

# *E145W* EVOLUTION



## PRELIMINARY

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**Net flywheel power**                      **83 kW – 113 HP**

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**Max operating weight**                      **16000 kg**

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**Bucket capacity**                              **da 0.23 a 0.74 m<sup>3</sup>**

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EVOLVING TECHNOLOGY

# Technical features



## Tier 2 emissioned engine

Net flywheel power (ISO 14396).....83 kW/113 HP  
 Rated rpm .....2000  
 Make and model .....IVECO F4BE0484B  
 Type.....diesel, 4 stroke,direct injection, supercharged with aftercooler  
 Total displacement .....3.9 l  
 Number of cylinders .....4  
 Bore x stroke .....102 x 120 mm  
**Fuel and engine oil filters** located remote for easy replacement  
**Engine rpm electronic control**  
**Automatic idling return switch** with controls in neutral - auto idling  
**Engine rpm storage device**  
**Standard electronic anti-theft device**  
**Start at -20 ° external temperature** supplied as standard equipment  
 (optional start at -25 °)  
 The engine conforms to EEC 97/98 STAGE 2 and USA CARB and EPA TIER 2 standards



## Electrical system

Operating voltage .....24 V  
 Maintenance-free batteries supplied standard.....2  
 Capacity .....100 Ah  
 Alternator .....70 A  
 Starter motor.....4 kW



## Hydraulic system

**New Smart Hydraulic System** for improved controllability and all simultaneous movements. Closed circuit Load Sensing.  
**Automatic Priority System device.**  
**Engine Speed Sensing Control device and hydraulic pump electronic control** for total installed power use.  
**Swing Pressure Control device** for outstanding controllability and high operating comfort during superstructure acceleration/stop.  
**Flow Pump Saving and Shock Less System circuits** to minimise oil at discharge and ensure perfectly homogeneous movements.  
**Easy To Use multi-function monitor** incorporating:  
 - clock  
 - maintenance program  
 - Self Diagnosis system  
 - travel speed  
 - engine rpm  
**Hammer/2-directional pincer system** supplied standard  
**Independent hammer/pincer and positioner cylinder** (triple articulation version).  
 Main pump – maximum delivery:  
 implement/travel circuit .....182 l/min  
 superstructure slewing circuit .....90 l/min  
 Maximum operating pressure:  
 implement/travel circuit .....350 MPa  
 superstructure slewing circuit .....200 MPa  
 Hydraulic cylinders .....double effect  
 - lift .....2  
 bore x stroke.....105 x 980 mm  
 - dipper stick .....1  
 bore x stroke.....110 x 1140 mm  
 - bucket.....1  
 bore x stroke.....90 x 995 mm  
 - dipper stick (only triple articulation) .....1  
 bore x stroke.....145 x 730 mm  
 Hydraulic travel end cylinders. Less implement stress and increased operator comfort.



## Transmission

**Automatic** or manual control with variable displacement hydraulic motor and 2-speed synchronised gearshift (work and travel) for speed control with excavator on the move. Gear shifting consent from travel to to operating speed is managed by the on-board computer, to ensure maximum operator comfort and safety.  
 Lower travel speeds can be selected with a lever. The transmission is provided with a Travel Motor Displacement Control **device**, to minimise

service brake use in downhill travel.

Speeds	km/h	Max (%) slope
Operating:	fast	0 ÷ 8.9
	slow	0 ÷ 3.6
Travel:	fast	0 ÷ 37.2
	slow	0 ÷ 13.9

**Creep Speed** (optional). 0 ÷ 1.7 km/h for maximum hydraulic pump delivery at low travel speeds.



## Superstructure slewing

Slewing motor .....axial piston type  
 Slewing brake .....oil bath disc type with automatic insertion and hydraulic release  
 Final drive .....oil bath epcycoidal type  
 Circle .....grease bath type  
 Slewing speed .....8.0 rpm



## Axles

New axles complete with oil bath disc brakes mounted directly on wheel hubs. Rigid rear axle.  
 Oscillating front axles: oscillation.....±7  
 The front axle can be locked hydraulically in any position: safety valves lock the axle in case of a breakdown.



