



COMPACT WHEEL LOADERS

21E-121E-221E-321E



| | | | | |
|-------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| | 21E | 121E | 221E | 321E |
| Engine Horsepower | 40 kW/54 hp | 44 kW/60 hp | 45 kW/61 hp | 56 kW/76 hp |
| Operating weight | 4600 kg | 4900 kg | 5400 kg | 5800 kg |
| Bucket capacity | 0.70 - 0.80 m ³ | 0.80 - 0.90 m ³ | 0.90 - 1.00 m ³ | 1.00 - 1.20 m ³ |

P R O F E S S I O N A L P A R T N E R

DRIVING FORCE

Hydrostatic transmission allows full traction to the ground and precise movement of the machine. Limited slip differentials in the front axle and optional limited slip in the rear axle provide excellent traction in all types of conditions. **Robust driveline. Total traction.**

PRECISION LOADER

The Case monoboam delivers excellent visibility to the bucket, pallet forks or other attachments. Powerful breakout forces allow easy movement of vast amounts of materials. Automatic mechanical self leveling and optional ride control minimize the amount of spillage during material handling operations. **Maximum visibility. Total productivity.**

BUILT TO PERFORM

The standard auxiliary hydraulic function allows the operation of a wide choice of attachments, such as 4-in-1 buckets. Includes leak free quick disconnects for fast and easy tool change. **Premium versatility. Standard equipment.**



VERSATILITY BUILT IN

The easy to operate standard hydraulic quick coupler provides rapid attachment changes for maximum operating performance. Skid steer attachment compatibility ensures fleet acceptance with minimal investment. **Every application. Ready to work.**

EASE OF OPERATION

The large, comfortable cab offers 360 degree visibility. Easy to use layout of switches and gauges on the console provides outstanding operator convenience. Single lever control provides precise movement of loader arm, attachment and transmission directional control.

Operator comfort. Maximum productivity.

MINIMUM DOWNTIME

Contoured rear hood delivers excellent access to the reliable, high torque, 4 cylinder oil-cooled engine while also allowing superior rear visibility. All service points accessible from ground level for safe, rapid maintenance. In addition, the hydraulic driven fan eliminates belts, reduces power consumption and produces less cab noise. **Serviceability designed in. Maximum uptime.**



GROUND CONTROL

Rear axle oscillation ensures exceptional stability in different ground conditions. Optimized machine balance provides maximum stability when using various types of attachments.

Maximum stability. Operator confidence.

MONOBOOM



The Case monoboom wheel loader design delivers excellent visibility to the front end of the machine with a clear view to the front wheels and attachments. Clear visibility to the Case pallet fork attachments allows precise positioning of pallets of materials on trailer decks. The durable monoboom design combines high breakout forces with long reach, making the Case compact loader the right machine for both digging and loading operations. The mechanical self leveling function also maximizes material retention while loading soil, grain, seed, bricks or many other types of materials. While high rollback/dump angles and optional Case Ride Control further enhance the machines material handling capability.

HYD QUICK COUPLER & AUXILIARY HYDRAULICS



All Case compact wheel loaders are equipped with a standard hydraulic quick coupler that ensures rapid changeover between buckets, pallet forks, brooms, and other attachments. Standard auxiliary hydraulics, including quick disconnects, provide easy attachment hook up and detach. This maximizes uptime and ensures that the machine keeps working, whatever the task. Skid steer attachment compatibility increases machine versatility while also allowing more cost efficient management of multiple attachments.

FULLY ROTATABLE BUCKET



The Case quick coupler, which is standard on all compact E Series wheel loaders, allows for buckets to be completely rotated so that the top of the bucket runs parallel with the ground. This flexibility allows the operator to use the bucket to "pry" the machine out when caught up in difficult, sticky ground conditions. It's also useful for back-dragging material away from foundations, walls or other obstructions or lift front axle.

