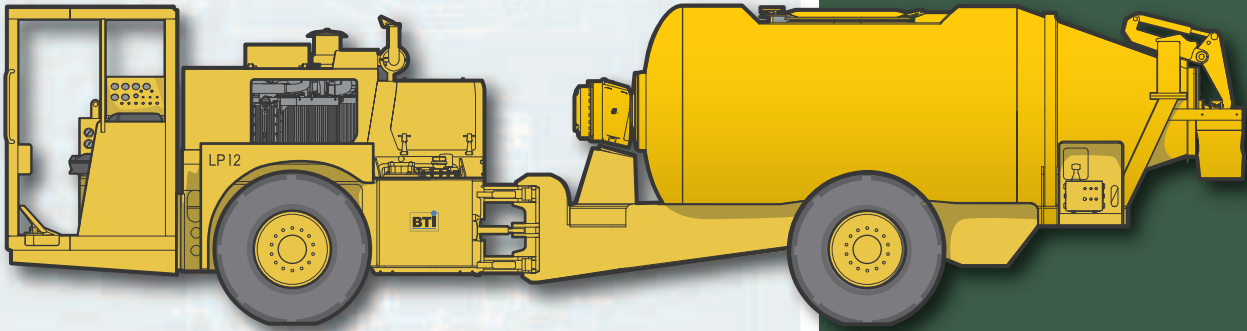


SCT SERIES - LP12

Shotcrete Transfer Vehicle



AT A GLANCE

Weights & Dimensions:

Operating Weight 43,500 lbs (19,773 kg)	Overall Trimming Length 29'-2" (8.88 m)	Overall Width 6'-6" (1.99 m)
Trimming Height 7'-6" (2.28 m)	Carrier Articulation +/- 45°	Inside Turning Radius 12'-4" (3.75 m)
Outside Turning Radius 21'-0" (6.39 m)		

Note: weights & dimensions are nominal and vary depending on final engine, operator's enclosure & option configuration.

Engine Configurations:

● Standard ▲ Optional

- Deutz BF4M1013C ▲ Caterpillar C4.4 ACERT
- 122 hp (91 kW) @ 2300 rpm 127 hp (95 kW) @ 2200 rpm
- MSHA/Tier II Tier III

Remixer Drum – 5.2 yd³ (4.0 m³) **Hydraulically Operated Discharge Door**
Discharge Rate: 3.92 yd³ (3.0 m³) per minute **Rotations/minute:** 0 – 14 (both directions)

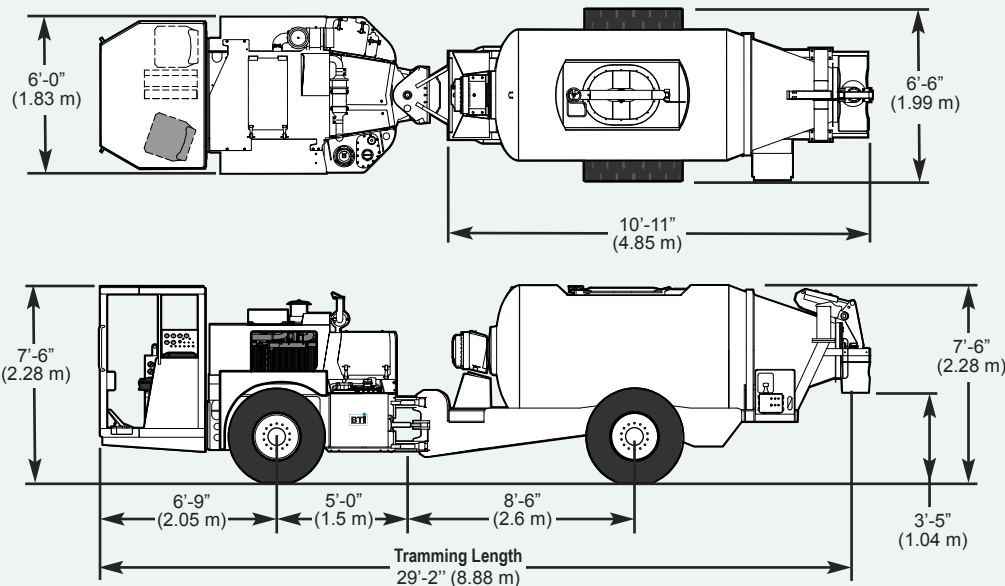
FEATURES & BENEFITS

High speed / high mobility underground shotcrete transfer vehicle.

