

**CASE**  
CONSTRUCTION

# COMPACT WHEEL LOADERS

21E | 121E | 221E | 321E Series 3



## 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. Optional return to Dig automatically returns the bucket to digging position after dumping material.

**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 engine while also allowing superior rear visibility. All service points accessible from ground level for safe, rapid maintenance. The coolers are conveniently mounted under the hood on the left hand side of machine for easy clean-out.

**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.

## 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 3 engine complies with 97/68/EC rules - Liquid cooled - Direct injection - 4 cylinder - Turbo

### 21E

Make \_\_\_\_\_ "Iveco SpA" (for Case)  
 Model \_\_\_\_\_ F5CE9454C\*A  
 Engine type \_\_\_\_\_ F5CE9454C\*A001  
 EPA \*family \_\_\_\_\_ 8VEXLO3.2TCI  
 Type \_\_\_\_\_ diesel, tier 3 , 4 stroke, 4 cylinder, turbocharged

#### Horsepower

Gross \_\_\_\_\_ 41 kW/54 hp  
 Net \_\_\_\_\_ 38 kW/50 hp  
 Operating speed \_\_\_\_\_ 2300 rpm  
 Bore x stroke/Displacement \_\_\_\_\_ 99 x 104/3.2  
 Aspiration \_\_\_\_\_ Turbo  
 Air filter \_\_\_\_\_ dry type

### 121E

Make \_\_\_\_\_ "Iveco SpA" (for Case)  
 Model \_\_\_\_\_ F5CE9454G\*A  
 Engine type \_\_\_\_\_ F5CE9454G\*A001  
 EPA \*family \_\_\_\_\_ 8VEXLO3.2TCI  
 Type \_\_\_\_\_ diesel, tier 3 , 4 stroke, 4 cylinder , turbocharged

#### Horsepower

Gross \_\_\_\_\_ 48 kW/64 hp  
 Net \_\_\_\_\_ 45 kW/60 hp  
 Operating speed \_\_\_\_\_ 2300 rpm  
 Bore x stroke/Displacement \_\_\_\_\_ 99 x 104/3.2  
 Aspiration \_\_\_\_\_ Turbo  
 Air filter \_\_\_\_\_ dry type

### 221E

Make \_\_\_\_\_ "Iveco SpA" (for Case)  
 Model \_\_\_\_\_ F5CE9454E\*A  
 Engine type \_\_\_\_\_ F5CE9454E\*A004  
 EPA \*family \_\_\_\_\_ 8VEXLO3.2TCI  
 Type \_\_\_\_\_ diesel, tier 3 , 4 stroke, 4 cylinder , turbocharged

#### Horsepower

Gross \_\_\_\_\_ 55 kW/74 hp  
 Net \_\_\_\_\_ 51 kW/69 hp  
 Operating speed \_\_\_\_\_ 2500 rpm  
 Bore x stroke/Displacement \_\_\_\_\_ 99 x 104/3.2  
 Aspiration \_\_\_\_\_ Turbo  
 Air filter \_\_\_\_\_ dry type

### 321E

Make \_\_\_\_\_ "Iveco SpA" (for Case)  
 Model \_\_\_\_\_ F5CE5454B\*A  
 Engine type \_\_\_\_\_ F5CE5454B\*A003  
 EPA \*family \_\_\_\_\_ 8VEXLO3.2TCE  
 Type \_\_\_\_\_ diesel, tier 3 , 4 stroke, 4 cylinder , turbocharged

#### Horsepower

Gross \_\_\_\_\_ 61 kW/82 hp  
 Net \_\_\_\_\_ 57 kW/77 hp  
 Operating speed \_\_\_\_\_ 2500 rpm  
 Bore x stroke/Displacement \_\_\_\_\_ 99 x 104/3.2  
 Aspiration \_\_\_\_\_ Turbo  
 Air filter \_\_\_\_\_ dry type

## ELECTRICAL CIRCUIT

Voltage \_\_\_\_\_ 12 V  
 Battery \_\_\_\_\_ 1 x 95 Ah  
 Alternator \_\_\_\_\_ 95 A

## HYDRAULIC CIRCUIT

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

	21E	121E	221E	321E
Flow	52 l/min	74 l/min	70 l/min	80 l/min
Pressure	250 bar	270 bar	270 bar	270 bar

### 3<sup>rd</sup> HYDRAULIC FUNCTION

	21E	121E	221E	321E
Flow	52 l/min	74 l/min	70 l/min	80 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)

1<sup>st</sup> \_\_\_\_\_ 0 - 6 km/h  
 2<sup>nd</sup> \_\_\_\_\_ 0 - 20 km/h

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

1<sup>st</sup> HTS \_\_\_\_\_ 0 - 6 km/h  
 2<sup>nd</sup> HTS \_\_\_\_\_ 0 - 16 km/h  
 plus 2<sup>nd</sup> 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 m<sup>3</sup> \_\_\_\_\_ 3847 mm  
 121E - 0.8 m<sup>3</sup> \_\_\_\_\_ 3963 mm  
 221E - 0.9 m<sup>3</sup> \_\_\_\_\_ 4095 mm  
 321E - 1.1 m<sup>3</sup> \_\_\_\_\_ 4154 mm

