

**T-SERIES BACKHOE LOADERS**  
**580ST | 590ST | 695ST**

**CASE**  
CONSTRUCTION



**THE ORIGINAL,  
READY FOR ANYTHING**

[www.casece.com](http://www.casece.com)  
**EXPERTS FOR THE REAL WORLD**  
**SINCE 1842**

# T-SERIES BACKHOE LOADERS



## EXPERTS FOR THE REAL WORLD SINCE 1842

- 1842** CASE is founded.
- 1959** CASE TLB 420 was the first diesel powered model.
- 1964** CASE is the first manufacturer to develop an extending dipper, the patented CASE Extindahoe.
- 1969** CASE begins skid steer loader production.
- 1998** CASE is the first to offer Ride Control on a loader/backhoe.
- 1999** CASE is the first company to offer a Powershift transmission on a loader/backhoe.
- 2000** CASE is the first company to offer a backhoe loader integrated quick coupler.

# HERITAGE

## CASE DNA SINCE 1957



- 2001** CASE M series backhoe is listed in “Construction Equipment” magazine among the TOP 100 products.
- 2005** CASE produces its 500,000th loader/backhoe and is today well on the way to three quarters of a million.
- 2012** CASE achieves Tier 4 emissions standards while delivering best-in-class breakout force and lift capacity.
- 2015** CASE extends its european product line-up with the new grader range.
- 2016** CASE backhoe offering is enlarged introducing “In-Line” backhoe and “Straight-Loader” arm satisfying the different customer needs and preferences.
- 2017** CASE introduces a Tier 4 final fully customizable backhoe.

# T-SERIES

## BACKHOE LOADERS



### LOW EMISSIONS

FPT: a leader in engine technologies.

- Fiat invented the «Common Rail» technology in the 80s
- Fiat Power Train produces over 600.000 industrial engines per year
- Our engines are used not only in earthmoving equipment but also in trucks, agricultural equipment, marine and military applications.

### FPT Engine family

The 3.4 litre FPT engine featuring state-of-the-art technology delivers a big performance in a small package with the lowest maintenance cost in the market:

- The air intake system with centrifugal dust separator reduces the cleaning intervals.
- 16 valves allows perfect air intake management, higher turbulence and consequently optimal combustion.
- High turbulence piston and air intake manifold.
- High pressure multi-injection common rail for a perfect air-fuel mix and greater burning efficiency.
- Electronically controlled “waste-gate” valve for immediate engine reaction and shorter lag time before the turbo begins to spool and generate a boost.
- The integrated engine and after treatment system management always provide the highest power with the lowest fuel consumption, whatever the climate conditions or engine load.
- Viscous fan: no power is wasted with its low cooling demands.
- Fully HVO diesel compatible

The Auto/Engine Shut down electronic function surveys, the most critical engine and transmission working parameters, it switches off the engine automatically if the specific parameter is below a pre-defined and safe threshold:

- engine oil pressure
- engine coolant temperature
- transmission oil temperature

The system can be deactivated if required by the driver.

This solution together with SITE WATCH telematics helps to prevent any major failure, dramatically reducing costs for extraordinary maintenance.



# ENGINE A POWERFUL HEART

## Compact HI-eSCR



### SAFE AND EASY MAINTENANCE

#### Compact engine, optimized layout

- Oil and filter check points are easily accessible on the left side of the bonnet. The front opening provides the operator with a full view of the engine components.
- The anti bumping frame surrounding the radiators prevents damage if the machine hits an obstacle at speeds up to 5 km/h, reducing extraordinary maintenance costs due to cracks in the radiators.
- The externally installed SCR eases the access to the after-treatment components, while ensuring a wider space under the bonnet to be used for routine maintenance.



# T-SERIES BACKHOE LOADERS



## PROTECTED BACKHOE OPERATION

### The King's DNA

Customers around the world have built their success on the power and performance of the CASE backhoe.

- The exclusive outer extendahoe is part of the CASE DNA: all the components in contact with the soil are protected against impact and material accumulation.
- The gripper teeth provide perfect material retention especially when working on pipe placement.
- The curved main boom provides greater digging ability and makes it easier to load a truck.
- Pilot controls automatically deactivate when not in use for improved safety. They are immediately reactivated at the touch of a switch.



## LOW PROFILE FOR EASY TRANSPORT

### A compact machine for big jobs

We don't like to wasting time and fuel, and we know you don't either, so we reduced significantly transport height with the overlapping cylinder geometry. The 580ST measures less than 3.5 m in height, while the 590ST and the 695ST measure less than 3.7 m.



