

W270C W300C

SCR
INSIDE



	W270C	W300C
BUCKET PAYLOAD for 1.8 t/m ³ density	8.1 ton	9.1 ton
BUCKET VOLUME for 1.8 t/m ³ density	4.4 m ³	5.0 m ³
MAXIMUM POWER	320 hp	347 hp
MAXIMUM WEIGHT	24.6 ton	27.3 ton



BUILT AROUND YOU

AS LONG AS MAN SHAPES MATERIAL

**MORE
PRODUCTIVITY**

**LOWER COST OF
OWNERSHIP**



S, WE WILL PROVIDE THE TOOLS.

**MORE COMFORT
EASY TO USE**

**A COMMITTED
PARTNER**



THE MAIN COMPONENTS OF OUR W



1 THE COOLING BOX



At New Holland we replaced the conventional overlapping radiators with our unique design: we made a box with the radiators. The benefits are longer maintenance intervals and easier cleaning.

2 CURSOR 9 ENGINE

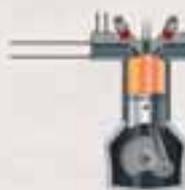


The 9-liter turbo charged engine with intercooler features second generation common rail technology with multiple injections for optimised performance and fuel efficiency.

HEEL LOADER



3 SCR ONLY TECHNOLOGY



AdBlue

SCR only technology SCR is a well-proven and reliable technology used in Europe on trucks since 2004. An after-treatment system, it maximises combustion efficiency, delivering power with less fuel. SCR ONLY technology doesn't require a particulate filter.

4 THE HEAVY DUTY AXLES WITH 100% FRONT LOCK

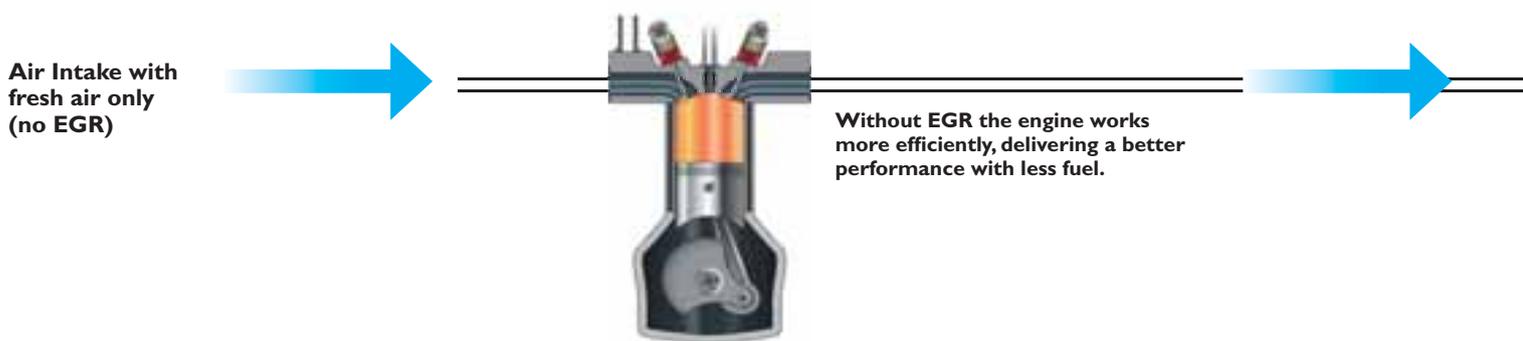


More traction and reliability.

INDUSTRY LEADING ENGINE TECHN



The 9-liter turbo charged Cursor engine with intercooler delivers up to 350 hp. With over 60,000 users, it has a proven track record.



THE ADVANTAGE TO BE MOTORIST

- New Holland is part of Fiat Industrial, which produces over 600,000 engines every year.
- Our engines are used not only in earthmoving equipment, but also in trucks and agricultural machines.
- Operating on such a big scale enables us to lead the industry by offering you today “SCR only”, our unique and well-proven technology that will reduce your operating costs.

