

**NEW**



## **SINGLE DRUM SOIL COMPACTOR | VM117/VM137**

Operating weight (cabin): 11.300kg/12.550kg Engine power: 93–108kW (125–145hp) Drum width: 2100mm



## PRODUCTIVITY MAXIMISED.

THE VM117 AND VM137 ARE DESIGNED TO GIVE YOU ULTIMATE PRODUCTIVITY. EQUIPPED WITH INNOVATIVE ECOMAX ENGINES THEY PROVIDE REDUCED LIFE CYCLE COSTS AND FUEL CONSUMPTION WITHOUT THE NEED FOR A DPF.

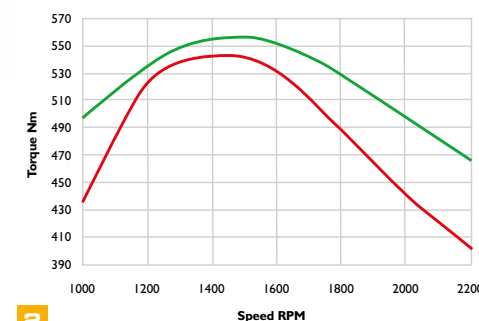
You can expect class-leading low fuel consumption from a JCB Stage 3B/T4i EcoMAX engine. This is partly thanks to a variable geometry turbo, which helps to provide improved cycle times and tractive effort at low engine speeds.



### Built for efficiency.

**1** The Stage 3B/T4i-compliant JCB EcoMAX engine is equipped with a variable fan as standard, providing your VM117 or VM137 with fuel savings of up to 6%.

**2** The JCB EcoMAX engine delivers a massive 550Nm (VM117) and 560Nm (VM137) of torque, at low engine speeds for optimum responsiveness, for fuel-efficient matching of transmission and hydraulics.



**1**

**2**

## Saving time and money.

**3** Both of these models boast quick (up to 11 km/h) travel times around site, which also speeds up preparation for the next compaction pass.

**4** These soil compactors have a tight turning circle for excellent manoeuvrability on confined sites.

## Complete compaction.

**5** Front weight ratio is high which provides a very high static linear load. Combined with optimised amplitude and frequency, this helps you to achieve the ultimate homogenous compaction performance in the lowest possible number of passes on every surface from sand to rock.

You'll benefit from class-leading 60% gradeability with an EcoMAX engine, thus ensuring great versatility and productivity anywhere in the world. The motor itself is a high performance unit (VM117 – 4.4-litre, VM137 – 4.8-litre), and it's combined with high-torque hydraulic components and optimised weight distribution.

**6** If you plan to use your machine to compact clay, opt for our pad foot drum to improve water evaporation and, therefore, create more stable soil. For added versatility, choose a pad foot shell kit, which offers the best of both worlds.



### MAXIMUM COMPACTED LAYER THICKNESS

Model		Rock	Sand/Gravel	Mixed Soil	Clay/Loam
VM117 D	m	0.6	0,3-0,4	0,3-0,4	0.2
VM117 PD	m	–	–	–	0.25
VM137 D	m	0,7-0,9	0,5-0,6	0.5	0.3
VM137 PD	m	–	–	–	0.4

## QUALITY, **RELIABILITY** AND DURABILITY.

SOIL COMPACTORS HAVE TOUGH LIVES, WHICH IS WHY WE'VE DESIGNED AND BUILT THE VM117 AND VM137 TO BE AS ROBUST AS THEY CAN BE. PRODUCTIVITY AND UPTIME ARE MAXIMISED ACCORDINGLY.



1

### Quality at its best.

1 For maximum reliability, our new exciter system only has 2 moving parts, providing standard dual amplitude / dual frequency setting.



2

2 The fuse box is positioned underneath the seat console, well protected and within easy reach.

3 All of our soil compactors are subjected to a 2-hour hot test to make sure they're ready for trouble-free use from day one.

