



SCOOPTRAM ST7LP

Low-profile, underground loader
with 6.8-tonne capacity



Atlas Copco

SCOOPTRAM ST7LP

SUPERIOR PRODUCTIVITY IN LOW-SEAM APPLICATIONS

THE LOW-PROFILE SCOOPTRAM ST7LP – WITH A BACK HEIGHT OF ONLY 1.6 M – IS A ROBUST UNDERGROUND LOADER BUILT FOR DEMANDING LOW-SEAM APPLICATIONS. THANKS TO A HOST OF SMART FEATURES, THE SCOOPTRAM ST7LP IS SUPERIOR IN ITS CLASS IN TERMS OF SAFETY, ERGONOMICS AND PRODUCTIVITY.

+ MAIN BENEFITS

Superior safety: The Scooptram ST7LP offers sophisticated safety features such as a ROPS/FOPS/RSPS-certified operator cab, forward and reverse video cameras, an automatic brake test, and a status-indicator beacon.

Greater comfort: The operator enjoys a first-class working environment in any surroundings in the Scooptram's air-conditioned, roomy cab.

Maximum productivity: The Scooptram ST7LP incorporates load-sensing hydraulics and the intelligent Rig Control System (RCS) from Atlas Copco for smarter, more efficient operation.



Load sensing hydraulics

Automatic break test





The comfortable ROPS/FOPS/RSPS-certified cabin is air conditioned and features the unique Atlas Copco Footbox to maximize leg room.



The loader's short yet powerful frame and its lengthy wheel base make the Scooptram ST7LP easy to maneuver and minimize the risk of its back end hitting the ceiling.



The Scooptram ST7LP includes traction control – a unique Atlas Copco feature that reduces wheel spin and tire wear in the muck pile to improve penetration and enable one-pass loading.



Ejector bucket

ROPS/FOPS certified cabin with air conditioning and Atlas Copco's unique footbox

Status beacon

Rig Control System, RCS

Machine protection

Short back end

Forward and reverse video cameras

Steering soft stops

Traction control

FEATURES

Safety

- Spring-applied, hydraulic release (SAHR) brakes
- Automatic brake test with diagnostics and logging
- ISO ROPS/FOPS/RSPS-certified, oil-free cabin with door interlock. (When cabin door is opened, the brakes are applied and steering and bucket/boom movement is blocked.)
- Forward and reverse cameras mounted on the right side to enhance operator visibility in both tramping directions
- Speed limiter

Comfort

- Atlas Copco Footbox to expand leg room
- Rubber-mounted cab to reduce vibration and noise
- Soft-stop steering to further reduce vibration
- Ergonomic, multifunction-control joysticks
- Easy-to-read multifunctional display with intuitive operator interface, available in 11 languages
- Comfortable T-back seat

Sustainability

- Traction control to reduce tire spin, extend tire life and improve loading performance
- Integrated de-clutch function to save fuel and extend the life of drive-train components
- Durable power-train components
- Fuel-efficient, clean-burning EPA Tier 3/EU Stage IIIA engine
- Rock-tough catalytic purifier
- L & M V-tube core radiator

Productivity

- Load-sensing variable displacement hydraulic pump for increased traction and reduced fuel consumption
- On-board diagnostics with indoor and outdoor indication lights to give the operator and nearby personnel a clear indication of machine status
- Load-weighing system

Serviceability

- Atlas Copco Rig Control System (RCS) to provide clear service information on the operator’s monitor
- Automatic lubrication system with low-level warning and lube-fault detection to service all daily lube points
- Sensors with data collection on air, hydraulic and transmission filters
- Easy access to filters, valve blocks and other service points for swift maintenance
- All daily maintenance from ground level
- Quick access to outside maintenance when necessary to maximize uptime and production

SPECIFICATIONS

Capacities	
Tramping	6 800 kg
Breakout force, hydraulic	12 000 kg
Breakout force, mechanical	10 300 kg
Motion times	
Boom raising	3.7 sec
Boom lowering	2.8 sec
Dumping	3.7 sec
Weights (Standard empty vehicle)	
Approximate weight	19 100 kg
Axle load, front end	8 700 kg
Axle load, rear end	10 400 kg