## Braking system

**Service brakes:** oil bath disc type acting on allfour wheels.  
**Operating brake:** acting on service brakes plus front axle oscillation lock.  
**Parking brake:** mechanical spring type acting on the transmission.  
**Emergency brake:** double braking circuit and automatic parking brake insertion with engine cut out.



## Steering system

Type.....ORBITROL with safety valve  
 Pump .....gear type  
 Double stem cylinder .....one, double effect  
 Steering with engine cut out and excavator on the move.  
 Steering radius .....27°  
 Minumum steering radius with twinned tyres.....12100 mm



## Tyres

Twinned wheels .....10.00 – 20  
 Single wheels .....18 – 19.5  
 800/40 – 22.5



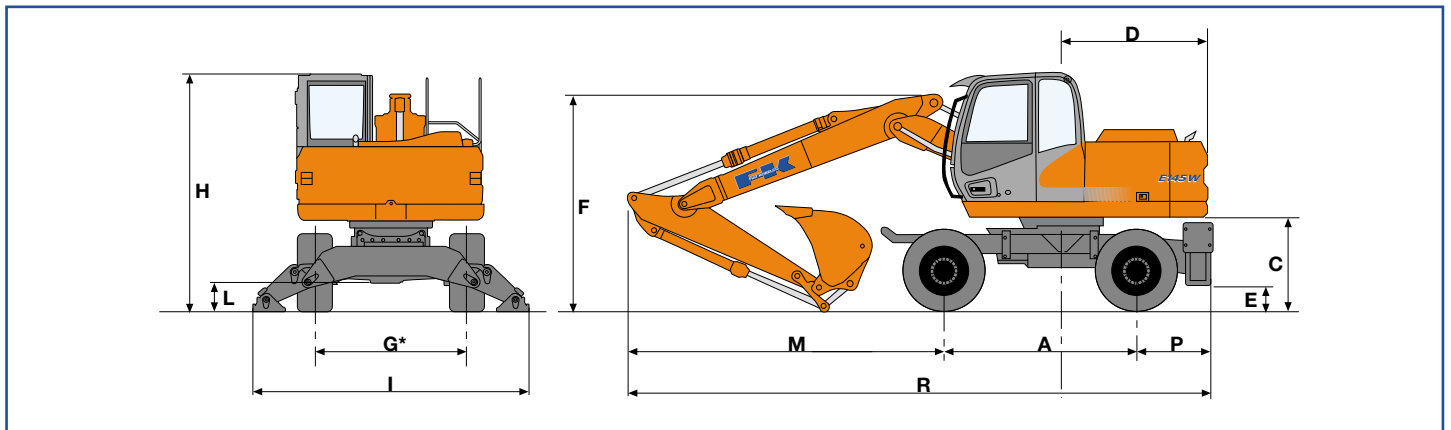
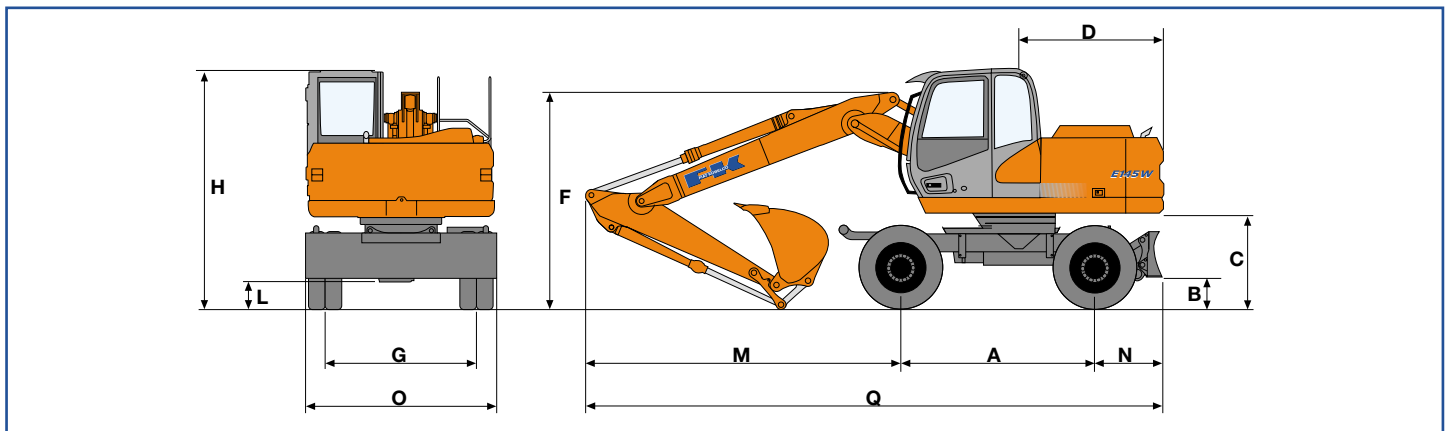
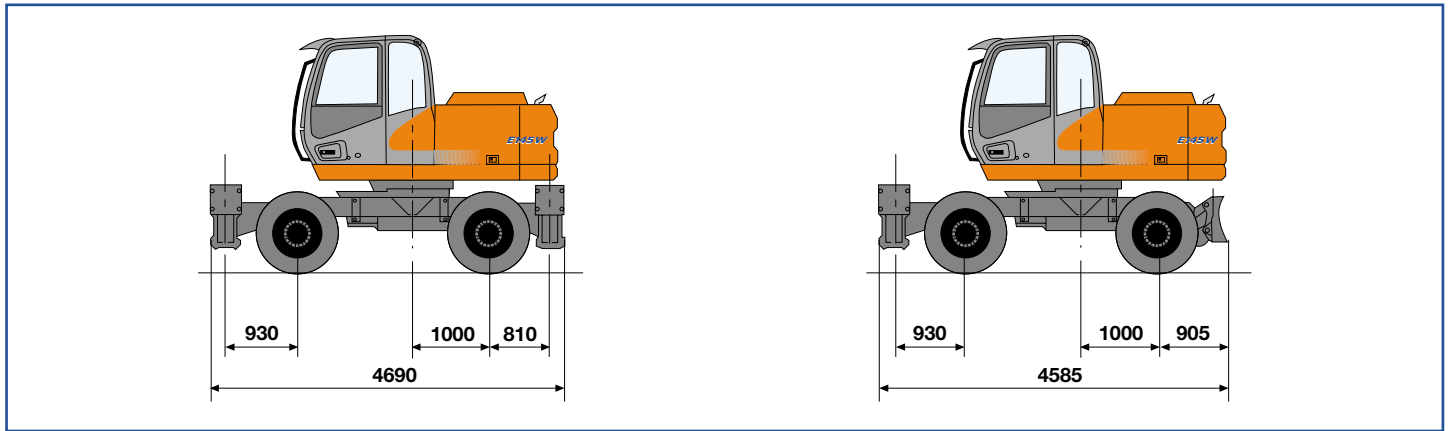
## Supplies

Engine litres  
 Lube oil .....12.5  
 Antifreeze .....24  
 Fuel .....250  
 Hydraulic system .....240