4 We use advanced manufacturing and assembly processes to ensure maximum precision and quality of components.



3



4

## Designed for reliability.

**5** The robust maintenance-free centre joint has been the trusted mainstay of JCB's VM115 soil roller generation and it continues to offer reduced servicing costs on these machines too.

**6** To prove our EcoMAX engines' durability, we've done 110,000 hours of testing in 70 different machines across the toughest applications and environments.

**7** The frame of the VM117 and VM137 is designed using finite element analysis, and it's fully strain gauged. It's also been tried and tested across various machines, applications and environments.

**8** A sturdy rear frame structure protects the glass fibre engine bonnet and the cleverly integrated rear light cluster\*.

\*Rear road lights are optional.



## VISIBLE BENEFITS.

WE BELIEVE THAT IN ORDER FOR SOIL COMPACTORS TO OFFER MAXIMUM PRODUCTIVITY, THEY NEED TO FIRST OFFER MAXIMUM VISIBILITY. THE VM117 AND VM137 ARE DESIGNED TO DO JUST THAT.

### 360° visibility.

- 1 There's superb all-round visibility on a VM117 and VM137 courtesy of a pillarless front cab design, and a sloping rear bonnet.
- 2 We use flat glass panels on these soil compactors (unlike our competitors), which makes replacement quick and easy.
- 3 Precision is guaranteed with the new clear view front screen and minimal front display, which help to provide an unrestricted view to the front drum edges.
- 4 The design of these machines incorporates an angled bonnet profile for an unrestricted view of the rear edge.

To improve safety and precision during operation, there's a low rear bonnet profile and no exhaust pipe in the field of vision, which makes for an unrestricted view to the rear and corners.



## COMFORTABLY SUPERIOR.

TO GET THE MOST OUT OF YOUR VMI17 AND VMI37, IT'S CRUCIAL THAT OPERATORS CAN PERFORM THEIR JOB EFFICIENTLY AND IN ALL-DAY COMFORT. AS SUCH, BOTH MACHINES ARE DESIGNED TO OFFER A GREAT WORKING ENVIRONMENT.

### Designed for ease of use.

**5** Operators can get working quickly on a VMI 17 or VMI 37 because of the intuitive, easy-to-use and ergonomic controls, all laid out in the industry standard.

**6** Our easily adjustable tilting steering column provides maximum comfort.

**7** When operators are getting in and out, there are three points of contact at all times; access steps are inclined and equally spaced, and there are well-positioned grab handles.

To make life easier, you only need one key to operate the ignition, door and bonnet.



**5** JCB's standard-fit automatic vibration control (AVC) activates whenever the drive lever is moved from the neutral position, increasing comfort and making compaction as consistent as possible.

### Comfort on the move.

**8** Fatigue-free all-day operation comes as standard: these machines are designed to offer low in-cab noise levels. What's more, by isolating the operator stand with 4 heavy duty rubber mounts, we've ensured class-leading low vibration levels too.

**9** The well positioned coloured TFT display provides the operator with direct reading machine data and error information.



There's a large range of seat options, including mechanical or air suspension and vinyl or fabric bases. No matter which you choose, you'll get a high back, an armrest, a document pouch and full adjustment, along with an optional pivoting function.

## LESS SERVICING, MORE SERVICE.

WE UNDERSTAND THAT A SOIL COMPACTOR IS ONLY PROVIDING ULTIMATE PRODUCTIVITY AS LONG AS IT'S ON-SITE WORKING FOR YOU. THAT'S WHY WE'VE DESIGNED THE VM117 AND VM137 TO OFFER MAXIMUM UPTIME WITH SIMPLE, MINIMISED SERVICING.

### Routine maintenance.

**1** For ease of servicing, the VM117 and VM137 are designed so that all daily checks can be done from ground level on one side. A wide opening rear bonnet gives fast access to the engine compartment.

**2** Testing and servicing are quick and easy because service ports, key fuses and the isolator key are all centralised and easy to access. An emergency towing valve is standard-fit on both machines.

