

Tracked Carrier

Stage V Certified



# Bell Tracked Carriers

## A premium solution for soft underfoot conditions

Bell Equipment has been designing, manufacturing, and distributing heavy equipment for the mining, construction, forestry, agriculture, and waste handling industries around the globe for over six decades.

Our passion for innovation, and proven ability to give customers fit-for-purpose solutions, has given rise to the Bell Tracked Carrier as a premium solution for soft underfoot conditions.

Harnessing our experience as a global Articulated Dump Truck specialist and Original Equipment Manufacturer, the Bell Tracked Carrier stays true to our philosophy of developing 'strong reliable machines'.

# Proven engineering, quality manufacturing

Well suited to the short haul and to provide solutions to the construction, oil and gas, forestry, drilling and mining industries, both the 7-ton TC7A and the 11-ton TC11A Tracked Carriers are made from higher grade steel, and fitted with premium components and Bell Equipment's proprietary software.



• Bell manufactured components – Design and manufacture philosophies that have been adopted from our decades of ADT successes have been instilled into the Tracked Carrier. The steel structures, including the cab, structures and track suspension system, are run through independently developed and globally recognized processes such as Finite Element Analysis (FEA) testing to ensure maximum durability.

• High quality components used throughout – Bell Equipment continues to choose from the best drivetrain technology available and has matched Cummins engines with Rexroth hydraulics in this application. This reliable combination ensures that fuel consumption and performance are optimized.

• Cummins engine – Both models are powered by the globally renowned, Stage 5 emissions compliant B6,7 Cummins engine. This 6,7-litre engine enjoys global market acceptance as the most popular diesel engine ever built by Cummins. Currently in its fourth decade of continuous improvement, it has set an industry standard for reliability and durability. Packaging has been made extremely compact with the diesel particulate filter (DPF), Selective Catalytic Reduction (SCR) and urea dosing placed in one unit.

CEO

• Fleetm@tic<sup>®</sup> - Monitor and manage your machines and your operators efficiently with our cutting-edge fleet management software. Accurate, up-to-date operational, production and diagnostic data helps you to work smarter and protect your investment.





00

04

**COMMENCE** 

#### On the right track

I o provide a light footprint and optimal ground contact, our engineers designed a unique balanced six-roller undercarriage with compound walking beams. In this way vehicle mass is applied through only two points on the chassis at either side enabling the walking beams to most optimally distribute the load through all the rollers onto the tracks.

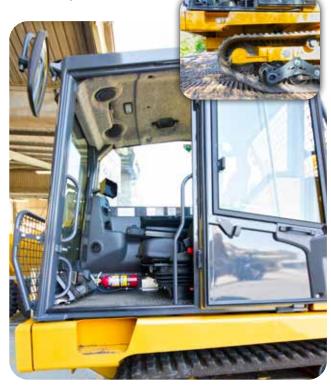


In addition, the walking beam geometry is biased, reducing the rear roller lift and track tension whilst traversing obstacles. The balanced system tracks the surface of the terrain better, providing chassis stability by not lifting the vehicle as high. This results in reduced ground pressure, lower track point-loading for longer track life, and improved operator comfort.

### Next level operator comfort

A comfortable operator is a productive operator, so we place great value on designing purpose-built cabs with a dedicated focus on ergonomics, comfort, and safety.

Geared towards safety, our Tracked Carrier cab is ROPS and FOPS certified and offers best-in-class visibility. A wide suspended step, with an unaligned foot hole above it, and conveniently placed handrails provide safe ease of access into the operator station.





In terms of ergonomics,

a single joystick control extends from the lefthand side armrest from which electric over hydraulic control of all forward, left, right and backward machine movements are controlled. Additional functions, such as raising and lowering the dump bed, cruise control and sounding the horn, are assigned to buttons on the joystick. For safety, all joystick functions require that the pilot switch be pressed for the functions to work.

An automotive mouse, or B-drive, is used to control the 5-inch colour display unit (CDU), which provides superior diagnostics. The CDU is customizable in terms of the operator's preferred views using the Quickselect function. To further enhance operator comfort, the Tracked Carriers are fitted with a Pilot suspension seat.

#### Made with ease of maintenance in mind



Making maintenance faster and easier translates into more machine uptime.

By design, the engine and radiator are strategically elevated to keep them far from mud and well protected from debris by belly plates.

The large ground level service hatch houses filters, as well as fuel and diesel exhaust fluid (DEF) filling points, for convenience and improved service and re-fuelling times.

