

D6T

Track-Type Tractor



Engine

Engine Model	Cat® C9.3 ACERT™	
Global Emissions	U.S. Tier 4 Interim/ EU Stage IIIB	
Gross Power – SAE J1995	171 kW	229 hp

Engine (continued)

Engine Power – ISO 14396	169 kW	227 hp
Engine Power – ISO 14396 (DIN)		230 hp
Net Power – SAE J1349	153 kW	205 hp
Net Power – ISO 9249	153 kW	205 hp
Net Power – ISO 9249 (DIN)		208 hp

D6T Features

Powerful Productivity

Standard electro-hydraulic controls help improve precision and response. Dedicated hydraulics and machine control systems aid overall productivity. Features like Eco Reverse, Multi Velocity Program and hydraulic demand fan help reduce overall fuel use and reduce operating costs.

Operator Station

Ease of operation, cab comfort and layout help keep operators focused and more productive.

Engine and Emissions Technology

Cat® engine and aftertreatment solutions meet U.S. EPA Tier 4 Interim and EU Stage IIIB emission standards.

Integrated Technologies

Grade Control Ready feature means easy installation of the performance enhancing Cat AccuGrade™ system. Cat Product Link helps fleet managers maximize utilization and control costs.

Serviceability and Customer Support

Ease of serviceability, Cat dealer support expertise and machine rebuild capability help to reduce overall owning and operating costs.

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The Cat D6T has earned a reputation for best-in-class versatility, productivity and resale value. Because it excels across a wide range of dozing tasks, customers choose the D6T for everything from dozing, ripping, scraper work and land clearing to finish grading, backfilling trenches, building oil/gas/wind farm pads and working landfills. And with features designed for even greater comfort, productivity and fuel efficiency, today's D6T does even more to help you meet your business objectives. The D6T meets U.S. Tier 4 Interim/ EU Stage IIIB emission standards.

Operator Station

Comfort and convenience



The D6T cab is designed and equipped for operator productivity, safety and comfort. An isolation-mounted cab reduces noise and vibration. Large single-pane windows, tapered hood and notched fuel tank provide excellent visibility to all sides of the machine and around the job site.

Updated dash and instrumentation streamline the display in a format that is more common across the Cat tractor line. A display mount is integrated into the dash for a grade control system, placing job site data conveniently in front of the operator.

A standard air-ride suspension seat is well padded and adjustable, with bolsters to comfortably restrain operator side-to-side movement when working on grades or slopes. Armrests are adjustable. Heating and air conditioning controls are located in the headliner for easy access, and conveniently located air vents evenly distribute airflow within the cab.

The cab is pre-wired for a radio and equipped with two speakers, an antenna and a radio mount recessed in the headliner. Two 10-amp, 12-volt power converters are also included for supplemental power for cellular phones and computers. The cab interior features a convenient storage compartment in the dash.

Engine

Power and reliability

The D6T features a Cat C9.3 ACERT™ engine and a Cat Clean Emissions Module to deliver the performance and efficiency that customers demand, while meeting U.S. EPA Tier 4 Interim/EU Stage IIIB emission standards.

The six-cylinder electronic engine is turbocharged and aftercooled. The displacement produces better lugging capability, lower internal stresses and longer component life.

ACERT™ Technology is a combination of building blocks that includes electronics, fuel systems, air management systems and aftertreatment components. The system is optimized based on engine size, the type of application and the geographic location in which it will work. The technologies are applied systematically and strategically to meet high customer expectations for productivity, fuel efficiency, reliability and service life.



Emissions Technology

Reliable, integrated solutions



Cat NOx Reduction System

The Cat NOx Reduction System captures and cools a small quantity of exhaust gas, then routes it into the combustion chamber where it drives down combustion temperatures and reduces NOx emissions.

Aftertreatment Technologies

To meet Tier 4 Interim/Stage IIIB emission standards and beyond, Cat aftertreatment components have been designed to match application needs. System components include a **Diesel Oxidation Catalyst (DOC)**, which uses a chemical process to convert regulated emissions in the exhaust system, and a **Diesel Particulate Filter (DPF)** that traps particulate matter that is carried into the exhaust stream.

The DOC, DPF and Cat Regeneration System are contained in a Caterpillar designed Clean Emissions Module (CEM) that protects the components, minimizes the aftertreatment footprint and simplifies maintenance. For high debris applications that require thermal shields on exhaust components, an optional insulated CEM is available for the D6T (available late 2011).

Cat Regeneration System

The Cat Regeneration System is designed to work transparently, without any interaction needed from the operator. Under most operating conditions, engine exhaust is hot enough to oxidize soot through passive regeneration. If supplemental regeneration is needed, the Cat Regeneration System elevates exhaust gas temperatures to burn off soot in the Diesel Particulate Filter (DPF). This is a process that happens automatically, but the operator can initiate the cycle when convenient or interrupt regeneration as needed. A soot level monitor and regeneration indicator lights are integrated into the D6T dash display.

Key Off Regeneration – Optional Key Off Regeneration allows the operator to initiate a regeneration cycle after the key has been turned off. If a cycle takes place, the engine will complete regeneration, followed by a cool down period prior to shutting down.

Delayed Engine Shutdown – Delayed Engine Shutdown feature is available to allow the machine to cool immediately after a heavy work load or regeneration cycle.

Engine Idle Shutdown Timer – An optional Engine Idle Shutdown timer will sound a warning and shut down the engine after the machine has been idling for a pre-set period of time.



In photo at left: Optional insulated Clean Emissions Module.



Powertrain

Powerful efficiency

The power shift transmission and differential steering work in tandem with the C9.3 ACERT engine to deliver the outstanding power, productive performance and reliability expected from Cat track-type tractors.

Torque Divider

A single-stage torque divider sends 70 percent of engine torque through a converter and 30 percent through a direct drive shaft for greater driveline efficiency and higher torque multiplication. This provides an optimum combination of operator efficiency and driveline reliability.

Differential Steering System

Differential steering maintains full power to both tracks to provide best-in-class turning with a loaded blade. When one track speeds up, the other slows down an equal amount. Maneuverability – especially with large blade loads – is improved, as well as cycle times in some applications. Greater load capacity, power and speed control are possible in soft underfoot conditions on steep slopes because both tracks are powered during turns. Low effort tiller bar, touch shift control and steering modulation ensure ease of operation.

Multi Velocity Program

This exclusive machine control system allows the operator to choose from five speed ranges in Forward and Reverse to best match machine speed to applications and ground conditions. Operators maximize production, minimize fuel consumption, and reduce overall machine operating costs.

Cat Eco Reverse

The standard Eco Reverse feature reduces engine speed during the reverse portion of the dozing cycle. Once set, no additional operator input is needed. Eco Reverse can reduce fuel use by up to 5 percent, depending on the application.

Implement and Steering Controls

Ergonomically designed for ease of operation



Steering and Transmission Control

The D6T utilizes electro-hydraulic differential steering. This steering method controls the direction and degree of turns, forward-reverse shifting, and gear selection in a single control handle, all enhancing operator comfort. A new control handle is ergonomically designed to reduce operator fatigue. The new thumb roller on the steering control shifts the electronically controlled powershift transmission, while the FNR switch controls the machine travel direction. The tiller allows the operator to work precisely in close areas – around structures, grade stakes and other machines.



Dozer and Rear Attachment Control Levers

The D6T features ergonomically designed implement controls with low effort, electro-hydraulic controls for added operator comfort, easy operation and precise work tool control. Electro-hydraulic controls are now standard on the D6T, simplifying installation of an AccuGrade system. When equipped with a VPAT blade, the lever allows six-way control of the blade and the thumb rocker adjusts blade angle.

Throttle Rocker Switch

One touch of the throttle rocker switch automatically adjusts engine speed to high or low idle. A new feature allows the operator to press and hold until desired engine speed is attained, then release for the machine to maintain the new chosen speed.

Implement/Work Tool Lock-Out Switch

Lock-out feature prevents inadvertent operation of hydraulic work tool attachments.

Auto-Shift/Auto-Kickdown

Operators can pre-select a forward and reverse speed setting for easy, efficient directional changes. Auto-shift settings include first forward to second reverse and second forward to second reverse. Auto-kickdown allows the transmission to automatically downshift when significant load increases are detected.



Instrument Panel and Cat Monitoring System

The D6T features a new in-dash display with new functionalities. The advanced monitoring system tracks the machine operating conditions in real time. The monitoring system display is illuminated for excellent visibility in low light and is glare resistant for easier viewing in bright light. It also includes controls for brightness and contrast.



Integrated Technologies

Solutions to make work easier and more efficient

Grade Control Ready

The D6T comes standard from the factory Grade Control Ready (GCR) including deeply integrated harnesses incorporated into the machine during assembly. This integration allows for an easy dealer installed AccuGrade Ready Option (ARO) and AccuGrade machine control and guidance system later as business requirements change, or for improved resale value. The machine dashboard also includes space to install an AccuGrade display.

AccuGrade Ready Option

The D6T can be ordered from the factory with optional brackets and hardware installed, making the tractor ready to plug in the dealer installed AccuGrade machine control and guidance system. The factory installed ARO simplifies the dealer installation of the AccuGrade components and integration into the machine helps protect components to enhance system robustness.

AccuGrade

AccuGrade is a dealer installed machine control and guidance system which enables operators to cut and fill to grade with increased accuracy, minimizing the need for traditional stakes and grade checkers.

AccuGrade uses advanced Laser, Global Navigation Satellite System (GNSS) and/or Universal Tracking Station (UTS) technology, machine-mounted components and off-board hardware. This state-of-the-art machine control system provides precise elevation information on an in-cab display to achieve accurate blade positioning. By displaying real-time cut/fill information in the cab, operators can improve their efficiency and get to grade faster with fewer passes than ever before. The AccuGrade System significantly improves the productivity and accuracy of grading equipment – by as much as 50 percent over conventional methods.

Cat Product Link

Remote monitoring with Product Link improves overall fleet-management effectiveness. Product Link is deeply integrated into machine systems. Events and diagnostic codes, as well as hours, fuel, idle time and other detailed information are transmitted to a secure web based application, VisionLink™. VisionLink includes powerful tools to convey information to users and dealers, including mapping, working and idle time, fuel level and more.

Cooling System

Durable and efficient



The engine radiator, Air To Air After Cooler (ATAAC), and hydraulic oil cooler are packaged in a single plane. Aluminum bar plate construction provides durability and allows for higher heat transfer and superior corrosion resistance. The standard cores feature 6 fins per inch to allow debris to pass through and reduce plugging concerns.

In cooler conditions, a new hydraulically driven demand fan reduces speed to conserve power, save fuel, and decrease sound levels.

An optional reversing fan attachment changes the fan rotation while the machine is backing up or stationary. This attachment includes access slots in the side of the radiator guard for cleaning access. A ROPS mounted air conditioner is packaged with the reversing fan attachment for optimum fan purging and ambient capability.

Undercarriage

Engineered for performance

The D6T features the Caterpillar elevated sprocket design that isolates final drives, axles, and steering components from harsh impacts. The modular design aids serviceability to help reduce maintenance costs. A variety of undercarriage configurations and track shoe designs help optimize performance and undercarriage life.

SystemOne™ Undercarriage

SystemOne can help reduce total undercarriage owning and operating costs in many applications. Lifetime sealed and lubricated cartridges eliminate bushing turns and sprockets require no replacement during the life of the chain. All SystemOne undercarriage components are designed to work and wear as a system for longer track life.

Heavy Duty Undercarriage (optional)

Heavy duty undercarriage is well-suited to aggressive applications like land clearing, side-slopes, or working in rocky or uneven terrain. Components are designed for extended wear life in abrasive conditions and high impact applications.





Work Tools

Equipped for the job

L-Shaped Push Arms

L-shaped push arms bring the blade closer to the machine than diagonal brace designs, providing excellent maneuverability, balance, and blade penetration. This design provides solid lateral stability and better cylinder positions for constant pryout capability independent of blade height.

Load Sensing Hydraulics

Field-proven, load-sensing hydraulics respond to operating requirements by automatically and continually adjusting hydraulic power to maximize work tool efficiency.

Cat Blades

Semi-Universal, Straight, and Angle Blade designs feature a strong box-section to stand up to the most severe applications. Heavy moldboard construction and hardened bolt-on cutting edges and end bits add strength and durability.

Variable Pitch Angle Tilt (VPAT) Blade

A Variable Pitch Angle Tilt (VPAT) blade on the D6T allows the operator to hydraulically adjust the blade lift, angle, and tilt simultaneously, using the ergonomically designed blade control. The operator also has the ability to manually adjust the blade pitch. The versatility of the VPAT blade gives the D6T the ability to take on a variety of applications and varying material conditions, such as finish grading, spreading material, side casting, V-ditching, and backfilling. VPAT blades are wider for more capacity and the ability to achieve full track coverage in one pass. VPAT blades can also be angled for ease of shipping.

Rear Implements

Versatility and balance



Multi-Shank Ripper

The multi-shank parallelogram style ripper is offered with one, two, or three shanks to best suit job conditions. Curved or straight ripper shanks are available.

Winch

A single lever control actuates both clutch and brake functions to help improve operator efficiency. See your Cat dealer for available winch options.