IT'S SIMPLE: MORE POWER AND LESS FUEL

- Engine combustion is optimised for efficiency: it only uses fresh air and occurs at high temperature, guaranteeing the best engine output for power and fuel efficiency.
- The second generation common rail technology with multiple injection reduces the noise and vibrations transmitted to the operator.
- The water-oil cooler and oil and water pumps are fully integrated in the engine block for leak prevention and noise reduction.
- ECOSTOP automatically shuts down the engine and the electric system after 5 minutes of idling, so there is no waste of fuel.



The AdBlue sprayed in the exhaust eliminates residual emissions



**TIER 4 INTERIM:
90% less particulates
and 50% less Nox.**

TIER 4, WITH "SCR ONLY"

The solutions that work best are the least complex: that is the case for "SCR ONLY".

- "SCR ONLY" doesn't use Exhaust Gas Recirculation or Particulate Filter
- The high-temperature combustion burns fresh air only, delivering optimised engine performances with less fuel
- SCR cuts emissions by spraying AdBlue, a low cost fluid, into the exhaust system.
- SCR uses diesel only to push into the pile.

THE ADVANTAGES OF "SCR ONLY"

- **Fuel savings:** up to 10%
- **Safety:** an after-treatment system, SCR works at low temperatures and kills the sparks in the exhaust
- **Ease of use:** you can turn off the machine anytime, SCR does not require any regeneration.
- **Maintenance cost savings:** SCR never gets stacked and doesn't use a filter
- **Reliability:** SCR is a well proven solution introduced in 2004 by Iveco. It is now used by all truck manufacturers and in most of agricultural equipment.

HIGH PRODUCTIVITY DESIGN



COOLED HEAVY-DUTY AXLES MAXIMISE DURABILITY

The new axles are oil cooled and the internal oil temperature is kept constant, resulting in exceptional reliability. The heavy-duty axles can work 24 hours a day - even with solid tyres, which are extremely hard on the axles.



OPEN DIFFERENTIALS FRONT AND REAR MINIMISE TYRE WEAR

With open differentials, no friction is applied to reduce wheel slip, resulting in less tyre wear and lower energy losses.



FRONT DIFFERENTIAL WITH 100% AUTO-LOCK MAXIMISES TRACTION

With 100% Auto-lock, 100% of the available torque goes to the wheel with traction, a big step up from the 75% of a limited slip differential! When in manual mode, it is activated with a control under your left foot.

Note: W270C and W300C are also available without diff lock

**+20%
PRODUCTIVITY**



PRODUCTIVITY-BOOSTING BUCKETS

Our flat bottom buckets make all the difference:

- The 0° ground angle results in easier penetration
 - The shorter bottom increases breakout force and stability
 - The 51° roll back angle in transport position allows 10% more load in the bucket with a better retention of the material so once it's in, it stays in.
- You will get the job done faster and with fewer trips.

FUEL EFFICIENT HYDRAULICS

Closed-center load sensing hydraulics with positive low pressure regeneration produce flow and pressure on demand and only in the amounts necessary for the job you need to perform, increasing fuel efficiency.

FASTER CYCLES

Our new hydraulic pump makes arm lifting very fast so that you can load more in less time.



WELCOME ON BOARD





EASY OPERATION IN FULL COMFORT



EXTRA WIDE ACCESS

The 4 wide steps and 2 handles make it easy for you to reach the cab; the wide door offer easy, obstacle-free access.

OUTSTANDING VISIBILITY

You can work fast and confidently with excellent all-round visibility, further enhanced by the curved shape of the rear hood, which is very low due to the small cooling package.

SUPERIOR AIR VENTILATION

You can work in comfort with the efficient ventilation provided by 16 air vents and the optional air conditioning system. In addition, the door opens 180° and can be easily locked in the open position or unlocked from the driver's seat



OPERATOR SAFETY AND LOW VIBRATIONS

You will enjoy the protection of our reinforced cab, which guarantees protection against roll over (ROPS) and falling objects (FOPS). The cab of W270C and W300C is very silent (70,7 dB)

SITTING COMFORTABLY WITH CONTROLS AT YOUR FINGERTIPS

You will enjoy the comfort of the heated seat with high vibration absorption. You can focus entirely on the job at hand and work comfortably with the steering knob, the joystick or the 2-lever control with the reverse button under your thumb. The control panel is positioned ergonomically under your right hand. The overhead radio positioning and ample storage add up to great convenience for you.