OPERATOR'S CAB

An ergonomic operator environment, featuring a tilt steering column and fully adjustable suspension seat, keeps the operator comfortable all day. Curved glass in front and rear, along with a sloping rear engine compartment offer the operator a panoramic view for maximum visibility. The single lever loader control and forward-neutral-reverse joystick with transmission speed button puts all controls at the operator's fingertips. An unobstructed view to the console gauges and indicator lights keeps the operator informed of critical machine functions. A cab heater with air intake filter is standard equipment, with optional air conditioning offered as well. The large door, steps and handles coupled with a spacious cab floor provides easy entry and exit from the cab.



TWO SPEED



The E Series compact wheel loaders are equipped with an efficient hydrostatic transmission. This provides two speed operation up to 20 km/h on all models. A high speed option on the 121E, 221E and 321E offers a higher speed of 35 km/h. The front axle has a limited slip differential as standard equipment and the rear has limited slip as an option to ensure maximum machine traction when working in difficult ground conditions.

STABILITY



The Case E Series compact loaders share many of the characteristics of the larger models in the Case range. One such feature is rear axle oscillation, rather than the central oscillation seen on some competitive machines. The 24 degree rear oscillation provides excellent stability on rough ground, to help maintain the balance of the bucket or attachment load. In addition, rear oscillation ensures that all four wheels maintain contact with the ground, maximizing traction and increasing productivity in digging operations.

Rear departure angles from 32 degrees to 35 degrees provide more clearance when stockpiling material on the job site.

MAINTENANCE



Easy to reach daily service checkpoints combined with fluid sight gauges gives operators more time for real work while keeping the machine in peak operating condition. No tool air filters and easy access drains for coolant, hydraulic oil and engine oil provide for fast, low cost maintenance and fluid changes. The exclusive ground line fuel fill with lockable cap means no climbing to reach the fill port. Also, the one piece rear hood design provides industry leading access to the cooling fan, engine and all daily service points.







SPECIFICATIONS

ENGINE

Type: Low emission Tier 2 engine complies with 97/68/EC rules - Oil cooled - Direct injection

21E

Make and model _____ Deutz F4M2011
 ISO 14396 horsepower _____ 40 kW/54 hp
 ISO 9249 horsepower _____ 40 kW/54 hp
 Operating speed _____ 2300 rpm
 Cubic capacity _____ 3100 cm³
 Number of cylinders _____ 4
 Bore x stroke/Displacement _____ 94 x 112/3.1
 Aspiration _____ natural
 Air filter _____ dry type

121E

Make and model _____ Deutz F4M2011
 ISO 14396 horsepower _____ 44 kW/60 hp
 ISO 9249 horsepower _____ 44 kW/60 hp
 Operating speed _____ 2400 rpm
 Cubic capacity _____ 3100 cm³
 Number of cylinders _____ 4
 Bore x stroke/Displacement _____ 94 x 112/3.1
 Aspiration _____ natural
 Air filter _____ dry type

221E

Make and model _____ Deutz F4M2011
 ISO 14396 horsepower _____ 45 kW/61 hp
 ISO 9249 horsepower _____ 45 kW/61 hp
 Operating speed _____ 2500 rpm
 Cubic capacity _____ 3100 cm³
 Number of cylinders _____ 4
 Bore x stroke/Displacement _____ 94 x 112/3.1
 Aspiration _____ natural
 Air filter _____ dry type

321E

Make and model _____ Deutz BF4M2011
 ISO 14396 horsepower _____ 56 kW/76 hp
 ISO 9249 horsepower _____ 56 kW/76 hp
 Operating speed _____ 2300 rpm
 Cubic capacity _____ 3100 cm³
 Number of cylinders _____ 4
 Bore x stroke/Displacement _____ 94 x 112/3.1
 Aspiration _____ turbocharged
 Air filter _____ dry type

ELECTRICAL CIRCUIT

Voltage _____ 12 V
 Battery _____ 1 x 92 Ah
 Alternator _____ 55 A

HYDRAULIC CIRCUIT

Type: Gear type pump for implement and steering, open centre circuit, pressure/flow compensated 3rd hydraulic function.

| | 21E | 121E | 221E | 321E |
|----------|----------|----------|----------|----------|
| Flow | 51 l/min | 67 l/min | 70 l/min | 74 l/min |
| Pressure | 250 bar | 270 bar | 270 bar | 270 bar |

3rd HYDRAULIC FUNCTION

| | 21E | 121E | 221E | 321E |
|----------|----------|----------|----------|----------|
| Flow | 51 l/min | 67 l/min | 70 l/min | 74 l/min |
| Pressure | 250 bar | 270 bar | 270 bar | 270 bar |

BRAKES

Hydrostatic brake: (On Transmission) actuated over inch brake pedal in combination with Service Brake.