## TIME SAVING

### Do it from the cab!

- The patented integrated hydraulic quick coupler enables the operator to change over the backhoe attachments from the cab, with a simple switch.
- The hydraulic side shift allows easy and quick backhoe replacement in all working conditions.

# BACKHOE TAILORED MADE SOLUTIONS



## FLEXIBLE BUCKET CHOICE

### CASE Universal Coupler

The new Universal coupler allows to install on Backhoe boom, not only traditional CASE buckets, but also the most common buckets of the main backhoe manufacturers. This solution allows the customer to have multiple choices and to fit buckets already present on his yard. The universal coupler is optional for in-line geometry backhoe design.



## “IN-LINE” BACKHOE GEOMETRY

### No Stress power

CASE has enriched the offering introducing a new backhoe design with “In-Line” cylinder geometry and inner extendahoe. The new solution allows the customer to choose the better technology for his own needs. A different solution to lead the market with top performances, comparable with well known CASE DNA characteristics. The aligned cylinders ensure perfect visibility across the boom and reduce the structure bending distributing the stress. This is the typical solution adopted on large excavators where productivity and reliability are a must. The new technology will flank the well known and more backhoe oriented CASE DNA boom with overlapping cylinders and outer extendahoe.

# T-SERIES BACKHOE LOADERS



## AUTO RIDE CONTROL

### Safe productivity

- Auto Ride Control reduces loader arm bouncing during travel, maintaining maximum material retention on all surfaces, for higher travel speeds and reduced journey times. The system offers a choice of 3 settings to match customer preferences or different soil conditions.
- The front axle offers +/-11 degrees of oscillation, to maintain traction on the toughest terrain, improve bucket retention and maintain high productivity.
- Different tyre designs (from industrial to agricultural) and technologies (radial or bias) are available to meet the different requirements for traction or resistance to impact and stress.



## FAST LOADING CYCLE

### The job has never been so easy!

Curved front loader arms improve truck loading while mechanical self-levelling assists the operator. Return-to-dig function significantly reduces operator effort on repetitive loading operations and speeds up the whole cycle. Excellent front loader visibility and the mechanical self-levelling feature make loading and unloading pallets simple.

# LOADER: STRAIGHT TO PERFORMANCE



## ABOVE ANY LIMIT

### Top loading reach, lowest maintenance costs

For the professionals requiring very high tipping height or for those working mainly with the backhoe, the Straight Loader Arm is the preferred solution. The arm design makes the loader structure less complex minimizing the greasing points and providing higher visibility on the front of the machine. The straight and long arms have the loader pin point 8 cm higher than standard bent arms without affecting the breakout and loading performance which are aligned with the more “traditional” solution.

The anti-tipping function keeps the bucket on the correct position while lifting the load, consequently there is no risk of material spillage.

## SMARTFIT<sup>®</sup>

BUCKET TOOTH SYSTEM

The new Smart-fit teeth are now available for the front and backhoe heavy-duty buckets.

These teeth contribute to the backhoe loader's improved performance: they penetrate deeper and stay sharp longer, resulting in more productivity that lasts over time and lower service costs. They are also remarkably quick to change: it is just a matter of minutes and the machine is back at work. The result: more productivity, longer life, lower costs.

# MAIN REASONS TO CHOOSE THE T-SERIES



## LOW PROFILE FOR EASY TRANSPORT

- The design with overlapping cylinders reduces the overall boom transport height to 3.5 m for 580ST and 3.7 m for 590ST and 695ST.



## “IN-LINE” BACKHOE GEOMETRY

- Higher visibility thanks to the narrower frame, high stress resistance due to balanced effort distribution along the boom.



## FLEXIBLE BUCKET CHOICE

- Economic backhoe interchangeability keeping best/in/class digging performances.



## TIME SAVING

- The patented integrated hydraulic quick coupler allows changing over the backhoe attachments from the cab with a simple switch.
- The hydraulic side shift enables easy and quick backhoe replacement in all work conditions.



## PROTECTED BACKHOE OPERATION

- The outer extendahoe is the perfect solution for tough working conditions: the sliding part never touches the soil preserving its efficiency.
- The gripper teeth are the right tool for excellent material retention.



## ABOVE ANY LIMIT

- Straight loader arm  
The CASE loader ensure highest loading capacity in the market combined with best-in-class tipping height.



## LOW EMISSIONS

- The 3.4-litre FPT engine with high power and torque density dramatically reduces emissions ensuring the lowest maintenance costs in the market.



