

Cane Loaders

I 125A 3 cylinder I 125A 4 cylinder I 125A 4 cylinder (Regulated)
I 220A 4 cylinder



BELL



Bell Cane Loaders

Bell Cane Loaders represent the first production machine produced by Bell and are a symbol of our proud heritage in the Sugar industry.

Since its inception in 1964, the Bell Cane Loader has been used with great success in many industries throughout the world. Found in the field, on transloading zones and at the sugar mill, it is in the world sugar market where it has truly found its place as a low cost per ton sugar cane handling solution. Our products range from the lighter, more agile 125A through to the heavier 220A zone loading machines.

The unique combination of foot pedal control for travel and direction and hand operated controls for the boom and grab make the Bell Cane Loader a highly efficient tool for loading cane.

Available in both 3 cylinder and 4 cylinder engine configurations, the 125A Cane Loader is used extensively for loading directly into trailers in field to a lesser extent for zone loading, where the larger capacity 220A comes into its own.

These lightweight, agile machines have very low ground pressures and are ideal for in-field operations.

The 125A Cane Loader is able to load to a maximum height of 5 440 mm, thereby allowing the machine to easily load any trailer or transport vehicle. The grab can safely carry up to 600 kg per bite. The machine's typical fuel consumption for the 3 cylinder is 4-5 litres per hour, the 4 cylinder is 5-6 litres per hour, make these an extremely cost effective selection to loading sugar cane.

Loading rates are dependant on field conditions and carry distances. Loading Rates vary from 20 tons per hour to 40 tons per hour with the lighter cane loader, but can be as 50 tons per hour with the 220A Cane Loader in ideal conditions.

The 4 cylinder 220A is a larger, heavier unit with slightly higher lifting capacity which makes it ideal for zone loading.

Shorter carry distances, flatter slopes and increased lifting capacity increase the loading rates of these machines on the zone, but the agility of the 125 makes it more suitable in field.

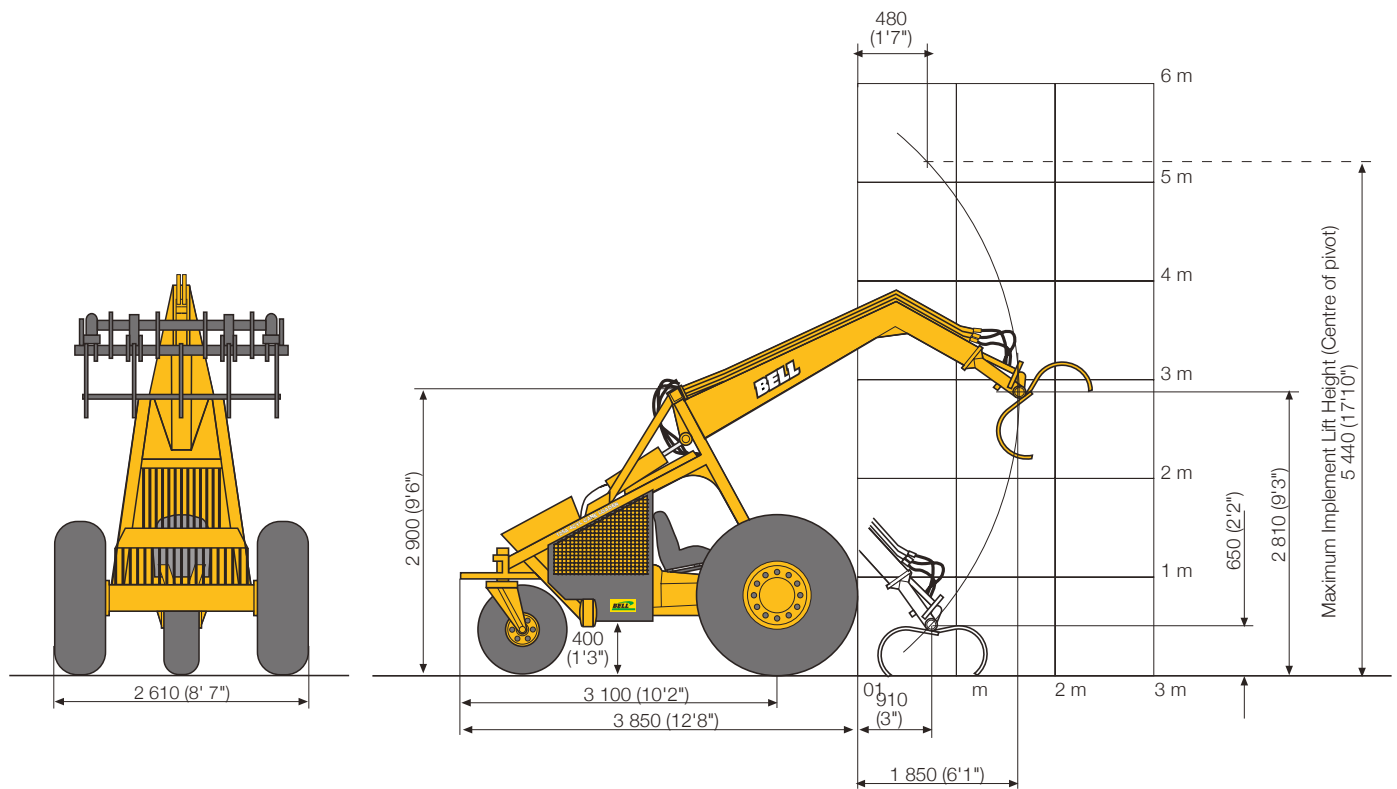
Like all Bell machines, the tri wheeled crop handler is designed to meet the rigours of harsh applications such as sugar cane loading head on.