Service brake: Hydraulically actuated dry disk type, direct on front axle and on joint shaft.

HIGH TRAVEL SPEED version (121E/221E/321E) has two additional wet disc brakes on front axle, close to planetaries.

Parking brake: Mechanical.

TRANSMISSION

Type: Hydrostatic transmission (with automatic power regulation). Directional and gear change integrated into the loader control handle. Permanent 4 wheel drive.

TRAVEL SPEED (Fwd/Rev)

1st _____ 0 - 6 km/h
 2nd _____ 0 - 20 km/h

HIGH TRAVEL SPEED (Fwd/Rev) Optional on 121E/221E/321E

1st HTS _____ 0 - 5 km/h
 2nd HTS _____ 0 - 16 km/h
 plus 2nd HTS (With mechanical gear section) _____ 0 - 35 km/h

Rear axle (oscillating): total oscillation 24°.

Limited slip differential optional or included in the HTS (High Travel Speed) version.

Front axle (rigid): Limited slip differential as standard.

Standard tyres:

21E _____ 335/80 R18
121E - 221E _____ 365/80 R20
321E _____ 405/70 R20

STEERING

Type _____ Orbitrol
 Turning angle _____ ± 41°

Turning radius - Bucket outer:

21E - 0.7 m³ _____ 4320 mm
121E - 0.8 m³ _____ 4460 mm
221E - 0.9 m³ _____ 4600 mm
321E - 1.1 m³ _____ 4670 mm

CAPACITIES

Fuel tank _____ 100 l

Hydraulic system:

