

 **NEW HOLLAND**

**W110**



NET FLYWHEEL POWER

82 kW - 110 hp

OPERATING WEIGHT

10 540 kg

BUCKET CAPACITY

1.8 - 2.1 m<sup>3</sup>

 **NEW HOLLAND**

PROVEN PERFORMANCE

## EVOLUTION IN COMFORT AND SAFETY

### COMFORT

Working in absolute comfort means eliminating fatigue, noise and dust and putting operators in the ideal conditions to express all their talent. It means a compressed air suspension Full Adjustment operator seat with backrest adjustable to any need. It means light weight and sensitive joystick or two-lever servo controls with easy reach. It means a height and tilt adjustable steering column for best operating posture for each operator referred to the seat and foot pedals. It means a perfectly sound deadened cab with attention to all details, from top class internal finishings to wraparound ventilation, and from automatic All Climate heat adjustment to the radio set.

### SAFETY

Working in safety means easy access to the operator compartment and hooking up your safety belt under protection of a Rops-Fops structure solidly integrated into the cab's classical design. It means dominating the entire jobsite with all-round visibility and complete control of all machine functions. It means absolute dynamic stability guaranteed by perfect weight distribution on the axles and the Load Travel Stabilizer LTS system that opens up to productivity by eliminating counter shocks and guaranteeing top dynamic stability. It means energy accumulation braking and fully reliable emergency steering. It means road travel certification.



■ Cab  
First class internal finishing  
Double adjustment  
steering column  
Wraparound ventilation



■ Ultra-light servo controls  
 All-climate heat adjustment  
 Radio

■ Rops-Fops cab - Safety belt  
 All-round visibility -  
 Emergency braking  
 LTS Load Travel Stabilizer  
 Road certification

# EVOLUTION IN ACCESSIBILITY AND SERVICE.

**T**he New Holland W110 loader is always ready to operate full time thanks to its extraordinary ground level accessibility.

**T**he side panels perfectly integrated into the rear mudguard wraparound profile are provided with compressed air cylinders that open and close the covers with a seagull wing movement and lock in a safety position for immediate access to the injection pump, the alternator and the vertically positioned engine filter elements grouped together for immediate replacement without cartridge loss.

**F**luid discharges grouped together of the frame left rear side in a readily accessible position are of the ecological type to enable easy and totally safe engine oil, coolant and hydraulic oil replacement.



■ Easily accessed ecological type fluid discharge



■ Side panel opening enables easy access to main engine components and facilitates filtre replacement



■ ZF limited slip differentials supplied standard.



# W110 SPECIFICATIONS



## ENGINE "EMISSIONED"

Net flywheel rate power at .....2000 rpm  
 (SAE J1349) .....110 HP/ 82 kW  
 (ISO 9249) .....82 kW  
 (CEE 80/1269) .....82 kW

The engine retains rated power up to 2500 m above sea level

Make and model .....CNH 4 TAA-4502

Type.....Diesel, turboaftercooler, direct injection

Total displacement .....4.5 l

N° of cylinders .....4

Bore x stroke .....104 x 132 mm

Rated engine speed .....2000 rpm

Maximum torque at 1400 rpm.....45.5 daNm

Lubrication with gear pump

Engine complies with standard ECE 97/68 STAGE 2, and with U.S. standards EPA TIER 2.



## ELECTRICAL SYSTEM

Voltage .....24 V

Batteries, in series, maintenance-free .....2

- total capacity .....100 Ah

- type.....maintenance-free

Starter motor .....4 kW

Alternator capacity .....70 A



## ELECTRIC SYSTEM BROWN BOX

On-board processor, Brown Box, enables the operator to work totally relaxed in absolutely safe conditions. It ensures check-up of all functional parameters, which are then shown on a digital display. Furthermore, it coordinates transmission automatic self-diagnosis and self-protection functions.



## TORQUE CONVERTER

Type .....single stage / single phase

Torque multiplication ratio .....2.549 : 1



## TRANSMISSION

Type: Power-Shift countershaft design with four forward and three reverse speeds

Control: single lever electric "fingertip" type.

