

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

CASE
CONSTRUCTION



**RELIABLE AND EFFECTIVE
COMPACTION**

www.casece.com

**EXPERTS FOR THE REAL WORLD
SINCE 1842**

1107EX COMPACTOR

HERITAGE A TRADITION OF INDUSTRY FIRSTS



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.

- 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 102 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



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 and drum drive 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 bi-directional 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 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



HIGH RELIABILITY

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



COMFORTABLE AND SAFE OPERATOR STATION

- Easy and safe cab access
- 90° clockwise rotating seat
- All-around safe hand rail
- Excellent visibility: two-post canopy design, sloping hood



HIGH EFFICIENCY

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



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.



SAFE AND EASY MAINTENANCE

Daily and regular maintenance is possible from ground level thanks to the one-piece tilting hood. Reduced downtime and operating costs result in more productivity and better profitability.



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
- All-around safe hand rail
- Easily foldable and removable canopy legs for fast transportation
- 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 access 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 COMPACTOR

SPECIFICATIONS

SPECIFICATIONS

ENGINE

| | |
|-------------------------|-----------------------------------|
| Make | FPT |
| Model | S 8000 - TIER III |
| Type | 4 stroke turbocharged aftercooled |
| Cylinders | 4 |
| Bore/stroke | 105 x 120 |
| Displacement (l) | 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: | 900±50 |
| - High: | 2200 |
| Max. power (hp) (@rpm) | 102 (2200) |
| (ISO3046) | |
| Max. torque (Nm) (@rpm) | 435 (1300) |

VIBRATION SYSTEM

| | |
|-------------------------|---|
| Type | Variable displacement bi-directional axial piston pump with electrical displacement control |
| Drive to vibration pump | Mechanical |
| Engine to pump ratio | Direct Drive 1:1 |
| Displacement (cc/rev) | 34.4 |
| Charge pressure (bar) | 27 |
| Vibration motor | Fixed displacement mounted on drum |

STEERING

| | |
|-----------------------------------|---|
| Steering system | articulated hydrostatic steering |
| Steering angle | 37° on either side (74° between stop to stop) |
| Turning radius (inner radius) (m) | 3.65 |
| Drum oscillation angle | 15° |
| Tyre size | 23.1/18-26 8 PR or 12 PR Tubeless |

ELECTRICAL SYSTEM

| | |
|-----------------------|----------|
| Alternator output (A) | 65 |
| Battery (V/Ah) | 12 / 130 |

SERVICE CAPACITIES

| | |
|-----------------------|-----|
| Fuel tank (l) | 235 |
| Hydraulic tank (l) | 70 |
| Engine crank case (l) | 9.5 |
| Engine coolant (l) | 18 |

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 piston pump with manual displacement control |
| Displacement (cc/Rev) | 75 |
| Flow @rated engine (LPM) | 156 |
| Charge pressure (bar) | 27 |

Drive motors

| | |
|---------------------------|--|
| Type | High speed low torque driving motor mounted on rear axle input shaft |
| For drum drive (optional) | Low speed high torque drive motor mounted on front drum frame along with rear axle motor |
| Hydraulic oil filter | Cartridge |
| Axle | Heavy duty with integrated parking brake mechanism and out board planetary |
| Parking brake | Spring applied hydraulically released |
| Engagement | Operate on /off parking brake switch on instrument panel, engine stop |

Machine speed:

| | |
|------------------------|---------------------------------|
| - Working speed (km/h) | 0-5.5 |
| - Travel speed (km/h) | 0-11.5 |
| Final drive | High torque out board planetary |

Gradeability

| | |
|------------------------|----------|
| Without drum drive (%) | 31 (17°) |
| With drum drive (%) | 36 (20°) |
| Intermittant (%) | 40 |