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|-------------------------------------|---|
| ● Unique characteristics | ● Simple and cost effective to maintain |
| ● High strength micro-alloyed steel | ● Optimum fuel-energy conversion |
| ● Hydrostatically driven | ● Superb manoeuvrability |
| ● Simple to operate | |

Specifications - I25A Cane Loader (3 cylinder)

ENGINE Model Deutz F3L912 Configuration 3 cylinder, in-line, air cooled with integrated blower fan Governed Power 33 kW Max Torque 163 Nm @ 1600 rpm Governed Full Power Engine Speed 2 150 rpm Aspiration Naturally aspirated Displacement 2 827 cc Fuel Filtration Two stage. Spin-on water separator primary, replaceable spin-on secondary	DRIVE MOTORS Type Axial piston, closed loop TRANSMISSION CHARGE CIRCUIT Type Gear, Open centre WHEEL DRIVE SYSTEM Drive Motor Series #24 DRIVE WHEELS Drive Tyre Type All Traction Field & Road - 8 ply with inner tube Drive Tyre Size 18.4 x 26 Drive Wheel Rim 16 x 26, 1 piece	HYDRAULIC TANK Type Integral with tubular frame Oil Type Rando HDZ 68 hydraulic fluid Capacity 120 l (130 l for system) Breather Remote to filler cap, 3 Micron, 0,75 bar pressurised Cleaning Cleaning via bolt on hydraulic filter housings IMPLEMENT HYD SYSTEM Boom Hydraulic Function Pump Type Gear, open centre, Transmission pump thru-drive Grapple/Rotator/Tele Hyd. functions Pump Type Gear, open centre, engine geartrain drive	CABIN Type Integral with steel frame. No doors. Guarding HD windscreens guard. Rear engine bay doors Ventilation Open Cabin SAFETY/ERGONOMICS Seat Plate Lockable over-centre lock-down latches x2 to prevent accidental seat plate tip-up Seat Low profile padded seat with lap strap seat belt WARNING/CUTOFF SYSTEMS Alternator, no charge light "D" terminal switch Blower Fan Belt-Breakage warning Mechanical auto cut-off
EXHAUST Type Engine manifold mounted mild steel silencer with short side-pointing tail pipe Cooling fin hot air outlet Open sided gridded engine covers	DRIVE WHEEL INFLATION PRESSURE 1,5 bar Unladen Ground Pressure Rear 0,44 bar TAIL WHEEL Tail Wheel Tyre Type High Flotation Implement, 10 Ply with inner tube Tail Wheel Tyre Size 400 x 15.5 Tail Wheel Rim 13 x 15.5, 1 piece Tail Wheel Inflation Pressure 1,0 bar Unladen Ground Pressure Rear 0,68 bar	FUEL TANK Type Remote to frame, rear mounted Capacity 76 l	Engine Oil Pressure Light Pressure sensor switch-on point: 0,25+ .1 bar OPERATING MASSES Unladen Front 3 045 kg Unladen Rear 1 220 kg Unladen Total 4 265 kg Shortest Wheelbase 2 458 kg Load distance ahead of front axle 2 600 mm Outstretched Tipping load 1 153 kg SWL - Payload 650 kg
AIR CLEANER Type Dual (primary & safety) paper element cyclonic canister type with restriction visual indicator Pre Cleaner Type Cyclonic dust bowl. Daily emptying requirement	BRAKES Service Brake Type Closed loop hydrostatic wheel retardation. Park Brake Type Spring applied, hydraulic release wet multi disc	ELECTRICAL SYSTEM Voltage 12 V Starter motor rating 2,7 kW	Battery Rating 100 Ah Fuse box Inside cabin- instrumentation box, on firewall and on battery positive terminal
FUEL INLET SYSTEM Water Separator Primary Filter- spin-on Engine mounted, 5 microns Secondary Filter- spin-on Engine mounted, 5 microns	ATTACHMENT Type Bell Series 36 Cane Capacity 0,36 m ² BOOM/MAST Type Welded yoke crankboom	Alternator rating 14V/55A Overload Protection Main line circuit breaker 300A at battery terminal, 60A on Firewall	Battery Isolator Switch Single pole type, accessible alongside seat
ENGINE/TRANS. COUPLING Type Bell nylon gear coupling	HYDRAULIC COOLER Type Frame/Tank	Battery Isolator Switch Single pole type, accessible alongside seat	Ignition Solenoid 130A
HYDROSTATIC TRANSMISSION Type Variable displacement closed loop manual control axial piston tandem pump, Closed Loop motor circuit with remote charge pump, filtered charge pressure with non-filtered direct-return to tank.	HYD./ENG COOLER SYSTEM Type Heat radiation to ambient via high surface area of frame structure	Lights Relay switching, 30 Amp circuit breaker	STEERING SYSTEM Type Front wheel hydraulic skid steer via foot operated treadle control system.
DRIVE PUMPS Type Axial piston, closed loop, manual control swash plate Control Direct control, foot linkage			

