

953D SH 963D SH 973D SH

Shiphold/Port Handling



Supplement

Note: For standard specifications and features, refer to the standard Caterpillar® specalog for this machine.

	953D SH		963D SH		973D SH	
Engine						
Engine Model	Cat® C6.6 ACERT™		Cat® C6.6 ACERT™		Cat® C9 ACERT™	
Net Flywheel Power	110 kW	148 hp	141 kW	189 hp	196 kW	263 hp
Buckets						
Capacity – GP	1.85 m ³	2.42 yd ³	2.45 m ³	3.2 yd ³	3.21 m ³	4.2 yd ³
Capacity – MP	1.60 m ³	2.09 yd ³	1.90 m ³	2.48 yd ³	3.05 m ³	3.92 yd ³
Trim Blade						
Capacity – All Material	2.3 m ³	3 yd ³	3.24 m ³	4.23 yd ³	3.57 m ³	4.67 yd ³
Capacity – Coal			4 m ³	5.25 yd ³		
Weights						
Operating Weight – GP Bucket with Teeth	15 526 kg	34,229 lb	21 426 kg	47,236 lb	28 058 kg	61,857 lb
Operating Weight – Trim Blade all material	15 298 kg	33,726 lb	21 201 kg	46,470 lb	28 161 kg	62,084 lb

Track-Type Loaders Features

Cat® Engine with ACERT™

- Fuel efficient*
- Reliable*
- Durable*
- Low exhaust emissions*
- Compliant with world wide emission regulations*

Hydraulic System

- Powerful and fuel efficient*
- Load sensing*
- Electro hydraulic controls*
- Automatic lift and tilt kick-outs*

Operator Station

- Excellent visibility*
- Quiet, comfortable, ergonomic and spacious cab*
- Seat mounted controls*
- Automatic air-conditioning*
- 90° tiltable cab for easy maintenance*

Tools

- Multiple work tools available*
- Trim blades and buckets*
- Quick coupler*



Time is money. Optimizing the unloading time is what it is all about when it comes to machine selection.

You can load many types of machines inside a shiphold but none would provide the perfect match for the application as the Track-Type Loader can thanks to the combination of tracks giving traction, loader arm for the reach and engine at back for the machine balance.

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Track-Type Loaders

Shiphold/Port Handling

Infinite Variable Speeds (hydrostatic transmission)

- Smooth controls, more operator comfort
- Increased operator productivity

Joysticks for Transmission and Work Tools

- Easy to maneuver
- Intuitive controls minimize training requirements

High Reach Work Tool

- Loader arm allows cleaning of the walls of the hold
- Increases versatility of the machine

Track-Type Undercarriage

- Low ground pressure for better traction in some materials
- Several shoe widths available or can be manufactured at order to meet customer requirements
- Optional center hole shoes reduce track packing and track chain tightening which extends undercarriage life

Lifting Eyes

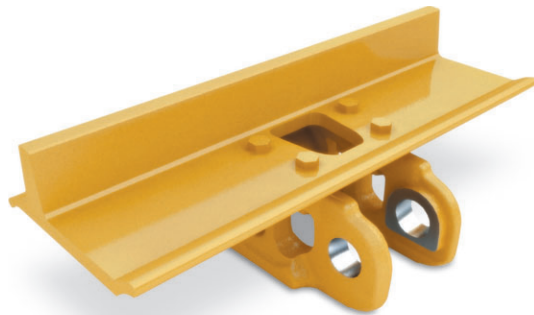
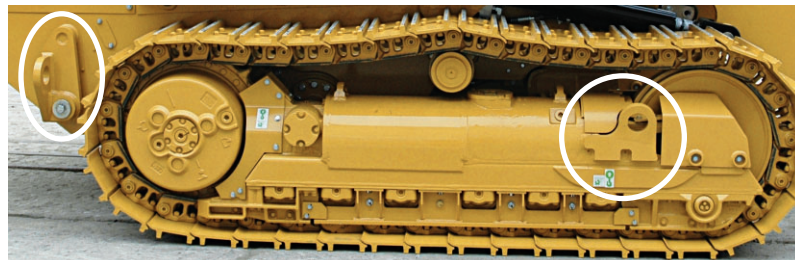
- Front eyes welded on the Track Roller Frame (TRF)
- Rear eyes mounted on the main frame
- Wide spacing for good stability during lifting