EASY OPERATION

For added comfort and higher productivity during repetitive tasks the following functions, which can be activated or de-activated according to your preferences, will free your right hand for steering:

- **Auto-lift** : automatically lifts the boom to the maximum height or to the height you have set
- **Reverse button** : allows you to use your left hand for steering and activate reverse speed from the joystick with your right hand
- **Return to dig** : automatically brings back the bucket to the right position for loading again
- **Return to travel** : automatically lowers the boom to carry position; it can be adjusted according to your tyres and bucket
- **Auto-shift** : ensures the machine always operates in the most suitable gear according to speed, kick down and engine braking
- **Auto-Glide Ride**: reduces loader arm bounce during travel, maintaining maximum material retention on all surfaces. It's activated from 7 km/h

MAINTENANCE: EASY, QUICK AND S



THE COOLING BOX

LESS MAINTENANCE

Our unique design delivers greater cooling efficiency, as the radiators do not overlap, resulting in 50% longer

- Transmission oil: 1.500h
- Axle oil: 1.500h
- Engine coolant: 1.500h

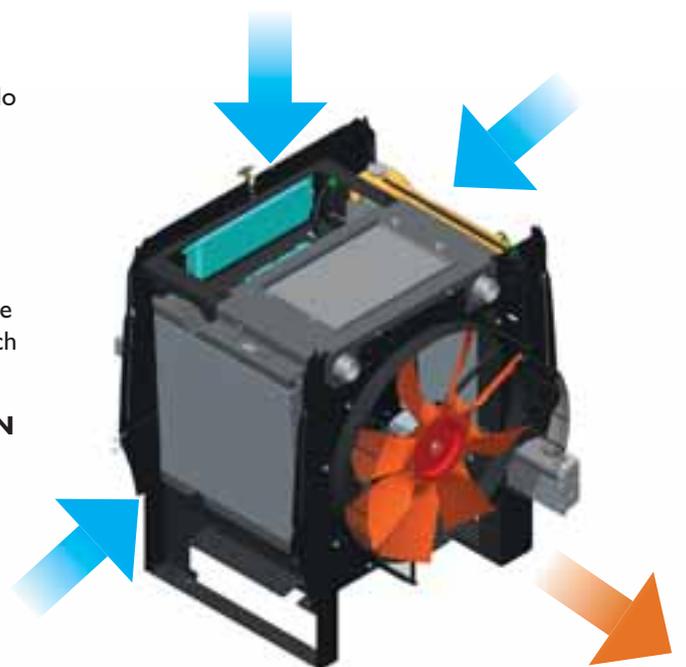
EASY CLEANING OF THE RADIATORS

With our cooling box design, the radiators are easy to clean, as they are positioned at the rear of the machine forming a cube. You can clean each radiator separately and activate the reversible fan from the cab.

MORE EFFECTIVE CLEANING WITH THE REVERSIBLE FAN

The reversible fan cleans the coolers more effectively, as the radiators do not overlap. This keeps them working more efficiently even in very dusty conditions.

The reversible fan can be activated manually or automatically.





You can carry out your daily visual check of hydraulic and coolant before entering the cab



Grouped greasing points and visual transmission oil level check for easy daily maintenance



Grouped drains.

Engine oil level check can easily be performed slightly opening the electrical hood



The removal of air filter can be done from ground level in a few seconds



Hood opening and battery on/off switches. In case of flat battery, hood opening can be done externally with remote jump start



QUICK AND EASY OPERATOR DAILY ROUTINE

EASY MAINTENANCE FROM GROUND LEVEL

The one-piece electric hood makes it very quick and easy to access all the service points.