Dimensions



LOWEST COST per ton solutions

LOW fuel consumption

LOW maintenance

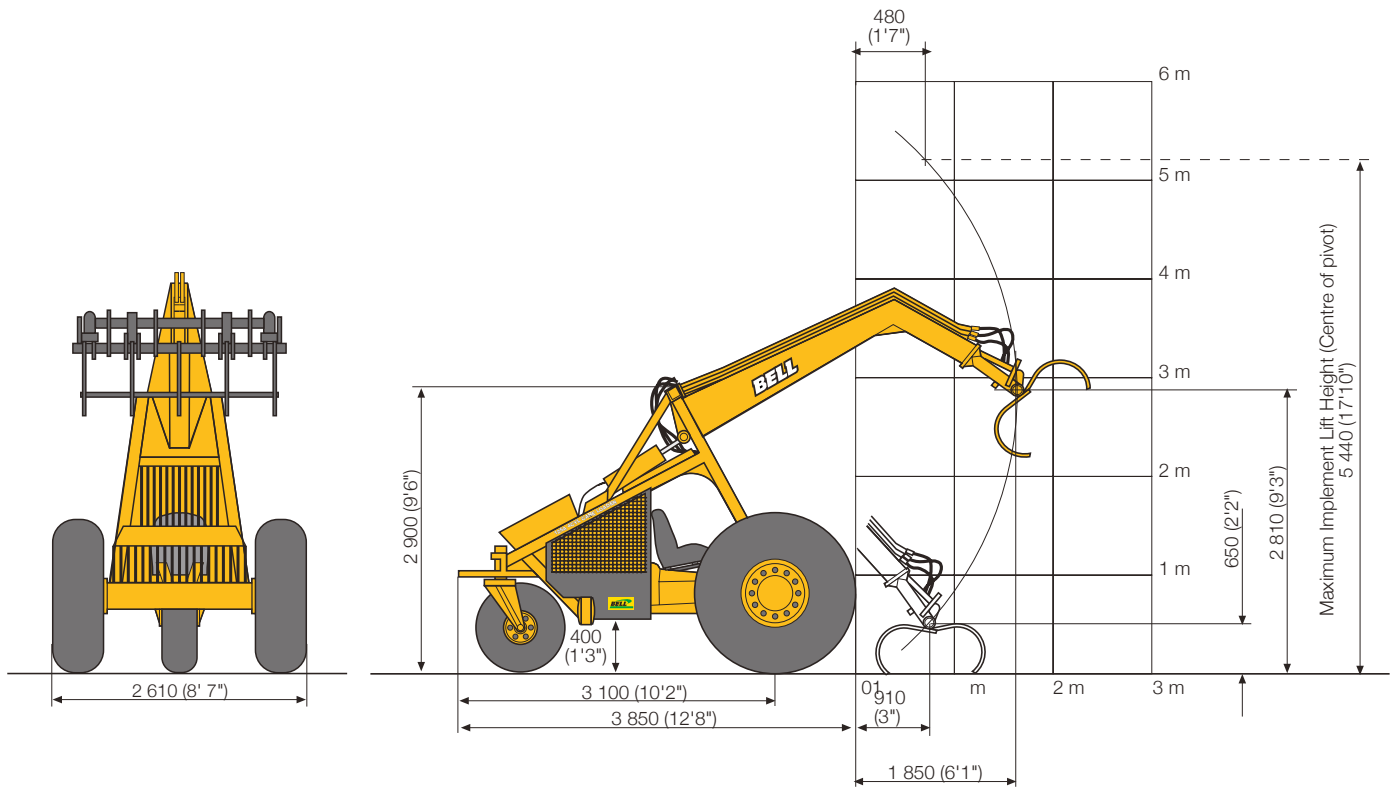
DESIGNED for field loading operations

Where agility and a light
foot print are **REQUIREMENTS**

Specifications - I25A Cane Loader (4 cylinder)

ENGINE Model Deutz F4L912 Configuration 4 cylinder, in-line, air cooled with integrated blower fan Governed Power 46 kW Max Torque 230 Nm @ 1500 rpm Governed Full Power Engine Speed 2 000 rpm Aspiration Naturally aspirated Displacement 3 770 cc Fuel Filtration Two stage. Spin-on water separator primary, replaceable spin-on secondary	DRIVE MOTORS Type Axial piston, closed loop TRANSMISSION CHARGE CIRCUIT Type Gear, Open centre WHEEL DRIVE SYSTEM Drive Motor Series #27	HYDRAULIC TANK Type Integral with tubular frame Oil Type Rando HDZ 68 hydraulic fluid Capacity 140 l (150 l for system) Breather Remote to filler cap, 3 Micron, 0,75 bar pressurised Cleaning Cleaning via bolt on hydraulic filter housings	CABIN Type Integral with steel frame. No doors. Guarding HD windscreen guard. Rear engine bay doors Ventilation Open Cabin
EXHAUST Type Rubber frame mounted stainless steel vertical silencer with short stack pipe outlet. Cooling fin hot air outlet Open sided gridded engine covers	DRIVE WHEELS Drive Tyre Type All Traction Field & Road - 8 ply with inner tube Drive Tyre Size 18.4 x 30 Drive Wheel Rim 15 x 30, 1 piece Drive Wheel Inflation Pressure 1,5 bar Unladen Ground Pressure Rear 0,41 bar	IMPLEMENT HYD SYSTEM Boom Hydraulic Function Pump Type Gear, open centre, Transmission pump thru-drive Grapple/Rotator/Tele Hyd. functions Pump Type Gear, open centre, engine geartrain drive	SAFETY/ERGONOMICS Seat Plate Lockable over-centre lock-down latches x2 to prevent accidental seat plate tip-up Seat Low profile padded seat with lap strap seat belt Rearview Mirrors Frame mounted rear view mirrors with HD steel housings