**3** To extend service intervals (and therefore productivity) both models feature a cyclonic air cleaner which reduces debris build-up in the air filter. An air intake scavenge system then removes the debris.

**4** Local JCB dealer servicing is easy and cost-effective, with all aftermarket requirements catered for.

The cooling pack is easy to get into and clean, which optimises engine cooling. The fuel tank is located behind simple panels for similarly straightforward access, allowing ground-level filling and cleaning.





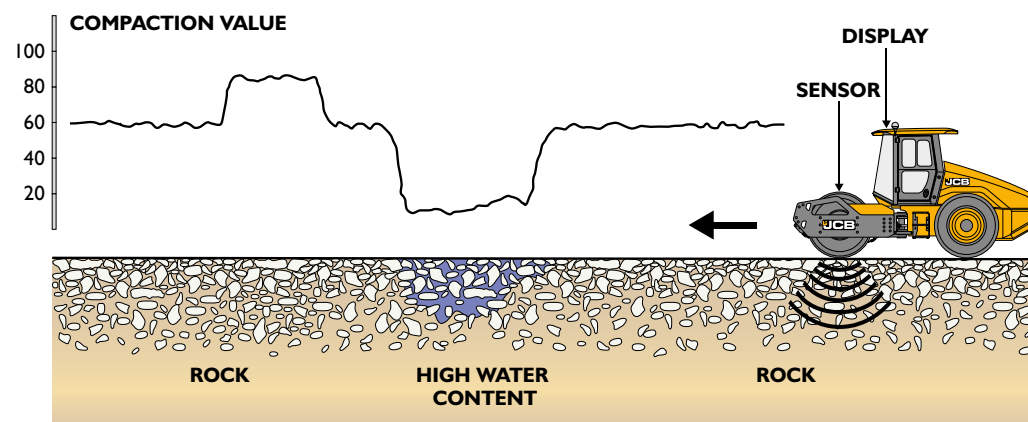
### Drum maintenance.

- 5 The front frame is fully bolted for great service access to the drum. The bolt heads are fully inserted into a rigid side frame.
- 6 A long service life and reduced running costs are ensured by JCB's unique preloaded rubber mountings; the design means that the rubber mounts can't be overloaded and can be quickly replaced.
- 7 The hydraulic hoses are completely protected from potential damage and dirt by a massive cover plate.



# COMPACTION MEASUREMENT.

THE INNOVATIVE TECHNOLOGIES USED ON THE VM117 AND VM137 ARE INTUITIVE AND RELIABLE UNDER ALL WORKING CONDITIONS, ENSURING THAT YOUR COMPACTION WORK IS AS EFFICIENT, SAFE AND SUCCESSFUL AS CAN BE.



## Efficient compaction.

To make your compaction operation as efficient as possible, you can fit optional JCB COMPATRONIC systems to your VM117 and VM137. There are three systems available, ranging from basic to high-end; whichever one you opt for, an accelerator sensor mounted next to the drum will measure the reaction from the ground and provide feedback about the rebound to the corresponding system.

The upshot is that you can minimise your number of passes, avoid over-compaction and prevent jump operation, which can damage both machinery and soil composition. The more sophisticated COMPATRONIC PRO and NAV versions are comprehensive compaction measurement systems with tracking and documentation functions for quality control.

### COMPATRONIC



Round display with LED scale for display of the relative compaction value, warning lamp for jump operation and LED display for vibratory frequency

Search for weak compaction areas

Reduce number of passes & avoid overcompaction

### COMPATRONIC PRO



Economic solution for a comprehensive compaction control system with a TCD display for a track view up to 18 tracks. Display of the relative compaction value, working speed, amplitude and frequency as well as jump operation.

Print functionality

GPS sensor optional

### COMPATRONIC NAV



High end comprehensive compaction control system with a coloured tablet and easy to run operator menu. Three workings modes to achieve required compaction specification are possible (number of passes, relative compaction value in relation to plan value and increase of compaction per pass).

Exchange of job data between office desktop and tablet is possible via mobile (GPRS) or USB.