## CAPACITIES

Fuel tank \_\_\_\_\_ 100 l

Hydraulic system:

21E \_\_\_\_\_ 56 l  
 121E - 221E \_\_\_\_\_ 67 l  
 321E \_\_\_\_\_ 74 l

## SOUND LEVEL

Exterior

21E - 121E \_\_\_\_\_ 98 dBa

221E - 321E \_\_\_\_\_ 100 dBa

Interior \_\_\_\_\_ 75 dBa

ISO 6396, machine operating per ISO 6395

## TYRES

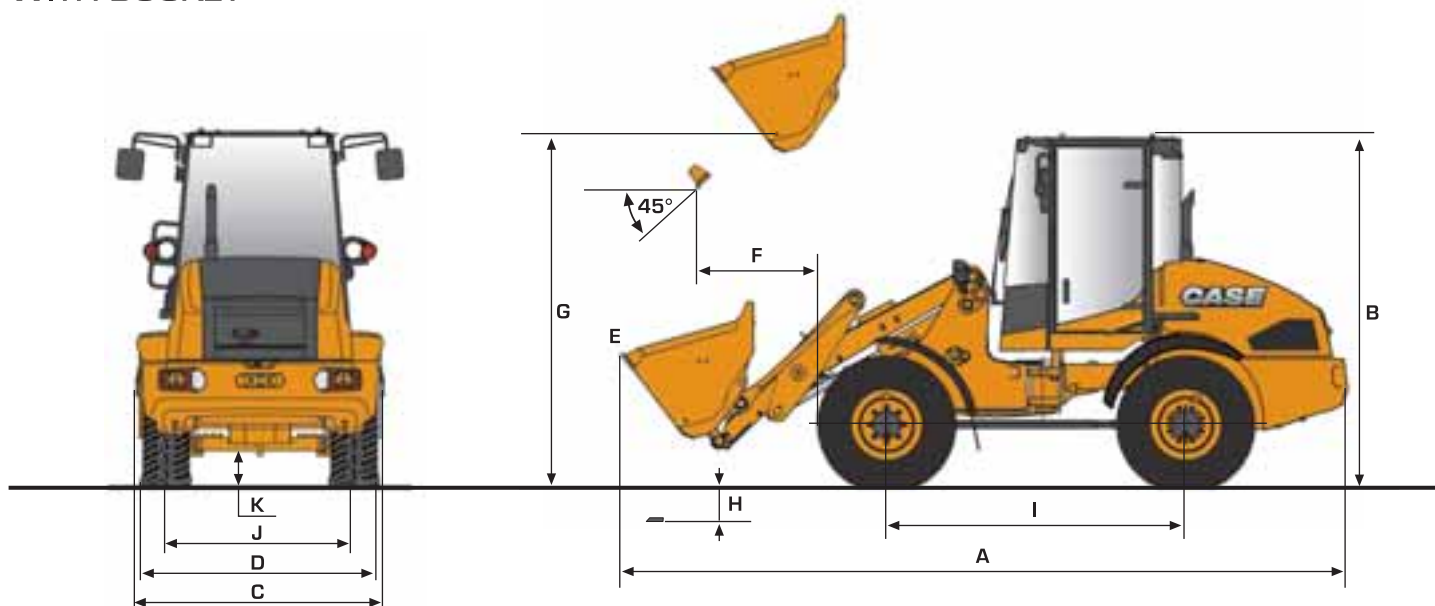
	21E	121E	221E	321E
12.5x20	12.5x20	-	-	-
		14.5x20	14.5x20	14.5x20
335/80 R 18	-	-	-	-
365/70 R 18	-	-	-	-
-	365/80 R 20	365/80 R 20	-	-
-	405/70 R 20	405/70 R 20	405/70 R 20	405/70 R 20

\*\*EPA: Environmental Protection Agency



# GENERAL DIMENSIONS

WITH BUCKET



		21E	121E	221E	321E	
A	Overall length	m	5334	5435	5598	5753
B	Cab height	m	2711	2825	2813	2807
C	Bucket width	m	1900	2050	2050	2100
D	Width outside tyres	m	1846	1909	1936	2022
E	Dump clearance	m	2566	2615	2667	2686
F	Bucket dumping reach	mm	882	833	907	957
G	Maximum pin height	mm	3243	3302	3386	3459
H	Digging depth	m	97	60	50	89
I	Wheelbase	m	2182	2250	2350	2350
J	Gauge	m	1480	1526	1526	1570
K	Ground Clearance	m	315	370	360	354
	Operating weight	kg	4624	4920	5418	5771