AIR CLEANER Type Dual (primary & safety) paper element cyclonic canister type with restriction visual indicator. Pre Cleaner Type Cyclonic dust bowl. Daily emptying requirement.	TAIL WHEEL Tail Wheel Tyre Type High Flotation Implement, 10 Ply with inner tube Tail Wheel Tyre Size 400 x 15.5 Tail Wheel Rim 13 x 15.5, 1 piece Tail Wheel Inflation Pressure 1,0 bar Unladen Ground Pressure Rear 0,70 bar	FUEL TANK Type Remote to frame, rear mounted Capacity 76 l	WARNING/CUTOFF SYSTEMS Alternator, no charge light "D" terminal switch Blower Fan Belt-Breakage warning Mechanical auto cut-off Engine Oil Pressure Light Pressure sensor switch-on point: 0,25+ .1 bar
FUEL INLET SYSTEM Water Separator Primary Filter- spin-on Engine mounted, 5 microns Secondary Filter- spin-on Engine mounted, 5 microns	BRAKES Service Brake Type Closed loop hydrostatic wheel retardation. Park Brake Type Spring applied, hydraulic release wet multi disc	ELECTRICAL SYSTEM Voltage 12 V Starter motor rating 2,7 kW Alternator rating 14V/55A	OPERATING MASSES Unladen Front 3 070 kg Unladen Rear 1 250 kg Unladen Total 4 320 kg Shortest Wheelbase 2 458 kg Load distance ahead of front axle 2 600 mm Outstretched Tipping load 1 182 kg SWL - Payload 750 kg
ENGINE/TRANS. COUPLING Type Bell nylon gear coupling	ATTACHMENT Type Bell Series 36 Cane Capacity 0,36 m ²	Battery Rating 100 Ah Fuse box Inside cabin- instrumentation box, on firewall and on battery positive terminal	Overload Protection Main line circuit breaker 300A at battery terminal, 60A on Firewall
HYDROSTATIC TRANSMISSION Type Variable displacement closed loop manual control axial piston tandem pump, Closed Loop motor circuit with remote charge pump, filtered charge pressure with non-filtered direct-return to tank.	BOOM/MAST Type Welded yoke crankboom	Battery Isolator Switch Single pole type, accessible alongside seat	
DRIVE PUMPS Type Axial piston, closed loop, manual control swash plate Control Direct control, foot linkage	HYDRAULIC COOLER Type Frame/Tank HYD./ENG COOLER SYSTEM Type Heat radiation to ambient via high surface area of frame structure	Ignition Solenoid 130A	
		STEERING SYSTEM Type Front wheel hydraulic skid steer via foot operated treadle control system.	