# Triple articulation

Equipped with twinned 10.00 - 20 tyres

# Dimensions (mm)



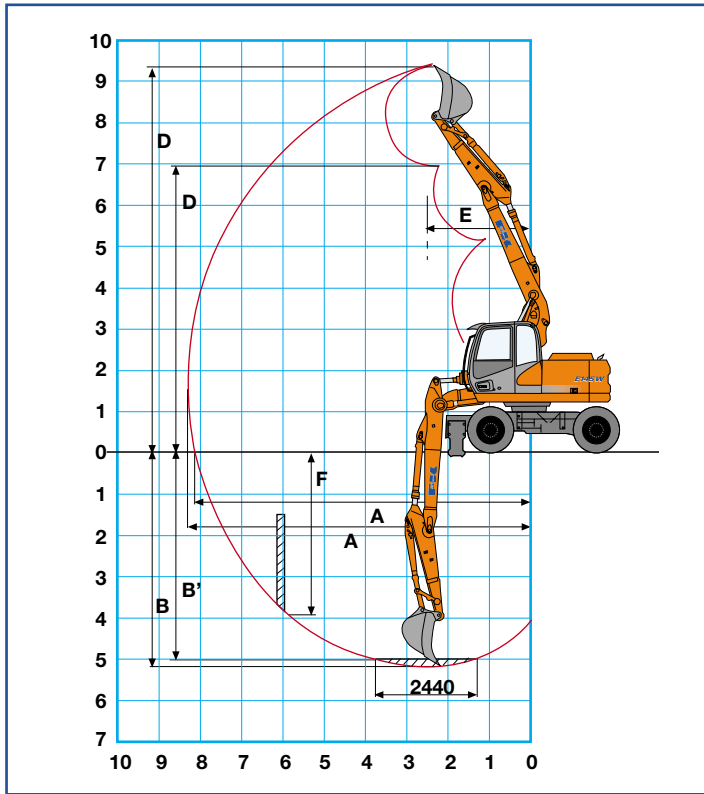
Dipper stick	A	B	C	D	E	F	G*	H	I	L	M	N	O	P	Q	R
2100 (1)	2550	395	1205	1945	305	2855	1975	3110	3660	325	4185	905	2530	1010	7635	7740
2500 (2)	2550	395	1205	1945	305	2830	1975	3110	3660	325	4265	905	2530	1010	7720	7825
3000	2550	395	1205	1945	305	3325	1975	3110	3660	325	4090	905	2530	1010	7545	7650

(1) (2) Booms approved for unescorted road travel

\* With single 18R 19.5 XF TL tyres: .....2000 mm  
 single 600/40 - 22.5: .....1950 mm

# Triple articulation

## Diggability



Dipper stick	mm	2100*	2500*	3000
A	mm	8380	8665	9160
A'	mm	8125	8490	8995
B	mm	5180	5565	6065
B'	mm	4990	5385	5900
C	mm	9360	9640	10080
D	mm	6915	7195	7635
E	mm	2490	2660	3015
F	mm	3945	4435	4945