+/-45° vehicle articulation for tight turning radius.

Close coupled engine/transverter provides a short turning radius and excellent weight distribution.

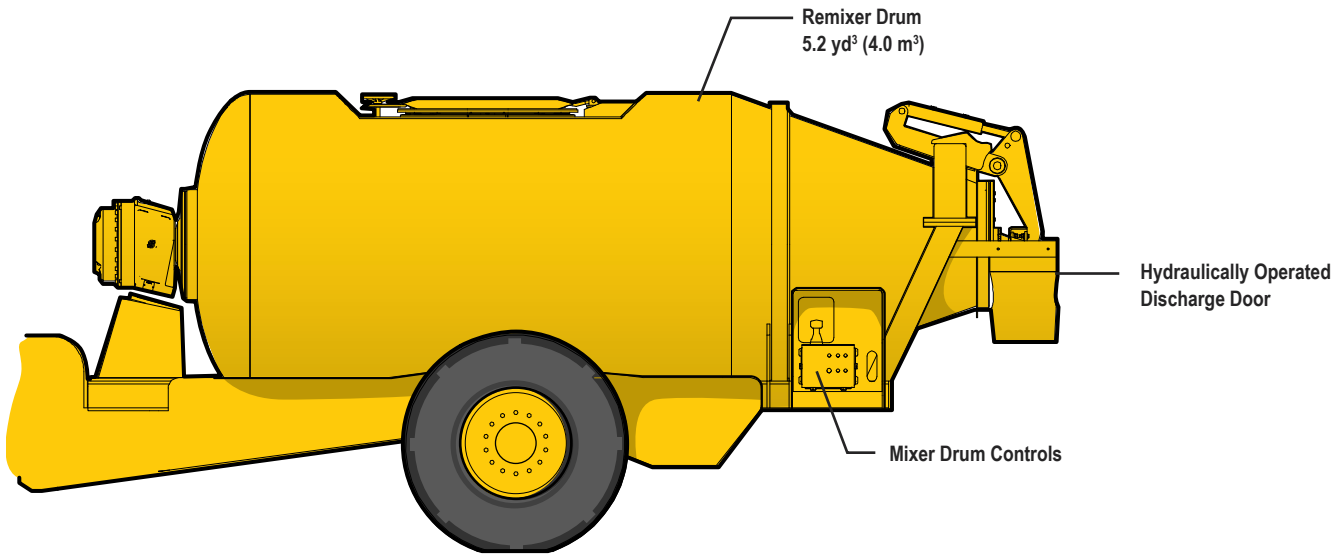
Operator's compartment provides comfort and visibility for operator and passenger.



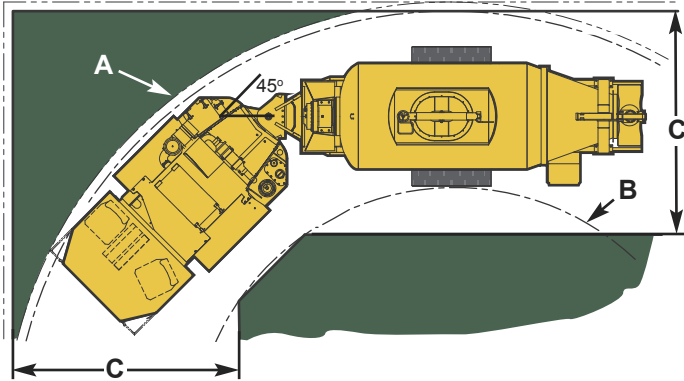
OPTIONS

- Protective operator structure
- Seating configurations
- Air intake system
- Exhaust system
- Hydraulic filling system
- Tires
- Fire suppression system
- Wheel chocks
- Stabilizer jacks
- Catwalk
- Pressure washer
- Discharge chute