Remote oil drainage is possible for the engine and hydraulic tank using the remote drain hose supplied with the machine. This allows for a quick, convenient oil drain and an engine drain through the service hatch without having to remove the entire belly plate. Additional removable panels are deliberately situated to provide ample access to all areas of the machine for ease of maintenance.

The undercarriage also features greaseless, rubber conical bearings in the bogie pivots for extended life and reduced cost over the life of the machine. The greaseless undercarriage utilizes oil-filled rollers and idlers, which translates into less maintenance on the machine.









#### Customizable

I he TC7A has a utility tipping load body with the ability to fold down or remove the tailgate and sides for a flat deck. The TC11A factory options include a dump bed or a flat bed. The flat bed can either be in a tipping configuration or fixed to provide a permanent utility vehicle.

The base units lend themselves to several customized solutions with the flat bed option allowing for various configurations through third party suppliers.

#### TC7A Tracked Carrier

ENGINE

Manufacturer Cummins

Model B6.7

Configuration Inline 6, turbocharged and intercooled

Gross Power 168 kW (225 hp) @ 2200 rpm

Net Power 160 kW (215 hp) @ 2200 rpm

Displacement 6.7 litres (409 cu.in)

Fuel Tank Capacity 194 litres (51.2 US gal)

Diesel Exhaust Fluid Capacity 37,8 litres (10 US gal)

Air Cleaner Radial seal air cleaner with clear bowl pre-cleaner. Filter blockage is detected by a pressure transducer

Certification The B6.7 meets EU Stage V emissions regulations

HYDRAULIC SYSTEM

Hydrostatic Drive System Electro-hydraulic pump control with variable displacement hydraulic motors. Closed loop system

Wheel Drive System Double reduction planetary track drive Service Brake Hydrostatic brake

Park Brake Fail to safe Spring Applied Hydraulic Released (SAHR) brake

**System Pressure** 420 bar (6 092 psi)

Filtration 13 micron spin-on filters

Hydraulic Tank Capacity 85 litres (22.5 US gal)

TRACK Track Type Rubber tracks with steel inserts

Tensioning System Manually adjusted grease cylinder plus mechanical spring

**SUSPENSION** Roller Quantity 6 per side

Walking Beam Arrangement Two terrain-response compound walking beams per side which, maximize the ground contact area, minimize ground pressure, reduce roller to track pressure and decrease the potential for de-tracking

DUMPING SYSTEM Configuration Two double-acting, single stage, dump cylinders Flow Rate

56 litres (15 US gal) per minute

Raise Time 13 seconds

Lower Time 13 seconds

**Tipping Angle** 60 degrees

Safety Bin pole which locks bin in the up position

LOAD BODIES Standard Utility tipping load body with tailgate. Sides and rear can be folded down or removed to make a flat deck.

Standard Body Capacity (SAE 2:1) 3.5 m<sup>3</sup> (4.6 yd<sup>3</sup>)

**ELECTRICAL SYSTEM** Voltage 24 V

Battery Type Two AGM (Absorption Glass Mat) type

Battery Capacity 2 X 75 Ah

Alternator Rating 70 Amp

Headlights LED Hella Valuefit is fitted standard

Extra Lighting Option Optional LED bar light mounted to top of cab

Reverse Camera Standard CAB Configuration Dedicated cab developed by Bell for the Tracked Carrier application

Steering Single handed joystick controller

Air Conditioning HVAC system is standard fitment

Mirrors Heated (optional) and remotely operated

Safety ROPS/FOPS certified according to the following standards: ISO3471, ISO13459, ISO3449

**VEHICLE PERFORMANCE** Speed 12 km/h (7,5 mph)

Gradient (laden) 49% (26 degrees)

#### VEHICLE MASS (STANDARD CONFIGURATION)

**Unladen** 10 950 kg (24 140 lb)

**Laden** 17 950 kg (39 573 lb)

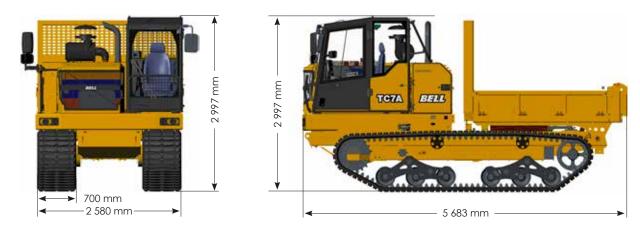
Payload 7 000 kg (15 432 lb)

#### UNLADEN GROUND PRESSURE

6" Sinkage method 0.17 kg/cm<sup>2</sup> (2.39 psi)

Hard Ground method 0.29 kg/cm<sup>2</sup> (4.09 psi)