Breakout force:				
bucket	kg	8700	8700	8700
dipper stick	kg	8200	6500	5700

\* Approved for unescorted road travel

## Operating weights

Equipped with twinned 10.00 - 20 tyres

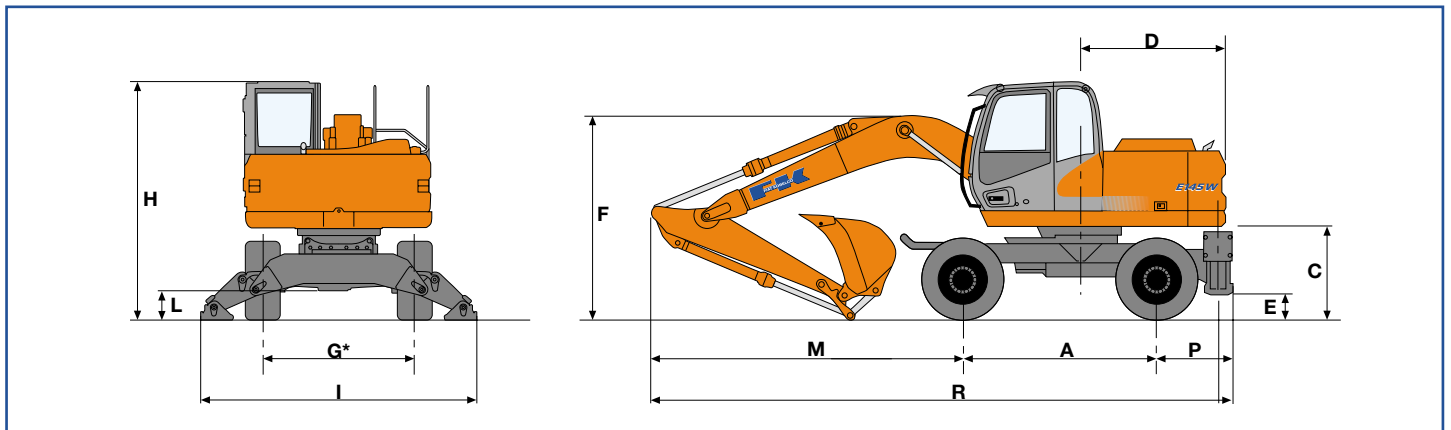
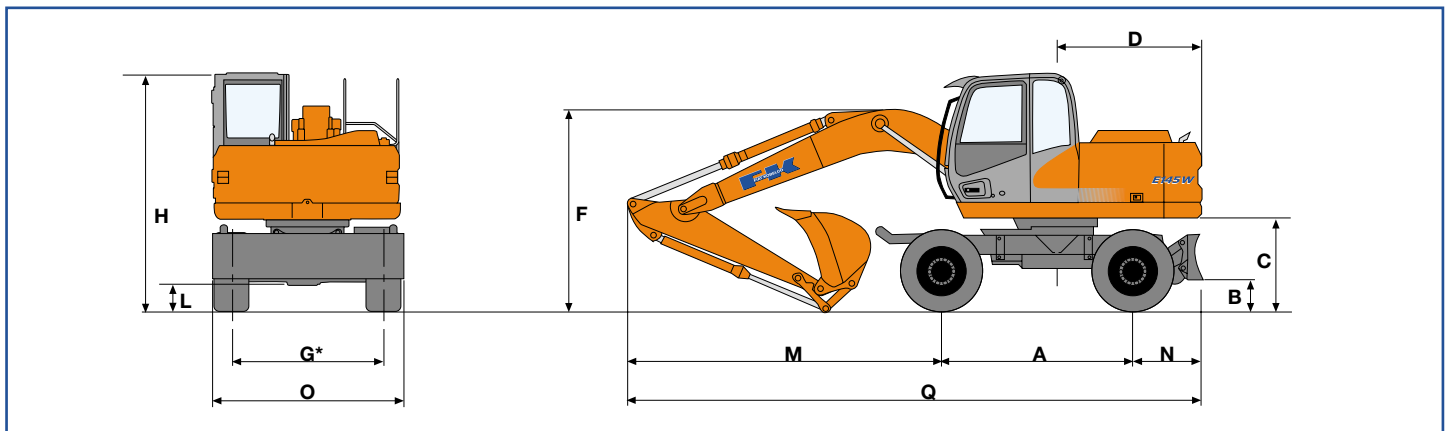
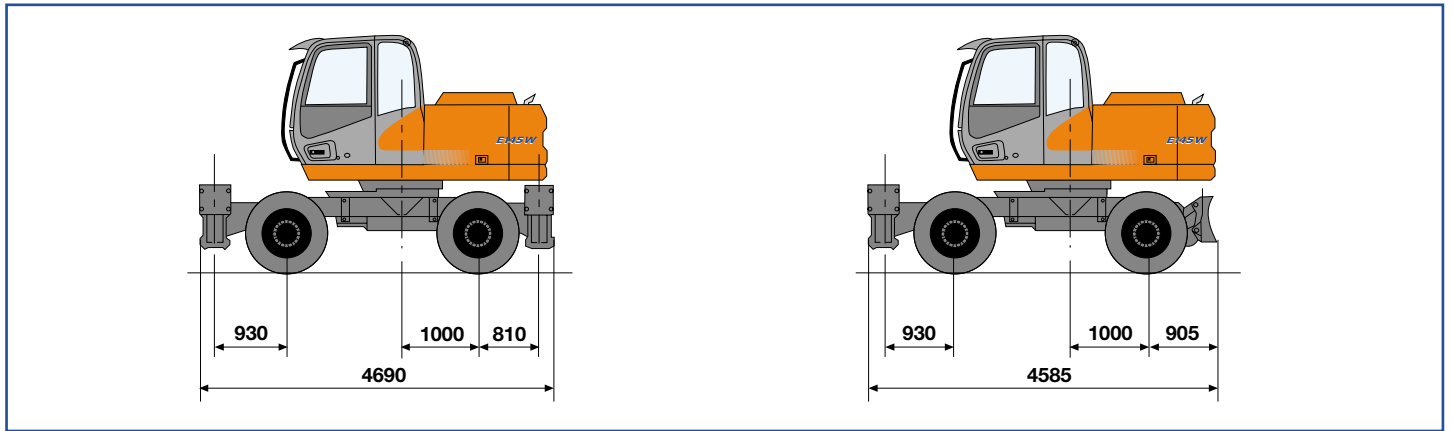
Dipper stick (mm)	Two stabilisers (kg)	Four stabilisers (kg)	Blade (kg)	Blade and stabilisers (kg)
2100	13700	15900	14400	15500
2500	14850	15950	14450	15550
3000	14900	16000	14500	15600



