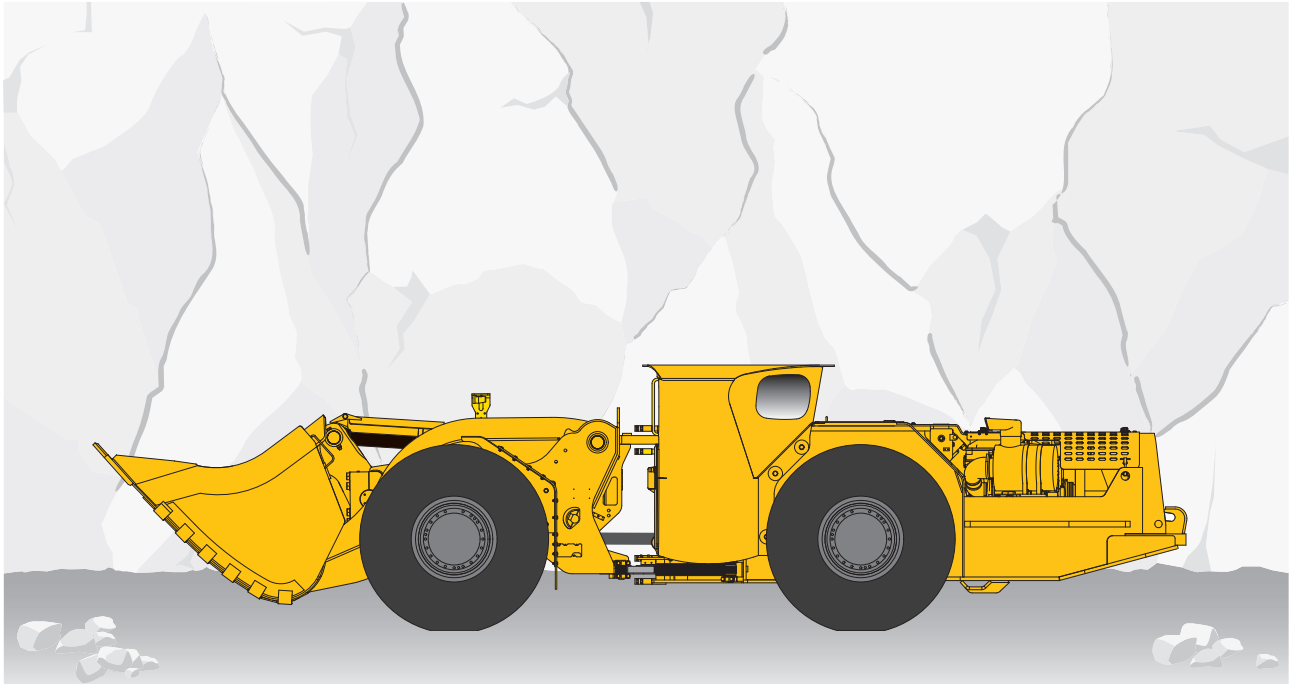


Scooptram ST1030

Technical specification



The Scooptram ST1030 is a reliable 10 tonne underground loader with an ergonomically designed operator compartment for unparalleled productivity in any underground mine.

Features

Load frame

- A Z-bar bucket linkage for efficient mucking and loading
- Easy to change bucket and cylinders with split-cap pin retention system
- Boom support and lock for increased safety during maintenance

Operator compartment

Ergonomically and spacious designed compartment for maximum safety and minimal operator fatigue with:

- Maximized legroom with the Atlas Copco Footbox
- Comfortable operator's seat offering improved ergonomic positioning, body orientation and generous shoulder and hip room

Power frame

- Atlas Copco unique powertrain including an upbox and a combined transmission and converter - allowing space for the Footbox plus a low and short powerframe
- Electronic transmission and engine control systems for

smooth and precise shifting

- A high power-to-weight ratio complemented by a fully integrated powertrain, automatically matching the gear selection to the load - producing high tractive effort without wheel spin
- Stacked V-tube Core radiator and charge air cooler; easy to clean and replace damaged tubes

General

- Efficient serviceability with centralized maintenance points
- Rugged tapered roller bearing centre hinge
- Anti skid material at service access points
- Central manual lubrication
- Hydraulic hoses, electric cables and hot surfaces are well protected

Specifications

CAPACITIES

kg		
	Tramming capacity*	10 000
	Breakout force, hydraulic	17 900
	Breakout force, mechanical	13 900

*Tramming capacity with EOD bucket 9 000 kg.

