

 **NEW HOLLAND**

**D255**



NET FLYWHEEL POWER 177 kW - 240 hp

OPERATING WEIGHT 30 400 kg

 **NEW HOLLAND**

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# D255 SPECIFICATIONS



## ENGINE "EMISSIONED EUROMOT 2"

Net flywheel power (DIN 6270) ..... 177 kW/240 hp  
 Net flywheel power (SAE J1349) ..... 177 kW  
 Net flywheel power (ISO 9249) ..... 177 kW  
 Net flywheel power (CEE 80/1269) ..... 177 kW  
 Make and model ..... Cummins 6CTAA 8.3  
 Type ..... turbocharged aftercooled, direct injection, 4-cycle diesel emissioned Euromot 2  
 Number of cylinders ..... 6  
 Bore x stroke ..... 114 x 135 mm  
 Displacement ..... 8.3 l  
 Governed rpm ..... 2200  
 Maximum torque at 1400 rpm ..... 115 kgm  
 Lubrication ..... full pressure by double gear pump  
*Engine will maintain specified power rating up to 2500 m*



## ELECTRICAL SYSTEM

Voltage ..... 24 V  
 Battery ..... 2  
 Rating (total) ..... 180 Ah  
 Type ..... maintenance free  
 Starter ..... 7.5 kW  
 Alternator ..... 70 A  
 Master switch for electrical system  
 Additional starter switch: engine start is from ground level when the operator compartment is tilted  
 Emergency current socket 24 V



## TORQUE CONVERTER

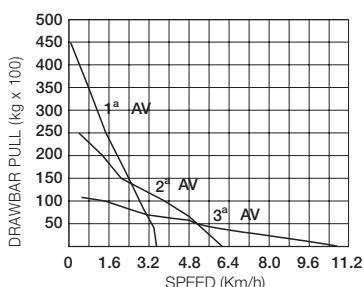
Type ..... single stage, rotating housing  
 Torque multiplication ..... 3.28 : 1



## TRANSMISSION

Type: ..... "Full PowerShift", countershaft, constant mesh  
 Control modulation ..... five trimmer valve, one per clutch pack  
 Control ..... pilot, single lever, semi-open pattern  
 Clutches ..... multiple disc, hydraulic  
 Lubrication ..... full pressure

Speeds and drawbar pull*	
Fwd.	km/h
1°	3.7
2°	6.1
3°	10.9
Rev.	km/h
1°	4.4
2°	7.2
3°	12.6



\* Drawbar tractive effort depends on adhesion coefficient, rolling resistance and machine operating weight.

Safety device: a lever in the lock position inhibits transmission control lever and engine starting; it automatically engages parking brakes



## STEERING AND BRAKING

**STEERING**  
 Hydraulically released, spring applied, oil cooled, multiple disc clutches  
 Combined steering and braking  
 Control ..... pilot, two levers, located to the operator's left  
 Control modulation ..... hydraulic retarder for re-engagement of steering clutches  
 Friction surfaces each clutch ..... 22  
 Total friction area each clutch ..... 7612 cm<sup>2</sup>

**BRAKES - SERVICE**  
 Hydraulically released, spring applied, contracting band oil bath type  
 Control ..... pilot, one pedal  
 Total friction area ..... 1604 cm<sup>2</sup>

**BRAKE - PARKING**  
 Automatic actuation on service brakes with safety transmission lever in lock position or with engine stop



## FINAL DRIVES

Type ..... double reduction  
 Ratio ..... 1 : 12.4  
 Lubrication ..... splash



## TRACK

Box section track frames. Oscillating type.  
 Hydraulic track adjusters. Sprockets with bolt-on segments, anti-packing tooth profile  
 Track bushing with greater diameter at the rolling area  
 Outer sprocket guard, front and rear track guards, full track roller guards  
 Disc idlers, track rollers, carrier rollers are permanently lubricated and sealed  
 Labyrinth sealed or sealed and lubricated track available  
 Split master link  
 Track rollers (per track) ..... 7  
 Carrier rollers (per track) ..... 2  
 Number of shoes ..... 41  
 Length of track on ground ..... 2973 mm  
 Gauge ..... 2070 mm  
 Track shoes width ..... 550 mm

Track shoes	Ground contact area
550 mm	32705 cm <sup>2</sup>
600 mm	35675 cm <sup>2</sup>
700 mm	41620 cm <sup>2</sup>