ENGINE

	Standard	Alternative*
Brand/Model: Cummins QSB6.7	EPA Tier 3 / EU Stage IIIA	EPA Tier 4 interim / EU Stage IIIB
Power rating at 2 200 rpm	144 kW / 193 hp	149 kW / 200 hp
Maximum torque at 1 400 rpm	931 Nm	929 Nm
MSHA Part 7 ventilation rate	241 m³/min	227 m³/min
MSHA Part 7 particulate index	269 m³/min	28 m³/min

Standard: Dry type air filter, catalytic purifier and silencer, exhaust heat protection, cooling package with tube type radiator, remote engine oil and cooling fuel drain.

Alternative: Dry type air filter, SCR, DPF.

*Please note! Requires Ultra Low Sulphur Diesel and low ash engine oil.

FUEL

Fuel tank capacity: 190 litres	●
Fuel filtration, primary, including water trap: 7µm	●
Fuel filtration, Secondary: 3µm	●

TRANSMISSION

Automatic power shift with integrated converter, fully modulated 4 speed shifting, forward/reverse with de-clutch function	●
Brand/model: Funk DF150	●

AXLES

Brand/model: Okubo Rock Tough 406	●
Degree of rear axle oscillation: 14° (7° on each side)	●
Differentials: Front, No spin	●
Differentials: Rear, Open	●

BRAKES

Fully enclosed, force-cooled, multiple wet discs at each wheel end	●
Service/parking/emergency brakes: SAHR	●
Brake apply after 3 sec in neutral	○
Brake release retriever tow hook	○

TYRES

Tubeless tyres design for underground mine service*	●
Tyre size front and rear: 17.5R25 (slicks)	○
Tyre size front and rear: 17.5R25 (threaded)	○

*As applications and conditions vary, Atlas Copco recommends that the user consults with tyre suppliers to obtain the optimum tyre selection

OPERATOR'S COMPARTMENT

Canopy (ISO ROPS/FOPS/RSPS)	●
Cabin with automatic climate control, pressurized with filtered air (ISO ROPS/FOPS/RSPS)	○
Door interlock (applies brakes, blocks steering and bucket/boom movement when door opens)	●
Open door retainer	●
Side seated operator for bi-directional operation	●
Comfortable T-back seat with retractable seat belt	●
External sound level according to ISO 6393 LwA 124.5 dB(A)	
Sound level in cabin according to ISO 6394 LpA 80 dB(A)	
Sound level in canopy according to ISO 6394 LpA 99 dB(A)	
Whole body vibration value according to below EN 14253 A(8)w maximum 0.55+/-0.2m/s ²	

HYDRAULIC SYSTEM

Heavy duty load sensing piston pump	●
System pressure: 24.0 MPa	●
Hydraulic tank capacity: 111 litres	●
Filtration, return line: 12 µm	●
Electric pump for hydraulic tank fill, 24 V	○
Arctic oil	○
Steer cylinders: chrome plated stems, 2 x 80 mm diameter	
Hoist cylinders: chrome plated stems, 2 x 110 mm diameter	
Tilt cylinder: chrome plated stems, 1 x 140 mm diameter	

CONTROL SYSTEM

Operator display with intuitive interface	●
Logging of production data, number of buckets, fuel consumption and tramming distance etc.	●
Brake test function with logging	●
Engine, transmission and hydraulic system diagnostics and logging	●
Save machine logged data on USB memory stick	●
Front and rear cameras	●
Audio-visual reverse alarm	●
Machine status indicator light mounted on canopy/cabin	●
Joystick controls for dump and hoist and steering	●
Joystick with Forward-Neutral-Reverse toggle switch	○
Steering soft stop	●
Bucket float	●
Traction Control	●
Speed limiter	◐
Machine protection	◐
Load weighing system	○
Emergency steering (Required for CE approved vehicles)	○
Redundant steering (Required for CE approved vehicles)	○