Rear Counterweight

Optimize balance for backing up steep slopes or increasing performance in heavy dozing applications. Rear counterweights are recommended if another rear attachment is not specified, and are required with VPAT blades.

Drawbar

The D6T can be equipped with a drawbar for retrieving other equipment or pulling work tools such as disks, compactors, or chopper wheels. Optional implement towing arrangements allow for quick setup of a hydraulically controlled towed scraper.

Sustainability

Thinking generations ahead

The Cat D6T is designed to benefit your business, and reduce emissions.

- Meets U.S. Tier 4 Interim/EU Stage IIIB emission standards.
- Fuel efficient engine, and features like Eco Reverse and a hydraulic demand fan, helps decrease overall fuel consumption.
- Technologies like AccuGrade and Product Link help improve overall efficiency, saving fuel and fluids, as well as wear and tear on equipment.
- New grab handles, steps, lighting packages and a ground level service center help enhance job site safety.
- Major components are built to be rebuilt, eliminating waste and saving customers money by giving the machine and/or major components a second – and even third – life.



Serviceability and Customer Support

When uptime counts

Enclosures and Guarding

Several key engine enclosure panels are hinged or feature tool-less removal for easy access during inspection or service work. Larger side engine enclosures provide direct access to the back side of the cooling package for inspection and cleaning. Heavy duty radiator grill doors are now standard and maintain their robust bolt-on, hinged design for easy access to the fan and the front side of the cooling package.

Ground Level Service Center

The new ground level service center is accessible on the left hand fender without setting foot on the machine, giving easy access to the battery disconnect and secondary engine shutdown switches. Optional access light switch, digital hour meter and jacket water heater plug are also available.

Access/Egress

Newly designed steps and handles make climbing on and off the tractor easier than ever. An access light switch is included with optional light packages that turns on the cab-mounted exterior light for night time visibility when mounting/dismounting the machine.

An Operator Presence Detection system allows the machine to idle when an operator is not in the seat. The system locks out the powertrain so any unintentional movements during ingress or egress will not physically move the machine.

Renowned Cat Dealer Support

From helping you choose the right machine to knowledgeable ongoing support, Cat dealers provide the best in sales and service. Manage costs with preventive maintenance programs like Custom Track Service, Scheduled Oil Sampling (S·O·SSM) analysis, and guaranteed maintenance contracts. Stay productive with best-in-class parts availability. Cat dealers can even help you with operator training to help boost your profits.

And when it's time for machine replacement, your Cat dealer can help you save even more with Genuine Cat Remanufactured parts. Receive the same warranty and reliability as new products at cost savings of 40 to 70 percent for powertrain and hydraulic components.



D6T Specifications

Engine		
Engine Model	Cat® C9.3 ACERT™	
Global Emissions	U.S. Tier 4 Interim/ EU Stage IIIB	
Gross Power – SAE J1995	171 kW	229 hp
Engine Power – ISO 14396	169 kW	227 hp
Engine Power – ISO 14396 (DIN)		230 hp
Net Power – SAE J1349	153 kW	205 hp
Net Power – ISO 9249	153 kW	205 hp
Net Power – ISO 9249 (DIN)		208 hp
Net Power – 80/1269/EEC	153 kW	205 hp
Bore	115 mm	4.5 in
Stroke	149 mm	5.9 in
Displacement	9.3 L	567 in ³

- Engine ratings apply at 1,850 rpm.
- Net power advertised is the power available at the engine flywheel when the engine is equipped with a fan at maximum speed, air cleaner, muffler and alternator.
- No deratings required up to 2286 m (7,500 ft) altitude, beyond 2286 m (7,500 ft) automatic derating occurs.

Transmission		
1.5 Forward	3.8 kph	2.3 mph
2.0 Forward	5.1 kph	3.2 mph
2.5 Forward	6.6 kph	4.1 mph
3.0 Forward	8.5 kph	5.3 mph
3.5 Forward	11.4 kph	7.1 mph
1.5 Reverse	4.8 kph	3.0 mph
2.0 Reverse	6.6 kph	4.1 mph
2.5 Reverse	8.4 kph	5.2 mph
3.0 Reverse	8.5 kph	5.3 mph
3.5 Reverse	14.6 kph	9.0 mph
Drawbar Pull:		
1.5 Forward	355.5 kN	79,910 lb
2.0 Forward	206.4 kN	46,410 lb
2.5 Forward	206.4 kN	46,410 lb
3.0 Forward	113 kN	25,360 lb
3.5 Forward	113 kN	25,360 lb

Undercarriage		
Shoe Type	Moderate Service	
Width of Shoe:		
XL/XL VPAT	560 mm	22 in
XW	760 mm	30 in
XW VPAT	710 mm	28 in
LGP	915 mm	36 in
LGP VPAT	790 mm	31 in
Shoes/Side:		
XL/XW	41	
LGP	45	
Grouser Height	65 mm	2.6 in
Pitch	203 mm	8.0 in
Ground Clearance	384 mm	15.0 in
Track Gauge:		
XL	1880 mm	74 in
XL VPAT	2134 mm	84 in
XW	2032 mm	80 in
XW VPAT/LGP/ LGP VPAT	2286 mm	90 in
Track on Ground:		
XL/XW	2840 mm	112 in
LGP	3250 mm	128 in
Ground Contact Area:		
XL	3.18 m ²	4,929 in ²
XW	4.31 m ²	6,680 in ²
LGP	5.95 m ²	9,223 in ²
XL VPAT	3.18 m ²	4,929 in ²
XW VPAT	4.03 m ²	6,246 in ²
LGP VPAT	5.10 m ²	7,905 in ²
Ground Pressure:		
XL	57.2 kPa	8.3 psi
XW	43.9 kPa	6.4 psi
LGP	33.5 kPa	4.86 psi
XL VPAT	64.7 kPa	9.4 psi
XW VPAT	52.0 kPa	7.5 psi
LGP VPAT	42.8 kPa	6.2 psi
Carrier Rollers/Side	1	
Track Rollers/Side		
XL/XW	7	
LGP	8	
Oscillation at Front Idler:		
XL/XL VPAT/ XW VPAT	103 mm	4.0 in
XW	100 mm	3.9 in
LGP/LGP VPAT	117 mm	4.6 in

- All dimensions above with SystemOne undercarriage.

Service Refill Capacities		
Fuel Tank	425.0 L	112.0 gal
Cooling System	64.4 L	17.0 gal
Engine Crankcase	24.6 L	6.5 gal
Powertrain	148.0 L	39.1 gal
Final Drives (each)	13.5 L	3.6 gal
Roller Frames (each)	25.0 L	6.6 gal
Pivot Shaft Compartment	5.0 L	1.3 gal
Hydraulic Tank	65.5 L	17.3 gal

Hydraulic Controls – Maximum Operating Pressure		
Bulldozer – Lift:		
Non-VPAT	19 300 kPa	2,800 psi
VPAT	21 550 kPa	3,125 psi
Bulldozer – Tilt:		
Non-VPAT	19 300 kPa	2,800 psi
VPAT	21 550 kPa	3,125 psi
Bulldozer – Angle:		
VPAT	21 550 kPa	3,125 psi
Ripper – Lift:		
Non-VPAT	19 300 kPa	2,800 psi
VPAT	21 550 kPa	3,125 psi
Steering	40 000 kPa	5,800 psi

Hydraulic Controls – Pump

Type		
RPM at Rated Engine Speed:		
Fan	2,135 rpm	
Implement	2,135 rpm	
Steering	2,854 rpm	
Pump Output:		
Fan	93 L/min	25 gal/min
Implement	205 L/min	54 gal/min
Steering	195 L/min	52 gal/min
Lift Cylinder Flow	190 L/min	50 gal/min
Tilt Cylinder Flow	110 L/min	29 gal/min
Ripper Cylinder Flow	190 L/min	50 gal/min
Angle Cylinder Flow – VPAT	170 L/min	45 gal/min

Hydraulic Controls – Main Relief Valve

Pressure Setting – Implement:		
Non-VPAT	21 700 kPa	3,150 psi
VPAT	24 400 kPa	3,540 psi

Winch

Winch Model	PA56	
Weight	1203 kg	2,652 lb
Oil Capacity	67 L	17.8 gal
Winch and Bracket Length	1214 mm	47.8 in
Winch Case:		
Length	902 mm	35.5 in
Width	872 mm	34.3 in
Increased Tractor Length:		
XL/XW	516 mm	20.4 in
LGP	365 mm	14.4 in
Drum Diameter	254 mm	10.0 in
Drum Width	315 mm	12.4 in
Flange Diameter	505 mm	19.9 in
Drum Capacity:		
22 mm (0.88 in)	85 m	281 ft
25 mm (1.0 in)	66 m	218 ft
Winch Drive	Mechanical	
Control	Electric	
Overall Width	975 mm	38.4 in
Rope Diameter (recommended)	22 mm	0.88 in
Cable Ferrule Size (O.D. × Length)	54 mm × 67 mm	2.1 in × 2.6 in
Maximum Bare Drum:		
Line Pull	40 700 kg	89,800 lb
Line Speed	39.6 m/min	130 ft/min
Maximum Full Drum:		
Line Pull	34 600 kg	76,300 lb
Line Speed	68.3 m/min	224 ft/min

Blades

Capacity:		
XL SU-Blade	5.31 m ³	6.94 yd ³
XL A-Blade	3.93 m ³	5.14 yd ³
XL VPAT-Blade	4.73 m ³	6.19 yd ³
XW SU-Blade	5.05 m ³	6.60 yd ³
XW A-Blade	4.30 m ³	5.63 yd ³
XW VPAT-Blade	5.08 m ³	6.65 yd ³
LGP S-Blade	3.70 m ³	4.83 yd ³
LGP A-Blade	5.22 m ³	6.82 yd ³
LGP VPAT-Blade	4.20 m ³	5.50 yd ³
Width:		
XL SU-Blade	3260 mm	10.7 ft
XL A-Blade	4160 mm	13.7 ft
XL VPAT-Blade	3880 mm	12.8 ft
XW SU-Blade	3560 mm	11.7 ft
XW A-Blade	4500 mm	14.8 ft
XW VPAT-Blade	4160 mm	13.7 ft
LGP S-Blade	4040 mm	13.3 ft
LGP A-Blade	5070 mm	16.7 ft
LGP VPAT-Blade	4160 mm	13.7 ft

Ripper

Type	Fixed Parallelogram	
Ramp Angle	26 degrees	
Pocket Spacing	1000 mm	39.4 in
Shank Gauge	2000 mm	78.8 in
Shank Section	74 mm × 175 mm	2.9 in × 6.9 in
Number of Pockets	3	
Overall Beam Width	2202 mm	87 in
Beam Cross Section	219 × 254 mm	8.8 × 10 in
Maximum Clearance Raised (under tip, pinned in bottom hole)	514 mm	20.2 in
Maximum Penetration	457 mm	18.0 in
Maximum Penetration Force	6603 kg	14,557 lb
Pryout Force	9134 kg	20,137 lb
Weight:		
With One Shank	1634 kg	3,606 lb
Each Additional Shank	74 kg	163 lb

D6T Specifications

Weights

Operating Weight:

XL A	21 148 kg	46,623 lb
XL SU	20 937 kg	46,158 lb
XL VPAT	23 663 kg	52,168 lb
XW A	22 068 kg	48,652 lb
XW SU	21 789 kg	48,036 lb
XW VPAT	24 112 kg	53,158 lb
LGP S	22 448 kg	49,489 lb
LGP A	23 482 kg	51,769 lb
LGP VPAT	24 569 kg	54,165 lb

Shipping Weight:

XL A	17 738 kg	39,106 lb
XL SU	17 738 kg	39,106 lb
XL VPAT	20 385 kg	44,941 lb
XW A	18 564 kg	40,927 lb
XW SU	18 564 kg	40,927 lb
XW VPAT	20 793 kg	45,841 lb
LGP S	19 527 kg	43,050 lb
LGP A	19 527 kg	43,050 lb
LGP VPAT	21 264 kg	46,879 lb

- Operating weight includes blade, lubricants, coolant, full fuel tank, standard track, ROPS/FOPS cab, drawbar and operator.
- Shipping weight includes blade lift cylinders, lubricants, coolant, ROPS/FOPS cab, standard track and 10% fuel.

Standards

ROPS/FOPS	ROPS meets criteria SAE J395, SAE 1040 MAY94, ISO 3471-1994/ FOPS meets ISO 3449-1992 Level II.
Brakes	Brakes meet the International Standard ISO 10265:2008.
Cab	Meets appropriate standards as listed below.

