NEW HOLLAND

E385B VERSION J

NEW HOLLAND KOBELCO

	STD	LC
NET FLYWHEEL POWER	209 kW - 280 hp	
OPERATING WEIGHT (MAX)	34 700 kg	35 500 kg
BUCKET CAPACITY	1.2 - 2.3 m^3	

NEW HOLLAND CONSTRUCTION

BUILT AROUND YOU

TOP EFFICIENCY
Productivity (m³/l) + 15%

C.P.B. (Continuous Power Boost)

Continuous Power Boost is a feature of excellence of the E385B. Continuous Power Boost means that, if the operator is facing a very tough application, he can select this function (hydraulic pressure raises to 37.8 Mpa) **with no time limit.** Continuous Power Boost allows him to work without problems in job-site productivity and machine reliability. **A unique feature only offered by New Holland.**

PERFORMANCE

SUPERIOR & SAFE DYNAMIC STABILITY

The whole structure of E385B has been redesigned and improved to guarantee a perfect match with its high performances by better positioning centre of gravity, by optimising stresses distribution and by adopting higher quality steel plates.
To eliminate bumps and shocks to the whole structure when the pistons reach their stoke end, cylinders have been equipped with automatic recovery and cushioning systems.
The long undercarriage together with the weight strategically distributed in its structure, contribute to enhance machine stability while avoiding unpleasant jumping effects even in tough digging conditions.

- **NEW** stronger undercarriage & upperstructure
- **NEW** generation, higher flow hydraulic pumps
- **NEW** flow & pressure set up system
- **NEW** HINO common rail Engine
- **NEW** operator compartment
- **NEW** hydraulic system

NEW HYDRAULIC SYSTEM

EFFICIENCY AND CONTROLLABILITY

To obtain a Hydraulic System which is much more efficient, controllable, fast and powerful, and which consumes less fuel than previously, New Holland engineers have been working not only on pumps but also on a completely redesigned and refined Control Valve adding a second arm spool and new working mode selection functions. Movement speed has been increased and machine controllability improved, especially on operations that require combined movements.
This outstanding characteristic is further enhanced by the new **H.A.O.A. Control.**

H.A.O.A. (Hydrotronic Active Operation Aid)

Hydrotronic Active Operation Aid is the most effective available combination of an extremely advanced electronic techology that provides a “just in time” comprehensive control of all machine functions, and a deeply refined and sophisticated hydraulic system. H.A.O.A. continuously optimises hydraulic output according to operator and job demand, providing the best machine controllability, productivity, operator comfort and fuel savings.

ED HYDRAULIC SYSTEM

A.E.P. - (Advanced Electronic Processor)

A.E.P. is a new Electronic Processor that interacts with the operator for selecting and monitoring all main working parameters, maintenance notifications, self diagnosis and operating data storage.
All this information is displayed in the new monitor, which features a larger back-lit, easier to read digital display and analogic gauges.
Simply select the requested working mode and A.E.P. pre-sets the hydraulic system to accomplish the job in the easiest and most productive way:

- **S mode** **for normal working operations**

- **H mode** **when maximum power is required**

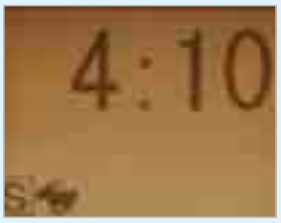
Two additional modes are available for special applications and to operate tools like breakers and crushers:

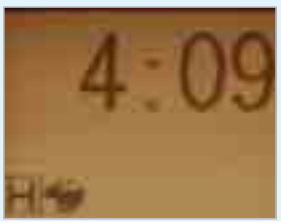
- **A mode** **adjusts the attachment circuit for tools which require two way flow.**

A dedicated switch on the dashboard, enables the operator to select two pumps oil flow

- **B mode** for attachments featuring one way flow only

Both in A and B working modes the operator, by using the buttons on the monitor, may adjust the flow by 10 l/min steps to perfectly match the parameters of the attachment being used.
In addition, the operator can save to memory 9 oil flow-steps in both A and B working modes.