SCT SERIES (LP12) SHOTCRETE CARRIER COMPONENTS



DRIVING SPECIFICATIONS



Turning Radius

Turning radius: +/- 45° articulation

		Fully Enclosed Cab	Open Air Canopy
A	Outside Turning Radius	21'-0" (6.39 m)	20'-6" (6.25 m)
B	Inside Turning Radius	12'-4" (3.75 m)	
C	Minimum Mine Tunnel Width	11'-1" (3.36 m)	10'-9" (3.29 m)



Recommended Drift Height

BTI recommends a minimum drift height with cab: 9'-10" (3 m)

LP12 CARRIER - COMMON FEATURES

- Standard - common to all engine combinations
- ▲ Optional

Notes:

● CHASSIS

LP12 articulated 4-wheel drive, all welded construction

● ENGINE END OSCILLATION

+/- 8° c/w heavy framed external walking beam

● CARRIER ARTICULATION

+/- 45° by two opposing 4" (100 mm) bore x 2" (50 mm) rod steering cylinders complete with stick steering control

● HYDRAULIC CIRCUIT

30 gallon (114 liter) hydraulic tank
Hydraulic piston pump with load sense control
In-line hydraulic pressure filter / In-line return filter

● ELECTRICAL CIRCUIT

24 VDC start/run 85 amp alternator
Murphy Power Vu instrument cluster for electronic engines

FUEL SYSTEM

- Fuel Tank - 30 gallon (114 liter)

SCT (LP12) SHOTCRETE TRANSFER VEHICLE CONFIGURATIONS

Choose one per group

- Standard
- ▲ Optional

Notes:

POWERTRAIN GROUPS

- Deutz BF4M1013C
- ▲ Caterpillar C4.4 ACERT

OPERATOR SEAT

- Suspension Seat, fixed
- ▲ Air Ride Seat, fixed

PASSENGER SEAT

- No passenger seat
- ▲ Suspension Seat, fixed
- ▲ Air Ride Seat, fixed

PROTECTIVE STRUCTURE

- Air canopy – uncertified, open
- ▲ Open air canopy – ROPS/FOPS certified
- ▲ Enclosed Cab – ROPS/FOPS certified including engine belt drive HVAC heat/air conditioner for engine drive applications

AIR INTAKE SYSTEM

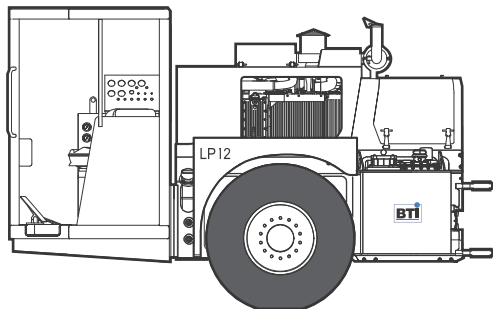
- Air Intake Filter
- ▲ Air Intake Precleaner

EXHAUST SYSTEM

- Catalytic exhaust
- ▲ Exhaust Manifold and Turbo Coating
- ▲ Exhaust System Wrap

POWERTRAIN GROUP OPTIONS

- Standard ▲ Optional



- **Engine:** Deutz BF4M1013C, four cylinder, turbocharged, intercooled diesel, MSHA Tier II, 122 hp (91 kW) @ 2300 rpm c/w fuel filter and water separator

Torque Converter: Clark T20000 series

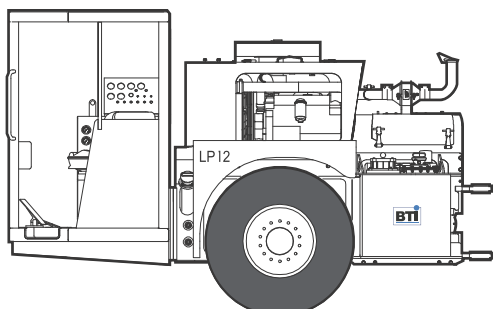
Transmission: Clark 20,000 series, long drop, remote mounted, electric shift
Three forward and three reverse speeds