21E _____ 56 l
121E - 221E _____ 67 l
321E _____ 74 l

SOUND LEVEL

Exterior _____ 98 dBa
 Interior _____ 78 dBa

ISO 6396, machine operating per ISO 6395

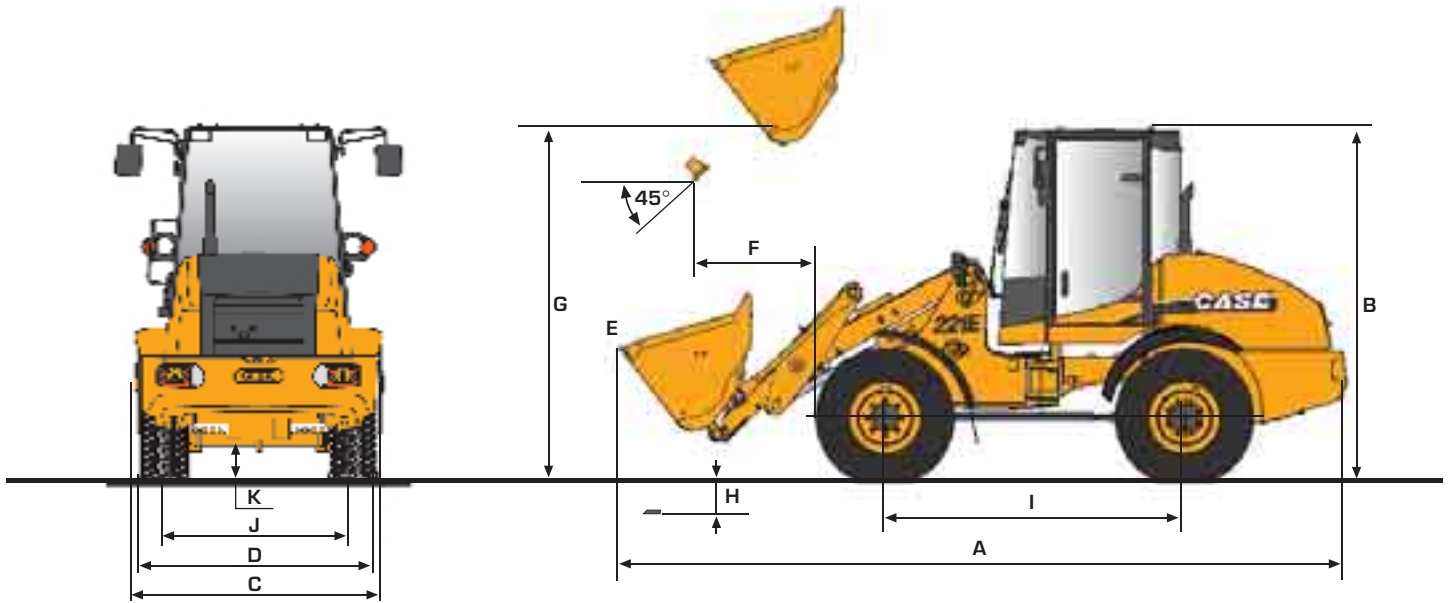
TYRES

| | 21E | 121E | 221E | 321E |
|-------------|-------------|-------------|-------------|-------------|
| 12.5x18 | | - | - | - |
| 12.5x20 | | 12.5x20 | - | - |
| | | 14.5x20 | 14.5x20 | 14.5x20 |
| 335/80 R 18 | | - | - | - |
| 365/70 R 18 | | - | - | - |
| - | 365/80 R 20 | 365/80 R 20 | - | - |
| - | 405/70 R 20 | 405/70 R 20 | 405/70 R 20 | 405/70 R 20 |



GENERAL DIMENSIONS

WITH BUCKET



| | | | 21E | 121E | 221E | 321E |
|---|----------------------|----|------|------|------|------|
| A | Overall length | m | 5330 | 5440 | 5635 | 5750 |
| B | Cab height | m | 2680 | 2810 | 2810 | 2810 |
| C | Bucket width | m | 1900 | 2050 | 2050 | 2100 |
| D | Width outside tyres | m | 1850 | 1910 | 1910 | 1980 |
| E | Dump clearance | m | 2530 | 2600 | 2600 | 2650 |
| F | Bucket dumping reach | mm | 820 | 780 | 840 | 890 |
| G | Maximum pin height | mm | 3250 | 3300 | 3400 | 3460 |
| H | Digging depth | m | 90 | 60 | 85 | 90 |
| I | Wheelbase | m | 2200 | 2250 | 2350 | 2350 |
| J | Gauge | m | 1480 | 1520 | 1520 | 1570 |
| K | Ground Clearance | m | 330 | 330 | 330 | 330 |
| | Operating weight | kg | 4610 | 4920 | 5420 | 5750 |

CYCLE TIME

| | | | 21E | 121E | 221E | 321E |
|----------------------------|-----|--|-----|------|------|------|
| Raising (with full bucket) | sec | | 6 | 6 | 6 | 6 |
| Lowering (bucket empty) | sec | | 3 | 3 | 3 | 3 |
| Dumping | sec | | 1 | 1 | 1 | 1 |
| Complete cycle time | sec | | 10 | 10 | 10 | 10 |

PERFORMANCE

| | | | 21E | 121E | 221E | 321E |
|--|-----------------|----|------|------|------|------|
| Standard bucket capacity (1.8 density) | m ³ | | 0.7 | 0.8 | 0.9 | 1.1 |
| Breakout | daN | | 3800 | 4550 | 4630 | 5100 |
| Tipping load | - in line | kg | 3310 | 3500 | 4270 | 4420 |
| | - turned to 40° | kg | 2910 | 3100 | 3650 | 3750 |
| Operating load | kg | | 1455 | 1550 | 1825 | 1875 |
| Bucket width | mm | | 1900 | 2050 | 2050 | 2100 |
| Lift capacity at ground level | daN | | 4240 | 5520 | 5070 | 6060 |
| Additional counterweight | kg | | 130 | 145 | 145 | 145 |
| Additional tipping load | - in line | kg | 221 | 255 | 261 | 253 |
| | - 40° | kg | 187 | 215 | 221 | 214 |