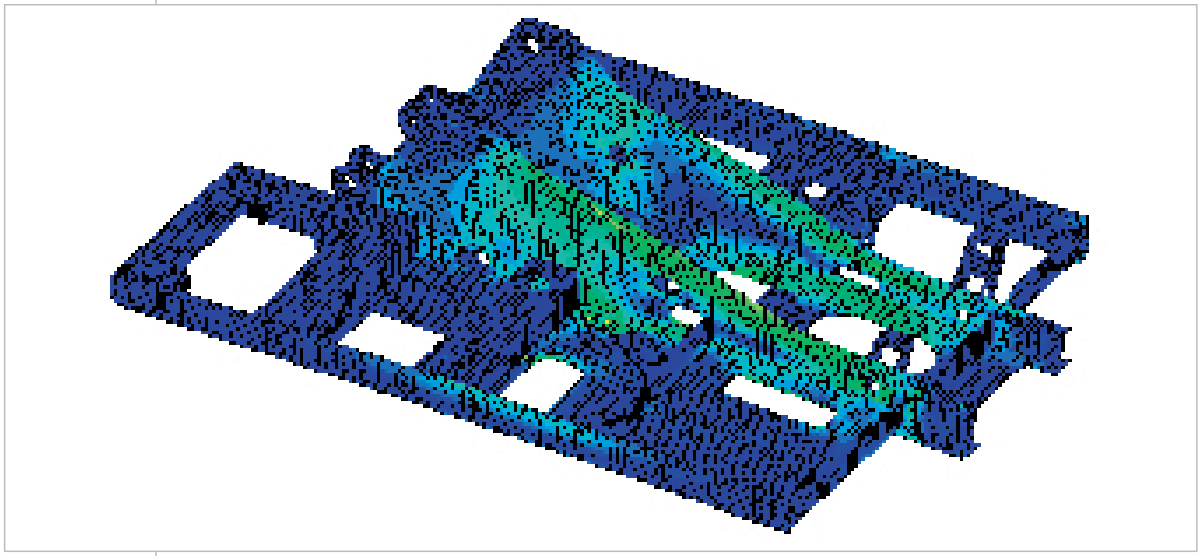
D.O.C. (Dipperstick Optimised Control)

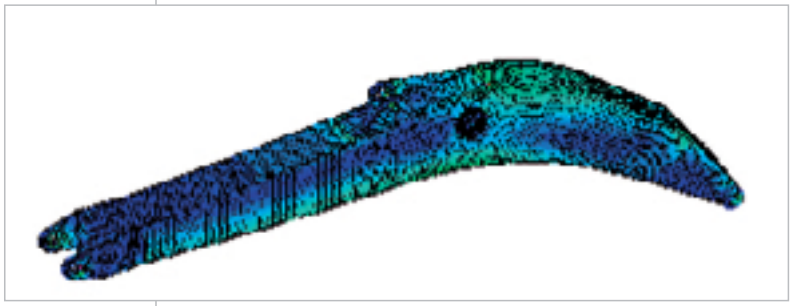
The newly redesigned Control Valve features a second spool dedicated to dipperstick operation.
The movement “dipper out” is now achieved with a double flow, i.e., using the flow of the two pumps.
The “dipper in” movement is even faster because of the double pump flow combined with the “Conflux”, or recirculation of unused oil which is diverted from return to tank.
A perfect combination of speed, efficiency, precision and increased production.

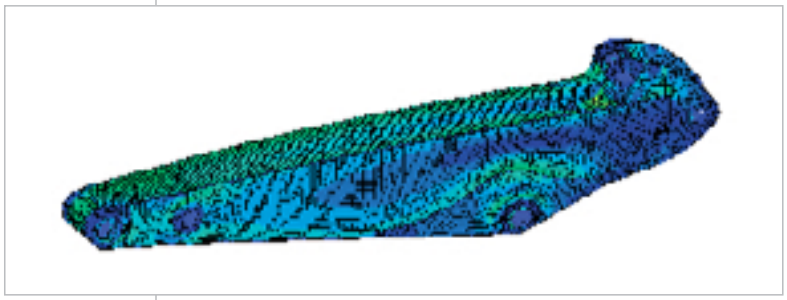
LOW EFFORT & PRECISE JOYSTICKS

All machine movements can be smoothly contolled by **low effort joystics...** a real, effective **Control of Power** allowing longer work times with less fatigue. The joystick illustrated is supplied as an option, together with rotating bucket circuit.