ELECTRICAL SYSTEM

System voltage: Start & accessories 24 V, 24/12V converter	●
Mine duty high output alternator: 140 Amps	●
Isolation switch lockout	●
Driving lights: 2 x 40W LED front	●
Driving lights: 6 x 40W LED back	●
Detachable service light (Required for CE approved vehicles)	○

MAIN FRAME

Center hinge and boom locking pins	●
EOD ejector bucket	○
Ground Engagement Tools	○
Wheel chocks and brackets	○
Knockdown construction	○
Inverted rims - tire lock on the inside	●
Central manual lubrication system	●
Central automatic lubrication system	○
240V block heater	○
Wiggins fast fuel fill	○
Wiggins fast hydraulic oil fill	●
Hand held fire extinguisher	○
Ansul manually activated fire suppression system with engine shut down	○
Ansul Checkfire automatically activated fire suppression system	○
3 x Machine stop buttons with fuel shut off valve	●

AUTOMATION

Scooptram radio remote interface	●
Scooptram radio remote control	○
CertiQ telematics solution professional*	○

*Certain country restriction may exist

PARTS AND SERVICES

Preventive maintenance kits	○
Repair and rebuild kits	○
Upgrade kits	○
Face mechanics tool set	○
Shop mechanics tool set	○
Service tool box for RCS	○
Operators training in simulator	○

DOCUMENTATION

Operator, service and spare parts manual on CD and hard copy	●
Plasticized parts and service manuals	○

**ATLAS COPCO SERVICE.
IT'S NOT JUST ABOUT
PROMISES, IT'S ABOUT
DELIVERY.**

We offer several levels of service agreements to meet the requirements of your operation and safeguard your productivity. Our service agreements help you build a quality operation focused on proactive, planned maintenance to minimize unplanned downtime. We support maintenance with detailed parts information on every item in our full inventory of components, accessories, and tools.



GRADE PERFORMANCE

Standard configuration, empty bucket													
%	Grade	0.0	2.0	4.0	6.0	8.0	10.0	12.5	14.3	16.0	18.0	20.0	25.0
Ratio	Grade	–	–	–	–	–	1:10	1:8	1:7	–	–	1:5	1:4
km/h	1st gear	4.6	4.6	4.5	4.5	4.3	4.3	4.1	4.1	4.1	4.0	4.0	3.8
	2nd gear	7.7	7.5	7.4	7.2	7.0	6.9	6.7	6.4	6.2	6.1	5.7	5.1
	3rd gear	14.9	14.3	13.6	12.8	12.0	11.1	9.4	–	–	–	–	–
	4th gear	24.0	22.2	19.6	16.5	12.2	–	–	–	–	–	–	–

3% rolling resistance assumed. Actual performance may vary depending on the application

GRADE PERFORMANCE

Standard configuration, loaded bucket													
%	Grade	0.0	2.0	4.0	6.0	8.0	10.0	12.5	14.3	16.0	18.0	20.0	25.0
Ratio	Grade	–	–	–	–	–	1:10	1:8	1:7	–	–	1:5	1:4
km/h	1st gear	4.3	4.3	4.1	4.1	4.0	4.0	3.8	3.8	3.8	3.7	3.5	3.3
	2nd gear	7.2	7.0	6.9	6.7	6.4	6.2	5.9	5.6	5.3	4.9	4.6	3.5
	3rd gear	14.0	13.1	12.2	11.1	9.8	8.3	–	–	–	–	–	–
	4th gear	22.2	19.3	15.6	–	–	–	–	–	–	–	–	–

3% rolling resistance assumed. Actual performance may vary depending on the application.



Scooptram ST7LP frontal view



COMMITTED TO SUSTAINABLE PRODUCTIVITY

We stand by our responsibilities towards our customers,
towards the environment and the people around us.

We make performance stand the test of time.
This is what we call – Sustainable Productivity.

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