



NEW HOLLAND

E80 BMSR

NEW HOLLAND KOBELCO



NET FLYWHEEL POWER	42 kW - 56 hp
MAX OPERATING WEIGHT	8 595 kg
BUCKET CAPACITY	0.23 - 0.35 m ³



NEW HOLLAND

CONSTRUCTION

BUILT AROUND YOU

E80BMSR*

TOP PERFORMANCE AND FLEXIBILITY PACKED INTO A VERY COMPACT MACHINE

Productivity (m³/l): + 20% vs. E80MSR

- NEW** “iNDR” (integrated Noise & Dust reduction) cooling system
- NEW** environmentally friendly turbocharged engine
- NEW** generation hydraulic pump
- NEW** wide operator compartment
- NEW** hydraulic circuit
- NEW** easy to transport narrow version (NLC)

- The E80BMSR represents an advanced example of Short Radius technology.
- It has been designed to satisfy customer needs, offering higher performance in terms of stability and productivity.
- This SR model features the revolutionary iNDR system that dramatically reduces machine noise level.
- Also a narrow (NLC) version is now available for customers who want a more flexible, easy to transport machine.
- Customers appreciate all the E80B MSR features and benefits where space, easy transportation and noise are constraints on urban job sites and in construction.



A BOOM SWING SYSTEM

A peculiar feature of E80B MSR is how the Boom “foot” is connected to the upperstructure. Thanks to a pinned support controlled by an hydraulic cylinder, it can swing up to 80° to the right and 50° to the left. It means maximum flexibility and productivity as the operator can approach close to a wall, dig and dump in maximum comfort without having to swing the upperstructure.

* A product of the global alliance between New Holland and KOBELCO

RESEARCH & INNOVATION

INCREDIBLY QUIET
EFFECTIVE DUST PROTECTION
REMARKABLY EASY MAINTENANCE



New Holland is proud to introduce also on E80BMSR, the unique, innovative and **patented iNDR (integrated Noise & Dust reduction) Cooling System**, with the engine compartment placed inside a single duct that connects the air intake and the exhaust outlet which are offset. The design itself, together with the correct positioning the insulation material inside the duct, minimise the engine noise.

A SIMPLE SOLUTION GRANTS MANY ADVANTAGES

iNDR is a highly environmentally friendly solution which maximises operator comfort and allows work in urban areas with minimum disturbance to the public.

Furthermore the ultra cleaned air provided by **iNDR** contributes to perfect fuel combustion.

E80BMSR



WIDER CAB INTERIOR

A new wider cab, the most spacious in its class, which features almost the same dimensions of a conventional excavator cab. 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, where they are easy to find and 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 six silicon liquid filled viscous dampers, 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 MONITOR

The new Monitor features an enlarged Display Screen 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.



NEW ONE-HAND WINDSCREEN OPENING

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

OPERATOR SAFETY AND COMFORT



WIDER CAB ACCESS

A 40 mm wider door and the left console which now lifts-up 10 degrees more than in the previous model, assure a wider cab access: an easier entry and exit for enhanced operator comfort.



INSTRUMENT LAYOUT

In-cab switches and controls have been moved to the right hand side in an easy to reach and more ergonomic position, thus improving operator comfort and convenience.

E80BMSR

DESIGNED TO EFFECTIVELY CUT OPERATING COSTS

CLEAN AND ACCESSIBLE LAYOUT

The machine layout has been designed to make inspections, maintenance and servicing much easier and less time-consuming.

The engine oil filter, the fuel filter and the water separator are remote mounted and easy to reach from ground level. Both the fuel filter and the water separator, which removes contaminants and water, have an important function for engine performance and durability.

Cooling components (radiator, hydraulic oil cooler and intercooler) are now mounted in parallel, which gives increased cooling efficiency for higher component reliability whilst being easier to check and clean.



A MODERN DESIGN COMBINED WITH STATE-OF-THE-ART TECHNOLOGY

The simplified layout of the New Holland E80BMSR enables easy access from ground level to most components, which are positioned under wide rear and side panels. It makes maintenance and inspections quicker and less expensive. Reduced maintenance and service time to keep machines in perfect condition: low maintenance costs, high reliability and durability, minimised owning and operating costs for your improved profit.