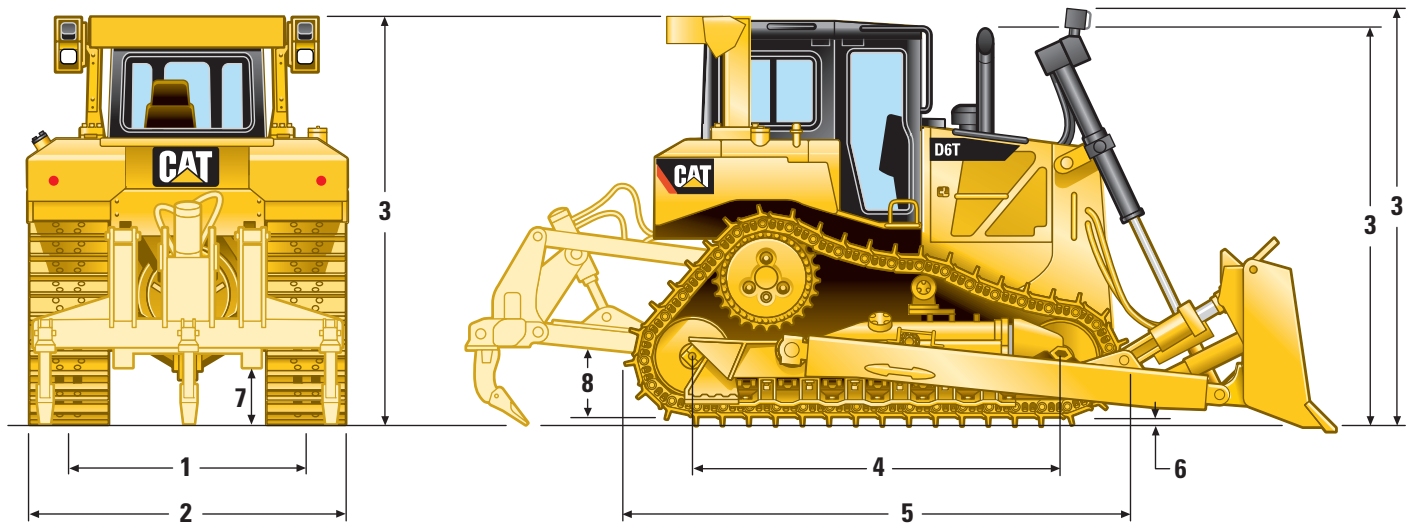
- The operator sound exposure Leq (equivalent sound pressure) measured according to the dynamic conditions in ISO 6396 is 79 dB(A) for a cab offered by Caterpillar when properly installed and maintained and with doors and windows closed when tested.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in noisy environment.
- The exterior sound pressure level for a standard machine was measured according to the dynamic conditions in ISO 6395. On this machine equipped with a carrier roller, the sound level is 115 dB(A).

Drive Train

Type	Mechanical
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Dimensions

All dimensions are approximate.



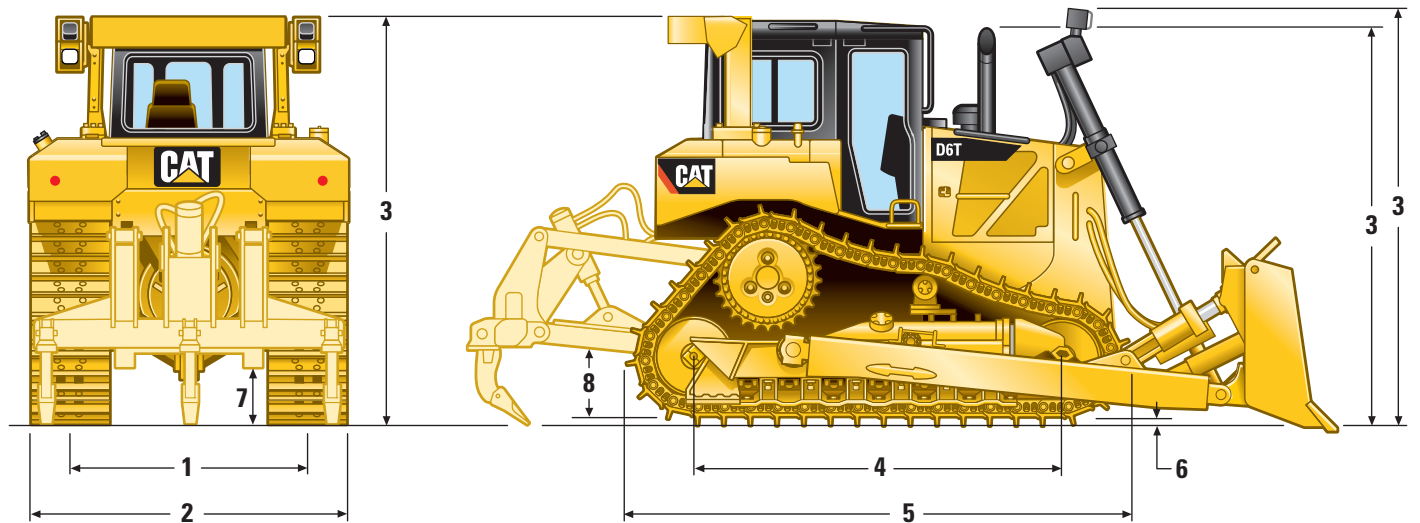
	XL		XL VPAT	
1 Track gauge	1880 mm	6 ft 2 in	2134 mm	7 ft 0 in
2 Width of tractor				
Over trunnions	2640 mm	8 ft 8 in	—	—
Without trunnions (std. track)	2440 mm	8 ft 0 in	2692 mm	8 ft 10 in
3 Machine height from tip of grouser:				
Stack	3126 mm	10 ft 3 in	3126 mm	10 ft 3 in
ROPS	3169 mm	10 ft 5 in	3169 mm	10 ft 5 in
Premium Light Package	3310 mm	10 ft 10 in	3310 mm	10 ft 10 in
4 Length of track on ground	2840 mm	9 ft 4 in	2840 mm	9 ft 4 in
5 Length of basic tractor	3860 mm	12 ft 8 in	3860 mm	12 ft 8 in
With following attachments add:				
Drawbar	182 mm	7 in	182 mm	7 in
Ripper Multi-Shank (tip at ground line)	1370 mm	4 ft 6 in	1370 mm	4 ft 6 in
Winch	517 mm	20 in	517 mm	20 in
S Blade	—	—	—	—
SU Blade	1271 mm	4 ft 2 in	—	—
A Blade	1341 mm	4 ft 3 in	—	—
VPAT Blade	—	—	1504 mm	4 ft 11 in
6 Height of grouser	65 mm	2.6 in	65 mm	2.6 in
7 Ground clearance	384 mm	15 in	384 mm	15 in
Track pitch	203 mm	8 in	203 mm	8 in
Number of shoes per side		41		41
Number of rollers per side		7		7
Standard shoe	560 mm	22 in	560 mm	22 in
Ground contact area (std. track)	3.18 m ²	4,929 in ²	3.18 m ²	4,929 in ²
Ground pressure*	57.2 kPa	8.30 psi	64.7 kPa	9.38 psi
8 Drawbar height	576 mm	23 in	576 mm	23 in
From ground face of shoe	511 mm	20 in	511 mm	20 in

* XL and XW with SU blade, LGP with S blade with no rear attachments unless otherwise specified and calculated per ISO 16754.

D6T Specifications

Dimensions

All dimensions are approximate.



	XW		XW VPAT		LGP		LGP VPAT	
1 Track gauge	2032 mm	6 ft 8 in	2286 mm	7 ft 6 in	2286 mm	7 ft 6 in	2286 mm	7 ft 6 in
2 Width of tractor								
Over trunnions	2950 mm	9 ft 8 in	—	—	3480 mm	11 ft 5 in	—	—
Without trunnions (std. track)	2794 mm	9 ft 2 in	2997 mm	9 ft 10 in	3193 mm	10 ft 6 in	3150 mm	10 ft 4 in
3 Machine height from tip of grouser:								
Stack	3126 mm	10 ft 3 in	3126 mm	10 ft 3 in	3176 mm	10 ft 5 in	3176 mm	10 ft 5 in
ROPS	3169 mm	10 ft 5 in	3169 mm	10 ft 5 in	3219 mm	10 ft 7 in	3219 mm	10 ft 7 in
Premium Light Package	3310 mm	10 ft 10 in	3310 mm	10 ft 10 in	3360 mm	11 ft 0 in	3360 mm	11 ft 0 in
4 Length of track on ground	2840 mm	9 ft 4 in	2840 mm	9 ft 4 in	3250 mm	10 ft 8 in	3250 mm	10 ft 8 in
5 Length of basic tractor	3860 mm	12 ft 8 in	3860 mm	12 ft 8 in	4247 mm	13 ft 11 in	4247 mm	13 ft 11 in
With following attachments add:								
Drawbar	182 mm	7 in	182 mm	7 in	—	—	—	—
Ripper Multi-Shank (tip at ground line)	1370 mm	4 ft 6 in	1370 mm	4 ft 6 in	1370 mm	4 ft 6 in	1370 mm	4 ft 6 in
Winch	517 mm	20 in	517 mm	20 in	397 mm	16 in	397 mm	16 in
S Blade	—	—	—	—	1168 mm	3 ft 10 in	—	—
SU Blade	1271 mm	4 ft 2 in	—	—	—	—	—	—
A Blade	1405 mm	4 ft 7 in	—	—	1475 mm	4 ft 10 in	—	—
VPAT Blade	—	—	1504 mm	4 ft 11 in	—	—	1412 mm	4 ft 8 in
6 Height of grouser	65 mm	2.6 in	65 mm	2.6 in	65 mm	2.6 in	65 mm	2.6 in
7 Ground clearance	384 mm	15 in	384 mm	15 in	434 mm	17 in	434 mm	17 in
Track pitch	203 mm	8 in	203 mm	8 in	203 mm	8 in	203 mm	8 in
Number of shoes per side	41		41		45		45	
Number of rollers per side	7		7		8		8	
Standard shoe	760 mm	30 in	710 mm	28 in	915 mm	36 in	785 mm	31 in
Ground contact area (std. track)	4.31 m ²	6,681 in ²	4.03 m ²	6,247 in ²	5.95 m ²	9,223 in ²	5.10 m ²	7,905 in ²
Ground pressure*	43.9 kPa	6.36 psi	52.0 kPa	7.54 psi	33.5 kPa	4.86 psi	42.8 kPa	6.20 psi
8 Drawbar height	576 mm	23 in	576 mm	23 in	626 mm	25 in	626 mm	25 in
From ground face of shoe	511 mm	20 in	511 mm	20 in	561 mm	22 in	561 mm	22 in

* XL and XW with SU blade, LGP with S blade with no rear attachments unless otherwise specified and calculated per ISO 16754.

Standard equipment may vary. Consult your Cat dealer for details.

POWERTRAIN

- C9.3 ACERT diesel engine
- EPA/ARB Tier 4 Interim and EU Stage IIIB certified engine with aftertreatment
- Air cleaner, precleaner with strata tube dust ejector
- Air filter with Electronic Service Ind.
- Aftercooler, Air to Air (ATAAC)
- Coolant, extended life
- Fan, sucker, hydraulic
- Final drives, three planet single reduction planetary
- Fuel priming pump, electric
- Parking brake, electronic
- Prescreener
- Radiator, aluminum bar plate
- Shift management
 - automatic directional and downshift
 - controlled throttle, load compensated
- Starting aid, ether, automatic
- Torque divider
- Transmission, electronically controlled powershift 3F/3R speeds
- Turbocharger
- Water separator

UNDERCARRIAGE

- SystemOne
- Carrier rollers
- Clamp master link
- Equalizer bar, heavy duty
- Guards, end track guiding
- Idlers, center tread, lifetime lubricated
- Rollers, lifetime lubricated track
- Track roller frames, tubular
- Track adjusters, hydraulic
- Sprocket rim segments, replaceable

ELECTRICAL

- Alarm, backup
- Alternator, 95 amp, brushless
- Batteries, 2 maintenance free 12V (24V system), heavy duty
- Converter, two 10 amp 12V outlets
- Connector, diagnostic
- Electric start, 24V
- Horn, forward warning

OPERATOR ENVIRONMENT

- Air conditioner, underhood
- Armrest, adjustable
- Cab, ROPS/FOPS, sound suppressed
- Decelerator pedal
- Electro-hydraulics implement and steering controls
- Five gauge cluster (engine coolant, powertrain oil, hydraulic oil, fuel level and engine RPM display/gear display)
- Foot pads, dash
- Heater
- Hour meter, electronic
- Mirror, rearview
- Multi Velocity Program (MVP), 5-speed includes Eco Reverse
- Radio ready
- Seat, adjustable contour suspension
- Seatbelt, retractable 76 mm (3 in)
- Throttle switch, electronic
- Wipers, intermittent

OTHER STANDARD EQUIPMENT

- CD ROM parts book
- Engine enclosures, perforated
- Front pull device
- Guards, hinged bottom
- Ground level service center with remote electrical disconnect and secondary shutdown switch
- Hood, perforated
- Hydraulics, independent steering and work tool and fan pumps
- Hydraulics, load sensing, dozer lift and tilt
- Oil cooler, hydraulic
- Product Link ready
- Radiator doors, louvered, hinged
- S·O·SSM sampling ports
- Vandalism protection allowance for fluid compartments and battery box

D6T Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

POWERTRAIN

Drains, ecology, powertrain
Fan, auto reversing
Oil change system, powertrain
Fuel system, fast fill
Precleaner turbine with screen
Thermal shield including insulated CEM
(late 2011)

UNDERCARRIAGE

Heavy duty undercarriage arrangements
XL machines
XW machines
LGP machines
XL VPAT machines
XW VPAT machines
LGP VPAT machines

Track Pairs

(XL VPAT Roller Frame, 41 Section)

Extreme Service (HD)
560 mm (22 in)
Extreme Service (SystemOne)
560 mm (22 in)
Extreme Service (SystemOne)
610 mm (24 in), Offset
Extreme Service (SystemOne)
560 mm (22 in), Center Hole
Extreme Service (SystemOne)
610 mm (24 in), Offset Clipped