Dimensions



LOWEST COST per ton solutions

LOW fuel consumption

LOW maintenance

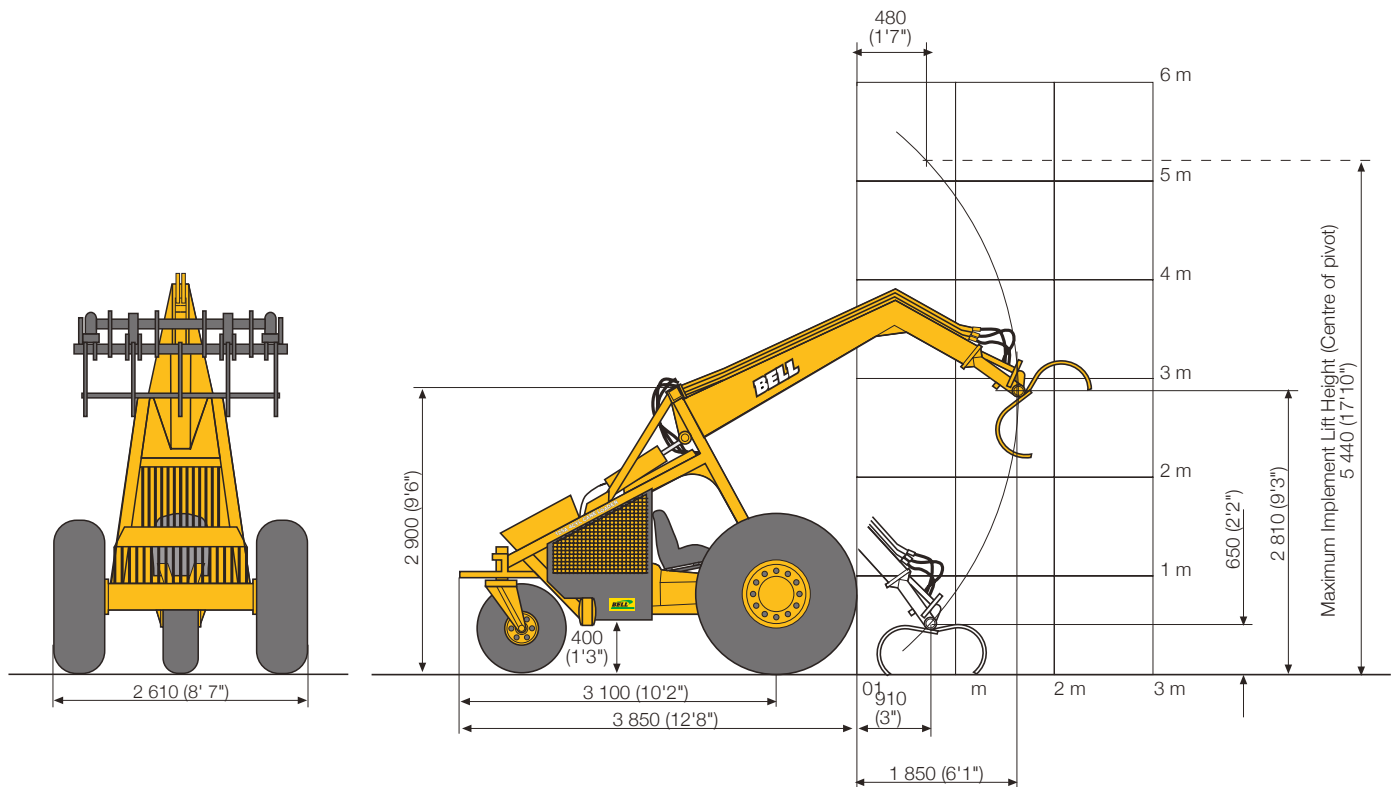
DESIGNED for field loading operations

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Specifications (Regulated) - I25A Cane Loader (4 cylinder)