Sound

- Sound suppressed cab and air suspended seat reduce operator fatigue and increase concentration
- The sound levels measured per ISO 6396 reach 74 dB(A) for 953D, 76 dB(A) for 963D and 77 dB(A) for 973D

Visibility

- Large windows all around operator and clipped engine enclosure provide excellent view to the environment and the work tool
- Day and night operations are lighted with 8 halogen lights: 4 lights facing frontward, 2 lights facing rearward and 2 facing sideways



Track-Type Loaders

Shiphold/Port Handling



Rear Engine and Cooling System Location

- Improved machine balance
- Engine less exposed to dust, increase engine life
- Limit plugging of radiator core
- Better visibility at front
- Reduce O&O cost

Reversing Fan

- The air flow can be either automatically or manually reversed. Maintains proper heat transfer by blowing material out of the radiator core.
- The hinged radiator grill gives easy access to the cooling system of the machine
- The hinged hydraulic fan makes the cleaning of the radiator easy and faster (not available on 973D)

Heavy Duty Bumper (963D and 973D only)

- Gives outstanding protection for the rear of the machine
- Cooling system is well protected in case of accidental impacts with a wall of the shiphold

Maintenance and Serviceability

- Filters and other systems are accessible from the ground on each side of the machine
- Cab can be tilted 90° with a crane or 30° with a hydraulic jack allowing job site repair
- Makes the maintenance of the machine easier for engine or hydraulic components

Engine Air Precleaner

- Debris is centrifugally removed from the airstream and delivers cleaner air to the engine filter
- Air filter life is extended





Work Tools and Optional Equipment

Designed to meet your needs

Work Tool Options

- Pin-on trim blade for all material
- Pin-on trim blade for coal
- Pin-on general purpose bucket
- Pin-on multi purpose bucket

The 963D can also be equipped with a Fusion™ quick coupler that allows to switch work tools easily.

- Fusion™ trim blade for all material
- Fusion™ GP bucket standard width and wide width (for lighter materials)
- Fusion™ MP bucket
- Fusion™ Forks

Other work tools from other products such as wheel loaders are compatible or can be made compatible with the 963D Fusion quick coupler. Please contact your work tool representative for more information.

Additional Fuel Tank

Additional fuel tank increases the working time into the shiphold. The unloading process is simplified and the ship unloading duration is optimized.

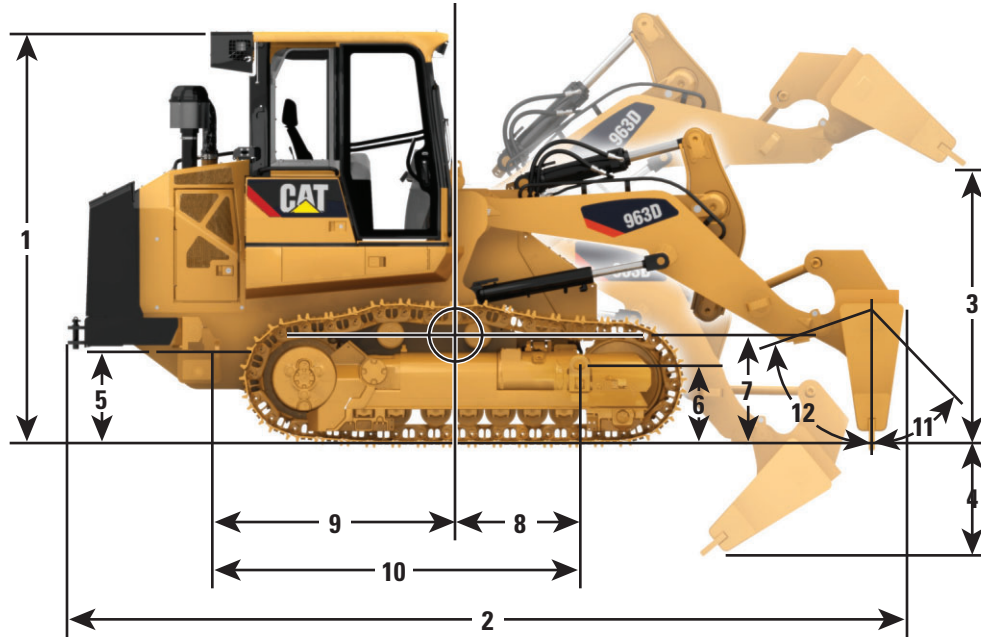
- The 953D can work 25 hours without refill
- The 963D can work 20 hours without refill