Track Pairs

(XL Non-VPAT Roller Frame, 41 Section)

Extreme Service (HD)
560 mm (22 in)
Extreme Service (SystemOne)
560 mm (22 in)
Moderate Service (SystemOne)
610 mm (24 in)
Moderate Service (HD)
610 mm (24 in)
Extreme Service (SystemOne)
610 mm (24 in)
Extreme Service (SystemOne)
610 mm (24 in), Clipped
Extreme Service (HD)
610 mm (24 in), Non-Trapezoidal
Extreme Service (SystemOne)
560 mm (22 in), Center Hole
Extreme Service (HD)
610 mm (24 in), Trapezoidal

Track Pairs

(XW VPAT Roller Frame, 41 Section)

Extreme Service (SystemOne)
610 mm, 710 mm (24 in, 28 in)
Extreme Service (SystemOne)
610 mm (24 in), Clipped
Moderate Service
790 mm (31 in), Offset,
Non-Trapezoidal
Moderate Service (HD)
610 mm (24 in)
Extreme Service (HD)
610 mm (24 in), Non-Trapezoidal
Moderate Service (HD)
710 mm (28 in), Non-Trapezoidal
Moderate Service (HD)
710 mm (28 in), Center Hole
Moderate Service (SystemOne)
710 mm (28 in), Clipped

Track Pairs

(XW Non VPAT Roller Frame, 41 Section)

Extreme Service (SystemOne)
610 mm (24 in)
Extreme Service (SystemOne)
610 mm (24 in), Clipped
Extreme Service (HD)
760 mm (30 in), Non-Trapezoidal
Extreme Service (SystemOne)
760 mm (30 in)
Extreme Service (HD)
610 mm (24 in), Non-Trapezoidal
Moderate Service (SystemOne)
710 mm (28 in)
Extreme Service (HD)
760 mm (30 in)
Moderate Service (HD)
760 mm (30 in), Non-Trapezoidal
Extreme Service (SystemOne)
760 mm (30 in), Center Hole

Track Pairs

(LGP VPAT Roller Frame, 45 Section)

Moderate Service (HD)
790 mm (31 in), Offset
Extreme Service (SystemOne)
790 mm (31 in), Offset
Moderate Service (HD)
915 mm (36 in)
Extreme Service (SystemOne)
915 mm (36 in)

Track Pairs

(LGP Non VPAT Roller Frame, 45 Section)

Extreme Service (SystemOne)
760 mm (30 in), Center Hole
Extreme Service (HD)
760 mm (30 in), Trapezoidal
Extreme Service (SystemOne)
915 mm (36 in), Center Hole
Extreme Service (HD)
915 mm (36 in), Trapezoidal
Self-Cleaning (HD)
990 mm (39 in)

HYDRAULICS

Control arrangement – ripper (NON-VPAT)
Control arrangement – ripper (VPAT)
Control arrangement – winch
Control arrangement – ripper/winch
(mid-2011)
Control arrangement – hydraulic
implement towing (mid-2011)

STARTERS, BATTERIES AND ALTERNATORS

Alternator, 150 amp
Alternator, 150 amp, ducted
Heater, engine coolant, 120V
Starter, heavy duty

ELECTRICAL

Lights 6, basic
Lights 10, premium
Switch, disconnect, remote mounted
(mid-2011)

OPERATOR ENVIRONMENT

Air conditioner, ROPS mounted
Camera, rear vision (mid-2011)
Canopy arrangement (OOPS) includes
vinyl covered seat with mechanical
suspension (mid-2011)
Glass, dual pane and precleaner
Handles, heavy duty
Handles, heavy duty VPAT

TECHNOLOGY PRODUCTS

AccuGrade Ready

GUARDS

Guard, rear tractor
Guard, final drive, clamshell
Guard, final drive seals
Guard, idler seals
Heavy duty guard package
Hitch, front
Screen, rear cab
Screen, rear for canopy arrangement
(mid-2011)
Sweeps package
Towing device, pull-hook

TRACK GUIDING GUARD

ARRANGEMENTS (SystemOne)

Guide, track, moderate service
Guide/guard, track, full length

OTHER ATTACHMENTS

Counterweights and drawbars
Counterweight, rear
Counterweight, rear slab
Counterweight, additional
Drawbar, rigid short
Drawbar, rigid long

WINCH ARRANGEMENTS

PA56 winch package, standard speed
PA56 winch package, slow speed
Fairlead, 3 rollers
Fourth roller

BLADES

VPAT XL Bulldozer
VPAT XW Bulldozer
VPAT LGP Bulldozer
6SU XL
6SU XL, Landfill
6SU XW
6SU XW, Landfill
6A XL
6A XW
6A LGP
6S LGP
6S LGP, Landfill

GROUND ENGAGING TOOLS

Ripper, multi-shank
Tooth, multi-shank ripper
Tooth, straight, 1 shank
Teeth, straight, set of 2
Teeth, straight, set of 3

MISCELLANEOUS

Seal group
Seal group – VPAT

D6T Track-Type Tractor

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

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AEHQ6141-01 (05-2011)



NEW

Hydraulic Excavator JS220 SC/LC/NLC



Engine Power: 128kW (172hp) Bucket Capacity: 0.40 – 1.19m³ Operating Weight: 21144 – 22490kg

A Product of Hard Work



Redefining excavation

Contents

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Strength
inside and out



Boom and dipper

Reinforced boom
Endurance testing
Precision engineering



Componentry

Best components in the industry



Structural strength

High-strength undercarriage
Rigid upper frame
Stiff, durable door design



BEFORE YOU BUY AN EXCAVATOR, YOU NEED TO KNOW IT'S GOING TO BE TOUGH ENOUGH TO PERFORM ANY JOB YOU ASK OF IT. FORTUNATELY, WITH A JCB JS220, STRENGTH AND DURABILITY COME AS STANDARD.



1

Boom and dipper

1 A JCB JS220's reinforced boom and dipper is made of high tensile strength steel, with single piece wrapper plates and internal baffle plates for long life durability.

2 Our advanced manufacturing and assembly processes produce high precision and quality assembled components.

Componentry

3 JCB JS220s boast the best components in the industry, including Berco running gear, Kawasaki pumps, Isuzu engine and Kayaba main control valves.



2

We use Finite Element Analysis with extensive rig and endurance testing to make key components last longer.



3



3



Structural strength

- 4 The high-strength undercarriage of a JCB JS220 uses a fully-welded X frame construction for long-term durability even in the most demanding applications.
- 5 A closed box section revolving frame increases strength and reduces stress. It is also highly resistant to impact damage.
- 6 The JS220's high-strength rigid upper frame provides maximum durability and support.
- 7 Our stiff, durable door design gives great strength and rigidity.

UNEARTHED: KEY FACT
 The JCB JS220 turret is welded to both the upper and lower undercarriage frame.



4



5



7



6

maximum
productivity,
minimum spend



Upping output

- 12% more productive over rivals
- Intuitive multifunction operation
- Four operating work modes

Efficiency

- Eco mode gives 11% fuel savings
- Optimised hydraulic settings

Stability, hydraulics and attachments

- Hydraulic regeneration system
- Cushioned boom and dipper ends

IT'S MORE IMPORTANT THAN EVER TO SAVE MONEY AND TIME; THE JCB JS220 RANGE IS DESIGNED TO MAKE THE MOST OF BOTH.



3

Upping output

1 With a massive 155kn bucket tearout, a JCB JS220 is up to 12% more productive than its closest competitors.

2 Simultaneous tracking and excavating is smooth and fast with an intuitive multifunction operation.

Efficiency

Advanced hydraulic technology ensures that the machines always starts in ECO mode for maximum fuel efficiency, contributing to fuel savings of up to 11%.

Optimised hydraulic pump settings and a revised spool configuration within the main valve block, only delivers the required oil flow, preventing wasted energy.

3 Tier 3 compliant Isuzu engine benefits from a revised electronic control system, delivering high torque at low revs and the highest power rated engine of 128kW (172hp) in the 20T market.



2



3

Four operating work modes allow a JCB JS220 operator to tailor performance:

AUTO: For heavy digging and high-output applications. Automatically adjusts engine speed and hydraulic flow depending on load.

ECONOMY: Gives you maximum fuel efficiency.

PRECISION: Reduces hydraulic flow and engine rpm, giving control and accuracy for fine work and grading.

LIFTING: Gives maximum power with reduced oil flow for controllability.

UNEARTHED: KEY FACT

To save fuel, JCB Auto-Idle technology automatically reduces engine speed when hydraulics aren't in use.



Stability, hydraulics and attachments

4 JCB's innovative hydraulic regeneration system means oil is recycled across the cylinders for faster cycle times and reduced fuel consumption.

5 A JCB JS220 has cushioned boom and dipper ends to prevent shock loadings, protect your machine and increase operator comfort.

6 A JCB JS220 has a solid, stable work platform for fast cycle times.

7 JCB's quickhitch system makes attachment changing fast and easy, and is purpose-designed for the JS range.

For ultra versatility, JCB offers a full list of auxiliary pipework options including hammer, auxiliary, merged and low flow.



4



6



7

a comfortable
favourite

Comfortably in control

Intuitive controls

Choose from short or long stroke

Balanced slew

Visibly better

70/30 front screen split

Laminated glass roof



Even more benefits

Adjustable cab and controls

Minimal noise and vibration

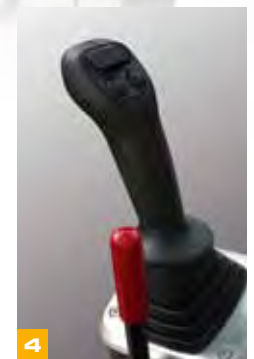
WE'VE DESIGNED THE JCB JS220 TO BE COMFORTABLE, ERGONOMIC, SIMPLE AND INTUITIVE TO OPERATE. WHICH IS GOOD FOR YOUR OPERATORS BUT EVEN BETTER FOR YOU; AFTER ALL, GREAT EASE OF USE EQUALS GREAT PRODUCTIVITY.

Visibly better

- 1 JCB JS220s have excellent front visibility with a 70/30 front screen split and a clear view of the front right track for easy, safe trench digging and manoeuvring.
- 2 A large laminated glass roof window gives the JS220 optimum visibility for working at height.

Comfortably in control

- 3 Light, intuitive and smooth controls improve comfort and productivity.
Choose between short stroke or long stroke hand control levers for operator choice and comfort.
- 4 JCB JS220s have proportional auxiliary control options for smooth, precise control.
- 5 For even greater speed and control, a JCB JS220 has a balanced slew and electronic/hydraulic controlled slew braking.





Even more comfort

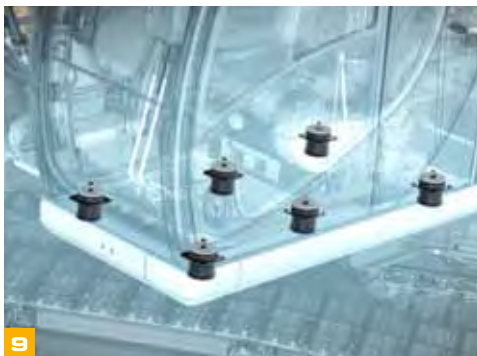
6 JCB JS220s have a spacious luggage tray behind the operator's seat.

7 Function switches are easy to reach and include the heater and climate control panels, while the side unit doubles as part of the immobiliser code selector.

8 The easily-accessible Advanced Monitoring System can keep tab on a JCB JS220's functions and inputs while different working modes are selected either manually or automatically.

9 JCB JS220 cabs use 6 viscous rubber mounts to minimise noise and vibration.

10 A large floor area with large high grip pedals give easy and precise tracking.



The JS220's cab and controls are independently adjustable so that it's easy to find the perfect operating position.



JCB's climate control option offers a precisely controlled cab temperature with fresh or recirculated air. Demisting/defrosting functions keep a JS220's front window clear.

**less servicing,
more.
service**



Easy does it

1000-hour boom and dipper greasing intervals

5000-hour oil life

Easily-accessible filters

Here to help

In-cab system monitoring

The best back-up in the business

Centralised grease points

Large service bays

Radiator, cooler and intercooler easily accessed

WE'VE DESIGNED JCB JS220S TO BE LOW MAINTENANCE AND EASILY SERVICEABLE. WHICH MAKES THEM AFFORDABLE, EFFICIENT AND HIGHLY PRODUCTIVE. HELPING YOU GET THE BEST SERVICE FROM YOUR MACHINE.



By using graphite impregnated bronze bushes, we've reduced the JS220's boom and dipper greasing intervals to 1000 hours for normal applications.



1



2

Easy does it

- 1** The air filter on a JS220 is easily accessible, and a double-element construction simplifies cleaning.
- 2** JCB's Plexus Oil Filter System extends oil life to 5000hrs by constantly filtering hydraulic fluid down to 2 microns, reducing risk of contamination.
- 3** The filters on a JCB JS220 (engine oil, hydraulic oil and fuel) are centrally located for fast, easy servicing.