EASY MAINTENANCE & SERVICEABILITY



VISUAL CHECKING & EASY CLEANING OF iNDr FILTERS

The iNDr filters are located in front of the cooling components (radiator, hydraulic oil cooler and intercooler) now mounted in parallel for improved cooling efficiency. The air goes directly from the intake duct through the iNDr stainless-steel filters which capture dust. The cleaned air, going through the cooling components, reduces the risk of clogging and minimises the cleaning intervals of maintenance routine. If they appear dirty during the start up inspection, they are easy to remove without tools for cleaning from ground level.



FUSES

The fuses are inside the cab, protected from dust and water and are easy to reach and control.

LONG LIFE HYDRAULIC OIL

The long-life hydraulic oil used by New Holland features excellent anti-emulsion characteristics as well as an optimised mix of anti-wear and anti-oxidants additives that **boost the service life to 5,000 hours**, reducing the number of oil changes necessary and resulting in an impressive **reduction in operation costs and a higher respect for the environment**.

INTERNAL CAB MAINTENANCE

- Detachable two-piece floormat with handles for easy removal. A floor drain is located under the mat to facilitate inside cab cleaning.
- Air conditioning filter can easily be removed from under the seat without tools from ground level for easy cleaning.



E80B MSR

SPECIFICATIONS



ENGINE STAGE IIIA

Net flywheel power (ECE R120)42 kW/56 hp
 Rated rpm..... 2200
 Make and modelISUZU - AU-4LE2X
 TypeDiesel 4-stroke, direct injection, turbo, aftercooler
 Number of cylinders 4
 Displacement2179 cm³
 Bore x Stroke85 x 96 mm
 Maximum torque at 1600 rpm.....200 Nm

Electronic engine rpm control dial type.

Auto-idling selector returns engine to minimum rpm when all controls are in neutral position.

The engine complies with requirements set by European Directive 97/68/EC (2004/26/EC)



ELECTRICAL SYSTEM

Voltage24 V
 Alternator..... 30 Amp
 Starter motor..... 3.2 kW
 Standard maintenance-free batteries2
 Capacity64 Ah



HYDRAULIC SYSTEM

Load sensing closed centre hydraulic system with pressure compensating and flow sharing valves for fast cycles and simultaneous movements.

Operating mode selector: **H** - heavy mode for high performance
S - standard mode for normal operations

Manual selector: **A** - crusher mode
B - hammer mode

Main pump:

One variable delivery axial piston pump.
 Pump automatically revert to zero delivery with controls in neutral
 Maximum delivery132 l/min
 Piloting circuit: gear type pump
 Maximum delivery18 l/min

Maximum operating pressure:

Equipment/Travel29.4 MPa
 Swing24.5 MPa
 Blade27.5 MPa
 Pilot circuit3.5 MPa

Hydraulic cylinders	Number	Bore	Stroke
Lift	1	110 mm	916 mm
Penetration	1	95 mm	833 mm
Bucket	1	80 mm	735 mm
Swing boom	1	105 mm	594 mm
Blade	1	120 mm	125 mm



TRANSMISSION

Type.....hydrostatic, two-speed
 Travel motors2, axial piston type, double displacement
 Brakes.....automatic discs type
 Final drive.....oil bath, planetary reduction
 Gradeability (continuous)70% (35°)

Travel speeds

Lowfrom 0 to 2.8 km/h
 Highfrom 0 to 5.3 km/h

Automatic DownShift device: to move travel motors to maximum displacement position with selector on "speed" when greater traction is required.

Drawbar pull72 kN



SWING

Swing motoraxial piston type
 Swing brakeautomatic discs type
 Final drive.....oil bath, planetary reduction
 Swing Ringoil bath type
 Swing Speed12.7 rpm



CAB AND CONTROLS

Transparent upper cab roof.
 Automatic conditioning.
 Controls.....piloted
 Two cross path pattern levers actuate all equipment movements and superstructure swing.
 One lever for blade lower/lift.
 Two pedals with detachable "hand" levers control all track movements, counter-rotation included.
 A safety lever completely neutralizes the piloting circuit.



UNDERCARRIAGE

X-frame undercarriage design.
 Heavy duty track chain with sealed bushings.