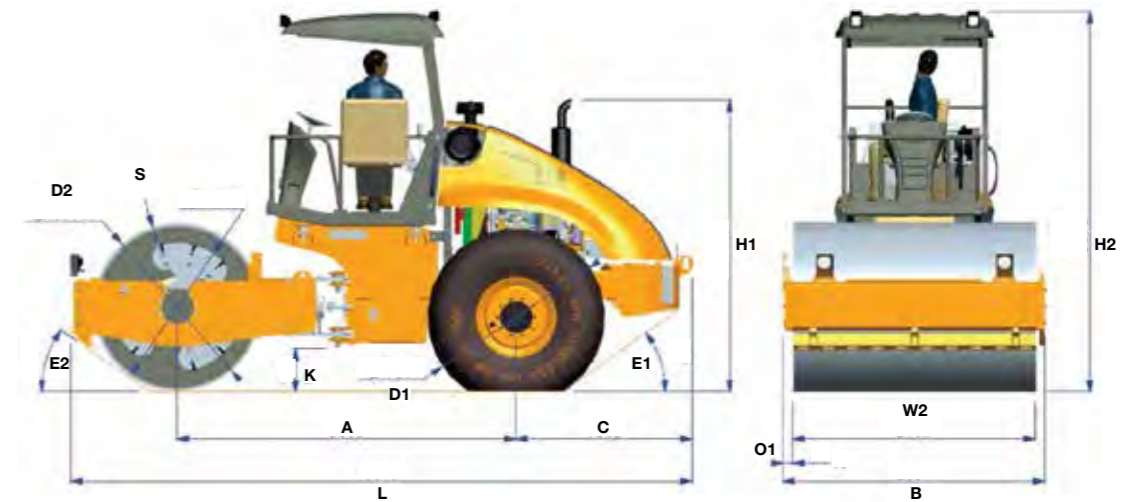
INSTRUMENTATION

| | |
|-----------------------|---|
| Indicators | Neutral, 2-speed, battery charging, lube oil pressure, parking brake |
| Gauges | Digital hour meter, water temp, fuel level, battery voltage, 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.

GENERAL DIMENSIONS



DIMENSIONS

| | | | |
|----|---|----|------|
| A | Horizontal distance from drum center to tyre center | mm | 3003 |
| B | Overall width of the machine | mm | 2324 |
| C | Rear overhang | mm | 1562 |
| D1 | Diameter of the rear tyres | mm | 1528 |
| D2 | Diameter of the drum | mm | 1500 |
| H1 | Height of silencer from ground level | mm | 2590 |
| H2 | Overall height of the machine (in transport) | mm | 3373 |
| K | Ground clearance | mm | 382 |
| L | Overall length of the machine | mm | 5508 |
| O1 | Side overhang | mm | 87 |
| S | Drum shell thickness | mm | 32 |
| W2 | Overall width of the drum | mm | 2150 |
| E1 | Rear Departure angle | mm | 36 |
| E2 | Front Departure angle | mm | 35 |

OPERATING DATA

| | | 1107 EX | 1107 EX-D | 1107 EX-PD (Drum drive required) |
|--------------------------------|-------|---------|-----------|-------------------------------------|
| Operating weight with operator | kg | 11030 | 11080 | 12390 |
| Front axle load | kg | 6333 | 6480 | 7790 |
| Rear axle load | kg | 4697 | 4600 | 4600 |
| Static linear load front | kg/cm | 30 | 30 | (-) |

VIBRATION SYSTEM

| Vibration Stage | | 1107 EX | | 1107 EX-D | | 1107 EX-PD (Drum drive required) | |
|--------------------|----|---------|-------|-----------|-------|-------------------------------------|-------|
| | | 1 | 2 | 1 | 2 | 1 | 2 |
| Frequency | Hz | 31 | 34 | 31 | 34 | 30 | 34 |
| Amplitude | mm | 1.8 | 0.8 | 1.8 | 0.8 | 1.8 | 0.8 |
| Centrifugal force | kg | 27965 | 16186 | 27965 | 16186 | 26190 | 14346 |
| Max. applied force | kg | 34415 | 22636 | 34415 | 22636 | 33890 | 23886 |



**CASE CONSTRUCTION EQUIPMENT
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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