	SERVICE INTERVALS
Engine oil and oil filter	Every 500 hours
Hydraulic oil	Every 5000 hours
Hydraulic oil filter	Every 1 000 hours



(A) Hydraulics oil filters (B) Fuel filters (C) JCB Plexus Oil Filter System



UNEARTHED: KEY FACT
JCB JS220 grease points are centralised for safe and easy access to high level pivots.

JCB JS220 bonnets open and close easily with gas-assisted cylinders, and the service bays are large and wide for good access.



4

Here to help

4 JCB's In-Cab Monitor checks engine oil levels and system errors on start-up.

5 Because they're mounted side by side on a JCB JS220, the engine radiator, hydraulic cooler and intercooler can be serviced individually yet cleaned easily.

6 Service your JCB JS220 with your local main dealer and our trained engineers can minimise downtime. Order genuine JCB parts online and, in 95% of cases, they'll be with you next day. For extra security and machine protection, opt for a package like JCB LiveLink remote machine monitoring.



5



6



6

LIVE LINK

the safe choice



Safety first

- Front-to-rear bonnet opening
- ROPS/FOPS protection
- Easily-isolated hydraulics
- Great visibility
- Anti-slip steps and platform
- Optional rear-view camera
- Optional full mirror set
- Engine/hydraulic heat shield

ON-SITE SAFETY IS CRUCIAL, SO WE'VE DESIGNED THE JS220 TO INCORPORATE AS MANY CUTTING EDGE SAFEGUARDS AS POSSIBLE. IN SHORT, YOUR OPERATORS ARE IN SAFE HANDS.

We've fitted as standard a bulk head heat shield between the pumps and the engine to guard against heat and noise.



1

1 JCB JS220 bonnet opens front-to-rear for easy and safe engine service access.

2 For extra peace of mind, JCB JS220 cabs are available with an integral rollover protection structure (ROPS). It's easy to fit JCB's FOPS (Falling Objects Protection Structure) to a JS220 cab, thanks to standard fitment mounting brackets.

3 JCB's Safety Lever Lock fully isolates hydraulic functions to avoid unintended movements. Our start function means a JCB JS220 can only be started in a safe locked position.

4 JCB JS220s have a large glass area and low bonnet line for superb visibility.

5 A JCB JS220's steps and platforms have anti-slip punched steel plates for optimum grip, even in wet or icy conditions. Bolt-on plates have recessed bolts to reduce trip hazard.

6 JCB's optional rear-view camera displays an uninterrupted backwards view on an in-cab colour monitor.

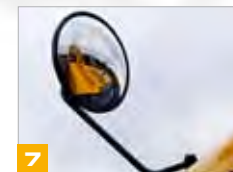
7 Equip your JCB JS220 with a full set of side and rear view mirrors for all round visibility and safety compliance.



2



3



7



5



5



5



7



6

LIVELINK, KNOWLEDGE IS POWER

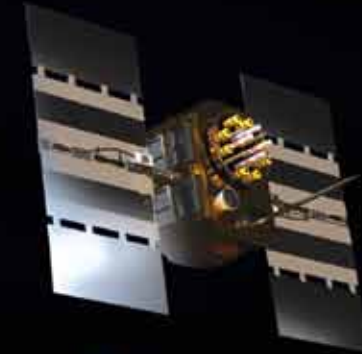
JCB LIVELINK IS AN INNOVATIVE SOFTWARE SYSTEM THAT LETS YOU MONITOR AND MANAGE YOUR MACHINES REMOTELY – ONLINE, BY EMAIL OR BY MOBILE PHONE. LIVELINK GIVES YOU ACCESS TO A WHOLE HOST OF USEFUL DATA, INCLUDING MACHINE ALERTS, FUEL REPORTS* AND EVENT HISTORY INFORMATION. ALL YOUR MACHINE INFORMATION IS HANDLED AT A SECURE DATA CENTRE FOR YOUR PEACE OF MIND.



Productivity and cost benefits

For ultimate productivity and cost-saving, JCB LiveLink provides information like idle time monitoring* and machine fuel consumption* to help reduce your fuel usage. Machine location information can improve fleet efficiency and you may even enjoy reduced insurance costs courtesy of the added security that LiveLink brings.

* These features require an electronic engine.



Maintenance benefits

JCB LiveLink makes it easy to manage machine maintenance. Accurate hours monitoring and service alerts improve maintenance planning, and real-time location data helps you manage your fleet. You'll also have access to critical machine alerts and maintenance history records.



Security benefits

Keep your machine operating safely with JCB LiveLink. Real-time geofencing alerts tell you when machines move out of predetermined operating zones, and real-time curfew alerts inform you if machines are being used when they're not supposed to be. Real time location information helps you store your machines in the safest places.



VALUE ADDED

JCB'S WORLDWIDE CUSTOMER SUPPORT IS FIRST CLASS. WHATEVER YOU NEED AND WHEREVER YOU ARE, WE'LL BE AVAILABLE QUICKLY AND EFFICIENTLY TO HELP MAKE SURE YOUR MACHINERY IS PERFORMING TO ITS FULL POTENTIAL.

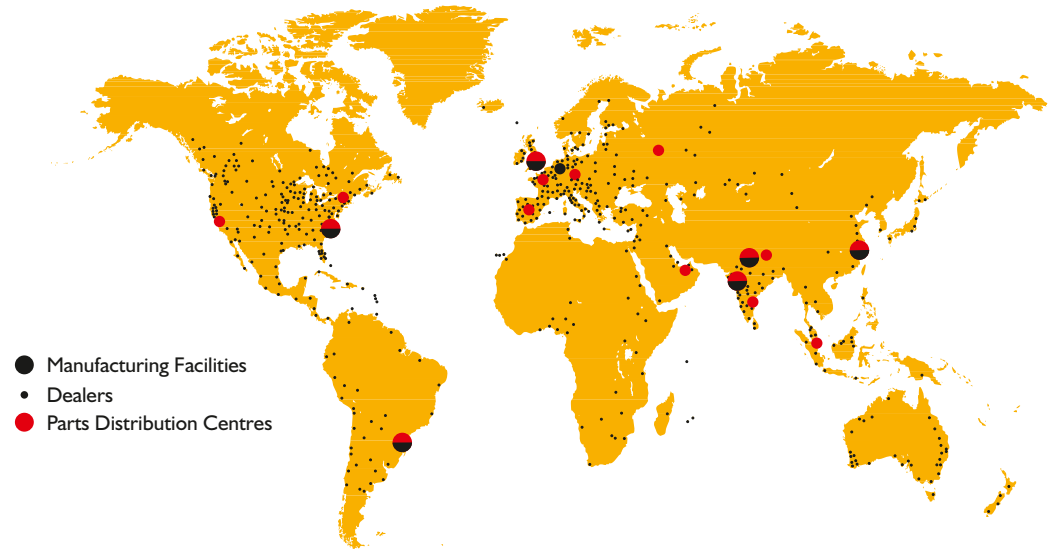


1 Our Technical Support Service provides instant access to factory expertise, day or night, while our Finance and Insurance teams are always on hand to provide fast, flexible, competitive quotes.

2 JCB Assetcare offers comprehensive extended warranties and service agreements, as well as service-only or repair and maintenance contracts. Irrespective of what you opt for, our Maintenance teams around the world charge competitive labour rates, and offer non-obligation quotations as well as fast, efficient insurance repair work.



3 The global network of JCB Parts Centres is another model of efficiency; with 16 regional bases, we can deliver around 95% of all parts anywhere in the world within 24 hours. Our genuine JCB parts are designed to work in perfect harmony with your machine for optimum performance and productivity.



ENGINE

Model	Isuzu 4HKIX. European Tier III emissions compliant.
Type	Water cooled, 4-stroke, 4-cylinder in-line, direct injection, turbocharged diesel.
Nett power (ISO 3046-1NF)	128kW (172hp) at 2000rpm.
Piston Displacement	5.193 litres.
Injection	Electronic injection.
Air Filtration	Dry element with secondary safety element and in cab warning indicator.
Cooling	Water cooler via large capacity radiator.
Starter motor	24 volt – 4.5kW.
Batteries	2 x 12 volt Heavy-duty.
Alternator	24 volt 40 amp.
Refuelling pump	Electric type.

SWING SYSTEM

Swing motor	Axial piston.
Swing brake	Hydraulic braking plus automatic spring applied disc type parking brake.
Final drive	Planetary reduction.
Swing speed	12.9rpm.
Swing gear	Large diameter, internally toothed fully sealed grease bath lubricated.
Swing lock	Switchable brake in cab.

UNDERCARRIAGE

Carriage options	SC-Standard, NC-Narrow and LC-Long Carriage.	
Construction	Fully welded, "X" frame type with central bellyguarding and track motor guards. Sloping sidemembers with dirt relief holes under top rollers. Front and rear.	
Recovery point	Sealed and greased.	
Track type	NC & SC – 500mm (20in), 600mm (24in), 700mm (28in). LC – 600mm (24in), 700mm (28in), 800mm (31.5in), 900mm (36in).	
Track shoe options	Heat treated, sealed and lubricated.	
Upper & lower rollers	Grease cylinder type.	
Track adjustment	Sealed and lubricated, with spring cushioned recoil.	
Track idler	NC & SC	LC
No. of track guides	2 per side	2 per side
No. of lower rollers	7 per side	8 per side
No. of upper rollers	2 per side	2 per side
No. of track shoes	46 per side	49 per side

ENVIRONMENT

Noise levels	LwA external: dBA 103 LwA operator ear: dBA 72
---------------------	---

HYDRAULICS

A variable flow load sensing system with flow on demand, variable power output and servo operated, multi-function open centre control. Machine auto warm up standard – maximises performance in cold conditions.

Pumps

Main pumps	2 variable displacement axial piston type.
Maximum flow	2 x 214 L/min (2 x 47 UK GPM).
Servo pump	Gear type.
Maximum flow	20 L/min (4.4 UK GPM).

Control valve

A combined four and five spool control valve with auxiliary service spool as standard. When required twin pump flow is combined to boom, dipper and bucket services for greater speed and efficiency.

Relief valve settings

Boom/Arm/Bucket	343 bar (4975 lbf/sq.in)
Automatic power boost	373 bar (5410 lbf/sq.in)
Swing circuit	289 bar (4190 lbf/sq.in)
Travel circuit	343 bar (4975 lbf/sq.in)
Pilot control	40 bar (580 lbf/sq.in)

A separate Cushion Control line in the servo system provides cushioning of the boom and dipper spools selection and quick warm-up of the servo system.

Hydraulic cylinders

Double acting type, with bolt-up end caps and hardened steel bearing bushes. End cushioning is fitted as standard on boom, dipper and bucket rams. Optional hose burst check valves available for boom and dipper rams.

Filtration

The hydraulic components are protected by the highest standard of filtration to ensure long hydraulic fluid and component life.

In tank	150 micron, suction strainer.
Main return line	10 micron, fibreform element.
Plexus Bypass line	1.5 micron, paper element.
Pilot line	10 micron, paper element.
Hydraulic hammer return	10 micron, reinforced microform element.

Cooling

Cooling is provided via a full return line air blast cooler as part of a single face cooling pack in conjunction with the engine water cooler.

TRACK DRIVE

Type	Fully hydrostatic, three speed with autoshift between high and medium speed.
Travel motors	Variable swash axial piston type, fully guarded within undercarriage frame.
Final drive	Planetary reduction, bolt-on sprockets.
Service brake	Hydraulic counter balance valve to prevent overspeeding on gradients.
Park brake	Disc type, spring applied, automatic hydraulic release.
Gradeability	70% (35 deg) continuous.
Travel speed	High – 5.6 km/h (3.4 mph). Mid – 3.3 km/h (2.1 mph). Low – 2.3 km/h (1.4 mph).
Tractive effort	191.9kN (19570 kgf, 43144 lbf).

DRIVES AND BRAKES

Steering control	Twin pedal and levers giving independent track control
Drive method	Hydrostatic
Travel operation	3 speed with automatic shift between medium and high speed
Gradeability	70% 35°
Maximum travel speeds	Low – 2.3 km/h (1.4 mph) Medium – 3.3 km/h (2.1 mph) High – 5.6 km/h (3.4 mph)
Tractive effort	202.3 kN (20629/45479 kgf/lbf)
Brake system	Hydraulically operated discs in each travel motor

EXCAVATOR END

Monoboom available along with a choice of dipper lengths to suit the requirements of reach, dig-depth, loadover height, tearouts and site versatility. Reserve strength is built into the fully welded structures for hydraulic hammer and other arduous operations. Fabricated bucket tipping links are provided with a choice of lift points. Strong, durable construction, large cross sections and multi plate fabrications to withstand high stress applications. The 5.7m (18ft 8in) boom is designed to ensure the optimum digging envelope when matched with the three dipper lengths. Low maintenance bronze alloy bushes with graphite plugs are fitted to boom base and boom to dipper pivots resulting in 1000 hour greasing intervals at these points.