Rollers:	LC	NLC
Track rollers (each side)	5	5
Carrier rollers (each side)	1	1
Length of track on ground (mm)	2240	2240
Gauge (mm)	1870	1700
Shoes triple grousers (mm)	450 - 600	450 - 600
Rubber (mm)	450	450



BLADE (STANDARD)

Redesigned dozer blade to improve reliability, durability and performance
 Width x Height2320/2470 x 460 mm
 Lift above ground355 mm
 Digging depth250 mm

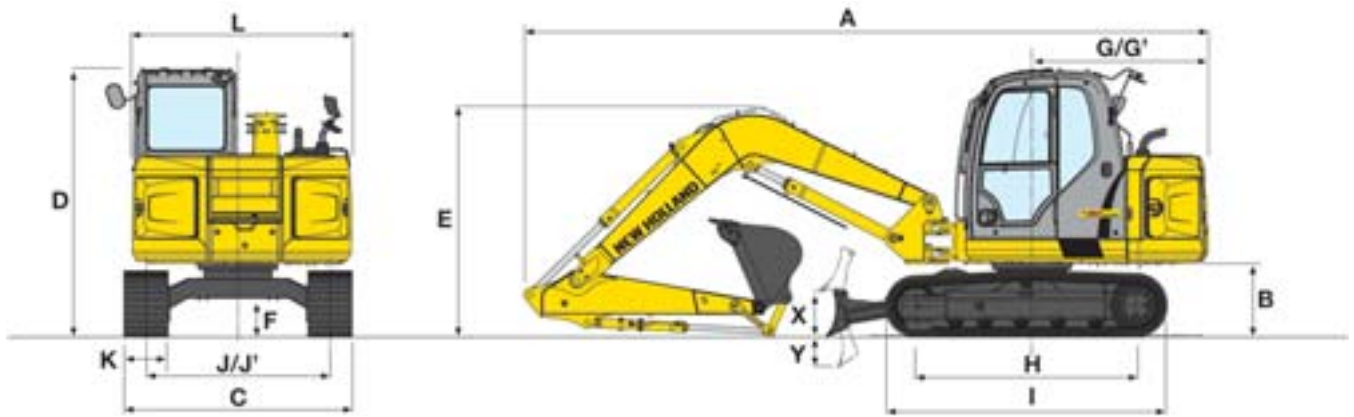


CAPACITIES

Engine	litres
Lube oil.....	11.0
Coolant.....	8.5
Fuel tank.....	120.0
Hydraulic system.....	90.0
Swing drive gear.....	1.5
Travel drive (each).....	5.3

ONE - PIECE BOOM AND BLADE

DIMENSIONS (mm) - OPERATING WEIGHTS



ARM	A	B	D	E	F	G/G'	H	I	J/J'	L
1870 mm	6950	730	2740	2340	360	1790/1920	2240	2860	1870/1700	2230
2130 mm	7510	730	2740	2920	360	1790/1920	2240	2860	1870/1700	2230

G' = Rear swing radius with additional (0.40 t) bolt-on counterweight (optional)

J = LC version gauge

J' = NLC version gauge

		STEEL - 3 GROUSERS	RUBBER
K - Shoe width	mm	450	600
C - maximum width**	mm	2320/2150	2470/2300
Operating weight with blade**	kg	8365/8310	8595/8540
Ground pressure	bar	0.37	0.28
Max blade width	mm	2320	2470
Blade height	mm	460	460
Blade weight	kg	500	515
X - max lift	mm	355	355
Y - max dig.	mm	250	250