RELIABILITY & DURABILITY







NEW BOOM & ARM

Booms and Arms have been redesigned using advanced CAD (Computer Aided Design) and FEM (Finite Elements Methodology) Systems to get higher strength **only** in those areas where stresses are concentrated.
These sophisticated design methodologies are combined with the most advanced production technologies, providing high tensile steel plates that are cut, assembled and welded at the New Holland plant.
The same innovative guidelines, to achieve maximum strength together with outstanding torsional and flexional resistance, are applied in design and manufacture of upper stucture and the undercarriage.

BUCKET LINKAGE WITH DOUBLE BUSHING

The arm/bucket long-life internal bushing now has extra protection from wear due to contact with the bucket linkage, thanks to new additional external bushings made from anti-wear steel material. When the radial surface is worn this new bushing can be easily changed, thus increasing pin and bushing durability while reducing ownership costs.

ILITY AND COMFORT

NEW CAB INTERIOR

The interior of the cab has been completely re-designed to maximise operator comfort and to enable optimum operator performance. All switches and controls are now ergonomically positioned on the right side, easy to find and to reach.
The radio and the new, more powerful and effective automatic air-conditioning system are standard equipment, creating an agreeable working atmosphere regardless of external weather conditions. At the same time, new interior design and materials create an elegant feeling. Rigid cab construction, combined with silicon liquid filled viscous dumpers, minimises vibrations.
Threaded holes, built into the cab structure, enable fast and easy attachment of optional FOPS structure and front guard, effectively contributing to operator safety.

NEW ONE-HAND WINDSCREEN OPENING

One-touch lock release simplifies opening and closing the front window, while a new mechanism makes it lighter.

NEW A.E.P. MONITOR

The newly designed A.E.P. Monitor, features analogical gauges which provide one sight advice, regardless of the operating environment.
The digital Display Screen has been enlarged to further enhance visibility.
Maintenance information is clearly displayed and the self-diagnostic function provides an early warning detection of malfunctions.
Details of any previous breakdown or malfunction are also stored.

E385B VERSION J

SPECIFICATIONS

ENGINE

Flywheel power (ISO 14396 / ECE R120) .....209 kW / 280 hp
Rated.....2100 rpm
Make and model.....HINO EB-J08E-TM
Type .....Diesel, common rail, direct injection, turbocharged, intercooler
Total Displacement .....7.7 l
Number of cylinders 6
Bore x stroke.....112 x 130 mm
Maximum torque at 1600 rpm .....998 Nm
Remote engine oil filter for easy replacement.
Engine rpm electronic control with knob selector.
Automatic Idling return selector with Auto-Idling controls in neutral

ELECTRICAL SYSTEM

Operating voltage.....24 V
Alternator.....60 Amp
Starter motor.....5 kW
Standard maintenance-free batteries.....2
Capacity .....160 Ah

HYDRAULIC SYSTEM

Higher capacity pumps, to supply higher flow at lower rpm;
Redesigned Main Control Valve, with added 2nd dipper spool and new Fail Safe Functions;
Bigger radius piping with SAE flange ports;
H.A.O.A. (Hydrotronic Active Operation Aid) to get the best hydraulic output according to operator/ application demand;
E.S.S.C. (Engine Speed Sensing Control) device, for total installed hydraulic power exploitation;
D.O.C. (Dipper Optimised Control) thanks to the 2nd dedicated spool in the Control Valve and to the Conflux system;
C.P.B. (Continuous Power Boost) to allow the operator to use extra power when and how long it is needed;
A.E.P. (Advanced Electronic Processor) interacting with the operator for selecting and monitoring main working parameters, maintenance programmes, self diagnosis and operating data storage thanks to the new monitor with a larger digital display and analogical gauges;

Two working modes:
- S = for normal digging operation;
- H = when maximum power is required;

Two Attachments modes:
- A = for attachments which require double pump flow;
- B = for attachments, such as breaker, featuring one way flow only.

