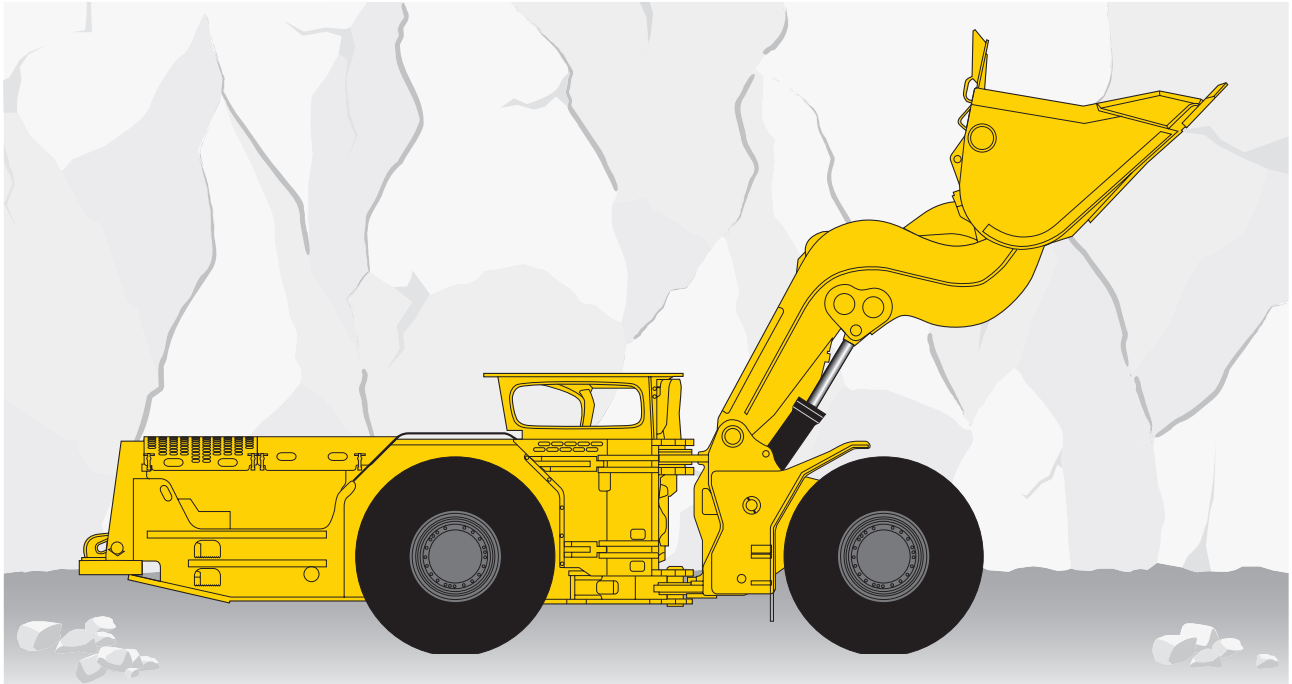


Scooptram ST1530

Technical specification



The 15 tonne capacity Scooptram ST1530 underground loader features state of the art levels of safety, serviceability and operator comfort, providing unmatched performance in any underground operation.

Features

» Safe working environment

- ISO ROPS/FOPS enclosed cabin (optional)
- Excellent visibility with a low rear hood height and large windows
- Door interlock (applies brakes, blocks steering and bucket/boom movement when door opens)
- Boom up locking device
- Spring applied hydraulic released (SAHR) brakes

Superior operator's comfort

- Spacious Atlas Copco Footbox
- Sound level in optional cab, below 82 dB(A)
- Low vibration level in cab
- A durable, adjustable suspension seat
- Dump & hoist control located forward of the right armrest
- Door mounted monostick steering control
- Extended wheel base for a steady ride while tramping

» Peak performance

- Clean burning Tier 3 / Stage IIIA engine
- L&M V-tube Core radiator
- Fully modulated automatic transmission
- Limited slip front differential
- An enhanced boom and load frame geometry optimizes digging performance
- De-clutch function for more efficient truck loading