Vehicle speeds with 12:00 x 20 tires @ 2200 rpm with standard axle ratio:
1st gear: 2.4 mph (3.9 kph) - 2nd gear: 6.2 mph (10.9 kph) - 3rd gear: 11.4 mph (18.3 kph)

Engine end axle: New Holland D65X no spin differential wet disk SAHR emergency brakes, wet disk HASR service brakes, complete with external walking beam, +/- 10 degrees oscillation

Deck end axle: New Holland D65X no spin differential wet disk SAHR emergency brakes, wet disk HASR service brakes

Drivelines: Mechanics 6C



- ▲ **Engine:** Caterpillar C4.4 ACERT electronic four cylinder, turbocharged, intercooled Diesel, Tier III, 127 hp (95 kW) @ 2200 rpm c/w fuel filter and water separator.

Torque Converter: Clark T20000 series

Transmission: Clark 20,000 series, long drop, remote mounted, electric shift
Three forward and three reverse speeds

Vehicle speeds with 12:00 x 20 tires @ 2200 rpm with standard axle ratio:
1st gear: 2.4 mph (3.9 kph) - 2nd gear: 6.2 mph (10.9 kph) - 3rd gear: 11.4 mph (18.3 kph)

Engine end axle: New Holland D65X no spin differential wet disk SAHR emergency brakes, wet disk HASR service brakes, complete with external walking beam, +/- 10 degrees oscillation

Deck end axle: New Holland D65X no spin differential wet disk SAHR emergency brakes, wet disk HASR service brakes

Drivelines: Mechanics 6C

AIR INTAKE SYSTEM OPTIONS

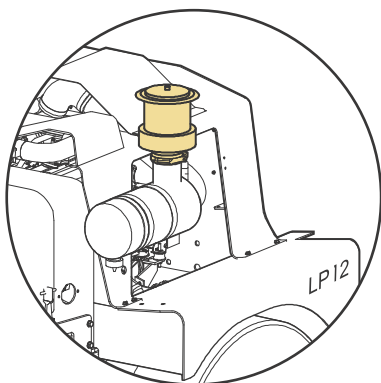
● Air Intake Filter

A dry element filter with safety element and replacement indicator.

▲ Air Intake Precleaner

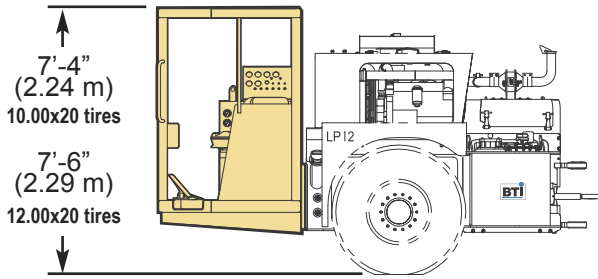
A dry element filter with safety element and replacement indicator, complete with a cyclone Pre-cleaner.

A pre-cleaner extends the life of your air filter by removing dirt and contaminants before they reach the filter and ejecting them automatically via the exhaust.



PROTECTIVE STRUCTURES OPTIONS

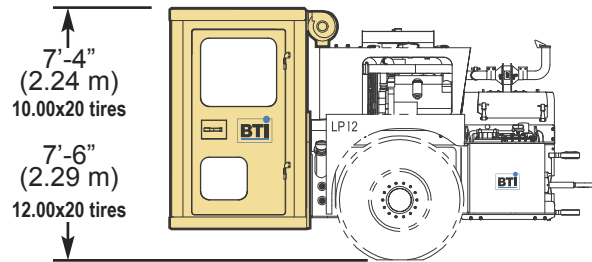
- Standard
- ▲ Optional



● Open Air Canopy – Uncertified

▲ ROPS/FOPS Canopy

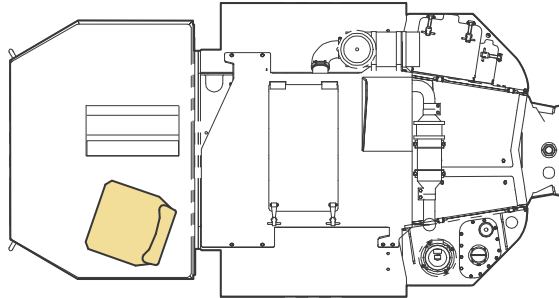
Open air canopy ROPS/FOPS certified



▲ ROPS/FOPS Cab

Full cab; covers operator, controls and passenger. Tested and certified ROPS/FOPS cab. Includes heavy-duty safety glass, wiper/washers, HVAC heat / air conditioning system, air pressurization system.

