# **VIBRATORY SOIL COMPACTOR 1107EX I 1107EX-D I 1107EX-PD**





# A SOLID BASE

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EXPERTS FOR THE REAL WORLD
SINCE 1842



# **EXPERTS FOR THE REAL WORLD SINCE 1842**

- 1842 Case is founded.
- **1869** The first Case portable steam engine road construction is born!
- 1958 The first Case 4-WD wheel loader, the W9, is introduced.
- 1969 Case begins skid steer loader production.
- 1985 Case starts production of its first compactor, branded Case-Vibromax.
- 1993 Case signs supply agreement with Ammann/STA for the distribution of Case branded compactors in the USA.

# **HERITAGE**

# **A TRADITION OF INDUSTRY FIRSTS**



- 1998 Case starts joint venture with L&T to produce and distribute 3 models of Compactors in India based on the VIBROMAX technology.
- **2000** Case signs a distribution agreement with Stavostroj, the largest manufacturer of compacting technology in Central and Eastern Europe.
- **2011** Case acquires 50% of its Indian Joint Venture with L&T and the company is renamed Case New Holland Construction Equipment India.
- **2013** Case launches the upgraded DX-Series soil compactor.
- **2016** Renewed EX-Series soil compactor features a new FPT engine.



### **HIGH EFFICIENCY**

### Tier 3 engine

The 1107 EX compactor features the new powerful 4-cylinder water cooled Tier 3 engine that delivers up to 110 hp and 16% more torque compared with the previous model.

With more than 3 million units operating all over the world, including the Case 570T backhoe loader, the engine assures an excellent reliability.

The turbocharged engine is equipped with an air aftercooler system with internal EGR that increases the density of the intake air, improving efficiency and reducing fuel consumption.

Coupled with the turbo pre-cleaner, the water cooled engine ensures excellent cooling and high fuel efficiency: -5% compared with the previous model.



FPT S8000: proven technology!



#### **HIGH RELIABILITY**

## For a durable performance

- 1. Well-proven compaction technology: high manufacturing quality standards achieved throughout a long experience
- 2. 4-pins central joints: a heavy duty design solution to make the machine suitable for the most severe applications
- 3. Turbo pre-cleaner mounted on top of engine compartment: only fresh air is delivered to the engine to assure a perfect combustion
- 4. Shock absorbers: low vibrations transmitted by the drum to machine components to increase durability

#### Turbo Pre-Cleaner



# **DRUM DRIVE AND VIBRATORY SYSTEM**



### FIRST-RATE PRODUCTIVITY

#### Drum drive

The 1107 EX vibratory soil compactor is available in three configurations to meet every surface compaction need:

- The 1107 EX with single drive and smooth drum for multi-purpose activities and standard jobs
- The 1107 EX-D with drum drive and increased traction on slopes and landfills
- The 1107 EX-PD with drum drive and clamp-on pad foot for compacting more cohesive materials such as clay and silt

The optional drum drive system features an additional high torque drive motor mounted on the front drum frame, resulting in excellent gradeability (36%) and optimized traction.





### **HIGH VERSATILITY**

### Ready for every mission

2 vibration stages provided by a variable displacement bidirectional axial piston pump with electrical displacement control allow effective compaction of a wide range of soil types.

- Great manoeuvrability:
  - +/- 15° drum oscillating angle
  - 37° steering angle -> short steering radius
- Low steering effort contributes to reducing operator fatigue
- Perfect match of frequency and amplitude vibration to the soil, in order to get the
  - best performance
- Easy transport features thanks to the optimal dimensions



## **MAIN REASONS**

# **TO CHOOSE THE 1107EX**



#### **FIRST-RATE PRODUCTIVITY**

- Perfect match of frequency and amplitude in vibration
- Cross-bar as a load-bearing structure for greater strength and more weight at the front
- The 32 mm thick drum shell provides excellent resistance and uniformity in compaction operations
- The ample steering angles (37° left and right) enable a reduced turning radius (3650 mm) providing excellent machine maneuverability.