We designed our wheel loaders so that all the main service points are easily accessible from the ground, so you can safely carry out your daily maintenance

LESS MAINTENANCE WITH NO PARTICULATE FILTER

Our SCR technology doesn't require a particulate filter, bringing significant savings on maintenance. In addition, the temperature in the engine compartment is lower, resulting in longer life for the rubber parts. It also means lower cooling needs than other Tier 4i solutions, so our wheel loaders mount smaller fans in our wheel loaders that use less fuel.

Also, our solution doesn't require a costly specific oil and no other tier 4i solution offer such a high fuel compatibility.

LESS MAINTENANCE WITH OPEN DIFFERENTIAL

The open differentials and front auto-lock reduce tyre wear because of no wheel slippage. The absence of friction in the differentials increases oil life by 50% (1500h).

More effective lubrication with longer lasting effect increases reliability.

LESS MAINTENANCE WITH THE COOLING BOX

We designed our cooling system to maximise its efficiency, making a box of the radiators instead of using the conventional design where they overlap. Our design significantly improves the cooling performance, lengthening the life of the oil by 50%. The better quality of the oil also means a longer life for your wheel loader.

W270C

SPECIFICATIONS

PRODUCTIVITY

(50-METER DISTANCE CYCLE)

Considering: density: 1.8 t/m³, fill factor: 100%, 52 cycles/hour and each hour includes a 5-minute break..... 230 m³/h or 410 t/h of material
52 loading cycles/h with standard bucket 4.4 m³ or 7.9 ton

ENGINE TIER 4 INTERIM

Compliant with Tier 4 interim (EU stage IIIB regulations)
FPT turbocharged engine F2CFE614C with:

- 100% fresh air combustion
- Air to Air intercooler
- Second generation common rail (1.600 bar)
- Multiple injections similar to multi-jet automotive technology to achieve best in class load response, max torque and power with the minimum fuel consumption.

6 cylinders - 8,7 liters - common rail

Max power (SAE J1995 / ISO 14396)239 kW / 320 hp @1800 rpm

Maximum torque (SAE J1349) 1479 Nm @1200 rpm

Nox emission 1.232 g/kWh

HC emission 0.009 g/kWh

CO emission 0.222 g/kWh

PM emission 0.009 g/kWh

TRANSMISSION

All-wheel drive with planetary axles

Kick-down function

4-speed torque converter

4-speed auto Powershift switchable to manual shifting

forward speeds7-13-19-38 Km/h

reverse speeds7-13-27 Km/h

Adjustable transmission declutch

AXLES AND DIFFERENTIAL

For outstanding traction with 50% longer maintenance intervals and 30% less tire wear

Front auto-lock differential 100% of available torque is always guaranteed on the wheel(s) with traction

Cooled ZF Heavy Duty axles with both Open Differentials

Front Heavy Duty axle + (ZF type MT-L3115-II)

Rear standard axle (ZF type MT-L3105-II)

Cooled ZF Heavy Duty axles

Front Heavy Duty axle + (ZF type MT-L3105-II)

Rear standard axle (ZF type MT-L3105-II)

Rear axle total oscillation 24°

TYRES

Tyres 26.5R25

BRAKES

Service brake Maintenance free, self-adjusting wet 4-wheel disc brakes

Area 0.74 m²/hub (HD axle) or 0.54 m²/hub (std axle)

Parking brake Disc brake on transmission activated from the cab cluster

Area 82 cm²

HYDRAULIC SYSTEM

Valves Rexroth Closed-center, load sensing hydraulic system
Main valve with 3 sections

Steering The steering orbital hydraulically is actuated with priority valve

Type of pump Tandem Variable displacement pump (352 l/min @2000 rpm)

Automatic hydraulic functions

- Bucket Return-to-dig

- Boom Return-to-travel

- Auto lift (to adjustable height)