OPERATOR SEAT OPTIONS

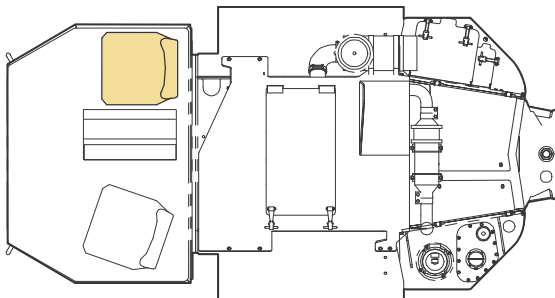


Operator Seat Options

- Suspension Seat, fixed
- ▲ Air Ride Seat, fixed

Mine duty operator seat options available in fixed suspension and fixed air ride variations.

PASSENGER SEAT OPTIONS



● No Passenger Seat

Passenger Seat Options

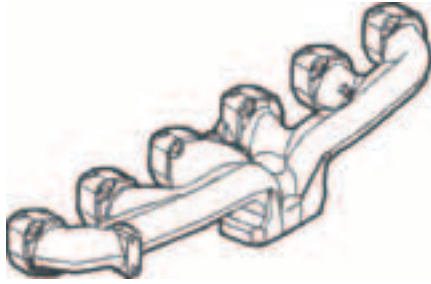
- ▲ Suspension Seat, fixed (facing front)
- ▲ Air Ride Seat, fixed (facing front)

Mine duty passenger seat option available in fixed suspension and fixed air ride variations.

EXHAUST SYSTEM OPTIONS

● Catalytic Exhaust

A catalytic exhaust, purifier/silencer. No exhaust blanket.

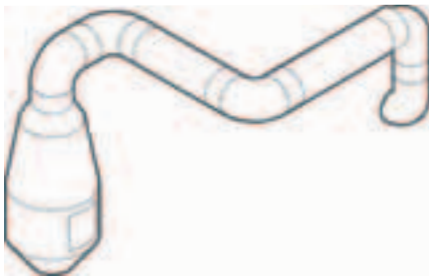


▲ Exhaust Manifold and Turbo Coating

Prevents fluids from igniting on hot engine and exhaust parts. High temperature performance: ideal for engine compartment components requiring long-term exposure to high temperatures.

Non-flammable. Protects personnel from burns.

Lowers ambient temperature; cooler engine compartment, less heat stress on operators and maintenance personnel.



▲ Exhaust System Wrap

Prevents fluids from igniting on exhaust parts. High temperature performance.

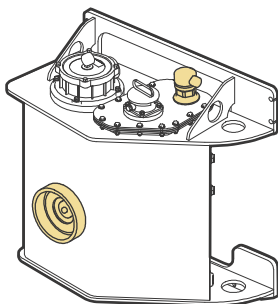
Non-flammable. Protects personnel from burns.

Lowers ambient temperature; cooler engine compartment, less heat stress on operators and maintenance personnel.

HYDRAULIC TANK OPTIONS

● Hydraulic Tank

30 gallon (114 liter) hydraulic tank, top fill, 4 psi pressurized cap.



▲ Hydraulic Tank with Fast Fill

30 gallon (114 liter) hydraulic tank complete with fast filling system. Designed for on-site fast fluid transfer.