GPS sensor allows true positioning of the machine in construction drawing, visible on tablet screen.

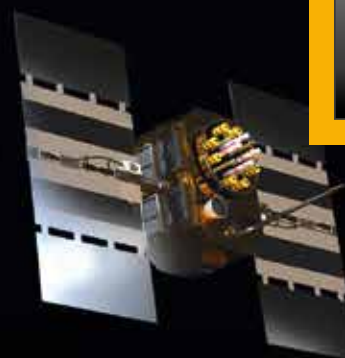


## LIVELINK, WORK SMARTER.

**LIVELINK IS AN INNOVATIVE SOFTWARE SYSTEM THAT LETS YOU MANAGE JCB MACHINES REMOTELY – ONLINE, BY EMAIL OR BY MOBILE PHONE. ACCESS EVERYTHING FROM MACHINE ALERTS TO FUEL REPORTS AND HISTORY INFORMATION, WITH ALL DATA STORED AT A SECURE CENTRE.**

### Productivity and cost benefits

By providing information like idle time monitoring and machine fuel consumption, JCB Livelink helps reduce your fuel usage, saving money and improving productivity. Machine location information can help improve efficiency and perhaps even reduce insurance costs.



### Maintenance benefits

Manage machine maintenance easily – accurate hours monitoring and service alerts improve maintenance planning, while real-time location data helps you manage your fleet. Critical machine alerts and maintenance history records are also available.



### Security benefits

Livelink's real-time geofencing alerts tell you when machines move out of predetermined zones, and real-time curfew alerts inform you of unauthorised usage.



## VALUE ADDED.

JCB'S WORLDWIDE CUSTOMER SUPPORT IS FIRST CLASS. WHATEVER YOU NEED AND WHEREVER YOU ARE, WE'LL BE AVAILABLE QUICKLY AND EFFICIENTLY TO HELP MAKE SURE YOUR MACHINERY IS PERFORMING TO ITS FULL POTENTIAL.

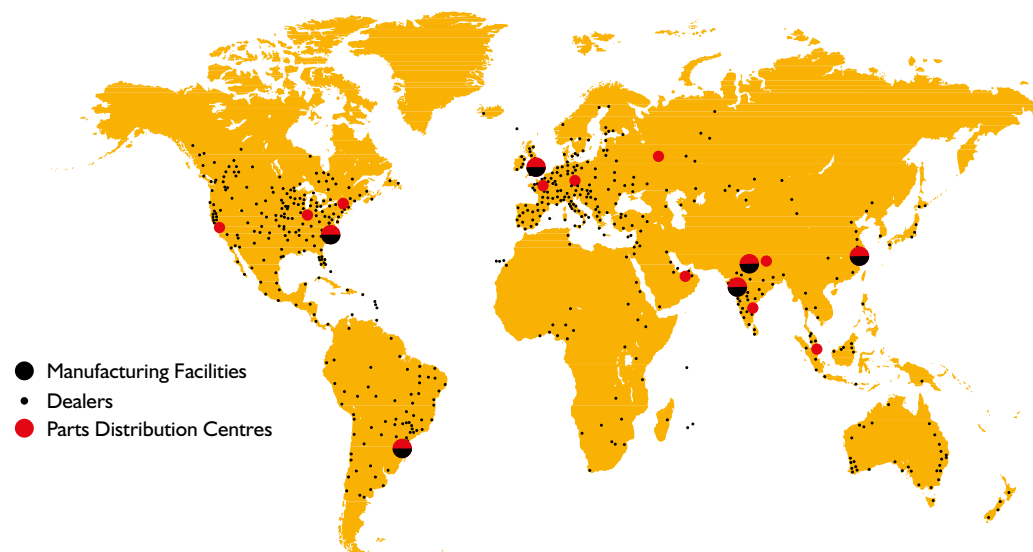


**1** Our Technical Support Service provides instant access to factory expertise, day or night, while our Finance and Insurance teams are always on hand to provide fast, flexible, competitive quotes.

