

CASE

CONSTRUCTION

COMPACT WHEEL LOADERS 21E-121E-221E-321E Series 3



Engine Horsepower	21E 41 kW/54 hp	121E 48 kW/64 hp	221E 55 kW/74 hp	321E 61 kW/82 hp
Operating weight	4624 kg	4920 kg	5418 kg	5771 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

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 monoboom 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



HYD QUICK COUPLER & AUXILIARY HYDRAULICS



FULLY ROTATABLE BUCKET



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.

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.

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.

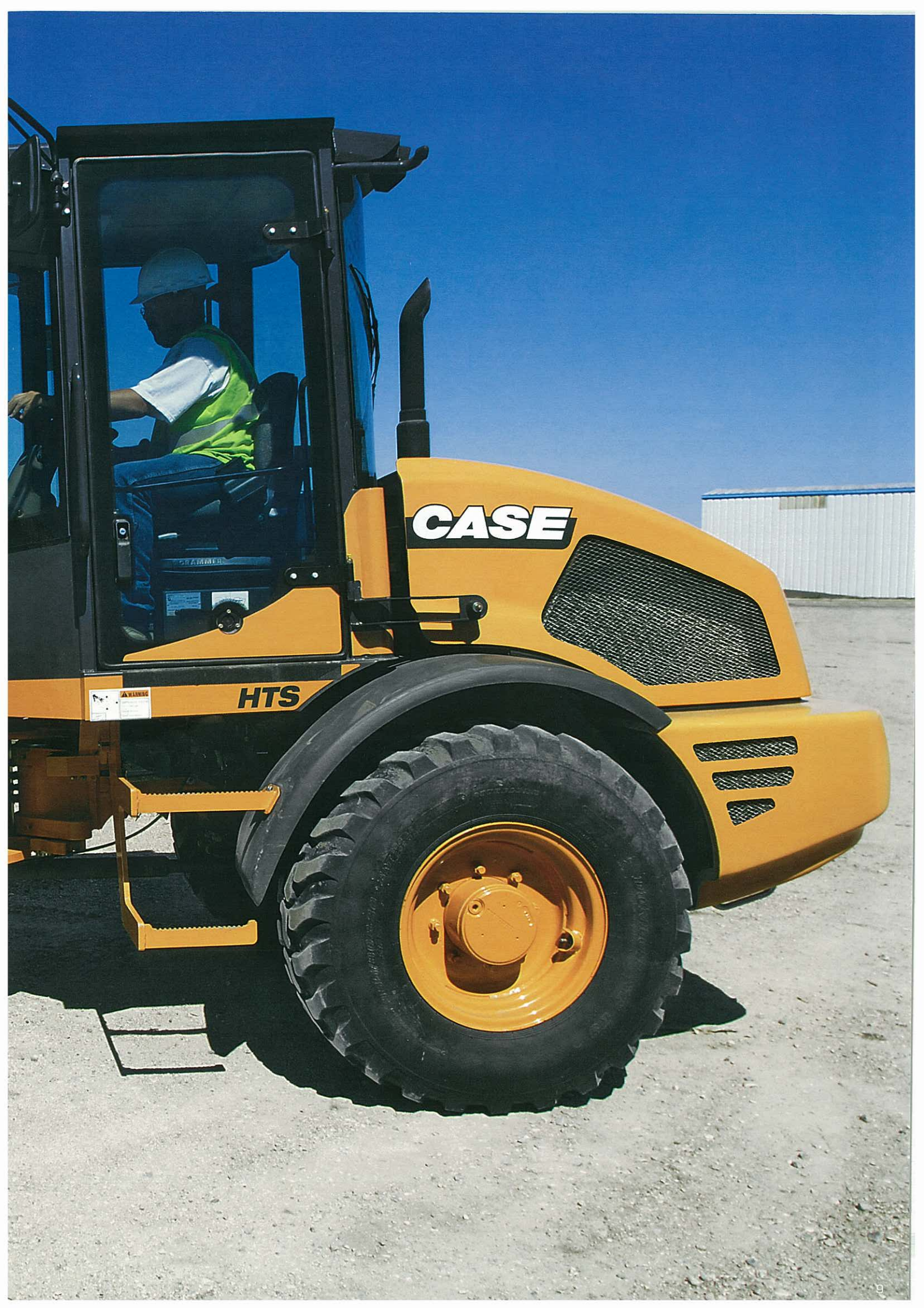
MAINTENANCE



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 _____ 8VEXL03.2TCI
 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 _____ 8VEXL03.2TCI
 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 _____ 8VEXL03.2TCI
 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 _____ 8VEXL03.2TCE
 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 3rd 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

3rd 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)

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

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

1st HTS _____ 0 - 6 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 _____ 3847 mm