TIRE OPTIONS

● Standard ▲ Optional

● Pneumatic Tires

12:00 x 20; 20 ply mine lug pneumatic tires

▲ Solid Tires

12:00 x 20 solid tires

▲ Foam Filled Tires

12:00 x 20 foam filled tires

▲ Solid Tires

10:00 x 20 solid tires

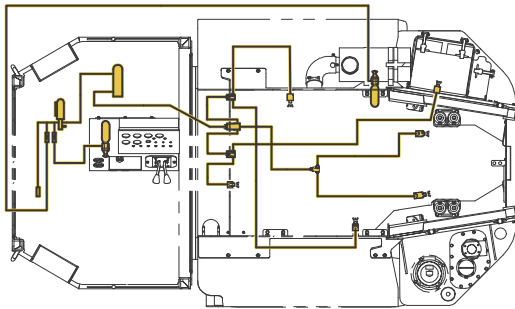
FIRE SUPPRESSION SYSTEM OPTIONS

● No Fire Suppression System



▲ Fire Extinguisher

1 x 20 lb (9 kg) fire extinguisher.



▲ Ansul Fire Suppression

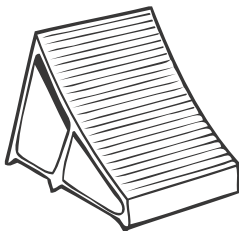
Ansul fire suppression system, 6 nozzle, complete with 2 actuators. Complete with 20 lb (9 kg) fire extinguisher.

▲ Ansul Fire Suppression with Detection

Ansul fire suppression system, 6 nozzle, complete with 2 actuators. Includes a check fire detection and activation system. Complete with 20 lb (9 kg) fire extinguisher.

WHEEL CHOCK OPTIONS

● No Wheel Chocks



▲ Wheel Chocks - aluminum

complete with holder

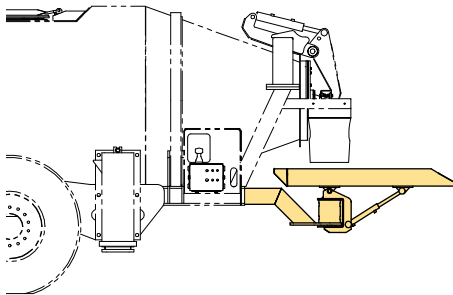
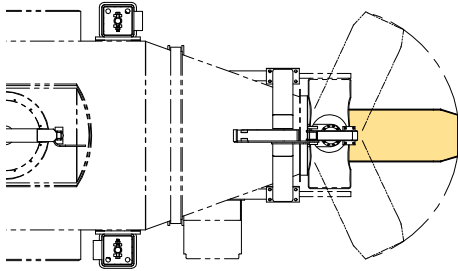
DISCHARGE CHUTE OPTIONS

- Standard
- ▲ Optional

● No Discharge Chute

▲ Discharge Chute Option

c/w hydraulic lift and swing (+/- 90 degree) functions

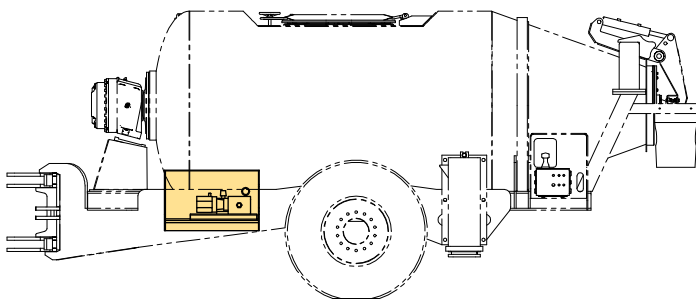
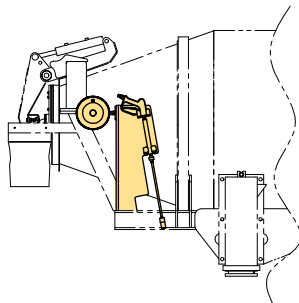