MOTION TIMES

sec		
	Boom raising	8.0
	Boom lowering	6.0
sec	Dumping	2.1

WEIGHTS

Standard equipped vehicle (EVW)		
kg		
	Approximate weight	27 200
	Axle load, front end	13 700
	Axle load, rear end	13 500

Engine

- Cummins Diesel Engine QSL9 C250, EPA Tier 3/EU Stage IIIA
- Power rating at 2 000 rpm..... 186 kW/250 hp
- Maximum torque at 1 400 rpm 1 085 Nm
- MSHA part 7 ventilation rate 255 m³/min
- Ventilation particulate index 340 m³/min
- Rock Tough exhaust purifier and silencer
- Dry type air cleaner
- Exhaust heat protection
- Remote engine oil drain
- Cooling package with V-tube Core radiator

Upbox

- Power transmitted through a 1:1 gear ratio box
- Superior..... AC826V

Transmission and converter

- Automatic power shift with integral converter, fully modulated 4 speed shifting, forward/reverse
- Funk DF250

Axles

- Kessler..... D 102
- Degree of oscillation..... +/-10°
- Differentials:
 - Front..... Limited Slip
 - Rear..... No Spin

Brakes

- Fully enclosed, force cooled, spring applied hydraulic released, multiple wet discs at each wheel end
- Service/parking/emergency brakes SAHR

Electrical system

- System voltage Start & accessories 24 V
- Alternator, high output..... 140 A
- Hydraulic warning system, tank & transmission level, tank temperature
- Rock Tough projection lights
- Isolation switch lockout

Tyres

- Tubeless, smooth, extra deep tread design for underground mine service
- Tyre size 18.00x25, 24 ply, L5S*
- Wheel rim guards

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

Operator's compartment

- Cabin/Canopy ISO ROPS/FOPS approved
- Side seated operator for bi-directional operation
- Two pilot operated joysticks for steering and dump and hoist control
- Grammer seat with retractable seat belt
- Open door retainer
- Door Interlock with steering and dump and hoist circuits
- External sound level according to ISO 6393 LwA 126dB (A)
- Sound level in cabin according to ISO 6394 Lpa 85dB (A)
- Whole body vibration value TBA

Hydraulic system

- Manual hydraulic tank fill pump
- Bucket float control
- Heavy duty gear type pumps
- Hydraulic tank capacity 189 litres
- System pressure 21.4 MPa
- Filtration, return line 12 µm
- Cylinders, double acting, chrome plated stems, diameter:
 - Steer cylinders (2) 90 mm
 - Hoist cylinders (2) 160 mm
 - Stabilizer cylinder 200 mm

Fuel

- Anti-siphon fuel supply
- Fuel tank capacity 284 litres
- Primary fuel filter 7 µm
- Secondary fuel filter 5 µm

System

- Fire extinguisher, 6 kg
- Central manual lubrication

Grade Performance

GRADE PERFORMANCE - 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	-	-	-	-	1:12	1:10	1:8	1:7	-	-	1:5	1:4
km/h	1st gear	5.0	4.8	4.8	4.7	4.6	4.5	4.4	4.3	4.2	4.1	4.1	3.9
	2nd gear	8.9	8.5	8.3	8.0	7.8	7.6	7.1	6.8	6.5	6.2	5.8	4.7
	3rd gear	15.8	14.7	13.8	12.8	11.6	10.2	7.9	5.9	4.4	-	-	-
	4th gear	26.7	23.3	18.9	12.7	-	-	-	-	-	-	-	-

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

GRADE PERFORMANCE - 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	-	-	-	-	1:12	1:10	1:8	1:7	-	-	1:5	1:4
km/h	1st gear	4.9	4.8	4.8	4.8	4.4	4.3	4.2	4.1	4.0	3.9	3.7	3.4
	2nd gear	8.7	8.3	7.9	7.6	7.2	6.7	6.1	5.4	5.1	4.1	3.3	-
	3rd gear	15.1	13.9	12.4	10.6	8.2	-	-	-	-	-	-	-
	4th gear	24.9	19.1	-	-	-	-	-	-	-	-	-	-