Standard double pump flow device and Diverter Valve automatically actuated while selecting A;
Super Fine hydraulic filter (8 micron) to grant perfect oil filtration, contributing to increase oil change interval
Main pumps:
two variable delivery pumps with electronic delivery adjustment.
With controls on neutral, the pumps automatically move to displacement position “0”.
Maximum delivery .....2 x 294 l/min
Piloting circuit gear type pump
Maximum delivery .....20 l/min
Maximum operating pressure:
Equipment / travel.....34.3 MPa
Swing.....29.0 MPa
Power Boost .....37.8 MPa
Hydraulic cylinders .....double effect
- Lift (2) - bore x stroke .....140 x 1550 mm
- Penetration (1) - bore x stroke .....170 x 1788 mm
- Bucket (1) bore x stroke .....150 x 1193 mm

TRANSMISSION

Type .....two-speed hydrostatic
Motors .....axial piston double displacement type, collapsible into track carriage
Brakes .....automatic discs type
Final drive.....oil bath epicyclical
Maximum slope .....70% (35°) continuous
Travel speeds:
slow .....0 to 3.3 km/h
high.....0 to 5.6 km/h
Drawbar pull ..... 322 kN
‘Automatic DownShift” device: with selector on “fast” in case of need for more traction force, adjusts travel motors to maximum displacement.

SWING

Swing motor.....axial piston type
Swing brake.....automatic, disc type
Final drive.....oil bath epicyclical
Slew ring .....grease bath type
Swing speed.....10.0 rpm

CAB AND CONTROLS

Transparent upper canopy.
Standard automatic conditioning.
Controls.....piloted
Two cross travel levers control all tool movements and superstructure swing.
Two non-removable lever pedals control all track movements, counter-rotation included.
A safety lever neutralises the piloting circuit completely.

UNDERCARRIAGE

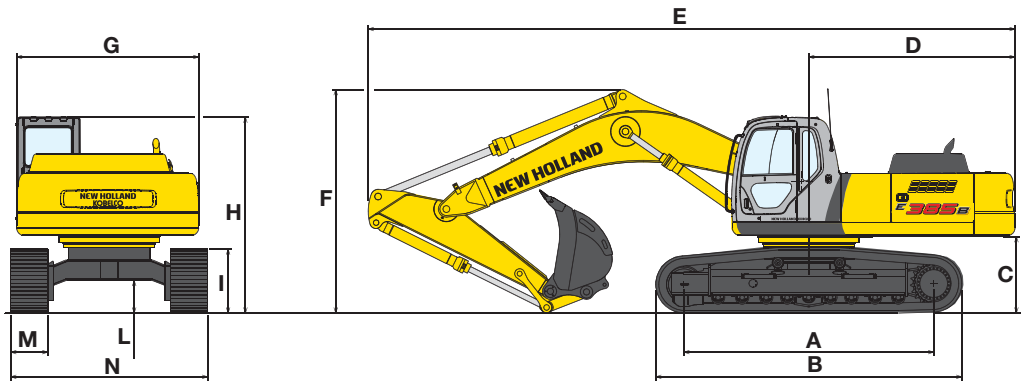
X-design undercarriage.
Sealed bushing reinforced track HD chain.

	E385BJ	E385BJ-LC
Track rollers (each side)	7	9
Carrier rollers (each side)	2	2
Length of track on ground (mm)	3730	4050
Gauge (mm)	2600	2600
Shoes available (mm)	600	600
	800	800

CAPACITIES

	litres
Lube oil	28.5
Coolant	31.0
Fuel tank	580.0
Hydraulic system	353.0

ONE - PIECE BOOM
DIMENSIONS (mm) - OPERATING WEIGHT



VERSIONS	A	B	C	D	E	F	G	H	L
E385BJ	3730	4650	1190	3500	(1) 11280	(1) 3640	2950	3160	500
E385BJ-LC	4050	4980	1190	3500	(1) 11280	(1) 3640	2950	3160	500

(1) 2600 mm dipperstick

		E385BJ		E385BJ-LC	
M - Shoe width	mm	600	800	600	800
N - Maximum width	mm	3200	3400	3200	3400
Operating weight *	kg	33600	34700	34300	35500
Specific ground pressure	bar	0.70	0.54	0.66	0.51