# Monobloc

Equipped with single 18 - 19.5 tyres

# Dimensions (mm)

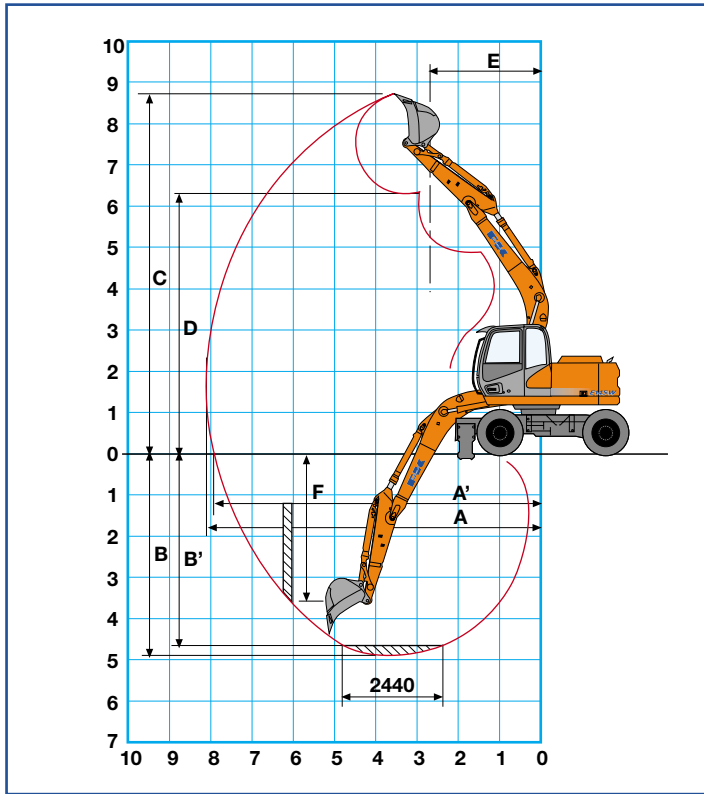


Dipper stick	A	B	C	D	E	F	G*	H	I	L	M	N	O	P	Q	R
2100	2550	415	1225	1945	325	2690	2000	3130	3645	350	4135	905	2530	1010	7590	7695
2500	2550	415	1225	1945	325	3160	2000	3130	3645	350	4040	905	2530	1010	7495	7600
3000	2550	415	1225	1945	325	3570	2000	3130	3645	350	3845	905	2530	1010	7300	7405

\* With twinned 10.00 - 20 tyres: .....1975 mm  
 twinned 600/40 - 22.5: .....1950 mm