ENGINE Model Deutz F4L912 Configuration 4 cylinder, in-line, air cooled with integrated blower fan Governed Power 46 kW Max Torque 230 Nm @ 1500 rpm Governed Full Power Engine Speed 2 000 rpm Aspiration Naturally aspirated Displacement 3 770 cc Fuel Filtration Two stage. Spin-on water separator primary, replaceable spin-on secondary	DRIVE MOTORS Type Axial piston, closed loop TRANSMISSION CHARGE CIRCUIT Type Gear, Open centre WHEEL DRIVE SYSTEM Drive Motor Series #27 DRIVE WHEELS Drive Tyre Type All Traction Field & Road - 8 ply with inner tube Drive Tyre Size 18.4 x 30 Drive Wheel Rim 15 x 30, 1 piece Drive Wheel Inflation Pressure 1,5 bar Unladen Ground Pressure Rear 0,41 bar TAIL WHEEL Tail Wheel Tyre Type High Flotation Implement, 10 Ply with inner tube Tail Wheel Tyre Size 400 x 15.5 Tail Wheel Rim 13 x 15.5, 1 piece Tail Wheel Inflation Pressure 1,0 bar Unladen Ground Pressure Rear 0,88 bar BRAKES Service Brake Type Closed loop hydrostatic wheel retardation. Park Brake Type Spring applied, hydraulic release wet multi disc ATTACHMENT Type Bell Series 36 Cane Capacity 0,36 m² BOOM/MAST Type Welded yoke crankboom HYDRAULIC COOLER Type Frame/Tank HYD./ENG COOLER SYSTEM Type Heat radiation to ambient via high surface area of frame structure	HYDRAULIC TANK Type Integral with tubular frame Oil Type Rando HDZ 68 hydraulic fluid Capacity 140 l (150 l for system) Breather Remote to filler cap, 3 Micron, 0,75 bar pressurised Cleaning Cleaning via bolt on hydraulic filter housings IMPLEMENT HYD SYSTEM Boom Hydraulic Function Pump Type Gear, open centre, Transmission pump thru-drive Grapple/Rotator/Tele Hyd. functions Pump Type Gear, open centre, engine geartrain drive FUEL TANK Type Remote to frame, rear mounted Capacity 76 l ELECTRICAL SYSTEM Voltage 12 V Starter motor rating 2,7 kW Alternator rating 14V/55A Battery Rating 100 Ah Fuse box Inside cabin- instrumentation box, on firewall and on battery positive terminal Overload Protection Main line circuit breaker 300A at battery terminal, 60A on Firewall Battery Isolator Switch Single pole type, accessible alongside seat Ignition Solenoid 130A Lights Relay switching, 30 Amp circuit breaker STEERING SYSTEM Type Front wheel hydraulic skid steer via foot operated treadle control system.	CABIN Type Integral with steel frame. No doors. Guarding HD windscreen guard. Rear engine bay doors Ventilation Open Cabin SAFETY/ERGONOMICS Lockable over-centre lock-down latches x2 to prevent accidental seat plate tip-up; Low profile padded seat with lap strap seat belt; 3 kg Fire extinguisher holder, sealed and insulated firewall, Frame mounted rear view mirrors with HD steel housings REGULATED SPECIFICATIONS Options • Reverse Alarm • Mirrors and Guards • Inclinator • Exhaust guard • Dual counter weights • Groundlevel greasing for all points • Lockable engine bay • Hose burst protection on boom cylinder supply SWL 500 kg Noise Level 93 dB @ operator seat WARNING/CUTOFF SYSTEMS Alternator, no charge light “D” terminal switch Blower Fan Belt-Breakage warning Mechanical auto cut-off Engine Oil Pressure Light Pressure sensor switch-on point: 0,25+ .1 bar OPERATING MASSES Unladen Front 3 070 kg Unladen Rear 1 564 kg Unladen Total 4 634 kg Shortest Wheelbase 2 458 kg Load distance ahead of front axle 2 600 mm Outstretched Tipping load 1 479 kg SWL - Payload 750 kg
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Dimensions