* With 3300 mm dipperstick and 1.4 m^3 bucket

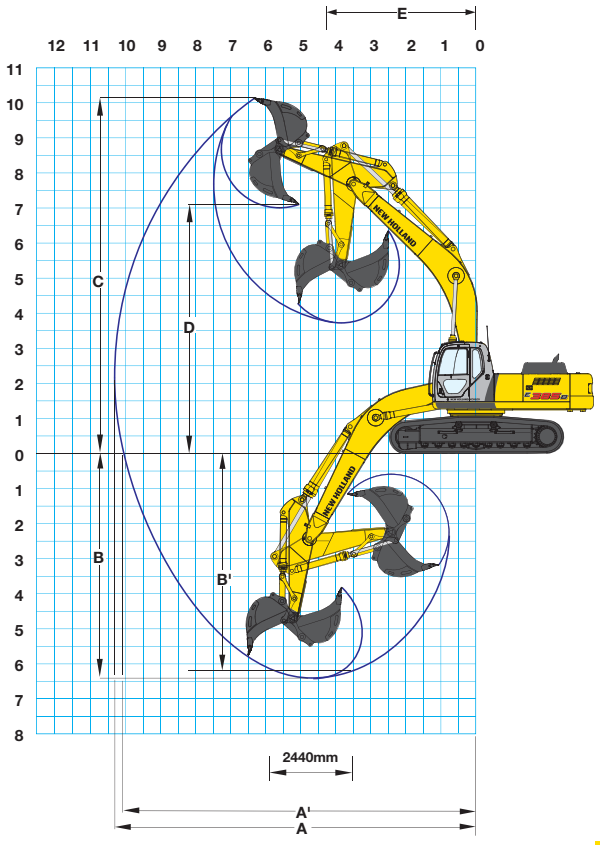
DIGGING PERFORMANCE

ONE - PIECE BOOM = 6500 mm

DIPPERSTICK		2600	3300	4150
A	mm	10610	11260	11970
A'	mm	10040	11060	11790
B	mm	6860	7560	8410
B'	mm	6670	7400	8270
C	mm	10260	10580	10700
D	mm	7060	7370	7530
E	mm	4450	4370	4430

BREAKOUT FORCE:				
Bucket	daN	22200	22200	22200
Dipperstick	daN	20500	16500	14000

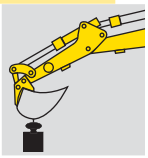
WITH "POWER BOOST" ON:				
Bucket	daN	24400	24400	24400
Dipperstick	daN	22500	18100	15400



E385B VERSION J

LIFTING CAPACITY

VALUES ARE EXPRESSED IN TONNES



RADIUS OF LOAD

HEIGHT	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		AT MAX. REACH		
	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	REACH m

E385BJ DIPPERSTICK 2600 mm - 600 mm SHOES

HEIGHT															
+7.5 m													6.4*	6.4*	7.14
+6.0 m									6.4*	6.3			6.3*	5.6	8.11
+4.5 m			15.6*	15.6*	10.1*	10.1*	7.9*	7.9*	6.8*	6.1			6.4*	4.8	7.80
+3.0 m					12.6*	12.6*	9.1*	8.2	7.4*	5.8			6.2	4.3	9.00
+1.5 m					14.4*	11.7	10.2*	7.7	7.9	5.5			6.0	4.1	9.04
0 m					14.9*	11.3	10.7*	7.3	7.7	5.3			6.2	4.2	8.80
-1.5 m			16.7*	16.7*	14.5*	11.2	10.7*	7.2	7.6	5.2			6.7	4.6	8.29
-3.0 m			17.9*	17.9*	13.2*	11.4	9.9*	7.3					7.7*	5.5	7.43
-4.5 m			14.0*	14.0*	10.6*	10.6*							7.8*	7.7	6.07
-6.0 m															

E385BJ DIPPERSTICK 3300 mm - 600 mm SHOES

HEIGHT															
+7.5 m									5.6*	5.6*			3.6*	3.6*	8.05
+6.0 m									5.8*	5.8*			3.6*	3.6*	8.88
+4.5 m							7.3*	7.3*	6.3*	6.3*	5.8*	4.5	3.6*	3.6*	9.41
+3.0 m			12.5*	12.5*	11.7*	11.7*	8.6*	8.6*	7.0*	6.0	6.1*	4.3	3.9*	3.8	9.67
+1.5 m			7.0*	7.0*	13.9*	12.3	9.8*	8.0	7.7*	5.6	6.1	4.2	4.3*	3.6	9.70
0 m			10.3*	10.3*	15.0*	11.6	10.6*	7.5	7.9	5.4	5.9	4.0	4.9*	3.7	9.49
-1.5 m	10.7*	10.7*	14.8*	14.8*	15.0*	11.4	10.9*	7.3	7.7	5.2	5.8	3.9	5.8	3.9	9.02
-3.0 m	15.1*	15.1*	20.2*	20.2*	14.1*	11.5	10.5*	7.3	7.7	5.2			6.7	4.5	8.26
-4.5 m	20.2*	20.2*	16.9*	16.9*	12.2*	11.8	9.1*	7.5					7.2*	5.8	7.10
-6.0 m					8.5*	8.5*							7.0*	7.0*	5.29