CAB

Excellent digging, loading and positioning visibility results from the careful design of front, side and roof lights. All screens are tinted to improve in cab conditions. Fully opening front screen is very smooth to operate and as the lower screen is stored in rear of cab. Fresh air ventilation available from opening door window, opening slot in front screen and fully opening front screen. Parallelogram wash wiper for upper screen ensuring good wiped area for maximum visibility. Wiper motor is fitted in the left hand side of the roof screen so as not to affect bucket visibility when loading. Optional lower screen wiper available. Fresh air ventilation and heater with windscreen demister. Infinitely variable blower speed, temperature and recirculation control. Optional climate control. Fully adjustable deluxe suspension seat with arm rest adjustment and backrest recline. Optional radio with digital tuner fitted into the roof lining for maximum protection. Conveniently placed radio mute button incorporated into lower console. 12v power point and mobile phone holder built into the right hand console. Courtesy light can be operated from ground level and is illuminated for five minutes or until switched off improving operator access at night. Cab mounted roller blind protects operator from suns' glare through front or top screens.

SERVICE CAPACITIES

Fuel tank	litres (UK gal)	343 (75.4)
Radiator	litres (UK gal)	25.5 (5.61)
Engine oil	litres (UK gal)	17.5 (3.85)
Swing drive	litres (UK gal)	5.0 (1.1)
Hydraulic tank	litres (UK gal)	120 (26.4)
Final drive (each side)	litres (UK gal)	4.7 (1.0)

AMS – ADVANCED MANAGEMENT SYSTEM

Four selectable working modes link the operators control movements with the engine and hydraulic systems to maximise productivity and efficiency.

- A (Auto)** Up to 100% engine power and 100% flow. Gives variable power and speed depending on the operator's input, matching the demand for output and efficiency to the job. Power boost is automatically activated in this mode should hard conditions be encountered. Auto idle cuts in after a period of inactivity (between 5 and 30 seconds as set by the operator)
- E (Economy)** 80% engine power. 95% of hydraulic flow maximises economy while maintaining excellent output.
- P (Precision)** 55% engine power. 90% of hydraulic flow for fine control of grading operations.
- L (Lifting)** 55% engine power. 63% of hydraulic flow with permanent power boost for maximum lifting power and control.

The Auto mode allows the AMS processor to select the optimum operational performance to match the demands of the job while the three alternative modes give precise matching of application when specific tasks are undertaken.

The adjustable position monitor mounted on the front right hand pillar of the cab gives the operator a constant read out of mode, tracking range, operating temperature and a host of other information, while retaining excellent visibility of the monitor and the job being carried out.

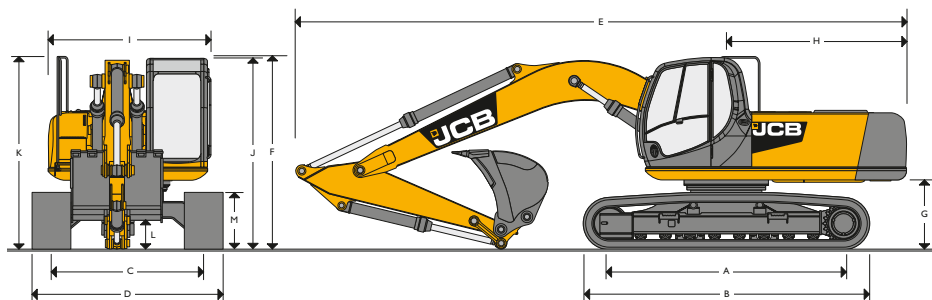
The required flow for hammer applications can be set and stored in the AMS memory and is automatically activated whenever the hammer pedal is depressed.

A maintenance indicator warns of imminent service needs, and all servicing and basic checks can be carried out using only the in cab display.

CONTROLS

- Excavator** All servo lever operated to ISO control pattern, independently adjustable to the seat.
- Tracks** Individually servo operated by foot pedal or hand lever.
Speed selection via joystick button.
- Auxiliary** Via servo operated foot pedal.
- Control isolation** Via gate lock lever at cab entrance or panel switch.
- Engine speed** Dial type throttle control plus servo lever mounted one-touch idle control or separate selectable auto-idle with adjustable time delay using AMS.
- Engine stop** Ignition key operated and separate shut-down button.
- Horn** Operated via servo lever mounted button.

STATIC DIMENSIONS – JS220 NLC/SC/LC MONOBOOM



Dimensions in millimetres (ft-in)	NLC	SC	LC
A Track length on ground	3660 (12-0)	3370 (11-1)	3660 (12-0)
B Undercarriage overall length	4460 (14-6)	4170 (13-8)	4460 (14-8)
C Track gauge	1990 (6-6)	2200 (7-2)	2390 (7-10)
D Width over tracks (500mm trackshoes)	2490 (8-2)	2700 (8-10)	–
D Width over tracks (600mm trackshoes)	2590 (8-6)	2800 (9-2)	2990 (9-10)
D Width over tracks (700mm trackshoes)	2690 (8-10)	2900 (9-6)	3090 (10-2)
D Width over tracks (800mm trackshoes)	–	–	3190 (10-6)
D Width over tracks (900mm trackshoes)	–	–	3290 (10-10)
Dipper lengths	1.91m (6ft 3in)	2.40m (7ft 10in)	3.0m (9ft 10in)
E Transport length with Monoboom	9570 (31-5)	9560 (31-4)	9440 (31-0)
F Transport height with Monoboom	3055 (10-0)	3060 (10-0)	3025 (9-11)
G Counterweight clearance			1066 (3-6)
H Tailswing radius			2825 (9-3)
I Width of superstructure			2549 (8-4)
J Height over cab			2946 (9-8)
K Height over grab rail			3025 (9-11)
L Ground clearance			486 (1-7)
M Track height			885 (2-11)

WEIGHTS AND GROUND BEARING PRESSURES

Figures include 1.14cu.m. bucket 760kg (1675lbs), operator, full fuel tank, 600mm track shoes and 2.4m dipper.

MONOBOOM		500mm shoes	600mm shoes	700mm shoes	800mm shoes	900mm shoes
JS220NLC						
Machine weight	kg (lb)	21144 (46615)	21396 (47170)	21648 (47725)	–	–
Ground bearing pressure	kg/cm (lb/ft ²)	0.51 (7.25)	0.43 (6.11)	0.37 (5.26)	–	–
JS220SC						
Machine weight	kg (lb)	21227 (46800)	21479 (47350)	21731 (47900)	–	–
Ground bearing pressure	kg/cm (lb/ft ²)	0.51 (7.25)	0.43 (6.11)	0.37 (5.26)	–	–
JS220LC						
Machine weight	kg (lb)	–	21904 (48290)	22172 (48880)	22440 (49470)	22490 (49580)
Ground bearing pressure	kg/cm (lb/ft ²)	–	0.41 (5.83)	0.36 (5.12)	0.31 (4.41)	0.28 (3.98)

BUCKET AND ARM FORCE

Arm length		1.91m (6ft 3in)	2.40m (7ft 10in)	3.00m (9ft 10in)
Bucket digging force	kg (lb)	14550 (32080)	14550 (32080)	14550 (32080)
Bucket digging force at Power boost	kg (lb)	15800 (34835)	15800 (34835)	15800 (34835)
Arm crowd force	kg (lb)	13450 (29650)	11560 (25485)	9590 (21142)
Arm crowd force at Power boost	kg (lb)	14610 (32210)	12550 (27670)	10410 (22950)

STANDARD EXCAVATING BUCKETS

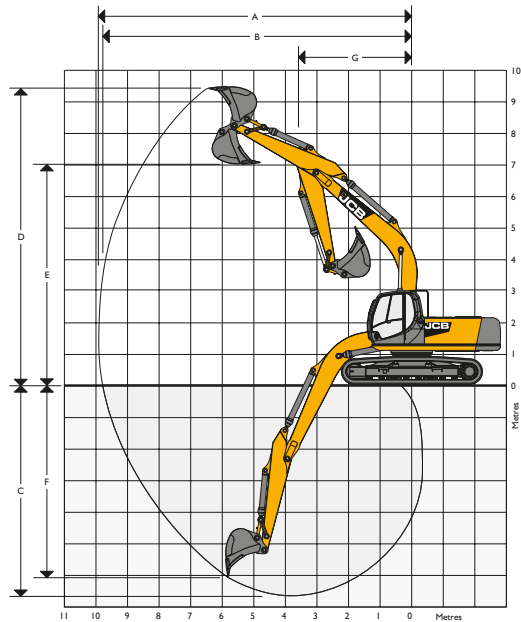
JS220 Mono Boom Bucket and Arm combination								
Bucket width	mm (in)	600 (24)	900 (24)	1000 (39)	1200 (47)	1350 (53)	1450 (57)	1500 (59)
Bucket capacity	m ³ (yd ³)	0.40 (0.52)	0.71 (0.93)	0.81 (1.06)	1.03 (1.35)	1.05 (1.37)	1.14 (1.49)	1.19 (1.56)
Bucket weight	kg (lb)	484 (1067)	595 (1312)	627 (1382)	705 (1555)	679 (1497)	720 (1588)	734 (1618)
Undercarriage and Dipper length								
JS220NLC	1.91m (6ft 3in)	○	○	○	○	○	○	○
JS220NLC	2.40m (7ft 10in)	○	○	○	○	○	●	●
JS220NLC	3.00m (9ft 10in)	○	○	○	●	●	■	■
JS220SC	1.91m (6ft 3in)	○	○	○	○	○	○	○
JS220SC	2.40m (7ft 10in)	○	○	○	○	○	○	○
JS220SC	3.00m (9ft 10in)	○	○	○	○	○	●	●
JS220LC	1.91m (6ft 3in)	○	○	○	○	○	○	○
JS220LC	2.40m (7ft 10in)	○	○	○	○	○	○	○
JS220LC	3.00m (9ft 10in)	○	○	○	○	○	○	○

○ Material weight up to 2000kg/m³ (1.50t/yd³) ● Material weight up to 1800kg/m³ (1.35t/yd³) ■ Material weight up to 1500kg/m³ (1.1t/yd³)

These recommendations are given as a guide based on typical operating conditions.

Please contact your distributor for the correct selection of buckets and attachments to suit the application.

WORKING RANGE – JS220 NLC/SC/LC MONOBOOM



WORKING RANGE – JS220 NLC/SC/LC MONOBOOM

Boom length 5.70m (18ft 8in)				
Dipper length		1.91m (6ft 3in)	2.40m (7ft 10in)	3.00m (9ft 10in)
A	Maximum digging reach	m (ft-in) 8.89 (29-2)	9.34 (30-8)	9.87 (32-5)
B	Maximum digging reach (on ground)	m (ft-in) 8.70 (28-7)	9.16 (30-1)	9.70 (31-10)
C	Maximum digging depth	m (ft-in) 5.53 (18-2)	6.02 (19-9)	6.60 (21-8)
D	Maximum digging height	m (ft-in) 8.95 (29-4)	9.20 (30-2)	9.40 (30-10)
E	Maximum dumping height	m (ft-in) 6.31 (20-8)	6.53 (21-5)	6.75 (22-2)
F	Maximum vertical wall cut depth	m (ft-in) 4.90 (16-1)	5.47 (17-11)	6.07 (19-11)
G	Minimum swing radius	m (ft-in) 3.76 (12-4)	3.71 (12-2)	3.60 (11-10)
	Bucket rotation	deg. 183°	183°	183°
	Dipper tearout (ISO 6015)	kgf (lbf) 13450 (29650)	11560 (25485)	9590 (21142)
	Dipper tearout with boost (ISO 6015)	kgf (lbf) 14610 (32210)	12550 (27670)	10410 (22950)
	Bucket tearout (ISO 6015)	kgf (lbf) 14550 (32080)	14550 (32080)	14550 (32080)
	Bucket tearout with boost (ISO 6015)	kgf (lbf) 15800 (34835)	15800 (34835)	15800 (34835)

STANDARD EQUIPMENT

Isuzu 4KH1X 128kW common rail, turbocharged intercooled direct injection EU Stage III and EPA Tier 3 compliant engine; Dual element type air cleaner with in-cab warning system; Automatic fuel system de-aeration; Automatic engine warm-up system; Engine overheat prevention/warning system; Automatic engine deceleration/idle function; AMS machine monitor system; 4 selectable work modes – Auto, Economy, Lifting, Precision; Remote engine oil level check; Plexus filtration system; Servo oil filtration system; Dual fuel intake filters with additional water separator; 3 speed travel system; High back suspension seat; Overload warning device; Horn; Upper and lower underguarding; Lockable service doors and engine cover; Frame mounted toolbox; Remote greasing for slew bearing; Electric refuelling pump; Handrails with non-slip walkways; Boom and mainframe mounted worklights; Toolkit; Quick connect engine oil drain; Remote mounted easy access filters; Cushion control; Operators manual.

Auto operator cab – Pressurised; Tinted safety glass with sun visor; Opening front window; Operator storage shelf with cargo net; Ashtray and cigarette/mobile phone charger socket; Mobile phone holder; Radio mute switch; Courtesy light; Heater and demister; Removable floor mat.

OPTIONAL EQUIPMENT











SC, LC and NLC undercarriages; 500, 600, 700, 800 and 900mm triple grouser track plates; Monoboom or T.A.B.; 1.91m, 2.4m and 3.0m dippers; Auxiliary pipework (full and lowflow), quick release couplings for auxiliary pipework, shut-off valves for auxiliary pipework; Hose burst check valves; Tipping link mounted lift points; FOPS (Level II) protection system; Mesh screen guard; Additional worklights; ISO 63 or ISO 32 hydraulic oils; Bio oil; Lower wiper; Rain visor (not available with FOPS protection or mesh screen guard); Climate control; Heated and suspension high backed seat; Radio; Fire extinguisher; Widecore radiator; Visibowl or Turbo II precleaner; P3 or carbon cab air intake filter; Travel alarm; Quickhitch pipework; JCB buckets or attachments. NB: Long Reach option available – please ask your dealer for more information.