LOWEST COST per ton solutions

LOW fuel consumption

LOW maintenance

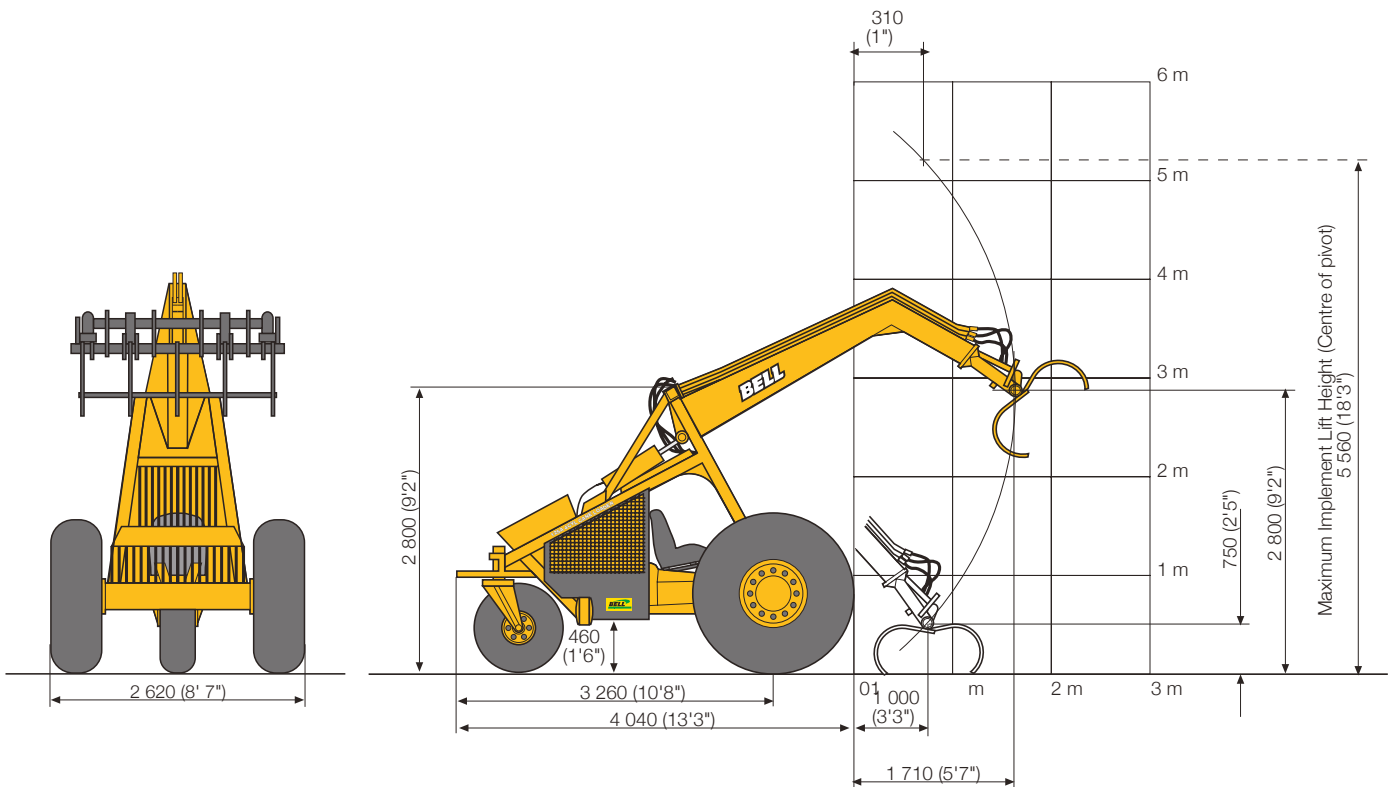
DESIGNED for field loading operations

Where agility and a light
foot print are **REQUIREMENTS**

Specifications - 220A Cane Loader

ENGINE Model Deutz F4L912 Configuration 4 cylinder, in-line, air cooled with integrated blower fan Governed Power 46 kW Max Torque 230 Nm @ 1500 rpm Governed Full Power Engine Speed 2 150 rpm Aspiration Naturally aspirated Displacement 3 770 cc Fuel Filtration Two stage. Spin-on water separator primary, replaceable spin-on secondary	DRIVE MOTORS Type Axial piston, closed loop TRANSMISSION CHARGE CIRCUIT Type Gear, Open centre WHEEL DRIVE SYSTEM Drive Motor Series #27	HYDRAULIC TANK Type Integral with tubular frame Oil Type Rando HDZ 68 hydraulic fluid Capacity 140 l (150 l for system) Breather Remote to filler cap, 3 Micron, 0,75 bar pressurised Cleaning Cleaning via bolt on hydraulic filter housings	CABIN Type Integral with steel frame. No doors. Guarding HD windscreen guard. Rear engine bay doors Ventilation Open Cabin
EXHAUST Type Rubber frame mounted stainless steel vertical silencer with short stack pipe outlet. Cooling fin hot air outlet Open sided gridded engine covers	DRIVE WHEELS Drive Tyre Type All Traction Field & Road - 8 ply with inner tube Drive Tyre Size 18.4 x 30 Drive Wheel Rim 15 x 30, 1 piece Drive Wheel Inflation Pressure 1,5 bar Unladen Ground Pressure Rear 0,43 bar	IMPLEMENT HYD SYSTEM Boom Hydraulic Function Pump Type Gear, open centre, Transmission pump thru-drive Grapple/Rotator/Tele Hyd. functions Pump Type Gear, open centre, engine geartrain drive	SAFETY/ERGONOMICS Seat Plate Lockable over-centre lock-down latches x2 to prevent accidental seat plate tip-up Seat Low profile padded seat with lap strap seat belt
AIR CLEANER Type Dual (primary & safety) paper element cyclonic canister type with restriction visual indicator. Pre Cleaner Type Cyclonic dust bowl. Daily emptying requirement.	TAIL WHEEL Tail Wheel Tyre Type High Flotation Implement, 10 Ply with inner tube Tail Wheel Tyre Size 400 x 15.5 Tail Wheel Rim 13 x 15.5, 1 piece Tail Wheel Inflation Pressure 1,0 bar Unladen Ground Pressure Rear 0,95 bar	FUEL TANK Type Remote to frame, rear mounted Capacity 76 l	WARNING/CUTOFF SYSTEMS Alternator, no charge light "D" terminal switch Blower Fan Belt-Breakage warning Mechanical auto cut-off Engine Oil Pressure Light Pressure sensor switch-on point: 0,25+ .1 bar