## HYDRAULIC SYSTEM

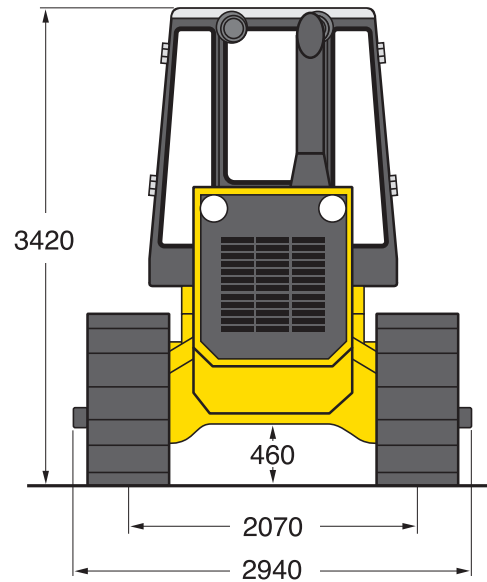
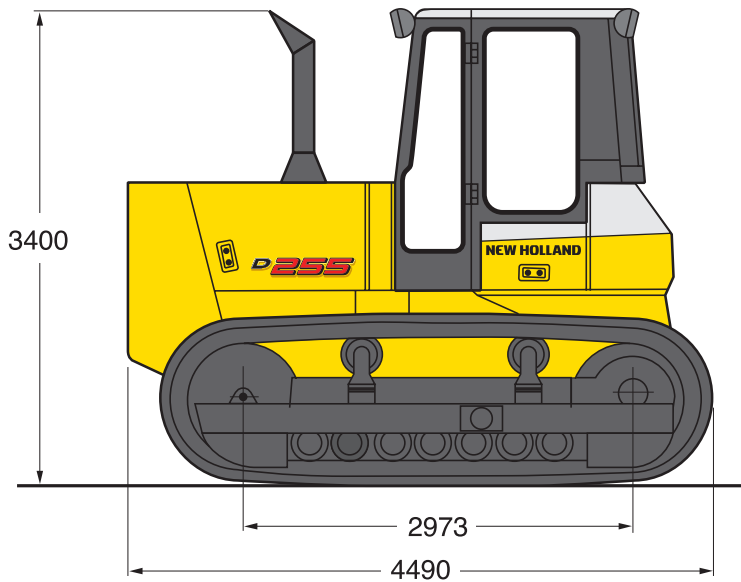
Reservoir ..... closed  
 Pump ..... gear type  
 Capacity at governed rpm ..... 212 l/min  
 Relief valve pressure ..... 190 bar  
 Control valve ..... monobloc, three balanced spools with safety lock  
 Actuation (blade) ..... single lever  
 Dozer circuit ..... raise, hold, lower, float  
 Tilt circuit ..... left, hold, right  
 Auxiliary circuit ..... for ripper or other attachments

# D255 DIMENSIONS



## SHIPPING WEIGHT

(including ROPS canopy, blade lift cylinders, lubricants, coolant, 10% fuel) ..... 21850 kg



Blade type	Blade width mm	Blade height mm	Blade capacity SAE J1265 m <sup>3</sup>	Max tilt mm	Max pitch	Digging depth mm	Max lift above ground mm	Overall length with blade mm <sup>***</sup>	Operating weight	
									with ROPS	with ROPS cab kg*
Semi-U (HSU)	3800	1500	7.0	800	11°	530	1220	5855	26600	27000
Angle (HA)**	4460	1100	4.1	700	10°	560	1300	5800	26000	26400

\* Includes blade, standard shoes, fuel, lubricants and operator  
\*\* Max angulation ± 25°

\*\*\* With ripper raised, add 1150 mm to dozer length

Double acting cylinder control  
Blade, with quick drop and travel limit valves ..... 2  
Bore x stroke ..... 110 x 1302 mm  
Tilt (HSU) ..... 1

Bore x stroke ..... 160 x 140 mm  
Tilt (HA) ..... 1  
Bore x stroke ..... 140 x 124 mm  
Hydraulic oil level sight gauge reservoir



## CAPACITIES

Litres

Lube oil ..... 22  
Coolant ..... 65  
Fuel tank ..... 500  
TRANSMISSION, oil  
Torque converter and transmission ..... 35  
Steering and braking ..... 65  
Final drive (each) ..... 46  
HYDRAULIC SYSTEM ..... 105



## RIPPER

MODEL ..... PD255  
Type ..... parallelogram  
Ripping depth ..... 700 mm  
Ripping width ..... 2000 mm  
Shanks ..... 3  
Shank holders ..... 3  
Clearance under tooth with ripper raised ..... 685 mm  
Clearance under tool beam with ripper lowered ..... 305 mm  
Hydraulic cylinders ..... 2  
Bore x stroke ..... 125 x 590 mm  
Weight (with three shanks) ..... 3400 kg

# STANDARD EQUIPMENT

- Air cleaner dust ejector
- Alternator 70 A
- Antifreeze
- Air cleaner, dry type
- Back-up alarm
- Batteries, maintenance free
- Canopy ROPS
- Control and piping for rear implement
- Combined steering and braking
- Decelerator
- Electronic engine revolution indicator
- Emergency current socket 24 V
- Electrical system, 24 V
- Fan pusher
- Guards: crankcase and transmission,  
track adjusters, sprocket, front and rear track frames
- Horn
- Hourmeter
- Hood side panels, hinged
- Hook, front and rear
- Hydraulic track adjuster
- Hydraulic: three spool valve, piping, blade lift cylinders

- Instrument -Electronic Data Monitor-
  - warning check level lights: engine oil, transmission oil, engine coolant
  - warning pressure lights: engine oil, transmission oil
  - warning temperature lights: engine coolant, transmission oil
  - warning lights: air filter restriction, hydraulic oil filter
  - warning light: battery charge
  - general malfunction warning light
  - indicator: fuel level
  - level sensor switch
- Lights, two front and four on ROPS canopy
- Muffler
- Operator's compartment tiltable, hydraulic jack
- Pilot control for transmission, steering and braking
- Suspension seat, with cloth cover and seat belt
- Single lever blade control
- Track shoes, 550 mm
- Track roller guards
- Transmission, "Full PowerShift",  
three speeds forward and reverse
- Warning lights: brake lining wear

# OPTIONS

- Air conditioning
- Blades: Semi-U (HSU) complete with Equistatic compensator,  
push beams and tilt cylinder.  
Angle blade (HA) complete with C-frame.  
Angle blade with tilt cylinder.
- Cab ROPS
- Cold weather starting aid
- Diagnostic system
- Heating system for ROPS cab
- Ripper PD255, parallelogram, three shanks
- Sound suppression, external
- Tool kit
- Track, sealed and lubricated with split link
- Track shoes: 600 mm, 700 mm

Note: standard and optional equipment may vary by country. Consult your NEW HOLLAND dealer for specific details.

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