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

Optional equipment

Main frame

- Optional bucket sizes
- EOD buckets, recommended for truck loading
- High wear resistant bucket packages, Atlas Copco GET
- Shipping covers

Operator's compartment

- Enclosed cab
- Heater
- Air conditioner

System

- Ansul dual bottle fire suppression system with engine shutdown
- Ansul Checkfire, automatic fire suppression
- Electric fill pump for hydraulic oil
- Fire extinguisher - 6 kg (extra)
- Lincoln auto lube with timer
- Wiggins fast fuel fill
- Wiggins fast hydraulic tank fill
- Loadrite payload weighing system
- Atlas Copco Scooptram RRC (line of sight radio remote control)

Electrical system

- Amber strobe light - power on
- Audio-visual reverse alarm

Controls and instruments

- Blockout 3rd and/or 4th gears
- Brake release retriever tow hook
- Ride control

Power unit

- Fire resistant fluids
- Cold weather packages, 120V or 240V:
 - Block heater
 - Engine oil pan heater
 - Battery warmer
 - Fuel heater
 - Arctic oil

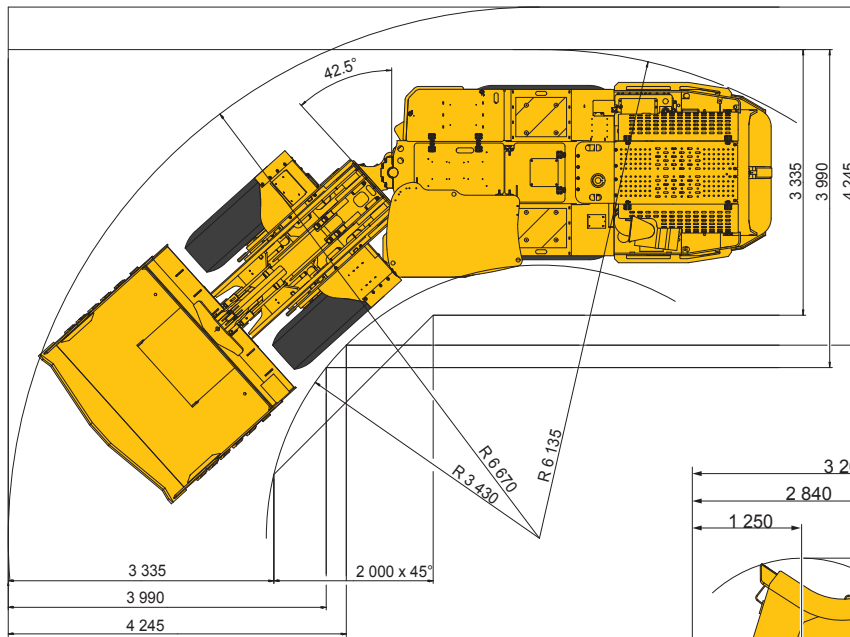
Documentation

- LinkOne parts book, CD
- LinkOne viewer
- Parts kit - 1 000 hour consumables

Parts and Services

- Preventive maintenance kits
- Repair and rebuild kits
- Upgrade kits
- Face mechanics tool set
- Shop mechanics tool set