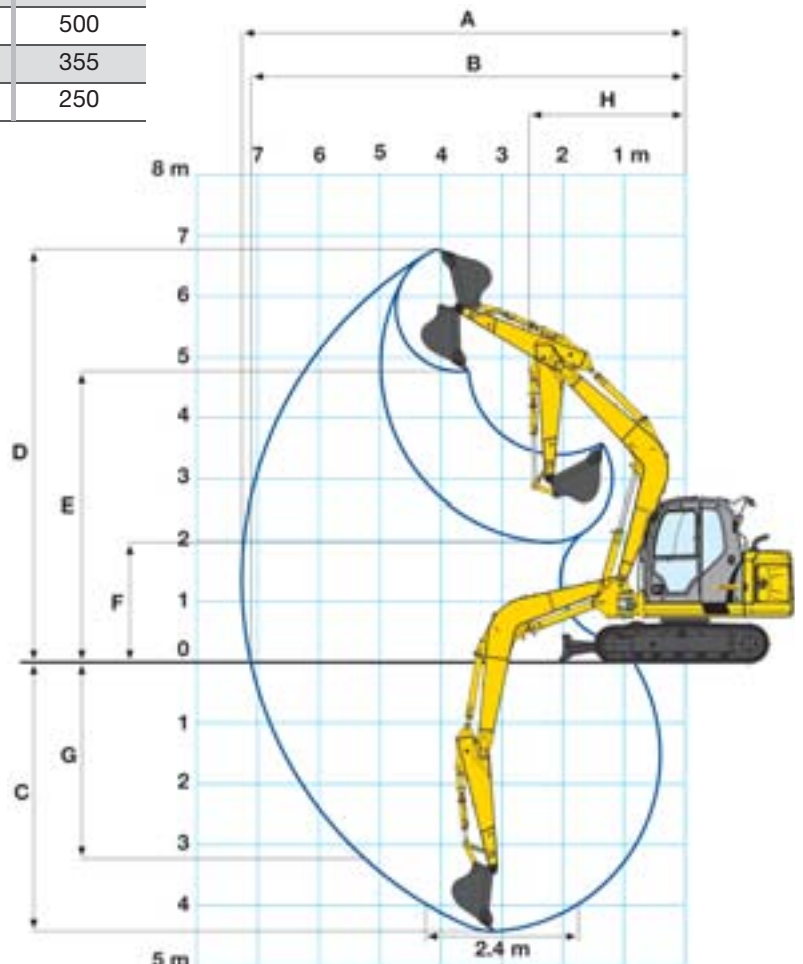
** LC/NLC version

DIGGING PERFORMANCE

ONE PIECE BOOM = 3670 mm

DIPPERSTICK		1870	2130
A	mm	7260	7640
B	mm	7110	7500
C	mm	4430	4700
D	mm	6780	7240
E	mm	4770	5190
F	mm	1970	1810
G	mm	3230	3810
H	mm	2560	3130

BREAKOUT FORCE			
Bucket	daN	5300	5300
Dipperstick	daN	3800	3550

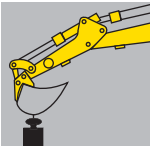


E80BMSR

LIFTING CAPACITY

All data intended with blade up

VALUES ARE EXPRESSED IN TONNES

	REACH										REACH m
	1.5 m		3.0 m		4.5 m		6.0 m		AT MAX REACH		
	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	

E80BMSR-LC ONE-PIECE BOOM - 1870 mm DIPPER - STD Counterweight

HEIGHT	1.5 m		3.0 m		4.5 m		6.0 m		AT MAX REACH		REACH m
+4.5 m					1.6*	1.6*			1.2*	1.2*	5.3
+3.0 m					1.9	1.6	1.1	1.0	1.1	0.9	6.1
+1.5 m			3.3	2.7	1.7	1.5	1.1	0.9	1.0	0.8	6.4
0 m			3.1	2.5	1.6	1.3	1.0	0.9	1.0	0.8	6.2
-1.5 m	3.4*	3.4*	3.1	2.5	1.6	1.3			1.2	1.0	5.5
-3.0 m			3.1*	2.6					1.9	1.6	4.1

E80BMSR-LC ONE-PIECE BOOM - 2130 mm DIPPER - STD Counterweight

HEIGHT	1.5 m		3.0 m		4.5 m		6.0 m		AT MAX REACH		REACH m
+4.5 m									1.2*	1.1	5.8
+3.0 m					1.8*	1.6	1.1	1.0	1.0	0.8	6.5
+1.5 m			3.4	2.7	1.8	1.5	1.1	0.9	0.9	0.7	6.8
0 m			3.1	2.5	1.6	1.3	1.0	0.9	0.9	0.7	6.6
-1.5 m	2.8*	2.8*	3.0	2.4	1.6	1.3			1.0	0.8	6.0
-3.0 m	4.8*	4.8*	3.1	2.5	1.6	1.3			1.5	1.2	4.7