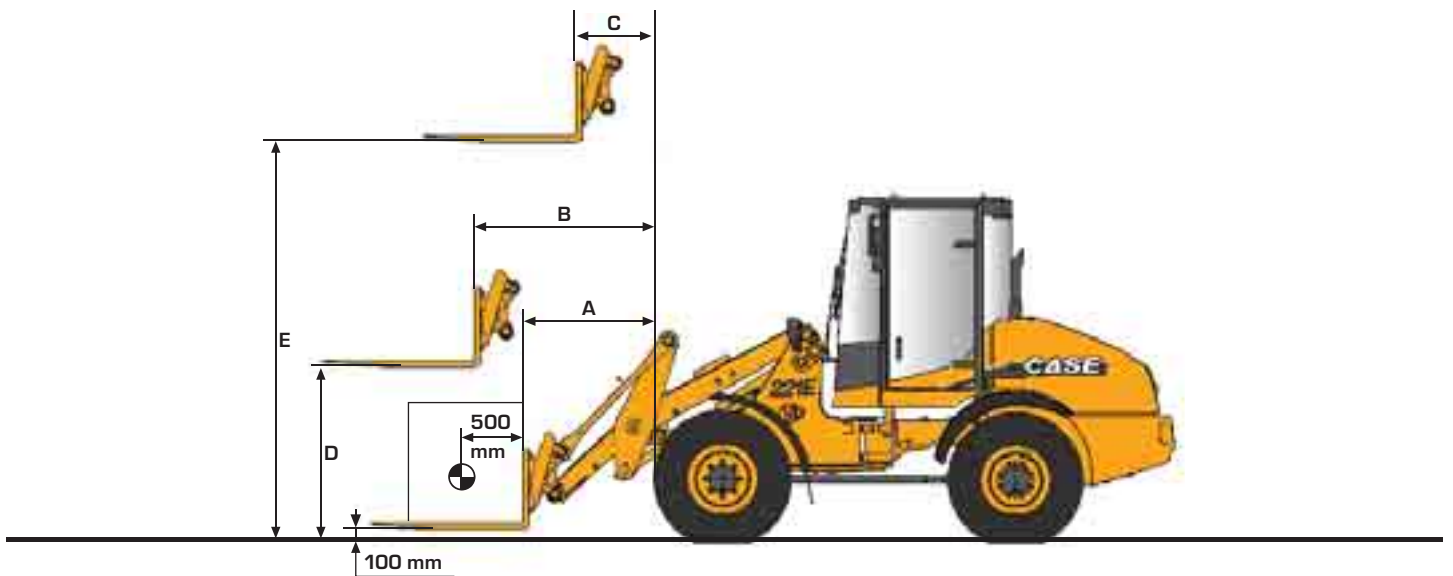
BUCKETS

BUCKETS
(with or without teeth)

| | | EARTHMOVING | | | | | | | 4-in-1 | | | |
|--------------|----|-------------|------|------|-----------|-----------|------|------|--------|------|------|------|
| Capacity | l | 700 | 800 | 800 | 900 | 1000 | 1100 | 1200 | 650 | 700 | 850 | 950 |
| Width | mm | 1900 | 1900 | 2050 | 2050 | 2100 | 2100 | 2100 | 1900 | 2050 | 2100 | 2100 |
| Availability | | 21E | 21E | 121E | 121E/221E | 221E/321E | 321E | 321E | 21E | 121E | 221E | 321E |