# Monobloc

## Diggability



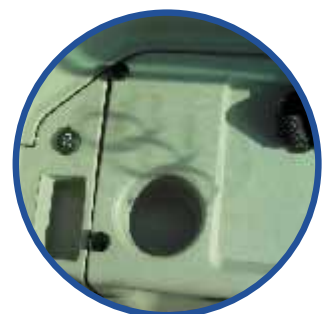
Dipper stick	mm	2100	2500	3000
A	mm	8110	8460	8950
A'	mm	7925	8280	8785
B	mm	4885	5285	5785
B'	mm	4645	5070	5605
C	mm	8730	8950	9335
D	mm	6360	6555	6935
E	mm	2665	2755	3025
F	mm	3600	4125	4690

Breakout force:				
bucket	kg	8700	8700	8700
dipper stick	kg	8200	6500	5700

## Operating weights

Equipped with twinned 10.00 - 20 tyres

Dipper stick (mm)	Two stabilisers (kg)	Four stabilisers (kg)	Blade (kg)	Blade and stabilisers (kg)
2100	14250	15350	13850	14950
2500	14300	15400	13900	15000
3000	14350	15450	13950	15050



## Standard equipment

Electronic accelerator complete with engine rpm storage push button  
 Immobiliser electronic anti-theft device  
 Maintenance toolkit  
 Horn  
 Maintenance-free batteries  
 Triple articulation monobloc boom  
 2090 mm dipper stick  
 Cab complete with transparent canopy, rain protection, front and rear sunshield, parallelogram windshield wiper  
 Hydraulic cylinders with hydraulic travel end device  
 Electrical vertical adjustment instrument panel  
 Centralised pressure control  
 Auto-Idling device  
 Fuel electrical pump  
 Cab lights  
 Cyclone pre-filter dry air filter  
 Remote location engine fuel/oil filter  
 Oil bath disc brakes in wheel hubs  
 Lift hook on bucket levers  
 24V electrical system

Load Sensing hydraulic system with hydraulic power electronic control  
 Centralised boom lubrication  
 Multi-function manipulators  
 Easy To Use multi-function monitor  
 Travel and slewing motor with automatic disc brakes  
 Road travel certification  
 Mechanical lock/unlock brake pedal  
 Cell phone holder  
 Operator compartment with automatic conditioning  
 Pedal control hammer /pincer predisposition  
 Travel motor protection predisposition  
 Grapple bucket swing predisposition  
 Radio with load speakers  
 Grease bath circle  
 10.00 – 20 twinned wheels  
 Heated mechanical control seat  
 Automatic or manual shift hydrostatic transmission  
 Lift, penetration anti-drop valve with integrated spool

## Optional equipment

-25 °C cold start  
 Multi-use, rock and heavy duty buckets  
 2490 mm dipper stick  
 2990 mm dipper stick  
 Left toolkit  
 Creeper speed (1.7 km/h)  
 Front blade and rear stabilisers  
 Rear blade  
 Gearshift protection

18 - 19.5 single wheels  
 600 – 40 – 22.5 single wheels  
 Left ladder  
 Heated compressed air seat  
 Front and rear stabilisers  
 Rear stabilisers  
 Hammer/pincer hydraulic piping  
 Grapple bucket hoses

### Buckets

SAE capacity	CECE capacity	Width	Weight
0,23 m <sup>3</sup>	0,21 m <sup>3</sup>	500 mm	230 kg
0,41 m <sup>3</sup>	0,37 m <sup>3</sup>	750 mm	270 kg
0,48 m <sup>3</sup>	0,43 m <sup>3</sup>	850 mm	300 kg
0,52 m <sup>3</sup>	0,47 m <sup>3</sup>	900 mm	340 kg
0,59 m <sup>3</sup>	0,54 m <sup>3</sup>	1000 mm	400 kg
0,74 m <sup>3</sup>	0,67 m <sup>3</sup>	1200 mm	450 kg

At your dealership

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Published by FIAT KOBELCO CONSTRUCTION MACHINERY S.p.A. - <http://www.fiatkobelco.com>  
LEADER Firenze - Printed in Italy - SatizMSX (Turin - Italy) - Printed n. 60054 - INB 04/03



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