# COMFORTABLE OPERATOR STATION

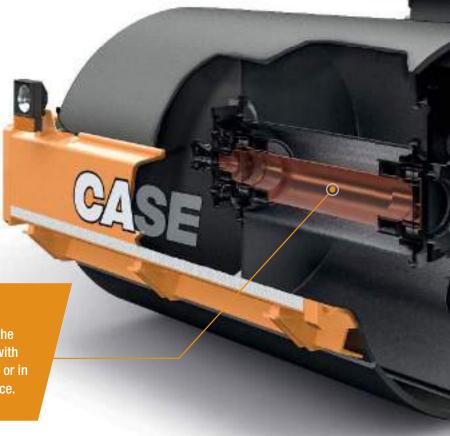
- Efficient A/C and heating system with 8 louvers
- 90° clockwise rotating seat
- Deluxe Grammer suspension seat with adjustable armrests (ROPS and cab versions)
- Radio predisposition available (cab version)





#### **HIGH RELIABILITY**

- Standard turbo pre-cleaner
- Heavy-duty drum support frame
- World-class components



The centrifugal force is generated by an internal eccentric shaft and a rotating mass: depending on the direction of rotation, the rotating mass is in phase with the eccentric shaft for a maximum centrifugal force or in the opposite position, for a minimum centrifugal force.







#### COMFORTABLE AND SAFE OPERATOR STATION

Easy access and excellent visibility

- 90° clockwise rotating seat to ensure good visibility of rear wheel and front drum in every pass
- Easy and safe cab access thanks to the wide steps and robust handles
- Unobstructed glazed area from roof to top allows good visibility around the jobsite and to the drum
- Fully adjustable mechanical suspension Grammer seat for increased Operator comfort
- Efficient A/C and heating system with 8 louvers for perfect cab climate control
- Operator station mounted on rubber shock absorbers to minimize transmitted vibrations
- 2 front lights + 2 head-lamps and 2 rear work-lamps as standard 2 optional side working lights





## **SAFE AND EASY MAINTENANCE**

Reduced downtime and operating costs

- Easy acces from ground level to battery and all main service items, thanks to the one piece engine hood
- Optimized engine layout facilitates the access to the hydrostatic and hydraulics pumps

# 1107EX OPERATOR STATION AND MAINTENANCE



#### **SPECIFICATIONS**

**ENGINE** 

ENGINE	
Make	FPT
Model	S 8000 - TIER III
Type 4	stroke turbocharged aftercooled
Cylinders	4
Bore/stroke	104 x 115
Displacement (I)	3.9
Fuel injection	Direct
Fuel	High speed diesel
Fuel filter	Spin-on type
Air intake	Turbocharged with internal EGR
Air filter	Dry type with dual element
Engine oil filter	Spin-on type
Cooling	Liquid
Engine speeds (no load)	
- Low:	950±50
- High:	2150±25
Max. power (hp) (Canopy / Cab)	100 / 110
(@rpm) (Canopy / Cab)	2200 / 2300
(ISO3046)	
Max. torque (Nm) (Canopy / Cab)	445 / 430
(@rpm) (Canopy / Cab)	1300 / 1400
VIBRATION SYSTEM	
Type Variable displac	coment hi directional avial nicton
numn wit	th electrical displacement control
Drive to vibration pump	Machanical Machanical
Engine to pump ratio	Direct Drive 1:1
Displacement (cc/rev)	
Charge pressure (bar)	27
Charge pressure (bar) Vibration motorFixed	I displacement mounted on drum
STEERING	
Steering system	articulated hydrostatic steering
Steering angle	_artiodiated riyarootatio otooring 37° on either side
Otoorning unglo	(74° between stop to stop)
Turning radius (inner radius) (m)	
Drum oscillation angle	
Tyre size	23.1/18-26
.,	8 PR or 12 PR Tubeless
<b>ELECTRICAL SYSTEM</b>	
	05.1405
Alternator output (A) (Canopy / Cab)	
Battery (V/Ah)	12 / 130
SERVICE CAPACITIES	
Fuel tank (I)	235
Hydraulic tank (I)	70
Engine crank case (I)	9.1
Engine coolant (I)	15