PRESSURE WASHER OPTIONS

● No Pressure Washer

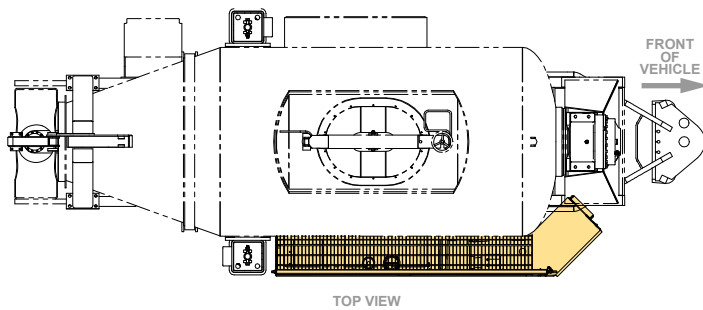
▲ Pressure Washer Option

On-board mounted hydraulic-driven pressure washer c/w 50' (15.2 m) hose and spray wand and 3/4" NPT hook-up for mine water (no tank)

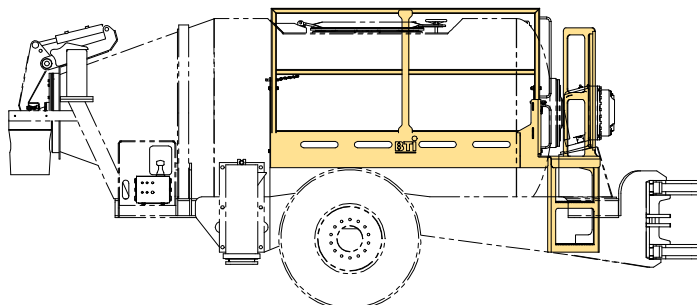


RH CATWALK PLATFORM

- Standard
- ▲ Optional



TOP VIEW



SIDE VIEW

● No Catwalk

Catwalk Options

- ▲ Right-hand Catwalk c/w 3'-6" (1.07 m) tall fixed safety rail and access ladder
- ▲ Right-hand Catwalk c/w 3'-6" (1.07 m) tall folding safety rail and access ladder

The catwalk/platform structure allows the operator to quickly and safely access the drum hatches for filling and inspection.

The catwalk is complete with 3'-6" (1.07 m) tall safety rail and access ladder. It includes either a fixed or removable handrail/ladder at mixer discharge end.

LH CATWALK PLATFORM

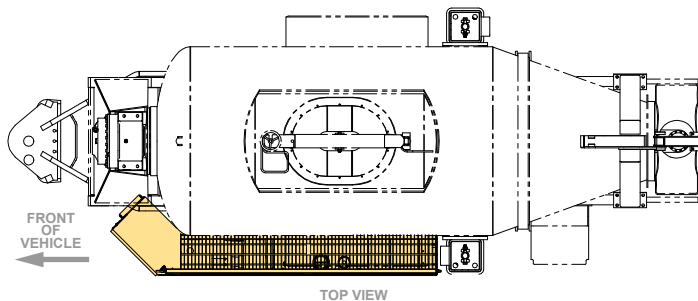
● No Catwalk

Catwalk Options

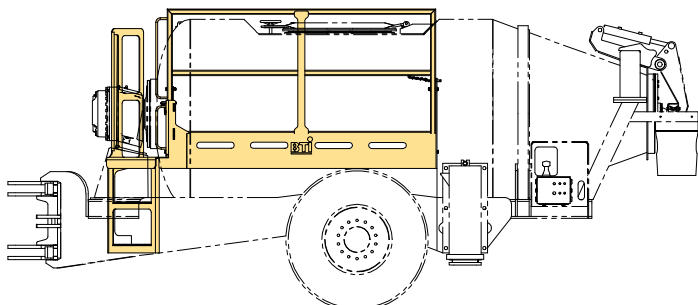
- ▲ Left-hand Catwalk c/w 3'-6" (1.07 m) tall safety rail and access ladder
- ▲ Left-hand Catwalk c/w 3'-6" (1.07 m) tall folding safety rail and access ladder

The catwalk/platform structure allows the operator to quickly and safely access the drum hatches for filling and inspection.

The catwalk is complete with 3'-6" (1.07 m) tall safety rail and access ladder. It includes either a fixed or removable handrail/ladder at mixer discharge end.



