERFORMANCE DATA		E215C / E215C LC			
		Arm 1.90 m	Arm 2.40 m	Arm 2.94 m	
Boom length	mm	5700	5700	5700	
Bucket radius	mm	1450	1450	1450	
Bucket wrist action	°	177	177	177	
A	Maximum reach at GRP	mm	8770	9240	9730
B	Maximum reach	mm	8910	9380	9870
C	Max. digging depth	mm	5610	6110	6650
D	Max. digging height	mm	9140	9410	9610
E	Max. dumping height	mm	6330	6590	6810
	Arm digging force with auto power up	kN	152	132	110
	Bucket digging force with auto power up	kN	152	152	152



		E215C	E215C LC
<b>ENGINE</b>			
Model		FPT F4HE0687A*J105	
Type		Water-cooled, 4-cycle diesel, 6-cylinder in line, electronically controlled, high pressure common rail system, turbocharger, air cooled intercooler	
Displacement	l	6.727	
Emission certified		Tier 3	
Bore/Stroke	mm	104 x 132	
Horsepower ISO 14396 GROSS	min <sup>-1</sup>	117 kW	
Horsepower ISO 14396 GROSS (Metric)	min <sup>-1</sup>	159 hp	
Maximum torque ISO 14396 GROSS	min <sup>-1</sup>	622 Nm @ 1800	
<b>HYDRAULIC SYSTEM</b>			
Type		2 variable displacement axial piston pumps with regulating system	
Max oil flow	l/min	2x211 @ 1800 min <sup>-1</sup>	
Working circuit pressure:			
Boom/Arm/Bucket circuit	MPa	34.3	
Boom/Arm/Bucket circuit (with auto power up)	MPa	36.8	
Swing circuit	MPa	29.4	
Travel circuit	MPa	34.3	
<b>SWING</b>			
Maximum swing speed	min <sup>-1</sup>	11.5	
Swing torque	N-m	64,400	
<b>FILTERS</b>			
Suction filter	µm	105	
Return filter	µm	6	
Pilot line filter	µm	8	
<b>TRAVEL</b>			
Travel motor		Variable displacement axial piston motor	
Max travel speed	km/h	5.6	
Low travel speed	km/h	3.4	
Gradeability		70% (35°)	
Drawbar pull	kN	205	
<b>ELECTRICAL SYSTEM</b>			
Circuit	V	24	
Alternator	Amp	70	
Starter motor	kW	4.0	
Battery		2 x 12V 110Ah	
<b>UNDERCARRIAGE</b>			
Number of carriers rollers (each side)		2	
Number of track rollers (each side) (E215C / E215C LC)		7/8	
Number of shoes (each side) (E215C / E215C LC)		46/49	
Type of shoe		Triple grouser shoe	
<b>CAPACITIES</b>			
Fuel tank	l	458	
Hydraulic system	l	295	
Cooling system	l	25	
Engine Crank	l	16.5	
Hydraulic Tank capacity	l	162	
<b>WEIGHT AND GROUND PRESSURE</b>			
2.94 m arm, 1.0 m3 bucket, 600mm with triple track guard, operator, lubricant, coolant and full fuel tank			
Operating Mass	Kg	21,725	22,460
Ground Pressure	MPa	0.049	0.046
2.94 m arm, 1.0 m3 bucket, 800mm with triple track guard, operator, lubricant, coolant and full fuel tank			
Operating Mass	Kg	22,230	22,875
Ground Pressure	MPa	0.037	0.036

# LIFTING CAPACITY

Front 360°	REACH										
	0.0 m		4.5 m		6.0 m		7.5 m		At max reach		m

## E215C LC, ARM 1.90 M, GP BUCKET 1.10M<sup>3</sup> (868 KG), SHOES 600 MM

7.5 m									5540*	5540*	4,9
6.0 m					5250*	4460			5270*	4130	6,2
4.5 m			6910*	6910*	5610*	4340			5280*	3250	7,0
3.0 m			8640*	6610	6330*	4200			4800	2850	7,4
1,5 m			9860*	6160	6760	4000	4640	2730	4640	2730	7,5
0 m			10140*	6030	6630	3880			4840	2840	7,3
-1,5 m			9710*	6080	6630	3880			5530	3260	6,7
-3.0 m			8410*	6270					6190	4330	5,7
-4.5 m											