Forward speeds.....km/h

1<sup>a</sup> .....6.9

2<sup>a</sup> .....13.3

3<sup>a</sup> .....23.4

4<sup>a</sup> .....37.6

Reverse speeds

1<sup>a</sup> .....7.2

2<sup>a</sup> .....14.0

3<sup>a</sup> .....24.5

with 17.5-25 tyres

Safety device prevents engine starting in gear

**Electronic Transmission System (ETS):** allows the operator to dedicate attention on the work cycle.

The on-board computer automatically finds the right gear in relation to the type of work.

**"HOLD"** function to maintain selected speed with the machine operating on a slope.

**"KICK-DOWN"** function to shift from 2nd to 1st gear when high pushability is required.

**"DOWN-SHIFT"** function to select the most suitable speed with the machine on a slope. Low gears favour the use of the engine brake function and consequently reduce brake use.

Forward and reverse control switch.



## AXLES

Rigid front axle, oscillating rear axle designed for heavy duty applications

Rear axle oscillation.....24°

Rear wheel vertical travel .....391 mm

"Limited slip" differentials supplied standard.

Hermetically sealed final drives and wet disc brakes

Oil change interval .....2000 h



## BRAKES

**Service brakes**.....self-adjusting

Type.....wet disc brakes  
 on all four wheels

Servo-assisted hydraulic brake circuit.

Independent circuit for each axle.

Control:pedal located to left of steering column.

Electrical transmission disengagement switch.

The brake circuit complies with the following international standards:

ISO 3450, CEE 71/320, SAE J1473

**Parking brake:** spring actuated caliper disc brake, electrically released by switch in cab.

Electrical control by means of switch in cab.



## TYRES

Type.....Tubeless

Radial .....17.5-25 GP-2B

17.5-25 XHA

17.5-25 XTLA



## HYDRAULIC SYSTEM

Type.....load sensing circuit, closed center

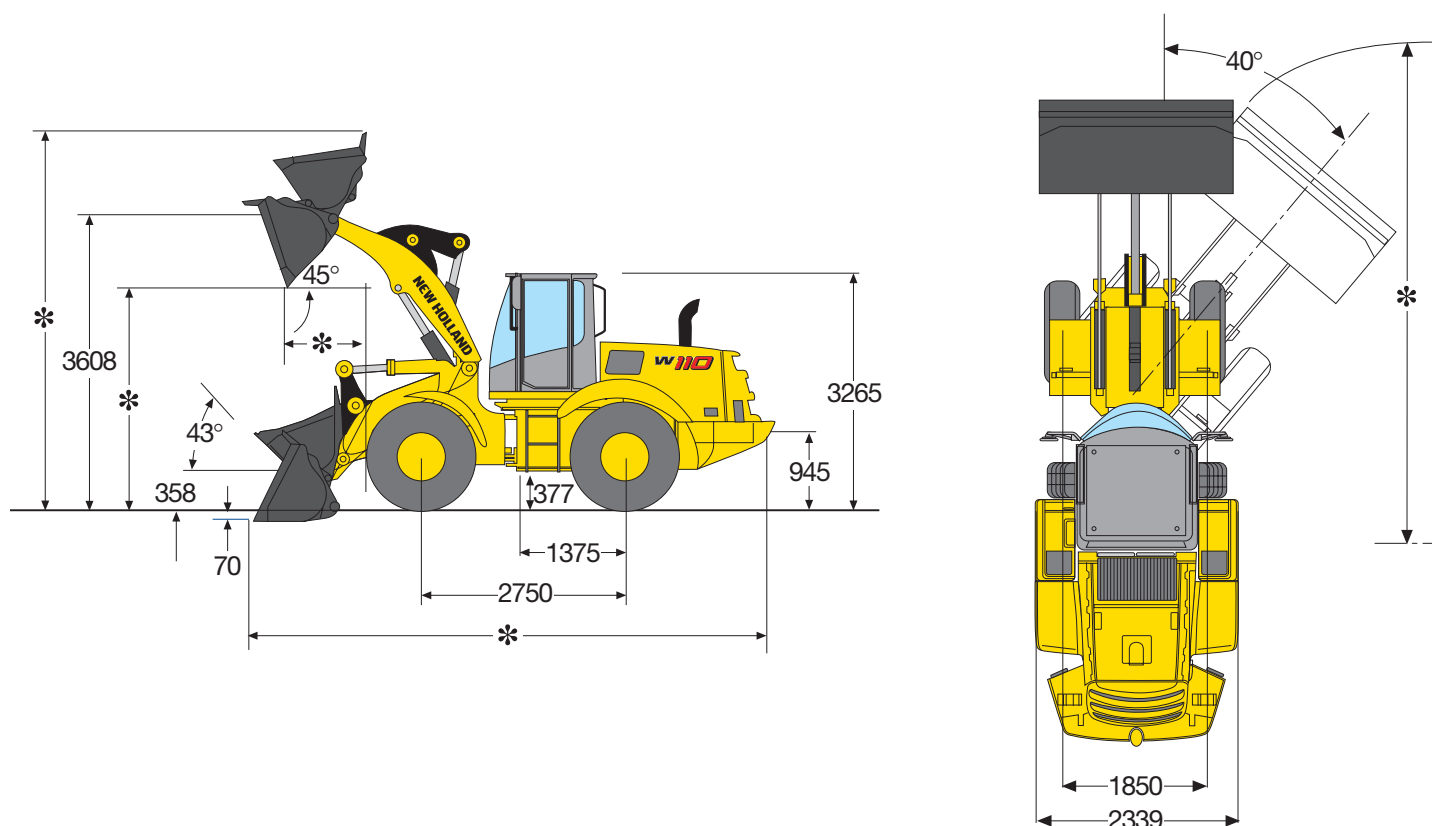
Pump. ....variable displacement - axial pistons - feeding the integrated implement and steering system