**2** The global network of JCB Parts Centres is another model of efficiency; with 16 regional bases, we can deliver around 95% of all parts anywhere in the world within 24 hours. Our genuine JCB parts are designed to work in perfect harmony with your machine for optimum performance and productivity.



**3** JCB Assetcare offers comprehensive extended warranties and service agreements, as well as service-only or repair and maintenance contracts. Irrespective of what you opt for, our maintenance teams around the world charge competitive labour rates, and offer non-obligation quotations as well as fast, efficient insurance repair work.



## OPTIONS LIST.

WHICHEVER OPTION YOU CHOOSE - FULLY GLAZED CAB OR ROPS STRUCTURE WITH SUNROOF - OPERATOR COMFORT AND SAFETY ARE SUPERB, HELPING YOU MAKE COMPACTION WORK MORE PROFITABLE.

### VM117 AND VM137

#### STANDARD FEATURES

Hydrostatic rear axle and drum drive  
Hydrostatic vibration drive  
Servo assisted center articulation with vertical oscillation  
JCB axle with limited slip differential  
Info and warning display  
One lever control for propulsion and vibration  
AVC (Automatic Vibration Control)  
Uphill / down hill traction control  
Power charger 12V  
Fully adjustable operator seat  
Adjustable steering column

Front and rear steel scrapers  
Centralized hydraulic service station  
Battery main switch  
Hydraulic hand pump for brake release  
3 stage air cleaner  
Air intake scavenge system  
One key solution  
Vibration isolated operator stand  
Noise isolation  
Emergency Stop switch  
Back-up warning horn  
Live Link.

#### OPTIONS

Cabin  
Heating  
Air Conditioning  
Radio  
ROPS/FOPS incl. handrails  
Sunroof  
Instrument panel cover  
Halogen working lights  
LED working lights  
Road traffic lights  
Rotary Beacon

Immobiliser  
Polyurethane scrapers (only D)  
PD shell kit (only D)  
Levelling blade  
Seat variants Vinyl or fabric seat, fixed or pivoting seat console, mechanical or air suspension  
3" seat belt  
Compatronic (compaction measurement systems)  
Grid heater  
Fuel lubrication filter  
Bio degradable hydraulic oil  
Tropical hydraulic oil.



ROPS/FOPS with sunroof and halogen working lights.

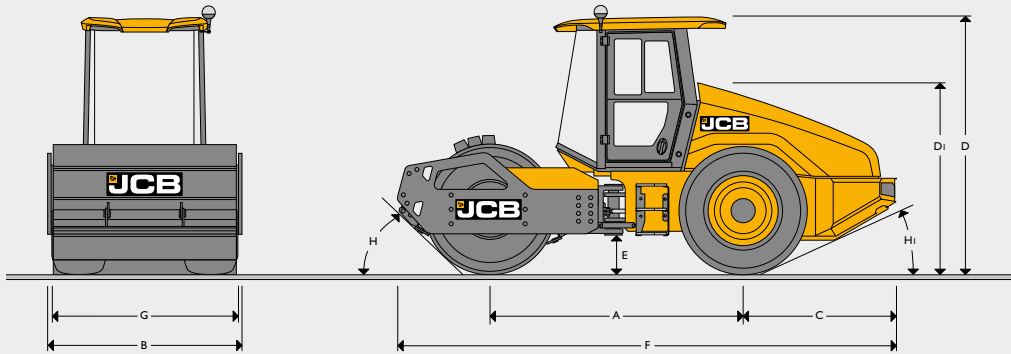


LED working lights.



Lockable vandal guards.