121E - 0.8 m³ _____ 3963 mm

221E - 0.9 m³ _____ 4095 mm

321E - 1.1 m³ _____ 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

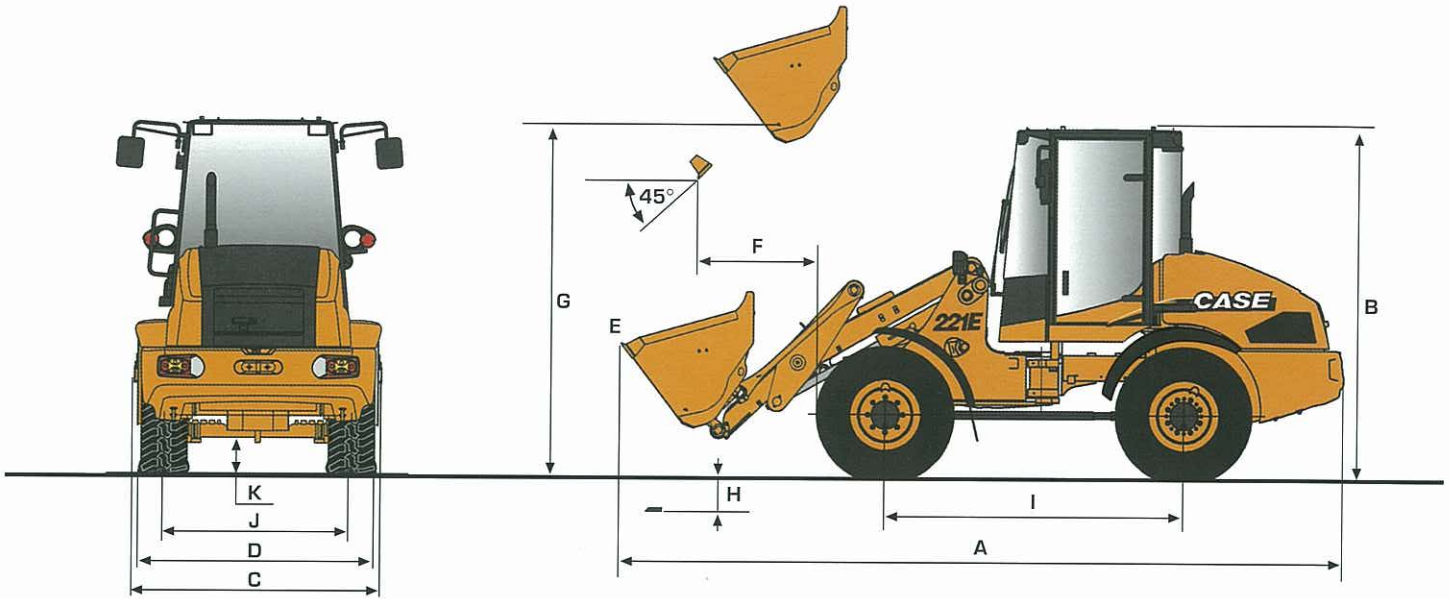
	21E	121E	221E	321E
12.5x20	12.5x20	-	-	-
		14.5x20	14.5x20	14.5x20
335/80 R 18	-	-	-	-
365/70 R 18	-	-	-	-
-	365/80 R 20	365/80 R 20	-	-
-	405/70 R 20	405/70 R 20	405/70 R 20	405/70 R 20

**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 ³	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

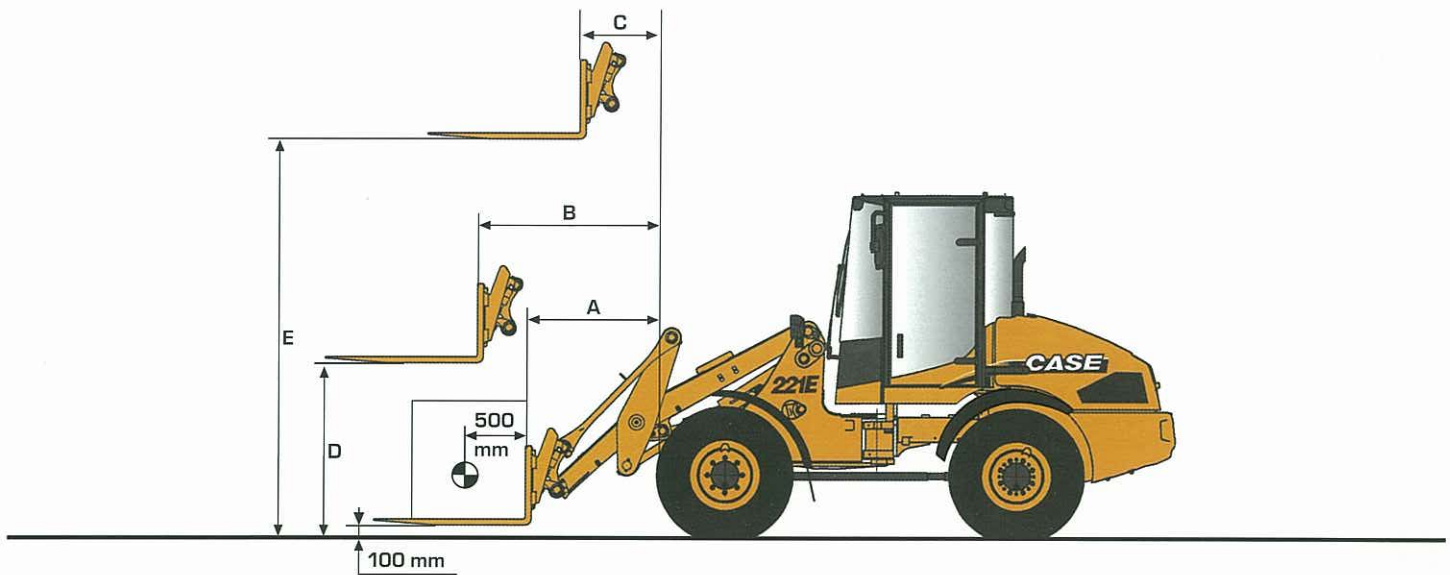
BUCKETS

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



		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	868	761	783	849
B Maximum reach	mm	133	1270	1300	1348
C Reach at maximum height	mm	595	534	570	555
D Height at maximum reach	mm	1356	1414	1460	1454
E 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 & OPTIONS

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/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.

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.

CASE Construction Equipment
CNH UK Ltd
Unit 4,
Hayfield Lane Business Park,
Field Lane, Auckley,
Doncaster,
DN9 3FL
Tel. 00800-2273-7373
Fax +44 1302 802829

www.casece.com

CASE
CONSTRUCTION



Conforms to directive 98/37/CE