#### Dimensions





#### TCIIA Tracked Carrier

ENGINE

Manufacturer Cummins

Model B6.7

Configuration Inline 6, turbocharged and intercooled

**Gross Power** 186 kW (249 hp) @ 2000 rpm

Net Power 177 kW (237 hp) @ 2000 rpm

Displacement 6.7 litres (409 cu.in)

Fuel Tank Capacity 192 litres (50.7 US gal)

Diesel Exhaust Fluid Capacity 37,8 litres (10 US gal)

Air Cleaner Radial seal air cleaner with clear bowl pre-cleaner. Filter blockage is detected by a pressure transducer

Certification The B6.7 meets EU Stage V emissions regulations

HYDRAULIC SYSTEM Hydrostatic Drive System Electro-hydraulic pump control

with variable displacement hydraulic motors. Closed loop system

Wheel Drive System Double reduction planetary track drive

Service Brake Hydrostatic brake

Dimensions

Park Brake Fail to safe Spring Applied Hydraulic Released (SAHR) brake

System Pressure 420 bar (6 092 psi)

Filtration 13 micron spin-on filters Hydraulic Tank Capacity

133 litres (35.1 US gal)

TRACK Track Type Rubber tracks with steel inserts

Tensioning System Manually adjusted grease cylinder plus mechanical spring

SUSPENSION Roller Quantity 6 per side

Walking Beam Arrangement Two terrain-response compound walking beams per side which, maximize the ground contact area, minimize ground pressure, reduce roller to track pressure and decrease the potential for de-tracking

DUMPING SYSTEM Configuration Two double-acting, single stage, dump cylinders

Flow Rate 92 litres (24 US gal) per minute

Raise Time 12 seconds

Lower Time 12 seconds Tipping Angle 60 degrees for normal load bed 40 degrees for flat deck

Safety Bin pole which locks bin in the up position

LOAD BODIES Standard Load body with tailgate

Standard Body Capacity (SAE 2:1) 5.25 m<sup>3</sup> (6.9 yd<sup>3</sup>)

Option Tipping flat deck (which can be bolted down)

**ELECTRICAL SYSTEM** Voltage

24 V

Battery Type Two AGM (Absorption Glass Mat) type

Battery Capacity 2 X 75 Ah

Alternator Rating 70 Amp

Headlights LED Hella Valuefit is fitted standard

Reverse Camera Standard

Extra Lighting Option Optional LED bar light mounted to top of cab CAB Configuration Dedicated cab developed by Bell for the Tracked Carrier application

Steering Single handed joystick controller

Air Conditioning HVAC system is standard fitment

Mirrors Heated (optional) and remotely operated

Safety ROPS/FOPS certified according to the following standards: ISO3471, ISO13459, ISO3449

VEHICLE PERFORMANCE Speed 14 km/h (8.7 mph)

Gradient (laden) 55% (29 degrees)

VEHICLE MASS (STANDARD CONFIGURATION) Unladen

13 960 kg (30 777 lb)

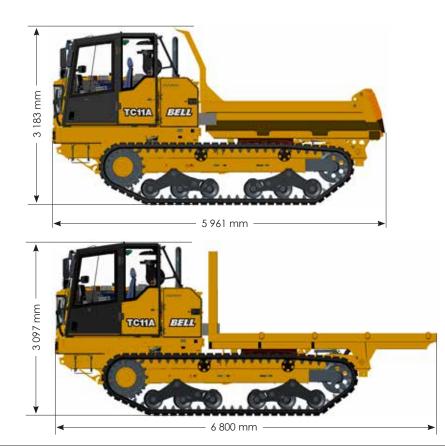
Laden 24 960 kg (55 027 lb)

Payload 11 000 kg (24 251 lb)

UNLADEN GROUND PRESSURE 6" Sinkage method 0.19 kg/cm<sup>2</sup> (2.72 psi)

Hard Ground method 0.33 kg/cm<sup>2</sup> (4.72 psi)









All dimensions are shown in feet and inches unless otherwise stated between brackets. Under our policy of continuous improvement we reserve the right to change technical data and design without prior notice. Photographs featured in this brochure may include optional equipment.

#### BELL INTERNATIONAL: Tel: +27 (0)35-907 9431 E-mail: marketing@bellequipment.com Web: www.bellequipment.com

Tel: +61 (0)8-9355-2442 Tel: +44 (0)1283-712862 Tel: +49 (0)6631 / 91-13-0



Tel: +27 (0)11-928-9700
 Tel: +33 (0)5-55-89-23-56
 Tel: +1 (704) 655 2802