For additional information on the Track-Type Loader D series, please refer to the 953D, 963D and 973D specalogs.

Machine Specifications

Dimensions

All dimensions are approximate.



	953D		963D		973D	
1 Overall Height	3099 mm	122.0 in	3335 mm	131.3 in	3510 mm	138.2 in
2 Overall Length	5513 mm	217.0 in	6687 mm	263.3 in	7200 mm	283.5 in
3 Work Tool Height	3495 mm	137.6 in	4359 mm	171.6 in	4420 mm	174.0 in
4 Digging Depth	560 mm	22.0 in	916 mm	36.1 in	977 mm	38.5 in
Overall Width – with 480 mm/19.7 in shoes	2280 mm	89.8 in				
Overall Width – with 550 mm/21.6 in shoes			2400 mm	94.5 in	2710 mm	106.7 in
Blade Width	3148 mm	124.0 in	3150 mm	124.0 in	3469 mm	136.6 in
5 Rear Lifting Eye Height	700 mm	27.6 in	762 mm	30.0 in	1040 mm	40.9 in
6 Front Lifting Eye Height	600 mm	23.6 in	645 mm	25.4 in	885 mm	34.8 in
Center of Gravity Dimensions						
7 Center of Gravity Height	902 mm	35.5 in	863 mm	34.0 in	863 mm	34.0 in
8 Center of Gravity to Front Eye	1027 mm	40.4 in	1034 mm	40.7 in	1207 mm	47.5 in
9 Center of Gravity to Rear Eye	1653 mm	65.1 in	1866 mm	73.5 in	1651 mm	65.0 in
10 Distance from Rear to Front Lifting Eyes	2680 mm	105.5 in	2900 mm	114.2 in	2960 mm	116.5 in
11 Trim Blade Pitch – Forward		+44°		+47°		+43°
12 Trim Blade Pitch – Rearward		-71°		-61°		-58°

Engine

Engine Model		
953D	Cat C6.6 Acert	
963D	Cat C6.6 Acert	
973D	Cat C9 Acert	
Net Power		
953D	110 kW	148 hp
963D	141 kW	189 hp
973D	196 kW	263 hp
Bore		
953D	105 mm	4.13 in
963D	105 mm	4.13 in
973D	112 mm	4.41 in
Stroke		
953D	127 mm	5 in
963D	127 mm	5 in
973D	149 mm	5.86 in
Displacement		
953D	6.6 L	402.76 in ³
963D	6.6 L	402.76 in ³
973D	8.8 L	537 in ³
Regulations		
953D	Rating at 2,000 rpm	
963D	Rating at 2,000 rpm	
973D	Rating at 1,900 rpm	
<ul style="list-style-type: none"> • Meets U.S. EPA Tier 3, EU Stage 3A and Japan MOC • Net power advertised is the power available at the flywheel measured per ISO 9249 or SAE J1349 when the engine is equipped with fan, air cleaner, muffler and alternator • For the 953D and 963D, no derating up to 3000 m (9,842 ft) altitude • For the 973D, no derating up to 1219 m (3,999 ft) altitude 		