## E215C LC, ARM 2.40 M, GP BUCKET 1.10M<sup>3</sup> (868 KG), SHOES 600 MM

7.5 m									4820*	4820*	5,6
6.0 m					4650*	4530			4640*	3520	6,8
4.5 m			6200*	6200*	5130*	4410	4580*	2830	4570*	2830	7,5
3.0 m			7950*	6710	5920*	4190	4700	2780	4280	2500	7,9
1,5 m			9410*	6200	6680*	3960	4600	2690	4140	2400	8,0
0 m			10020*	5970	6560	3810	4530	2630	4290	2480	7,8
-1,5 m			9860*	5950	6510	3770			4810	2800	7,2
-3.0 m			8900*	6090	6330*	3860			5770*	3570	6,3
-4.5 m			6280*	6280*					5650*	5650*	4,8

## E215C LC, ARM 2.94 M, GP BUCKET 1.10M<sup>3</sup> (868 KG), SHOES 600 MM

7.5 m					3980*	3980*			3080*	3080*	6,2
6.0 m					4060*	4060*			2840*	2840*	7,3
4.5 m					4600*	4450	4240*	2860	2820*	2450	8,0
3.0 m			7170*	6810	5430*	4200	4610*	2760	2930*	2180	8,4
1,5 m			8810*	6230	6290*	3930	4560	2640	3200*	2080	8,5
0 m			9730*	5900	6490	3730	4460	2550	3670*	2130	8,3
-1,5 m			9860*	5800	6400	3650	4430	2520	4190	2380	7,8
-3.0 m			9230*	5880	6440	3690			5120	2950	6,9
-4.5 m			7430*	6140					5470*	4410	5,6

## E215C LC, ARM 2.94 M, GP BUCKET 1.10M<sup>3</sup> (868 KG), SHOES 800 MM

7.5 m					3980*	3980*			3080*	3080*	6,2
6.0 m					4060*	4060*			2840*	2840*	7,3
4.5 m					4600*	4550	4240*	2940	2820*	2530	8,0
3.0 m			7170*	6970	5430*	4300	4610*	2850	2930*	2250	8,4
1,5 m			8810*	6390	6290*	4030	4700	2730	3200*	2150	8,5
0 m			9730*	6050	6670	3840	4590	2630	3670*	2210	8,3
-1,5 m			9860*	5960	6570	3760	4590	2600	4320	2640	7,8
-3.0 m			9230*	6040	6620	3800			5270	3040	6,9
-4.5 m			7430*	6300					5470*	4530	5,6

## E215C, ARM 1.90 M, GP BUCKET 1.10M<sup>3</sup> (868 KG), SHOES 600 MM

7.5 m									5540*	5540*	4,9
6.0 m					5250*	3950			5270*	3650	6,2
4.5 m			6910*	6390	5610*	3890			4690	2850	7,0
3.0 m			8640*	5810	6060	3700			4160	2490	7,4
1,5 m			9310	5380	5840	3500	4020	2370	4010	2370	7,5
0 m			9150	5250	5720	3390			4180	2470	7,3
-1,5 m			9210	5300	5720	3390			4780	2840	6,7
-3.0 m			8410*	5480					6200	3800	5,7
-4.5 m											

Front 360°	REACH									
	0.0 m	4.5 m		6.0 m		7.5 m		At max reach		m

### E215C, ARM 2.40 M, GP BUCKET 1.10M3 (868 KG), SHOES 600 MM

7.5 m									4820*	4570	5,6
6.0 m				4650*	4020				4640*	3100	6,8
4.5 m		6200*	6200*	5130*	3900	4120	2470	4120	2460	7,5	
3.0 m		7950*	5910	5920*	3680	4070	2420	3700	2160	7,9	
1,5 m		9360	5410	5810	3460	3980	2330	3560	2060	8,0	
0 m		9100	5190	5650	3310	3910	2270	3690	2130	7,8	
-1,5 m		9080	5170	5600	3270			4150	2420	7,2	
-3.0 m		8900*	5300	5700	3360			5260	3110	6,3	
-4.5 m		6280*	5640					5650*	5140	4,8	

### E215C, ARM 2.94 M, GP BUCKET 1.10M3 (868 KG), SHOES 600 MM

7.5 m				3980*	3980*			3080*	3080*	6,2
6.0 m				4060*	4060*			2840*	2630	7,3
4.5 m				4600*	3940	4170	2500	2820*	2120	8,0
3.0 m		7170*	6010	5430*	3690	4060	2400	2930*	1860	8,4
1,5 m		8810*	5440	5790	3430	3930	2280	3150	1770	8,5
0 m		9030	5110	5570	3240	3830	2190	3240	1820	8,3
-1,5 m		8930	5030	5480	3150	3800	2160	3590	2030	7,8
-3.0 m		9020	5100	5530	3200			4410	2550	6,9
-4.5 m		7430*	5350					5470*	3850	5,6