## 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
Bucket	m <sup>3</sup>	0.7	0.8	0.9	1.1
Breakout	daN	3800	4548	4623	5100
Tipping load Straight	kg	3068	3361	4111	4233
Tipping load Full turn	kg	2645	2975	3513	3586
Operating load	kg	1322	1487	1757	1793
Bucket width	mm	1900	2050	2050	2100
Lift capacity at ground level	daN	4196	5193	4840	5712
Additional counterweight	kg	133	150	150	150
Additional Tipping load Straight	kg	218	256	261	252
Additional Tipping load Full turn	kg	184	215	221	212

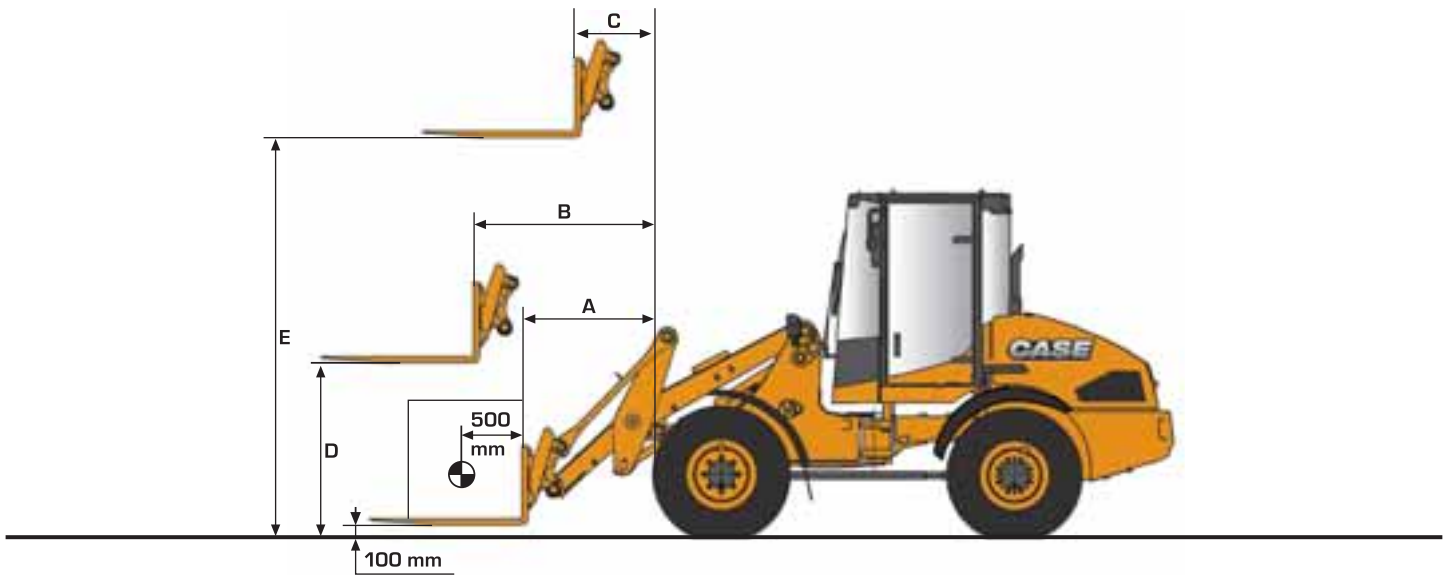
## BUCKETS

**BUCKETS**  
(with or without teeth)

		EARTHMOVING							4-in-1			
		700	800	800	900	1000	1100	1200	650	700	850	950
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



		<b>21E</b>	<b>121E</b>	<b>221E</b>	<b>321E</b>
Fork length	mm	1200	1200	1200	1200
Fork support width	mm	1450	1450	1450	1450
Weight	kg	370	370	370	370
<b>A</b> Ground reach	mm	868	761	783	849
<b>B</b> Maximum reach	mm	1330	1270	1300	1348
<b>C</b> Reach at maximum height	mm	595	534	570	555
<b>D</b> Height at maximum reach	mm	1356	1414	1460	1454
<b>E</b> Maximum height	mm	3007	3066	3150	3324
Tipping load Straight	kg	2308	2482	3042	3186
Tipping load Full turn	kg	1992	2157	2560	2659
Operating load - Rough terrain	kg	1195	1294	1536	1595
Operating load - Flat terrain	kg	1594	1726	2048	2127
Operating weight	kg	4653	4894	5372	5690
Additional counterweight	kg	133	150	150	150
Additional tipping load Straight	kg	160	188	192	187
Additional tipping load Full turn	kg	132	150	156	150





# Standard equipment

4 cylinder, turbo charged, Tier 3 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  
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)  
Tiltable forks  
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:

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32210 - 900 Contagem - MG  
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#### ASIA PACIFIC:

Unit 1 - 1 Foundation Place - Prospect  
New South Wales - 2148 AUSTRALIA

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### CASE Construction Equipment

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**CASE** Customer Assistance  
**00800-2273-7373**

The call is free from a land line. Check in advance with your Mobile Operator if you will be charged.



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.

Conforms to directive 2006/42/EC