Control type Pilot control with single joystick or two levers

CAPACITIES

Fuel tank 459 usable liters

AdBlue tank 65 usable liters

Cooling system 57 liters

Engine oil 26 liters

Hydraulic oil Tank: 134 litres, total system: 250 liters

Axles (including cooling circuit) 68 liters

Transmission oil 45 liters

CAB AND CONTROLS

For you safety the cab complies to:

protection against falling objects (FOPS) ISO EN3449

protection against roll over (ROPS) ISO EN13510

NOISE AND VIBRATION

Sound pressure level at operator's station Lpa = 70,7 dB (A) in compliance with standard ISO 6396:2008

Guaranteed Sound power level Lwa = 108 dB (A) according to European Directive 2000/14/EC

Switchable reverse gear alarm

Vibrations air-cushioned seat MSG 95A/732

Operator 's seat meets the criteria of ISO 7096:2000 representing vertical vibration input under severe but typical operating conditions.

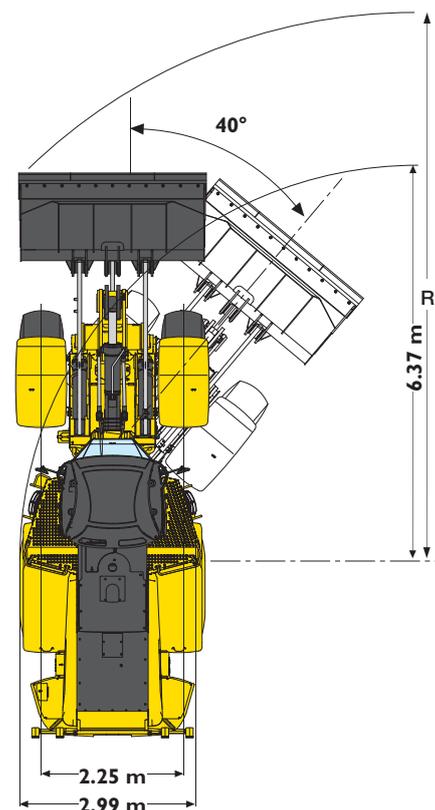
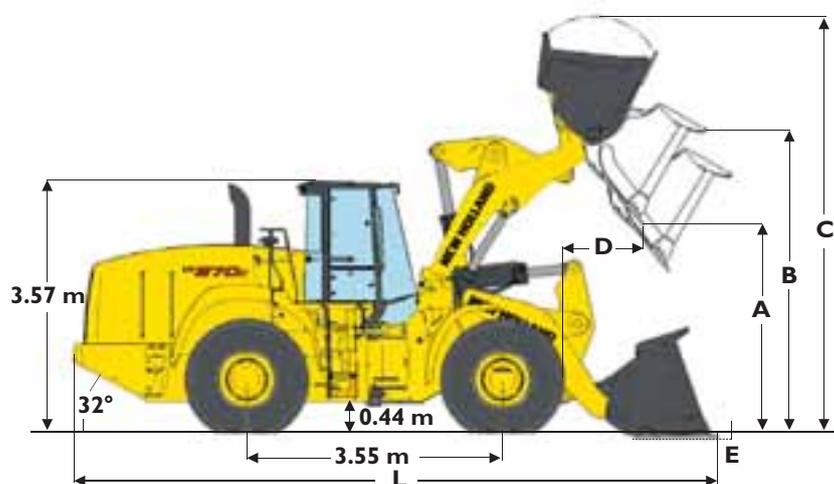
As a result the vibrations transmitted by the machine to the operator body does not exceed 0.5 m/s²