PALLET FORKS



| | | 21E | 121E | 221E | 321E |
|------------------------------------|----|------------|-------------|-------------|-------------|
| Fork length | mm | 1200 | 1200 | 1200 | 1200 |
| Fork support width | mm | 1450 | 1450 | 1450 | 1450 |
| Weight | kg | 370 | 370 | 370 | 370 |
| A Ground reach | mm | 850 | 740 | 760 | 820 |
| B Maximum reach | mm | 1330 | 1270 | 1300 | 1350 |
| C Reach at maximum height | mm | 590 | 530 | 570 | 560 |
| D Height at maximum reach | mm | 1370 | 1440 | 1490 | 1490 |
| E Maximum height | mm | 3040 | 3100 | 3180 | 3260 |
| Tipping load | kg | | | | |
| - Straight ISO | kg | 2350 | 2520 | 3100 | 3260 |
| - Turned to 40° ISO | kg | 2050 | 2220 | 2650 | 2770 |
| Operating load - turned to 40° ISO | kg | | | | |
| - Rough terrain (60%) | kg | 1230 | 1340 | 1590 | 1660 |
| - Flat terrain (80%) | kg | 1640 | 1780 | 2120 | 2220 |
| Operating weight (w/cwt) | kg | 4650 | 4895 | 5370 | 5690 |
| Additional counterweight | kg | 130 | 145 | 145 | 145 |
| Additional tipping load straight | kg | 155 | 180 | 180 | 180 |
| Additional tipping load 40° | kg | 130 | 150 | 150 | 150 |





21E-121E 221E-321E

STANDARD EQUIPMENT & OPTIONS

STANDARD EQUIPMENT

- Oil cooled engine
- 2 speed 20 km/h
- Hydrostatic transmission
- Hydraulic cooler
- Dry disk brake/parking brake
- Hydraulic return filter
- 4 wheel drive
- Limited slip differential on front axle
- Outboard planetary reduction
- Electrical protection circuit
- Tie down points
- Articulation lock-in
- Monoboom loader arm
- Self levelling +/- 1% - mechanical
- Hydraulic quick coupler - skid steer attachments compatible
- 3rd hyd function with quick disconnects
- Front & rear fenders
- Halogen head lights
- Side & brake lights
- Rops/Fops cab with heater
- Suspension seat
- Single lever control for loader and fwd/reverse
- Cab air filter
- Adjustable steering column
- Complete instrument panel (visual & audible devices)
- Hourmeter
- Retractable seat belt
- Direction indicator
- Horn
- Wired for radio
- Hydraulically driven fan with guard
- On board diagnostics
- Back up alarm

OPTIONS

- High travel speed 35 km/h (121E - 221E - 321E)
- Buckets (with teeth, blade or 4X1)
- Lift forks 1200 mm (std or tiltable)
- Tyres
- Antidrop valves
- Additional counterweight
- Antitheft device
- Battery main switch
- Radio cassette
- Rotating beacon
- Spot light front
- Spot light rear
- High performance heating system
- Hinge window
- Air conditioning with high performance heating system
- Back up alarm with switch off
- Hydraulic liquid "Panolin"
- Limited slip differential on rear axle
- Ride control (loader transport shock absorber)
- Tool box
- Return to dig

Note: Due to the higher breakout forces of the compact wheel loaders, the use of skid steer buckets is not recommended.

Standard and optional equipment shown can vary by country.

Worldwide Case Construction Equipment Contact Information

EUROPE/AFRICA/MIDDLE EAST:
Centre D'affaires EGB
5, Avenue Georges Bataille - BP 40401
60671 Le Plessis-belleville - FRANCE

NORTH AMERICA/MEXICO:
700 State Street
Racine, WI 53404 U.S.A.

LATIN AMERICA:
Av. General David Sarnoff 2237
32210 - 900 Contagem - MG
Belo Horizonte BRAZIL

ASIA PACIFIC:
Unit 1 - 1 Foundation Place - Prospect
New South Wales - 2148 AUSTRALIA

CHINA:
No. 29, Industrial Premises, No. 376,
De Bao Road, Waigaoqiao Ftz, Pudong,
SHANGHAI, 200131, P.R.C.

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 reserves the right to modify machine specifications without incurring any obligation relating to such changes.

Case Construction Equipment

CNH UK Ltd.
Armstrong House
The Finningley Estate
Hayfield Lane
Doncaster
DN9 3XA
Fax +44 (0)1302 802126

www.casece.com

CASE



Conforms to directive 98/37/CE