ATTACHMENTS

Surelock Hydraulic Quickhitch	
Hammermaster	HM1570Q, HM1760Q
GP Buckets	Cat style teeth – 610mm, 762mm, 914mm, 1067mm, 1219mm ESCO tooth system – 550mm, 850mm, 950mm, 1150mm, 1300mm, 1400mm, 1450mm
Heavy Duty Buckets	ESCO tooth system – 550mm, 850mm, 1150mm, 130mm
Grading Buckets	1542m, 1830mm, 2058mm
Selector Grab	SG700 – capacity 700l
Rockwheel	RW100N – 1058mm (42in) cutting width
Multiprocessor	MP200
Crusher Bucket	CB70 30m³/h











LIFT CAPACITIES – Dipper length: 1.9m, Monoboom 5.7m, Trackshoes: 500mm, No bucket.

JS220 NLC MONO

Reach	3m (9ft 10in)		4.5m (14ft 9in)		6m (19ft 8in)		7.5m (24ft 7in)		Max. Reach		Max. Reach
											
Load Point Ht.	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm
6.0m (19.8ft)					6380*	4750			5720*	4620	6105
4.5m (14.9ft)			8020*	7030	6720*	4650			5700*	3770	6907
3.0m (9.10ft)			9870*	6550	7250	4470			5410	3380	7318
1.5m (4.11ft)			10850	6210	7060	4290			5230	3260	7406
0m			10720	6110	6950	4200			5420	3350	7182
- 1.5m (- 4.11ft)	13010*	11410	10750	6130	6940	4190			6080	3720	6614
- 3.0m (- 9.10ft)	12760*	11580	9650*	6270					7600*	4710	5596











LIFT CAPACITIES – Dipper length: 2.4m, Monoboom 5.7m, Trackshoes: 500mm, No bucket.

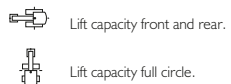
JS220 NLC MONO

Reach	3m (9ft 10in)		4.5m (14ft 9in)		6m (19ft 8in)		7.5m (24ft 7in)		Max. Reach		Max. Reach
											
Load Point Ht.	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm
7.5m (24.7ft)									5230*	5230*	5547
6.0m (19.8ft)					5810*	4840			4790*	3990	6767
4.5m (14.9ft)			7330*	7150	6290*	4710			4690	3360	7497
3.0m (9.10ft)			9230*	6680	7110*	4510	5240	3290	4800*	3060	7878
1.5m (4.11ft)			10820*	6290	7080	4320	5140	3200	4730	2950	7959
0m			10740	6120	6940	4190	5080	3150	4860	3020	7751
- 1.5m (- 4.11ft)	10850*	10850*	10710	6090	6900	4160			5340	3300	7229
- 3.0m (- 9.10ft)	14090*	11440	10270*	6180	6980	4230			6250	3980	6313
- 4.5m (- 14.9ft)			7500*	6440					6850	5960	4777

LIFT CAPACITIES – Dipper length: 3.0m, Monoboom 5.7m, Trackshoes: 500mm, No bucket.

JS220 NLC MONO











Reach	3m (9ft 10in)		4.5m (14ft 9in)		6m (19ft 8in)		7.5m (24ft 7in)		Max. Reach		Max. Reach
											
Load Point Ht.	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm
7.5m (24.7ft)					4350*	4350*			3440*	3440*	6285
6.0m (19.8ft)					5170*	4930			3210*	3210*	7382
4.5m (14.9ft)					5740*	4780	5190*	3410	3160*	3040	8056
3.0m (9.10ft)	11580*	11580*	8380*	6820	6630*	4560	5270	3310	3230*	2780	8411
1.5m (4.11ft)			10200*	6370	7120	4340	5150	3200	3430*	2690	8488
0m	6400*	6400*	10750	6120	6940	4180	5060	3120	3800*	2730	8293
- 1.5m (- 4.11ft)	10510*	10510*	10650	6040	6860	4110	5030	3090	4470*	2940	7807
- 3.0m (- 9.10ft)	15320*	11230	10700	6080	6880	4130			5600	3440	6969
- 4.5m (- 14.9ft)	12460*	11530	8920*	6250					6760*	4670	5619



- Notes:
1. For lifting capacity including bucket, subtract total weight of bucket or bucket and quickhitch from above values.
 2. Lifting capacities are based on ISO 10567, that is: 75% of minimum tipping load or 87% of hydraulic lift capacity, whichever is the less. Lifting capacities marked* are based on hydraulic capacity.
 3. Lift capacities assume that the machine is on firm, level ground.
 4. Lift capacities may be limited by local regulations. Please refer to your dealer.











LIFT CAPACITIES – Dipper length: 1.9m, Monoboom 5.7m, Trackshoes: 600mm, No bucket.

JS220 SC MONO

Reach	3m (9ft 10in)		4.5m (14ft 9in)		6m (19ft 8in)		7.5m (24ft 7in)		Max. Reach		Max. Reach
											
Load Point Ht.	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm
6.0m (19.8ft)					6380*	5250			5720*	5100	6105
4.5m (14.9ft)			8020*	7820	6720*	5140			5700*	4170	6907
3.0m (9.10ft)			9870*	7320	7340	4950			5480	3750	7318
1.5m (4.11ft)			10990	6980	7150	4780			5300	3610	7406
0m			10860	6870	7040	4680			5490	3720	7182
- 1.5m (- 4.11ft)	13010*	13010*	10890	6890	7040	4680			6160	4140	6614
- 3.0m (- 9.10ft)	12760*	12760*	9650*	7030					7600*	5250	5596











LIFT CAPACITIES – Dipper length: 2.4m, Monoboom 5.7m, Trackshoes: 600mm, No bucket.

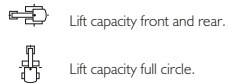
JS220 SC MONO

Reach	3m (9ft 10in)		4.5m (14ft 9in)		6m (19ft 8in)		7.5m (24ft 7in)		Max. Reach		Max. Reach
											
Load Point Ht.	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm
7.5m (24.7ft)									5230*	5230*	5547
6.0m (19.8ft)					5810*	5330			4790*	4400	6767
4.5m (14.9ft)			7330*	7330*	6290*	5200			4690*	3710	7497
3.0m (9.10ft)			9230*	7460	7110*	4990	5310	3640	4800*	3380	7878
1.5m (4.11ft)			10820*	7060	7180	4800	5210	3550	4790	3270	7959
0m			10880	6880	7040	4670	5150	3490	4930	3350	7751
- 1.5m (- 4.11ft)	10850*	10850*	10850	6860	7000	4640			5240	3670	7229
- 3.0m (- 9.10ft)	14090*	13140	10270*	6950	7080	4710			6610	4430	6313
- 4.5m (- 14.9ft)			7500*	7210					6850*	6660	4777

LIFT CAPACITIES – Dipper length: 3.0m, Monoboom 5.7m, Trackshoes: 600mm, No bucket.

JS220 SC MONO











Reach	3m (9ft 10in)		4.5m (14ft 9in)		6m (19ft 8in)		7.5m (24ft 7in)		Max. Reach		Max. Reach
											
Load Point Ht.	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm
7.5m (24.7ft)					4350*	4350*			3440*	3440*	6285
6.0m (19.8ft)					5170*	5170*			3210*	3210*	7382
4.5m (14.9ft)					5740*	5270	5190*	3760	3160*	3160*	8056
3.0m (9.10ft)	11580*	11580*	8380*	7610	6630*	5050	5340	3670	3230*	3080	8411
1.5m (4.11ft)			10200*	7140	7210	4830	5220	3560	3430*	2990	8488
0m	6400*	6400*	10890	6880	7030	4660	5130	3470	3800*	3040	8293
- 1.5m (- 4.11ft)	10510*	10510*	10790	6800	6950	4590	5090	3440	4470*	3270	7807
- 3.0m (- 9.10ft)	15320*	12920	10770*	6840	6980	4610			5680	3820	6969
- 4.5m (- 14.9ft)	12460*	12460*	8920*	7020					6760*	5210	5619



- Notes:
1. For lifting capacity including bucket, subtract total weight of bucket or bucket and quickhitch from above values.
 2. Lifting capacities are based on ISO 10567, that is: 75% of minimum tipping load or 87% of hydraulic lift capacity, whichever is the less. Lifting capacities marked* are based on hydraulic capacity.
 3. Lift capacities assume that the machine is on firm, level ground.
 4. Lift capacities may be limited by local regulations. Please refer to your dealer.











LIFT CAPACITIES – Dipper length: 1.9m, Monoboom 5.7m, Trackshoes: 700mm, No bucket.

JS220 LC MONO

Reach	3m (9ft 10in)		4.5m (14ft 9in)		6m (19ft 8in)		7.5m (24ft 7in)		Max. Reach		Max. Reach
											
Load Point Ht.	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm
6.0m (19.8ft)					6380*	5800			5720*	5640	6105
4.5m (14.9ft)			8020*	8020*	6720*	5700			5700*		
3.0m (9.10ft)			9870*	8200	7470*	5500			5980*		
1.5m (4.11ft)			11210*	7840	8160	5320			6010		
0m			11510*	7730	8050	5220			6230		
- 1.5m (- 4.11ft)	13010*	13010*	11040*	7750	8040	5220			7010		
- 3.0m (- 9.10ft)	12760*	12760*	9650*	7900					7600*		











LIFT CAPACITIES – Dipper length: 2.4m, Monoboom 5.7m, Trackshoes: 700mm, No bucket.

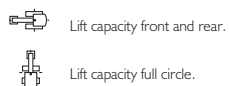
JS220 LC MONO

Reach	3m (9ft 10in)		4.5m (14ft 9in)		6m (19ft 8in)		7.5m (24ft 7in)		Max. Reach		Max. Reach
											
Load Point Ht.	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm
7.5m (24.7ft)									5230*	5230*	5547
6.0m (19.8ft)					5810*	5810*			4790*	4790*	6767
4.5m (14.9ft)			7330*	7330*	6290*	5750			4690*	4110	7497
3.0m (9.10ft)			9230*	8330	7110*	5540	6010	4040	4800*	3750	7878
1.5m (4.11ft)			10820*	7930	7930*	5340	5910	3950	5120*	3640	7959
0m			11480*	7740	8040	5220	5840	3890	5580	3730	7751
- 1.5m (- 4.11ft)	10850*	10850*	11300*	7720	8000	5180			6150	4080	7229
- 3.0m (- 9.10ft)	14090*	14090*	10270*	7810	7560*	5250			6980*	4930	6313
- 4.5m (- 14.9ft)			7500*	7500*					6850*	6850*	4777

LIFT CAPACITIES – Dipper length: 3.0m, Monoboom 5.7m, Trackshoes: 700mm, No bucket.

JS220 LC MONO

Reach	3m (9ft 10in)		4.5m (14ft 9in)		6m (19ft 8in)		7.5m (24ft 7in)		Max. Reach		Max. Reach
											
Load Point Ht.	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm
7.5m (24.7ft)					4350*	4350*			3440*	3440*	6285
6.0m (19.8ft)					5170*	5170*			3210*	3210*	7382
4.5m (14.9ft)					5740*	5740*	5190*	4160	3160*	3160*	8056
3.0m (9.10ft)	11580*	11580*	8380*	8380*	6630*	5600	5810*	4060	3230*	3230*	8411
1.5m (4.11ft)			10200*	8010	7560*	5370	5920	3950	3430*	3320	8488
0m	6400*	6400*	11240*	7740	8040	5210	5820	3860	3800*	3380	8293
- 1.5m (- 4.11ft)	10510*	10510*	11410*	7660	7960	5130	5790	3830	4470*	3650	7807
- 3.0m (- 9.10ft)	15320*	14880	10770*	7700	7980	5160			5790*	4260	6969
- 4.5m (- 14.9ft)	12460*	12460*	8920*	7890					6760*	5810	5619



- Notes:
1. For lifting capacity including bucket, subtract total weight of bucket or bucket and quickhitch from above values.
 2. Lifting capacities are based on ISO 10567, that is: 75% of minimum tipping load or 87% of hydraulic lift capacity, whichever is the less. Lifting capacities marked* are based on hydraulic capacity.
 3. Lift capacities assume that the machine is on firm, level ground.
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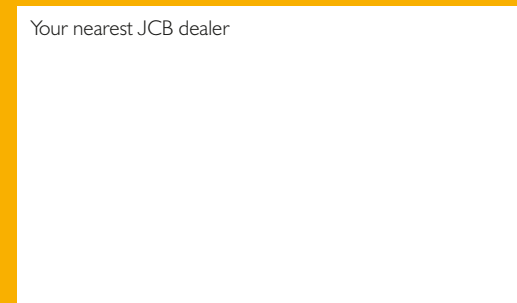


Hydraulic Excavator JS220 SC/LC/NLC Engine Power: 128kW (172hp) Bucket Capacity: 0.40 – 1.19m³ Operating Weight: 21144 – 22490kg

JCB Sales Limited, Rocester, Staffordshire, United Kingdom ST14 5JP. Tel: +44 (0)1889 590312.