TOP VIEW

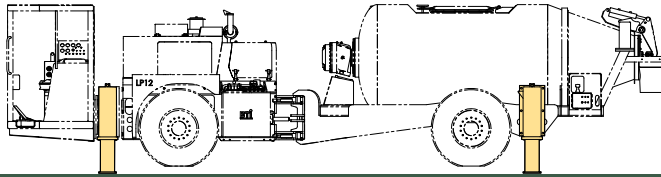


SIDE VIEW

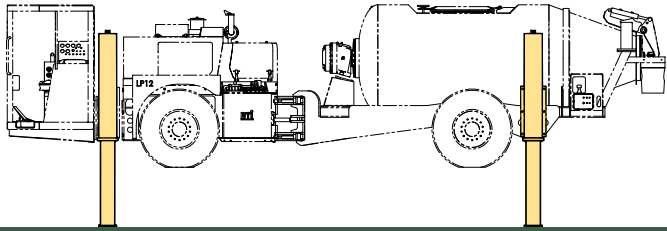
STABILIZER OPTIONS

- Standard
- ▲ Optional

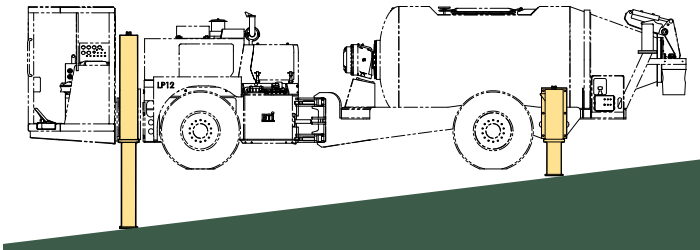
Engine-end/Mixer-end Stabilizers: 2 x 17" (432 mm)



Engine-end/Mixer-end Stabilizers: 2 x 46" (1.17 m)



Engine-end Stabilizers: 2 x 46" (1.17 m)
Mixer-end Stabilizers: 2 x 17" (432 mm)



● No Stabilizers

No stabilizers are needed if the mining application does not require stabilizers to lift the vehicle

Stabilizers

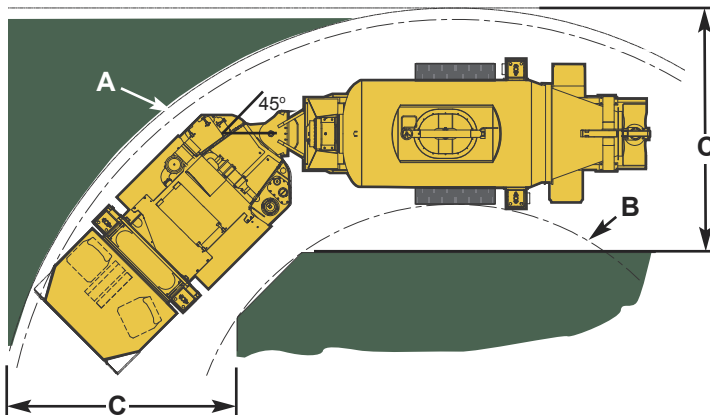
- ▲ Engine-end Stabilizers: 2 x 17" (432 mm)
- ▲ Engine-end Stabilizers: 2 x 46" (1.17 m)
- ▲ Mixer-end Stabilizers: 2 x 17" (432 mm)
- ▲ Mixer-end Stabilizers: 2 x 46" (1.17 m)

Engine-end stabilizers enable you to keep the vehicle horizontal for better discharge of concrete when pointing down a ramp or incline.

Mixer-end stabilizers allow you to raise the mixer drum discharge higher, providing better clearance and angle when transferring concrete to the shotcrete sprayer. They permit levelling the vehicle on downgrades and make it convenient to raise the truck for changing flat tires.

Turning Radius with Stabilizers

Turning radius: +/- 45° articulation



		Fully Enclosed Cab	Open Air Canopy
A	Outside Turning Radius	21'-5" (6.52 m)	20'-10" (6.36 m)
B	Inside Turning Radius	12'-4" (3.75 m)	
C	Minimum Mine Tunnel Width	11'-4" (3.45 m)	10'-10" (3.29 m)



10465-ENG-1009

All dimensions and specifications are subject to change without notice.