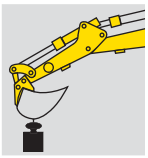
E385BJ DIPPERSTICK 4150 mm - 600 mm SHOES

HEIGHT															
+7.5 m													2.8*	2.8*	8.85
+6.0 m											4.6*	4.6*	2.7*	2.7*	9.62
+4.5 m									5.6*	5.6*	5.2*	4.6	2.8*	2.8*	10.11
+3.0 m			15.9*	15.9*	10.0*	10.0*	7.6*	7.6*	6.3*	6.1	5.6*	4.4	3.0*	3.0*	10.35
+1.5 m			12.5*	12.5*	12.6*	12.6*	9.0*	8.1	7.1*	5.7	6.0*	4.2	3.3*	3.2	10.38
0 m	6.1*	6.1*	11.7*	11.7*	14.2*	11.7	10.0*	7.6	7.8	5.3	5.9	4.0	3.7*	3.2	10.18
-1.5 m	9.5*	9.5*	14.2*	14.2*	14.8*	11.3	10.6*	7.2	7.6	5.1	5.7	3.8	4.5*	3.4	9.74
-3.0 m	12.9*	12.9*	18.0*	18.0*	14.5*	11.2	10.6*	7.1	7.5	5.0	5.7	3.8	5.7	3.8	9.04
-4.5 m	16.8*	16.8*	19.2*	19.2*	13.3*	11.3	9.8*	7.2	7.4*	5.1			6.7*	4.7	8.00
-6.0 m			15.0*	15.0*	10.7*	10.7*	7.8*	7.5					7.0*	6.7*	6.46

As per **ISO 10567** with excavator equipped with bucket. The indicated load is no more than 87% of hydraulic system lift capacity or 75% of static tipping load. Values marked with an asterisk are limited by the hydraulic system.

LIFTING CAPACITY

VALUES ARE EXPRESSED IN TONNES



E385BJ-LC DIPPERSTICK 2600 mm - 600 mm SHOES

HEIGHT	RADIUS OF LOAD														
	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		AT MAX. REACH		
	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	REACH m
+7.5 m													6.4 *	6.4 *	7.14
+6.0 m									6.4 *	6.4 *			6.3 *	5.7	8.11
+4.5 m			15.6 *	15.6 *	10.1 *	10.1 *	7.9 *	7.9 *	6.8 *	6.2			6.4 *	4.9	8.70
+3.0 m					12.6 *	12.6 *	9.1 *	8.4	7.4 *	5.9			6.5 *	4.4	9.00
+1.5 m					14.4 *	12.0	10.2 *	7.8	8.0 *	5.6			6.8 *	4.2	9.04
0 m					14.9 *	11.5	10.7 *	7.5	8.3 *	5.4			7.0 *	4.3	8.80
-1.5 m			16.7 *	16.7 *	14.5 *	11.5	10.7	7.4	8.2 *	5.3			7.4 *	4.7 *	8.29
-3.0 m			17.9 *	17.9 *	13.2 *	11.7	9.9 *	7.5					7.7 *	5.6	7.43
-4.5 m			14.0 *	14.0 *	10.0 *	10.6 *							7.8 *	7.8	6.07
-6.0 m															