## STATIC DIMENSIONS



			VM 117 D	VM 117 PD	VM 137 D	VM 137 PD
A	Wheelbase	mm	2930	2930	2930	2930
B	Overall width	mm	2230	2230	2230	2230
C	Axle to rear face	mm	1760	1760	1760	1760
	Drum diameter	mm	1500	-	1500	-
	Drum diameter min (Padfoot)	mm	-	1400	-	1400
	Drum diameter max (Padfoot)	mm	-	1600	-	1600
D	Total height with cabin/ROPS	mm	3000	3070	3000	3070
D <sub>1</sub>	Total height without cabin/ROPS	mm	2250	2320	2250	2320
E	Ground clearance	mm	445	445	445	445
F	Total travel length	mm	5690	5690	5690	5690
	Drum thickness	mm	25	15	30	20
G	Drum width	mm	2100	2100	2100	2100
H	Departure angle front	deg	46	46	46	46
H <sub>1</sub>	Departure angle rear	deg	32	32	32	32

## ENGINE

		VM 117 D	VM 117 PD	VM 137 D	VM 137 PD
Manufacturer		JCB	JCB	JCB	JCB
Model		444/EcoMAX	444/EcoMAX	448/EcoMAX	448/EcoMAX
Displacement	l	4.4	4.4	4.8	4.8
Bore	mm	103	103	106	106
Stroke	mm	132	132	135	135
Torque	Nm	550	550	560	560
No. of cylinders		4	4	4	4
Cooling		Water	Water	Water	Water
Emmision compliance		T4i Stage IIlb	T4i Stage IIlb	T4i Stage IIlb	T4i Stage IIlb
Performance	kW (hp)	93 / 125	93 / 125	108 / 145	108 / 145
Operating speed	rpm	2200	2200	2200	2200

## OPERATING DATA

		VM 117 D	VM 117 PD	VM 137 D	VM 137 PD
Operating weight max.	kg	13300	13300	14550	14550
Operating weight Cabin	kg	11300	11300	12550	12550
Operating weight ROPS	kg	10900	10900	12150	12150
Weight front / rear Cabin	kg	6200 / 5100	6200 / 5100	7200 / 5350	7200 / 5350
Weight front / rear ROPS	kg	6000 / 4900	6000 / 4900	7000 / 5150	7000 / 5150
Static linear load	kg/cm	29.5	29.5	34.3	34.3
Frequency	Hz	33 / 36	33 / 36	31 / 36	31 / 36
Amplitude	mm	1,83 / 0,75	1,83 / 0,75	1,98 / 0,9	1,98 / 0,9
Centrifugal force	kN	256 / 125	256 / 125	282 / 173	282 / 173
Working speed (forward / reverse)	km/h	0-8	0-8	0-8	0-8
Travel speed (forward / reverse)	km/h	0-11	0-11	0-11	0-11
Steering angle	deg	+/- 35	+/- 35	+/- 35	+/- 35
Oscillating angle	deg	+/- 15	+/- 15	+/- 15	+/- 15
Inner turning radius	mm	3380	3380	3380	3380
Tyre sizes		23.1 - 26 / 8 PR AWT	23.1 - 26 / 12 Tractor	23.1 - 26 / 8 PR AWT	23.1 - 26 / 12 Tractor
Number of padfeet		-	132	-	132
Height of padfoot		-	100	-	100
Gradeability up to	%	60	60	60	60

## SERVICE CAPACITIES

		VM 117 D	VM 117 PD	VM 137 D	VM 137 PD
Fuel	l	285	285	285	285
Engine oil	l	14	14	14	14
Gear oil (exciter)	l	8	8	8	8
Hydraulic oil	l	75	75	75	75

## ELECTRICAL SYSTEM

		VM 117 D	VM 117 PD	VM 137 D	VM 137 PD
Voltage	V	12	12	12	12
Battery capacity	Ah	120	120	120	120
Alternator	V	60	60	60	60



**ONE COMPANY, OVER 300 MACHINES.**

Your nearest JCB dealer

### **Single Drum Soil Compactor VM117/VM137**

Operating weight (cabin): 11.300kg/12.550kg

Engine power: 93–108kW (125–145hp) Drum width: 2100mm

JCB Sales Limited, Rocester, Staffordshire, United Kingdom ST14 5JP.

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Download the very latest information on this product range at: [www.jcb.com](http://www.jcb.com)

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