### E215C, ARM 2.94 M, GP BUCKET 1.10M3 (868 KG), SHOES 800 MM

7.5 m				3980*	3980*			3080*	3080*	6,2
6.0 m				4060*	4060*			2840*	2700	7,3
4.5 m				4600*	4030	4240*	2570	2820*	2190	8,0
3.0 m		7170*	6140	5430*	3780	4180	2470	2930*	1930	8,4
1,5 m		8810*	5570	5940	3520	4050	2350	3200*	1830	8,5
0 m		9270	5250	5730	3330	3950	2260	3350	1880	8,3
-1,5 m		9160	5160	5640	3250	3920	2230	3700	2100	7,8
-3.0 m		9230*	5240	5680	3290			4540	2630	6,9
-4.5 m		7430*	5490					5470*	3950	5,6

## STANDARD EQUIPMENT

### ENGINE

Tropical package for temperatures -15°C +50°C  
 Turbocharger with air cooled intercooler  
 Double element air cleaner  
 Air-pre cleaner - cup type  
 Pre fuel filter  
 Fuel filter w/ water separator  
 Automatic/manual engine return to idle  
 Neutral safety start  
 Emergency stop  
 Dial type throttle control

### HYDRAULIC SYSTEM

2 variable flow piston pumps  
 Auto/Heavy/Super Power working modes  
 Auto power boost  
 Swing priority (swing+arm)  
 Travel speed change  
 Selectable working modes  
 Pre-set auxiliary pump settings  
 ISO pattern controls  
 Arm and boom regeneration  
 Straight travel valve  
 100% return oil filtration

### CAB AND OPERATOR COMPARTMENT

Pre-disposal for the optional cab protection  
 Pressurized cab heat and defrost functions  
 Tilting consoles - 4-position  
 Low-effort controls  
 Sliding cockpit  
 Mechanical suspended seat  
 Arm rest  
 Sun shade  
 Color LCD monitor display  
 Auxiliary select system  
 Aux-in port for personal electronics (12v)  
 Rubberfloor mat  
 One-piece right hand window  
 Two piece door window  
 Roof top openable metal window  
 Windshield wiper / washer  
 Storage compartments  
 Anti-theft device  
 On-board diagnostic system  
 Standard handrails  
 Sliding front window – storable lower windshield  
 Rh front console w/ clock and cell phone holder  
 Rear mirror (mounted on cab)

Glow-plug pre-heat  
 HVAC with Auto Climate Control function  
 High band AM/FM Radio

### EQUIPMENT AND UNDERCARRIAGE

HD 5,7 meter boom  
 Two lights on cabin top  
 One light on tool box  
 HD Bucket linkage  
 Tool box  
 Sealed and lubricated tracks  
 Single track guide  
 600mm triple grouser steel shoes  
 Rear mirror

## OPTIONAL EQUIPMENT

### CAB AND OPERATOR COMPARTMENT

Telematics  
 Air suspended seat  
 Cabin Fan  
 Cold Package for temperatures -25°C +45°C  
 Super Tropical cooling package -15°C to +50°C  
 Warm up mode  
 ROPS cab  
 Rear view camera  
 Rear mirror

### EQUIPMENT AND UNDERCARRIAGE

Arm 1.90m  
 Arm 2.40m  
 Arm 2.94m  
 Bucket linkage  
 Bucket 0.9 Cum HD with side cutter  
 Bucket 0.94 Cum HD  
 Bucket 1.0 Cum GP  
 Bucket 1.1 Cum GP  
 800mm triple grouser steel shoes

Triple track guide  
 Auxiliary single acting circuit  
 Auxiliary single or High flow circuit  
 Upper front screen (mesh type)  
 Air-pre cleaner - cyclone type  
 Side cutter for GP bucket  
 Boom mounted work light (70 watt)  
 Low flow hydraulic circuit  
 One light on Boom foot  
 Lower under cover  
 Refuel pump



The New Holland dealer network is, in itself, the best guarantee of continued productivity for the machines it delivers to its customers. New Holland service technicians are fully equipped to resolve all maintenance and repair issues, with each and every service point providing the high standards they are obliged to observe under New Holland's stringent quality guidelines. The New Holland global parts network ensures fast, reliable, replacement parts for less downtime, increased productivity and, of course, profitable operation for its customers.

**Learn more at [www.newholland.com](http://www.newholland.com)**

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