ELECTRICAL SYSTEM

24V Batteries 2 x 12V

Alternator 65 A

PERFORMANCE DATA



W270C		Z-BAR buckets				LONG REACH buckets				
		4.4 m ³		4.2 m ³		4.4 m ³		4.2 m ³		
	Bucket with bolt on:	edge	teeth	edge	teeth	edge	teeth	edge	teeth	
	Bucket volume (heaped)	m ³	4.40	4.23	4.20	4.06	4.40	4.23	4.20	4.06
	Bucket Payload (SAE)	kg	7.9	8.0	7.9	8.0	6.6	6.8	6.7	6.8
	Maximum material density (SAE)	ton/m ³	1.8	1.9	1.9	2.0	1.5	1.6	1.6	1.7
	Bucket outside width	m	2.98	2.98	3.20	3.20	2.98	2.98	3.20	3.20
	Bucket weight	kg	2480	2321	2286	2268	2480	2321	2286	2268
	Tipping load - straight (SAE)	kg	18857	19219	19046	19193	15943	16267	16178	16298
	Tipping load - Articulated at 40° (SAE)	kg	15682	16018	15876	16002	13229	13530	13454	13556
	Breakout force	kg	19092	20963	20456	21922	19282	21170	17362	17401
	Lift capacity from ground	kg	23000	23479	23413	23659	18497	18888	12616	12612
A	-Dump height at 45° at full height	m	3.02	2.92	3.08	2.96	3.6	3.5	3.66	3.54
B	-Hinge pin height	m	4.24	4.24	4.24	4.24	4.82	4.82	4.83	4.83
C	-Overall height	m	5.94	5.94	5.80	5.80	6.52	6.52	6.38	6.38
D	-Bucket reach at full height	m	1.33	1.45	1.27	1.4	1.34	1.46	1.28	1.41
E	-Dig depth	cm	13	13	13	13	13	13	13	13
L	-Overall length with bucket on the ground	m	8.98	9.13	8.89	9.07	9.50	9.65	9.41	9.59
	Overall length without bucket	m	6.91	6.91	6.91	6.91	7.37	7.37	7.37	7.37
R	-Turning radius to front corner of the bucket	m	7.0	7.1	7.1	7.1	7.3	7.3	7.3	7.4
	Bucket rollback in carry position	°	49°	49°	49°	49°	48°	48°	48°	48°
	Dump angle at full height	°	53°	53°	53°	53°	50°	50°	50°	50°
	Machine operating weight	kg	24593	24434	24399	24381	25882	25723	25688	25670

LOADER SPEED		
Raising time (loaded)	sec	6.2
Dump time (loaded)	sec	1.3
Lowering time (empty, power down)	sec	2.8
Lowering time (empty, float down)	sec	2.6

W300C

SPECIFICATIONS

PRODUCTIVITY

(50-METER DISTANCE CYCLE)

Considering: density: 1.8 t/m³, fill factor: 100%, 52 cycles/hour and each hour includes a 5-minute break..... 260 m³/h or 460 t/h of material
52 loading cycles/h with standard bucket 5.0 m³ or 8.8 ton

ENGINE TIER 4 INTERIM

Compliant with Tier 4 interim (EU stage IIIB regulations)

FPT turbocharged engine F2CFE614B with:

- 100% fresh air combustion
- Air to Air intercooler
- Second generation common rail (1.600 bar)
- Multiple injections similar to multi-jet automotive technology to achieve best in class load response, max torque and power with the minimum fuel consumption.

6 cylinders - 8,7 liters - common rail

Max power (SAE J1995 / ISO 14396)259 kW / 347 hp @1800 rpm

Maximum torque (SAE J1349)..... 1604 Nm @1100 rpm

Nox emission 1.232 g/kWh

HC emission.....0.009 g/kWh

CO emission.....0.222 g/kWh

PM emission.....0.009 g/kWh

TRANSMISSION

All-wheel drive with planetary axles

Kick-down function

4-speed torque converter

4-speed auto Powershift switchable to manual shifting

forward speeds7-12-18-38 Km/h

reverse speeds7-13-26 Km/h

Adjustable transmission declutch

AXLES AND DIFFERENTIAL

For outstanding traction with 50% longer maintenance intervals and 30% less tire wear

Front auto-lock differential..... 100% of available torque is always guaranteed on the wheel(s) with traction

Cooled ZF Heavy Duty axles with both Open Differentials

Type..... Heavy Duty axle + (ZF type MT-L3 I 15-II)

Cooled ZF Heavy Duty axles

Type..... Heavy Duty axle + (ZF type MT-L3 I 15-II)