- max. flow delivery .....134 l/min



# DIMENSIONS mm

# W110



## PERFORMANCE

### BUCKET TYPE

### GENERAL PURPOSE

|   |                | WITH TEETH AND SEGMENTS |       | WITH CUTTING EDGE EXTENSION |       | WITH TEETH |       |
|---|----------------|-------------------------|-------|-----------------------------|-------|------------|-------|
|   |                |                         |       |                             |       |            |       |
| Bucket capacity                           | m <sup>3</sup> | 1.9                     | 2.1   | 1.9                         | 2.1   | 1.8        | 2.0   |
| Bucket weight                             | kg             | 826                     | 800   | 817                         | 790   | 750        | 720   |
| Bucket width                              | mm             | 2482                    | 2482  | 2440                        | 2440  | 2482       | 2482  |
| Dump height at 45°                        | mm             | 2604                    | 2558  | 2634                        | 2588  | 2744*      | 2698* |
| Reach at 45°                              | mm             | 1110                    | 1153  | 1072                        | 1115  | 1007*      | 1050* |
| Overall length (bucket on ground)         | mm             | 6765                    | 6835  | 6715                        | 6785  | 6765       | 6835  |
| Overall height (bucket raised)            | mm             | 4684                    | 4746  | 4684                        | 4746  | 4684       | 4746  |
| Turning radius (bucket at carry position) | m              | 5.5                     | 5.5   | 5.5                         | 5.5   | 5.5        | 5.5   |
| Breakout force                            | daN            | 8375                    | 7872  | 8092                        | 7622  | 9240       | 8380  |
| Static tipping load:                      | kg             | 8750                    | 8743  | 8730                        | 8726  | 8810       | 8790  |
| 0°  |                |                         |       |                             |       |            |       |
| 40°                                       | kg             | 7535                    | 7532  | 7522                        | 7520  | 7625       | 7595  |
| Max operating weight                      | kg             | 10540                   | 10515 | 10530                       | 10500 | 10465      | 10435 |

\* At bucket cutting edge

Note: All performance data and specifications based on a unit with 17.5-25 XTLA tyres and ROPS cab.  
All data is obtained in compliance with the latest applicable SAE Recommended Practices including J732c, J742b and ISO 6746/1, ISO 6746/2 and ISO 8313.



# PARTS & 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.

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