E80BMSR-LC ONE-PIECE BOOM - 2130 mm DIPPER - HEAVIER CWT*

HEIGHT	1.5 m		3.0 m		4.5 m		6.0 m		AT MAX REACH		REACH m
+4.5 m									1.2*	1.2	5.8
+3.0 m					1.8*	1.8	1.3	1.1	1.1	0.9	6.5
+1.5 m			3.7	3.0	1.9	1.6	1.2	1.0	1.0	0.8	6.8
0 m			3.4	2.7	1.8	1.5	1.1	1.0	1.0	0.8	6.6
-1.5 m	2.8*	2.8*	3.3	2.7	1.7	1.4			1.1	0.9	6.0
-3.0 m	4.7*	4.7*	3.4	2.8	1.8	1.5			1.6	1.4	4.7

E80BMSR-LC ONE-PIECE BOOM - 2130 mm DIPPER + 400 kg BOLT-ON CWT

HEIGHT	1.5 m		3.0 m		4.5 m		6.0 m		AT MAX REACH		REACH m
+4.5 m									1.2*	1.2*	5.8
+3.0 m					1.8*	1.8*	1.3	1.1	1.1	1.0	6.5
+1.5 m			3.8	3.1	2.0	1.7	1.3	1.1	1.0	0.9	6.8
0 m			3.4*	2.9	1.9	1.6	1.2	1.0	1.0	0.9	6.6
-1.5 m	2.8*	2.8*	3.5	2.8	1.8	1.5			1.2	1.0	6.0
-3.0 m	4.7*	4.7*	3.4*	2.9	1.9	1.6			1.7	1.5	4.7

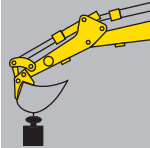
* HEAVIER Counterweight = + 260 kg (higher density material filled on)

The table values refer to ISO 10567 for 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

All data intended with blade up

VALUES ARE EXPRESSED IN TONNES

	REACH										REACH m
	1.5 m		3.0 m		4.5 m		6.0 m		AT MAX REACH		
	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	

E80BMSR-NLC ONE-PIECE BOOM - 1870 mm DIPPER - STD HEAVIER CWT*

HEIGHT	1.5 m		3.0 m		4.5 m		6.0 m		AT MAX REACH		REACH
+4.5 m					1.6*	1.6*			1.2*	1.2*	5.3
+3.0 m					1.9*	1.5	1.2	0.9	1.2*	0.9	6.1
+1.5 m			3.6	2.5	1.9	1.4	1.2	0.9	1.1	0.8	6.4
0 m			3.4	2.3	1.8	1.3	1.1	0.8	1.1	0.8	6.2
-1.5 m	3.4*	3.4*	3.4	2.3	1.7	1.3			1.3	0.9	5.5
-3.0 m			3.1*	2.4					2.1	1.5	4.1

E80BMSR-NLC ONE-PIECE BOOM - 2130 mm DIPPER - STD HEAVIER CWT*

HEIGHT	1.5 m		3.0 m		4.5 m		6.0 m		AT MAX REACH		REACH
+4.5 m									1.2*	1.0	5.8
+3.0 m					1.8*	1.6	1.3	0.9	1.1	0.8	6.5
+1.5 m			3.7	2.6	1.9	1.4	1.2	0.9	1.0	0.7	6.8
0 m			3.4	2.3	1.8	1.3	1.1	0.8	1.0	0.7	6.6
-1.5 m	2.8*	2.8*	3.3	2.3	1.7	1.2			1.1	0.8	6.0
-3.0 m	4.7*	4.7*	3.4	2.4	1.7	1.3			1.6	1.2	4.7

E80BMSR-NLC ONE-PIECE BOOM - 2130 mm DIPPER - STD HEAVIER CWT* + 400 kg BOLT-ON CWT

HEIGHT	1.5 m		3.0 m		4.5 m		6.0 m		AT MAX REACH		REACH
+4.5 m									1.2*	1.2*	5.8
+3.0 m					1.8*	1.8	1.4	1.1	1.2*	0.9	6.5
+1.5 m			4.1	3.0	2.2	1.6	1.4	1.0	1.1	0.8	6.8
0 m			3.4*	2.7	2.0	1.5	1.3	1.0	1.1	0.8	6.6
-1.5 m	2.8*	2.8*	3.8	2.7	2.0	1.4			1.3	1.0	6.0
-3.0 m	4.7*	4.7*	3.4*	2.7	2.0	1.5			1.8*	1.4	4.7

* HEAVIER Counterweight = + 260 kg (higher density material filled on)

The table values refer to ISO 10567 for 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.

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

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