Weights

Operating Weight with GP Bucket and Teeth		
953D	15 526 kg	34,229 lb
963D	21 426 kg	47,236 lb
973D	28 058 kg	61,857 lb
Operating Weight with Trim Blade		
953D	15 298 kg	33,726 lb
963D	21 201 kg	46,740 lb
973D	28 161 kg	62,084 lb

Undercarriage

Track Shoe Type		
953D	Double Grouser	
963D	Double Grouser with or without center hole	
973D	Double Grouser with or without center hole	
Track Shoe Width – Standard		
953D	480 mm	18.9 in
963D	550 mm	21.6 in
973D	550 mm	21.6 in
Track Shoe Width – Optional		
953D	380 mm	15 in
963D	480 mm	17.7 in
973D	675 mm	26.6 in
Ground Pressure – Standard Shoe		
953D	65.8 kPa	9.5 psi
963D	75 kPa	10.9 psi
973D	85.5 kPa	12.4 psi
Ground Pressure – Optional Shoe		
953D	84.1 kPa	12.3 psi
963D	91.3 kPa	13.2 psi
973D	69.5 kPa	10.1 psi
Ground Pressure – Standard Shoe with Trim Blade		
953D	67.4 kPa	9.8 psi
963D	74.2 kPa	10.7 psi
973D	85.7 kPa	12.4 psi
Grouser Height – Double Grouser		
953D	35 mm	1.4 in
963D	42 mm	1.65 in
973D	49 mm	1.92 in
<ul style="list-style-type: none"> • Ground pressure is calculated using operating weight of machine with GP bucket, teeth and segments. 		
Drive System		
Type	Drive System Hydrostatic drive with infinite machine speeds to 10.0 km/h (6.2 mph)	
Drive Pump	Two, variable-displacement, slipper-type axial piston pumps	
Track Motor	Two, variable displacement, bent axis motors	
Relief Valve Setting		
953D, 963D	48 000 kPa	6,961.8 psi
973D	45 000 kPa	6,527 psi

Main Service Refills

Fuel Tank		
953D	316 L	83.5 gal
963D	400 L	105.7 gal
973D	621 L	164 gal
Cooling System		
953D	31 L	8 gal
963D	34 L	9 gal
973D	44 L	11.6 gal
Hydraulic Tank		
953D	70 L	18.5 gal
963D	90 L	23.7 gal
973D	189 L	49.9 gal

Buckets

Capacity – General Purpose		
953D	1.85 m ³	2.42 yd ³
963D	2.45 m ³	3.2 yd ³
973D	3.21 m ³	4.2 yd ³
Bucket Width – General Purpose		
953D	2485 mm	97.8 in
963D	2612 mm	102.8 in
973D	2910 mm	114.56 in
Capacity – Multi-Purpose		
953D	1.60 m ³	2.09 yd ³
963D	1.90 m ³	2.48 yd ³
973D	3.05 m ³	3.92 yd ³
Bucket Width – Multi-Purpose		
953D	2471 mm	97.3 in
963D	2575 mm	101.3 in
973D	2868 mm	112.91 in

Blade

Trim Blade Capacity – All Material		
953D	1.6 m ³	2.09 yd ³
963D	3.24 m ³	4.2 yd ³
973D	3.57 m ³	4.67 yd ³
Trim Blade Capacity – Coal		
953D	Can be designed at order	
963D	4 m ³	5.25 yd ³
973D	Can be designed at order	

953D SH/963D SH/973D SH Shiphold/Port Handling

When the attachments are available a typical Track-Type Loader working in the shiphold/port handling application needs to be equipped with the following recommended features:

- Four lifting eyes
- Joystick for the transmission control
- Front guard for hydraulic tank
- Guards for lift and tilt cylinders
- Guard for the track rollers
- Heavy duty bumper
- Reversing fan
- Engine air precleaner
- E-SALT tracks equipped with center hole shoes
- Trim blade or bucket (with or without quick coupler)
- Lights facing forward, backward and sideways
- Windshield sealed
- Hydraulic tilt cab system

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