#### **PROPULSION**

Type	Infinitely variable hydrostatic
	drive with variable displacement pump
Drive pump	Mechanical
Engine to pump ratio	Direct drive 1:1
Type	Variable displacement bi-directional axial
71 -	piston pump with manual
	displacement control
Displacement (cc/Rev)	
Flow @rated engine (I PM)	156
	100
onarge pressure (bar)	
Drive motors	
	High speed low torque driving
	motor mounted on rear axle input shaft
	Low speed high toque drive motor
Tor drain drive (optional) _	mounted on front drum frame
	along with rear axle motor
Hydraulic oil filter	
Hydraulic oil filter	Heavy duty with integrated parking brake
AXIC	mechanism and out board planetary
Darking broke	Spring applied hydraulically released
Faiking blake	Operate on /off parking broke quitab
Engagement	Operate on /off parking brake switch
	on instrument panel, engine stop
Machine anada	
Machine speed:	0.55
- Working speed (km/h)	0-5.5
- Iravei speeu (KIII/II)	0-11.5
Final drive	Hight torque out board planetary
Cradoobility	
Gradeability	21 (170)
With draw drive (%)	31 (17°)
with druff drive (%)	36 (20°)
intermittant (%)	40

#### **INSTRUMENTATION**

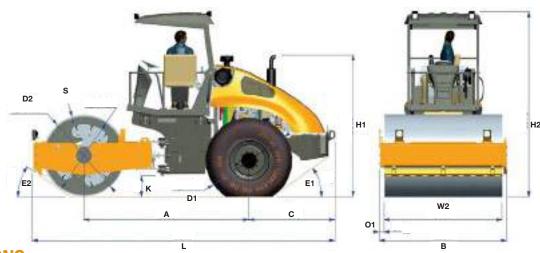
Indicators	Parking brake, high beam, low beam, position, battery not charging, 2-speed,
	pre-heater, turn signal left & right, neutral
Gauges	Digital hour meter, water temp,
	fuel level, engine rpm
Warning lights/alarms	Coolant overheat, hydraulic oil filter clog, low lube oil pressure, air filter clog

### **STANDARD EQUIPMENT**

Sun roof, horn, front and rear working lights, 90° rotating operator seat, guard rail structure on operator's platform, tilting engine hood, vandal guard, IP67 weather proof rocker switches, instrument cluster, glove box for operator, easy split design of canopy legs for transportation, 32 mm drum shell thickness.

# **SPECIFICATIONS**

## **GENERAL DIMENSIONS**



## **DIMENSIONS**

Α	Wheel base	mm	3003	
В	Overall width of the machine	mm	2324	
С	Rear overhang	mm	1562	
D1	Diameter of the rear tyres	mm	1380	
D2	Diameter of the drum	mm	1500	
H1	Height of silencer from ground level	mm	2561	
H2	Overall height of the machine (Canopy / Cab)	mm	3373 / 3341	
K	Ground clearance	mm	382	
L	Overall length of the machine	mm	5508	
01	Side overhang	mm	87	
S	Drum shell thickness	mm	32	
W2	Overall width of the drum	mm	2150	
E1	Rear departure angle	0	36	
E2	Front departure angle	0	35	

<b>OPERAT</b>	ING DATA		1107 EX	1107 EX-D	1107 EX-PD
Non-ROPS Canopy version	Operating weight without operator	kg	10780	11030	12460
	Front axle load	kg	6220	6470	7900
	Rear axle load	kg	4560	4560	4560
	Static linear load front	kg/cm	29	30	-
ROPS Canopy version	Operating weight without operator	kg	11095	11345	12775
	Front axle load	kg	6210	6460	7890
	Rear axle load	kg	4885	4885	4885
	Static linear load front	kg/cm	29	30	-
Cab version	Operating weight without operator	kg	11200	11450	12880
	Front axle load	kg	6370	6620	8050
	Rear axle load	kg	4830	4830	4830
	Static linear load front	kg/cm	30	31	-

VIBRATION SYSTEM		1107 EX		1107 EX-D		1107 EX-PD	
		1	2	1	2	1	
Frequency	Hz	31	34	31	34	30	
Amplitude	mm	1.8	8.0	1.8	8.0	1.3	
Centrifugal force	kg	26887	14888	26887	14888	25180	
Max. applied force (Non-ROPS version)	kg	33092	21093	33357	21358	33080	
Max. applied force (ROPS version)	kg	33097	21098	33347	21348	33070	
Max. applied force (Cab version)	kg	33257	21258	33507	21508	33230	

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NOTE: Standard and optional fittings can vary according to the demands and specific regulations of each country. The illustrations may include optional rather than standard fittings - consult your Case dealer. Furthermore, CNH Industrial reserves the right to modify machine specifications without incurring any obligation relating to such changes.

Conforms to directive 2006/42/EC