Rear axle total oscillation.....24°

TYRES

Tyres 26.5R25

BRAKES

Service brake..... Maintenance free, self-adjusting wet 4-wheel disc brakes

Area0.74 m²/hub

Parking brake.....Disc brake on transmission activated from the cab cluster

Area 82 cm²

HYDRAULIC SYSTEM

Valves.....Rexroth Closed-center, load sensing hydraulic system

Main valve with 3 sections

Steering..... The steering orbital hydraulically is actuated with priority valve

Type of pump..... Tandem Variable displacement pump (380 l/min @2000 rpm)

Automatic hydraulic functions

- Bucket Return-to-dig

- Boom Return-to-travel

- Auto lift (to adjustable height)

Control type..... Pilot control with single joystick or two levers

CAPACITIES

Fuel tank459 usable liters

AdBlue tank 65 usable liters

Cooling system 57 liters

Engine oil 26 liters

Hydraulic oil..... Tank: 134 litres, total system: 250 liters

Axles (including cooling circuit) 68 liters

Transmission oil 45 liters

CAB AND CONTROLS

For you safety the cab complies to:

protection against falling objects (FOPS).....ISO EN3449

protection against roll over (ROPS) ISO EN13510

NOISE AND VIBRATION

Sound pressure level at operator's station..... Lpa = 70,7 dB (A) in compliance with standard ISO 6396:2008

Guaranteed Sound power level.....Lwa = 108 dB (A) according to European Directive 2000/14/EC

Switchable reverse gear alarm

Vibrations air-cushioned seat MSG 95A/732

Operator 's seat meets the criteria of ISO 7096:2000 representing vertical vibration input under severe but typical operating conditions.

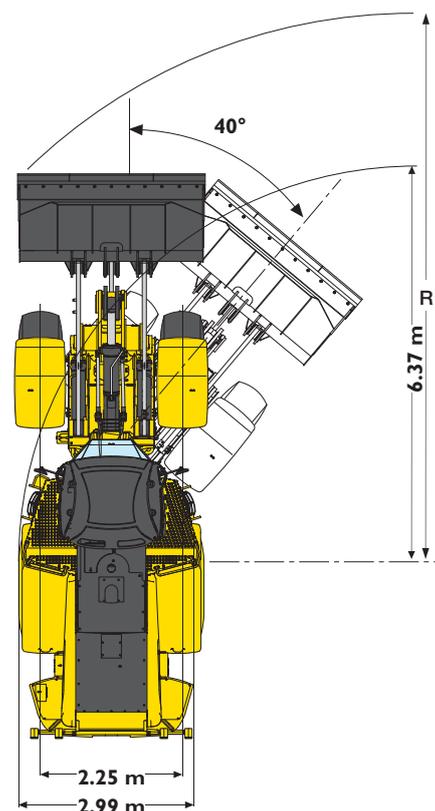
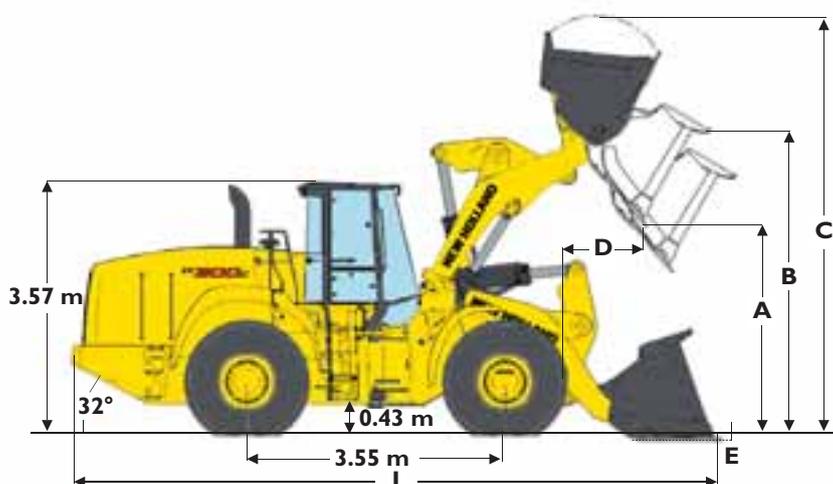
As a result the vibrations transmitted by the machine to the operator body does not exceed 0.5 m/s²