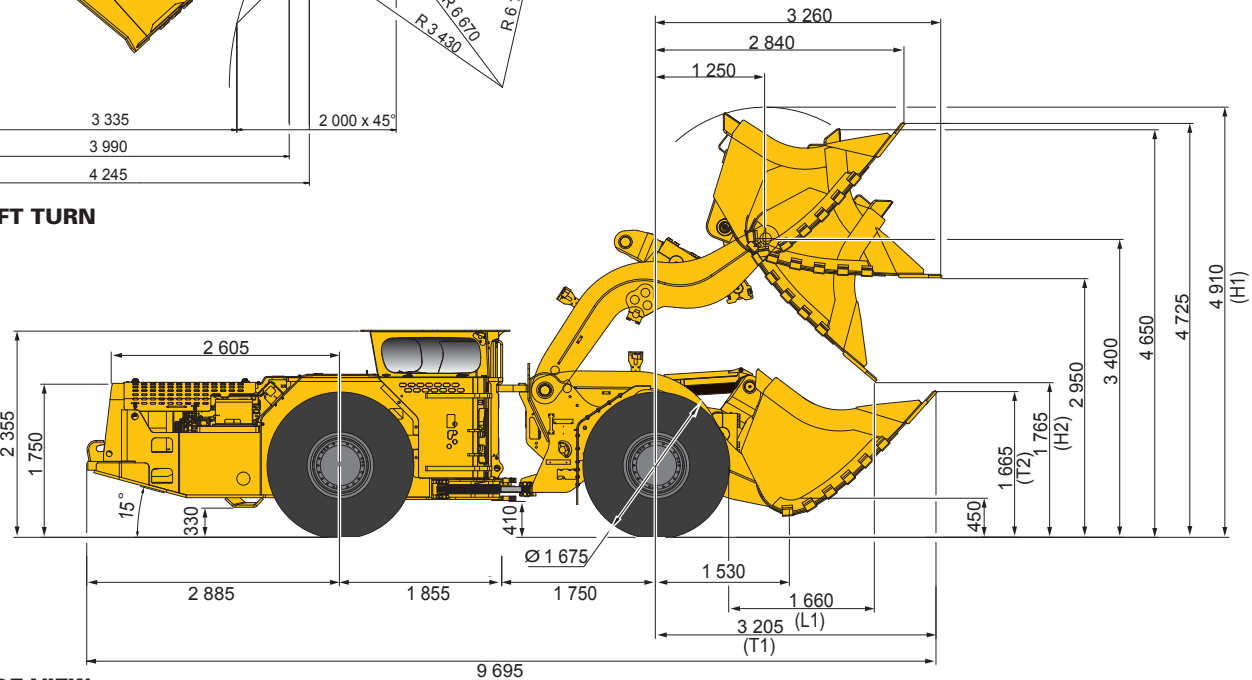
Measurements



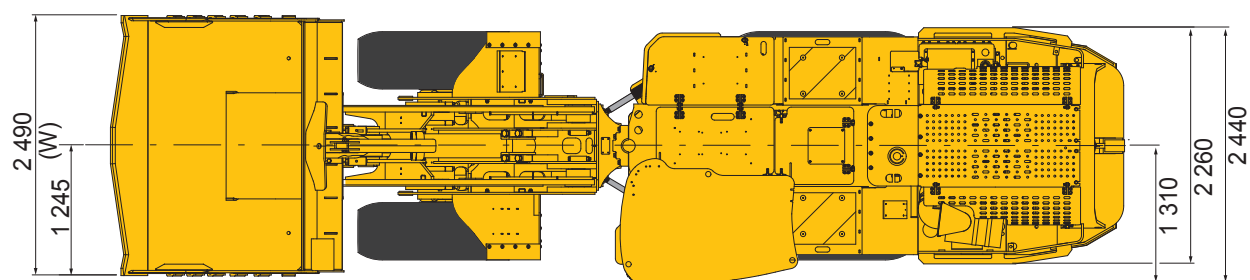
LEFT TURN

» Dimensions

- All dimensions are shown in millimetres
- All dimensions and calculations shown are based on standard vehicle configuration with 27 mm tyre deflection, unloaded



SIDE VIEW



TOP VIEW

		STD					
BUCKET DATA		5.0	4.5	4.2	3.8	3.6	3.3
Volume, nominal heaped (m3)		5.0	4.5	4.2	3.8	3.6	3.3
Maximum material density (t/m3)		2.0	2.2	2.4	2.6	2.8	3.0
Width, bucket (mm)	W	2 488	2 488	2 488	2 488	2 488	2 490
Tramming position: Axle centreline to bucket lip (mm)	T1	3 268	3 204	3 155	3 098	3 054	3 014
Tramming position: Ground to bucket tip (mm)	T2	1 726	1 663	1 614	1 558	1 515	1 475
Reach dimension (mm)	L1	1 734	1 662	1 610	1 547	1 500	1 456
Raised position: Back height, max. (mm)	H1	4 917	4 910	4 895	4 907	4 878	4 879
Raised position: Bucket tip, height (mm)	H2	1 708	1 765	1 811	1 863	1 903	1 940