## SAFE AND EASY MAINTENANCE

- All the main check points are easily accessible from the ground.
- The front tilting engine hood and the perfect layout of the components enable fast routine maintenance operations.



## COMFORTABLE AND SAFE CAB

- Excellent visibility for all operations with loader or backhoe.
- Fully openable front and rear windscreens for excellent cab ventilation.
- New LED lights
- New heated seat



## AUTO RIDE CONTROL

- Auto Ride Control offers 3 settings to match different working conditions.



## FAST LOADING CYCLE

- The return to dig mode guarantees precise automatic loader repositioning and easy to control loading operations.

# T-SERIES BACKHOE LOADERS



## COMFORTABLE AND SAFE CAB

### Get settled on your seat

- Personalised working position: pilot control columns and wrist rests are fully adjustable to suit your size.
- The sound of silence: the cab sits on insulating mountings, reducing vibration and noise levels to 77 dB(A)
- Excellent visibility equals greater safety: the rear screen is fully tiltable to provide an unobstructed view of the digging area. The stowed rear screen also provides rain protection in the open position.
- King Class Seat: you can set the height and the suspension of the seat pneumatically. Lumbar adjustment and fully adjustable armrests ensure a comfortable position throughout the working day.

#### **The new heated seat helps warming up in the coldest conditions.**

- Enhanced cab ventilation: all four cab windows can be opened partially or fully, to provide maximum ventilation in the cab.
- Plenty of storage space: a new overhead radio position and document storage box, combined with a lockable storage compartment make the CASE cab your comfortable office.
- Access to the King: wide steps and sturdy grab handles make it easy to get in and out of the cab. Large door apertures without obstacles make access to the seat equally easy.
- For night working the CASE backhoe loader comes with 10 LED or halogen working lights, including two on each side, for maximum visibility.

#### **New LED option provides 4 times more light intensity.**

Your work in dark conditions will be as bright as ever!

# CAB AND SEAT A CAB FIT FOR A KING



## Customized driving

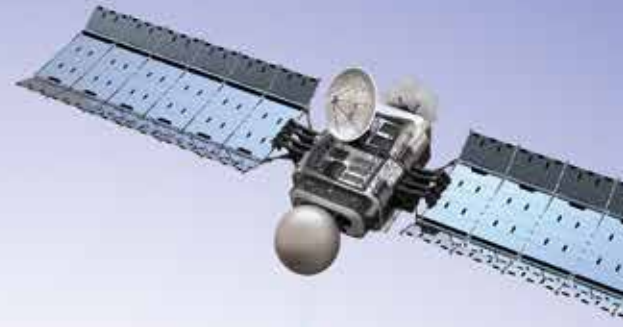
Thanks to electronics the driver can set backhoe driving reaction on 3 different levels.

Through the board computer:

- ride control
  - throttle
  - F/N/R shift
  - engine minimum and maximum rpm
  - auto engine shut down
- can be easily set matching specific customer needs or preferences.



# TELEMATICS



**CASE**®  
CONSTRUCTION

**SiteWatch**™

## THE SCIENCE BIT

The Case SiteWatch telematics system uses a high-tech control unit mounted on each machine to collate information from that machine and from GPS satellites. This data is then sent wirelessly through the mobile communication networks to the Case Telematics Web Portal.

### SiteWatch: centralised fleet control benefits at your fingertips

#### 📶 Measure your true asset availability and optimise it

- Eliminate the “phantom fleet”: SiteWatch allows to identify spare units or under loaded machines on each site.
- Able to reallocate units where they are more needed.
- Maintenance planning is easier since the actual machine hours are available and alerts will be sent when a service is due.
- Extend the benefits of SiteWatch to the rest of your fleet: SiteWatch can be installed on the units of other brands as well.

#### 📶 Challenge your Total Cost of Ownership!

- Being able to compare the fuel usage of different machine types will allow you choose the right equipment.
- Save on transport costs with planned and grouped service intervention.
- Peace of mind, optimised uptime and lower repair costs: with preventive maintenance you can be alerted if the engine needs to be serviced and avoid a disruptive breakdown.
- Be able to compare your asset Return On Investment on different sites.
- Your equipment is used only during working hours. You can receive alerts when is in use during the weekend or at night.

#### 📶 More Safety, Lower Insurance Premium

- Keep thieves away: dissuade them from attacking your asset because it is geo-localised. SiteWatch is hidden so that thieves can't find it quickly.
- Geo-fence your assets. You can define a virtual fence and receive an email when a machine exits that perimeter.
- Recover your asset if it is taken away, thanks to the continuous asset's tracking.