ELECTRICAL SYSTEM

24V Batteries 2 x 12V

Alternator 65 A

PERFORMANCE DATA



W300C		Z-BAR buckets						LONG REACH buckets					
		5.0 m ³		4.8 m ³		4.0 m ³		5.0 m ³		4.8 m ³		4.0 m ³	
	Bucket with bolt on:	edge	teeth										
Bucket volume (heaped)	m ³	5.0	4.8	4.8	4.6	4.0	3.9	5.0	4.8	4.8	4.6	4.0	3.9
Bucket Payload (SAE)	kg	8.7	8.9	8.9	8.9	9.0	9.0	7.6	7.8	7.8	7.8	7.9	7.9
Maximum material density (SAE)	ton/m ³	1.8	1.9	1.9	1.9	2.2	2.2	1.5	1.6	1.6	1.7	2.0	2.1
Bucket outside width	m	3.18	3.18	3.20	3.20	3.20	3.20	3.18	3.18	3.20	3.20	3.20	3.20
Bucket weight	kg	2643	2469	2414	2397	2239	2221	2643	2469	2414	2397	2239	2221
Tipping load - straight (SAE)	kg	20735	21123	20949	21099	21150	21310	18100	18456	18319	18449	18596	18732
Tipping load - Articulated at 40° (SAE)	kg	17495	18857	17713	17843	17923	18062	15286	15620	15506	15616	15765	15881
Breakout force	kg	24269	24443	22661	24151	25542	27431	24508	24682	22883	24387	25790	27698
Lift capacity from ground	kg	25502	25984	25732	25970	26363	26620	21368	21782	21598	21783	22150	22350
A -Dump height at 45° at full height	m	3.09	3.09	3.20	3.09	3.30	3.18	3.51	3.51	3.62	3.5	3.72	3.60
B -Hinge pin height	m	4.44	4.44	4.44	4.44	4.44	4.44	4.86	4.86	4.86	4.86	4.86	4.86
C -Overall height	m	6.20	6.20	6.12	6.12	5.96	5.96	6.62	6.62	6.54	6.54	6.38	6.38
D -Bucket reach at full height	m	1.4	1.4	1.27	1.41	1.16	1.30	1.45	1.45	1.32	1.45	1.20	1.34
E -Dig depth	cm	12	12	12	12	12	12	12	12	12	12	12	12
L - Overall length with bucket on the ground	m	9.83	9.83	9.12	9.30	8.97	9.14	9.70	9.70	9.53	9.71	9.37	9.55
Overall length without bucket	m	7.70	7.70	7.70	7.70	7.70	7.70	8.24	8.24	8.24	8.24	8.24	8.24
R - Turning radius to front corner of the bucket	m	7.2	7.2	7.2	7.2	7.1	7.2	7.4	7.4	7.4	7.4	7.3	7.4
Bucket rollback in carry position	°	51°	51°	51°	51°	51°	51°	49°	49°	49°	49°	49°	49°
Dump angle at full height	°	50°	50°	50°	50°	50°	50°	50°	50°	50°	50°	50°	50°
Machine operating weight	kg	27253	27079	27024	27007	26849	26831	28017	27843	27788	27771	27613	27595

LOADER SPEED

Raising time (loaded)	sec	6.5
Dump time (loaded)	sec	1.4
Lowering time (empty, power down)	sec	2.8
Lowering time (empty, float down)	sec	2.6

PARTS AND SERVICE

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.



AT YOUR OWN DEALERSHIP

The information contained in this brochure is intended to be of general nature only. The NEW HOLLAND KOBELCO CONSTRUCTION MACHINERY S.p.A. company may at any time and from time to time, for technical or other necessary reasons, modify any of the details or specifications of the product described in this brochure. Illustrations do not necessarily show products in standard conditions. The dimensions, weights and capacities shown herein, as well as any conversion data used, are approximate only and are subject to variations within normal manufacturing techniques.

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