FUEL INLET SYSTEM Water Separator Primary Filter- spin-on Engine mounted, 5 microns Secondary Filter- spin-on Engine mounted, 5 microns	BRAKES Service Brake Type Closed loop hydrostatic wheel retardation. Park Brake Type Spring applied, hydraulic release wet multi disc	ELECTRICAL SYSTEM Voltage 12 V Starter motor rating 2,7 kW Alternator rating 14V/55A	OPERATING MASSES Unladen Front 3 230 kg Unladen Rear 1 700 kg Unladen Total 4 930 kg Shortest Wheelbase 2 458 kg Load distance ahead of front axle 2 500 mm Outstretched Tipping load 1 671 kg SWL - Payload 950 kg
ENGINE/TRANS. COUPLING Type Bell nylon gear coupling	ATTACHMENT Type Bell Series 42 Cane	Battery Rating 100 Ah Fuse box Inside cabin- instrumentation box Overload Protection Main line circuit breaker 300A at battery terminal, 60A on Firewall	
HYDROSTATIC TRANSMISSION Type Variable displacement closed loop manual control axial piston tandem pump, Closed Loop motor circuit with remote charge pump, filtered charge pressure with non-filtered direct-return to tank.	BOOM/MAST Type Bolted yoke crankboom	Battery Isolator Switch Single pole type, accessible alongside seat Ignition Solenoid 130A Lights Relay switching, 30 Amp circuit breaker	
DRIVE PUMPS Type Axial piston, closed loop, manual control swash plate Control Direct control, foot linkage	HYDRAULIC COOLER Type Frame HYD./ENG COOLER SYSTEM Type Heat radiation to ambient via high surface area of frame structure	STEERING SYSTEM Type Front wheel hydraulic skid steer via foot operated treadle control system.	

Dimensions



LOWEST COST per ton solutions

HIGH power

LOW maintenance

DESIGNED for zone loading, where **HIGH** power
and capacity make for **HIGH** efficiency



Please note that all information supplied in this manual is intended to assist the customer in understanding the general applications of the Bell Equipment sugarcane handling range of machines.

Performance information is intended for estimating purposes only. Due to the many variables unique to individual operations such as weather, terrain, ground conditions, operator productivity, etc neither Bell Equipment Company nor its dealers warrant that the machines described will perform as estimated.

Due to Bell Equipment's policy of constant product improvement, specifications are subject to change without notice.

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**Strong Reliable Machines
Strong Reliable Support**

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