E385BJ-LC DIPPERSTICK 3300 mm - 600 mm SHOES

HEIGHT	RADIUS OF LOAD														
	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		AT MAX. REACH		
	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	REACH m
+7.5 m									5.6 *	5.6 *			3.6 *	3.6 *	8.05
+6.0 m									5.8 *	5.8 *			3.6 *	3.6 *	8.88
+4.5 m							7.3 *	7.3 *	6.3 *	6.3 *	5.8 *	4.6	3.6 *	3.6 *	9.41
+3.0 m			12.5 *	12.5 *	11.7 *	11.7 *	8.6 *	8.6 *	7.0 *	6.1	6.1 *	4.4	3.9 *	3.9 *	6.67
+1.5 m			7.0 *	7.0 *	13.9 *	12.5	9.8 *	8.1	7.7 *	5.8	6.5 *	4.3	4.3 *	3.7	9.70
0 m	10.7 *	10.7 *	10.3 *	10.3 *	15.0 *	11.9	10.6 *	7.7	8.2 *	5.5	6.7 *	4.1	4.9 *	3.8	9.49
-1.5 m	15.1 *	15.1 *	14.8 *	14.8 *	15.0 *	11.7	10.9	7.5	8.4 *	5.3	6.3 *	4.1	6.0 *	4.0	9.02
-3.0 m	20.2 *	20.2 *	20.2 *	20.2 *	14.1 *	11.7	10.5 *	7.5	8.0 *	5.3			6.9 *	4.6	8.26
-4.5 m			16.9 *	16.9 *	12.2 *	12.0	9.1 *	7.7					7.2 *	6.0	7.10
-6.0 m					8.5 *	8.5 *							7.0 *	7.0 *	5.29

E385BJ-LC DIPPERSTICK 4150 mm - 600 mm SHOES

HEIGHT	RADIUS OF LOAD														
	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		AT MAX. REACH		
	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	REACH m
+7.5 m													2.8 *	2.8 *	8.85
+6.0 m											4.6 *	4.6 *	2.7 *	2.7 *	9.62
+4.5 m									5.6 *	5.6 *	5.2 *	4.7	2.8 *	2.8 *	10.11
+3.0 m			15.9 *	15.9 *	10.0 *	10.0 *	7.6 *	7.6 *	6.3 *	6.2	5.6 *	4.5	3.0 *	3.0 *	10.35
+1.5 m			12.5 *	12.5 *	12.6 *	12.6 *	9.0 *	8.3	7.1 *	5.8	6.0 *	4.3	3.3 *	3.3 *	10.38
0 m	6.1 *	6.1 *	11.7 *	11.7 *	14.2 *	12.0	10.0 *	7.7	7.8 *	5.5	6.4 *	4.1	3.7 *	3.3	10.18
-1.5 m	9.5 *	9.5 *	14.2 *	14.2 *	14.8 *	11.5	10.6 *	7.4	8.2 *	5.3	6.6 *	3.9	4.5 *	3.5	9.74
-3.0 m	12.9 *	12.9 *	18.0 *	18.0 *	14.5 *	11.4	10.6 *	7.3	8.1 *	5.2	6.3 *	3.9	5.8 *	3.9	9.04
-4.5 m	16.8 *	16.8 *	19.2 *	19.2 *	13.3 *	11.6	9.8 *	7.3	7.4 *	5.2			6.7 *	4.8	8.00
-6.0 m			15.0 *	15.0 *	10.7 *	10.7 *	7.8 *	7.7					7.0 *	6.9	6.46

As per **ISO 10567** with excavator equipped with bucket. The indicated load is no more than 87% of hydraulic system lift capacity or 75% of static tipping load. Values marked with an asterisk are limited by the hydraulic system.

NEW HOLLAND.
THE POWER OF A GLOBAL BRAND

New Holland is a global brand with a key position in the Construction Equipment business. It supplies a **complete range of 13 product lines and 80 basic models** split into **Compact line** and **Heavy line.** It operates in all the main markets, such as **Europe, North and Latin America, Africa, Asia and Middle East** with the same technology and under the same logo and brand. It manufactures **durable, safe and productive** machines aimed at supporting customers in developing their own business.**Dealers are company partners**. They play an important role to support the brand in their territories through intense professional relationship with Customers. New Holland is reinforced by its **global alliance with Kobelco**: world leader in hydraulic excavator technology.

AT YOUR OWN DEALERSHIP

Published by NEW HOLLAND KOBELCO CONSTRUCTION MACHINERY S.p.A.
Printed in Italy - LEADER Firenze - **Cod. 73301 449GB - Printed 02/08**

Printed on recycled paper
CoC-FSC 000010 CQ Mixed sources

SELECTED SECONDARY FIBERS
ELEMENTAL CHLORINE FREE GUARANTEED

FIAT GROUP

NEW HOLLAND CONSTRUCTION
BUILT AROUND YOU

www.newholland.com