Download the very latest information on this product range at: www.jcb.com

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Warrior 1400X



The Powerscreen® Warrior 1400X is a flexible screening machine, aimed at small to medium sized operators who require a high performing, heavy duty, versatile machine that remains easy to transport. It offers improved performance, lower operating costs, and easier serviceability while building on the reliable foundation of our class-leading Warrior 1400 scalper. Its highly aggressive screen can accept bofor bars, finger screens, woven mesh and punch plates.

User benefits include jack up screen facilities to aid media access and hydraulic screen angle adjustment.

Features & Benefits

- Heavy duty, incline belt feeder with hydraulic hopper sides
- Heavy duty, adjustable angle, grease lubricated 2 bearing, 2 deck screen box
- Jack up screen facility to aid mesh changes
- Screen walkway and access steps
- Hydraulic folding conveyors with excellent stockpiling capacity
- Engine protection shutdown system
- Improved stockpiling capacity
- Rapid set-up and shutdown time
- Two speed tracks
- Collection conveyor raise feature

Options

- Radio controlled tracking
- Dual power (additional electric hydraulic drive)
- Quick release screen wedge tensioning
- Auto lubrication system
- Dust suppression
- Wide range of screen media
- 2 or 3 way split configuration
- High capacity incline apron feeder
- 300mm (12") Chassis riser
- Telescopic side conveyors
- Hopper extensions
- Screen blanket



Output Potential: up to 500 tph (551 US tph)

Warrior 1400X (Incline Belt Feeder)	3 Way Split
Weight (Est)	27,500kgs (60,627lbs)
Transport width	2.75m (9')
Transport length	14.21m (46'7")
Transport height	3.2m (10'6")
Working width	12.59m (41'3")
Working length	14.20m (46'7")
Working height	4.57m (15') (hopper extended) 4.87m (16') (hopper extended, 300mm (12") riser)
Screen unit	3.6m x 1.25m (12' x 4.5')



Avery Weigh-Tronix Ltd
Foundry Lane, Smethwick,
West Midlands. B66 2LP
Fax:(+44)(0)8709050085
E-mail: info@awtxglobal.com
Web site: www.averyweigh-tronix.com

Ref : HOSQ4888

CONTACT : CUSTOMER RESPONSE DESK
TEL : 08709 050066

16 August 2013

Britaniacrest Recycling Ltd
26 Reigate Road
Hookwood
HORLEY
Surrey
RH6 0HJ

For : Mr. Chris Foss
Tel : 01293 820221
Email : cfoss@britaniacrest.net

Dear Chris

SURFACE MOUNTED WEIGHBRIDGE FOR NEW SITE

Further to our recent discussion I have pleasure in enclosing our literature, specifications and quotation for the above project.

I understand that you are to develop a new local site and that you will require a single surface mounted weighbridge platform to connect to your existing WeighSoft computer system.

Avery Weigh-Tronix is the UK's leading supplier of weighbridge systems and after sales service. Annually we install more weighbridges than all other suppliers put together. This record has been achieved by a combination of excellent product range, superb build quality and unrivalled service backup.

Avery Weigh-Tronix manufactures and supply weighbridges to suit all applications. Models are available for either surface mounting or pit mounting to suit site and operating conditions and can be supplied in either pre-stressed, pre-cast concrete or heavy duty steel.

For your application I recommend the installation of our 'BridgeMont' model heavy duty steel surface mounted weighbridge. The Bridgemont platform is available in a number of standard sizes from 6m to 24m, with each module comprising a prestressed fully welded steel sandwich construction. The platform is available in 3 different widths to suit varying applications.



The simple modular construction enables a fast installation (typically a day) with minimal craneage requirements even when sited in locations where access is restricted such as inside buildings or bulk filling under silos.

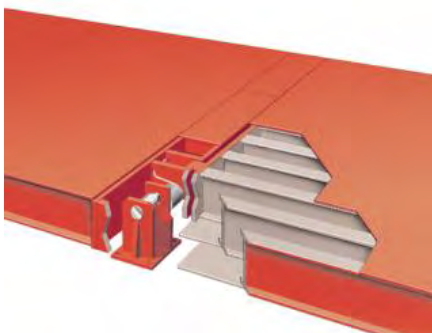
This model gains its superb strength by virtue of the 13 beams running the length of the platform, encased by top and bottom plates to form a monocoque structure.

Vehicles transfer their weight along the beams smoothly without crossing any welds. In alternative designs this gives rise to rippling of deck plates and ultimately cracking.

The standard design will accommodate a 30 tonne dual tandem axle at mid span and will carry 50% more than the UK maximum authorised weight limit.

Foundations for the BridgeMont platform could not be simpler, all that is required is a basic flat raft to which the platform can be bolted. If surface mounted the finished road height will be 355mm. Concrete access ramps can be constructed to this height or optional steel access ramps can be supplied making it totally portable. If pit mounted the minimum pit depth is 600mm.

The enclosed literature predominantly illustrates the surface mounted platform, the pit mounted version is identical in construction with the omission of the guide rails. A 600mm sq manhole is also fitted to the pit mounted platform to allow entry to the pit for housekeeping.



Paint finish - a high performance water based anti-corrosive primer with a dry film thickness of 50 microns (dft) is used. This provides excellent levels of adhesion and corrosion protection. The weighbridge is finished to a minimum thickness of 75 microns (dft) with gloss water based, modified alkyd resin giving outstanding resistance to wear and conditions expected in a weighbridge environment. After each application the modules are cured in a full size purpose designed oven.

Weigh Bars

Weighbars are factory fitted to Bridgemont weighbridges to ensure a quick trouble-free installation.

Weighbars are immune to end, side and torque loads and have proved to be 10 times more reliable than conventional load cells over 20 years.

The IP67 weighbar comes with a braided stainless steel sheathed cable to the junction box, surge arrestors and earth rods provide comprehensive lightning protection.

Access to each weighbar is from a removable top plate on the weighbridge deck.

There are over 500,000 weigh bars in operation worldwide,



O.I.M.L., N.T.E.P. and EU regulations approved to 5000 division accuracy. They are of single link suspension with self-dampening design that speeds up the weighing cycle – absorbing breaking and acceleration without the need for mechanical restraints.

As requested our quotation includes for the supply of a standard weighbridge digital indicator plus a full installation and commissioning package.

I would be pleased to meet you at your convenience to discuss our offer once you are ready to progress the project.

In the meantime, please do not hesitate to contact me if you have any queries or require additional information.

Yours faithfully

Terry Waghorn
Weighbridge Sales Engineer, Avery Weigh-Tronix
Mobile Number 07740 772242
E-mail twaghorn@awtxglobal.com



Avery Weigh-Tronix Ltd
Foundry Lane, Smethwick,
West Midlands. B66 2LP
Fax:(+44)(0)8709050085
E-mail: info@awtxglobal.com
Web site: www.averyweigh-tronix.com

Ref : HOSQ4888

CONTACT : CUSTOMER RESPONSE DESK
TEL : 08709 050066

16 August 2013

Britaniacrest Recycling Ltd
26 Reigate Road
Hookwood
HORLEY
Surrey
RH6 0HJ

Quotation

To supply and install onto foundations prepared to Avery Weigh-Tronix specified drawings.

One Avery Weigh-Tronix BridgeMont BMS road vehicle weighbridge comprising :

One surface mounted heavy duty steel weigh platform **15m x 3m** (2 x 7.5m modules) with integral guide rails

Six Weighbar load units, each rated to IP67 with stainless steel sheathed cables.

One 100% Earth bonding kit per module

One Avery Weigh-Tronix type E1205 digital indicator, capacity **50,000Kg x 20kg**

One Flash RAM module to enable direct connection to the Cobham WeighSoft system.

One set of local interconnecting cables.

One set of users instructions.

One installation package including :

- *delivery to site
- *craneage and labour for off-loading.
- *installation onto your prepared foundations.
- *service engineers to install, test, calibrate and commission.
- *hire of Avery Weigh-Tronix weighbridge test vehicle.
- *arranging attendance of Verification Officer.
- *payment of stamping fees.
- *initial operator training.



NAME: - David Solomon
COMPANY: - Britaniacrest Recycling Ltd

WHEEL WASH QUOTATION
MODEL: - FX1400-E
STANDARD ELECTRIC

SPECIFICATION

Main wash pump: - 1400 ltr/min, 415 volt, 3 phase, 22 KW
Submersible grinder pump: - 415 volt, 3 phase, 4 KW
Air compressor: - 240 volt, 1 ph, 1.5 KW
Frost protection heater: - 240 volt, 1 ph, 2 KW

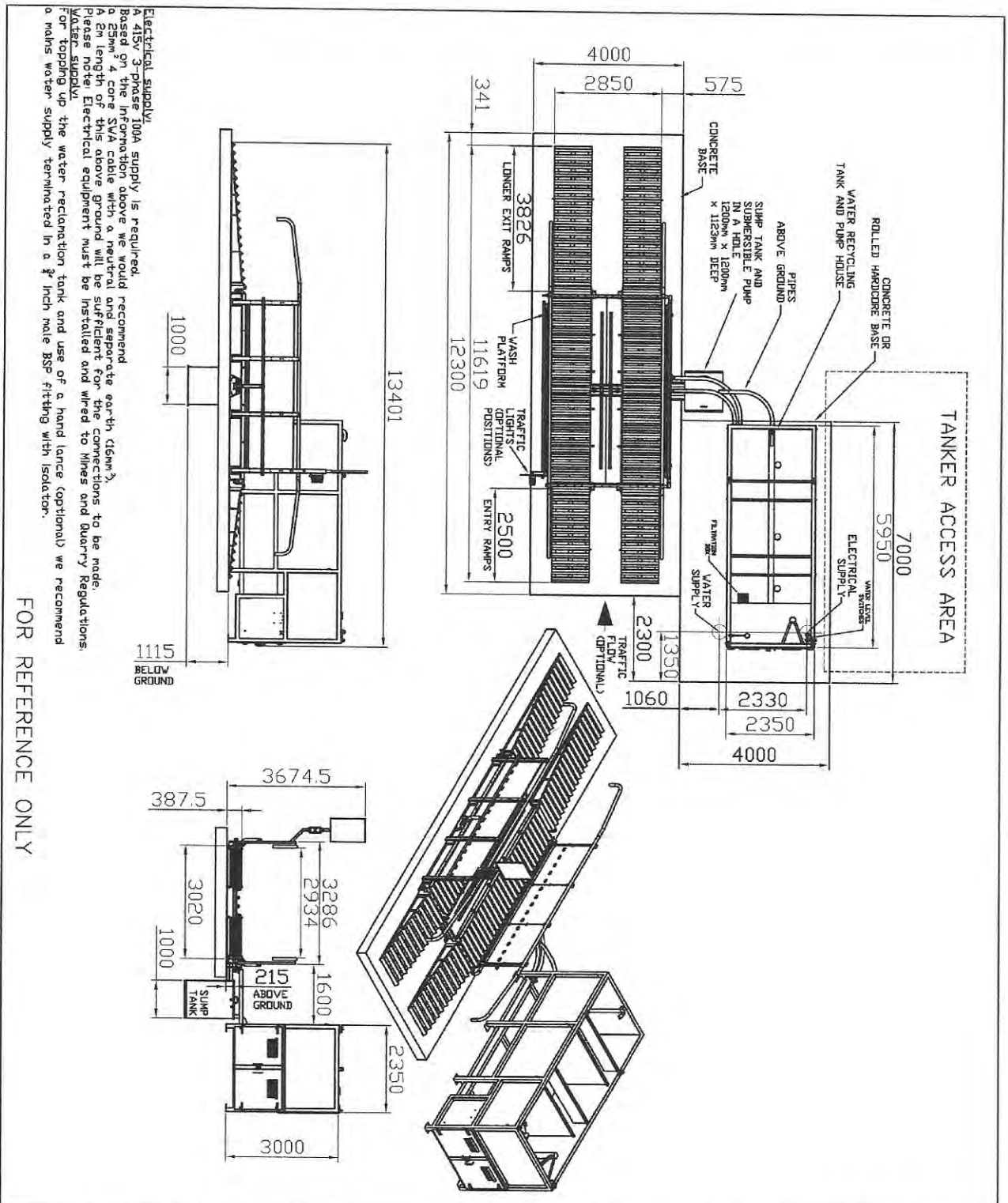
DIMENSIONS

Platform: - 11.48 metre long, 4 metre wide (including ramps)
Water tank: - 6 metre long, 2.35 metre wide
Sump tank: - 1 metre long, 1 metre wide

WEIGHTS

Platform: - 3980 KG
Tank: - 3790 KG (Dry)





Electrical supply:
 A 415v 3-phase 100A supply is required.
 Based on the information above we would recommend a 25mm² 4 core SWA cable with a neutral and separate earth (16mm²). A 2m length of this above ground will be sufficient for the connections to be made.
 Please note: Electrical equipment must be installed and wired to Mines and Quarry Regulations.
 WATER SUPPLY:
 For topping up the water reclamation tank and use of a hand lance (optional) we recommend a mains water supply terminated in a 3/4 inch male BSP fitting with isolator.

FOR REFERENCE ONLY

DWG. No. P0007200		ISS
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REMOVE ALL SHARP EDGES		
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