» Serviceability

- Centralized service bay
- Central manual lubrication
- Hydraulic test ports
- Easy access to service points, filters and valve blocks
- Tapered roller bearing articulation joint
- Trunnion cap mounted steering cylinders & bucket linkage

Specifications

CAPACITIES			MOTION TIMES			WEIGHTS		
kg	Tramming capacity	15 000	sec	Boom raising	7.3	Standard equipped vehicle (empty bucket)		
	Breakout force, hydraulic	25 500		Boom lowering	5.0	kg	Approximate weight	44 000
	Breakout force, mechanical	21 700	sec	Dumping	2.3		Axle load, front end	20 800
m³	Standard bucket volume (nominal heaped)	6.8		Axle load, rear end	23 200			

» Engine

- Cummins Diesel Engine QSX15, Tier 3/Stage IIIA
- Power Rating at 2 000 rpm 291 kW/390 hp
- Maximum torque at 1 200 rpm 1 825 Nm
- MSHA Part 7 ventilation:
 - Ventilation rate 440 M3/min
 - Particulate index 396 m3/min
- Catalytic exhaust purifier and silencer
- Dry type air cleaner
- Exhaust heat protection
- Remote engine oil drain
- V-tube core radiator

» Upbox

- Power transmitted through a 1:1 gear ratio box
- Rock Tough gear box

» Transmission and converter

- Automatic power shift with integrated converter, fully modulated 4 speed shifting, forward/reverse
- Dana TE32

» Axles

- Spiral bevel differential, full floating, planetary wheel end drive
- Kessler axles 106
- Degree of oscillation (total) 16°
- Differentials:
 - Front Limited slip
 - Rear No spin

» Brakes

- Fully enclosed, force cooled, multiple wet discs at each wheel end
- Service/parking/emergency SAHR

» Electrical System

- System voltage Start & accessories 24 V
- Alternator, high output 140 Amps
- Hydraulic low level warning system
- Battery isolation Switch lockout
- LED lights

****MSHA = Mine Safety and Health Administration, USA**
Ventilation rate = quantity of additional ventilation air required to dilute raw exhaust emission to a respective level per engine.

Particulate Index = Calculated air flow for minimum diesel particulate matter (DPM) dilution to a safe level per engine.

» Tyres

- Tubeless, extra deep tread design for underground mine service
- Tyre size 29.5 R 25

** 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
- Side seated operator for bi-directional operation
- Grammer seat with retractable seat belt
- Open door retainer
- Two pilot operated joysticks for steering, dump & hoist controls
- Enclosed operator's cabin (optional)
- External sound level according to ISO 6393 LwA 127 dB(A)
- Sound level in cabin according to ISO 6394 LwA 82 dB(A)
- Whole body vibration value according to EN 14253 A(8)w maximum 0.85 +/- 0.4m/s²

» Hydraulic system

- Ride control - includes 2 accumulators for loaded and empty tramming
- Bucket float
- Heavy duty gear type pumps
- System pressure 20.7 MPa
- Hydraulic tank capacity 221 litres
- Filtration, return line 12.0 µm
- Cylinders, double acting, chrome plated stems, diameter:
 - Steer cylinders (2) 125 mm
 - Hoist cylinders (2) 216 mm
 - Stabilizer cylinder 267 mm

» Fuel

- Fuel tank capacity 530 litres
- Fuel filtration 8.0 µm
- Anti-siphon fuel supply

» Other

- Boom up locking device
- Audio-Visual reverse alarm
- Central manual lubrication system
- Fire extinguisher

Grade performance

STANDARD CONFIGURATION, BUCKET EMPTY

%	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
km/h	1st gear	6.2	6.1	6.0	5.9	5.8	5.7	5.6	5.5	5.5	5.4	5.3	5.0
	2nd gear	12.1	11.7	11.4	11.0	10.6	10.2	9.5	8.9	8.3	7.4	6.6	—
	3rd gear	20.6	19.4	18.2	16.4	14.0	11.7	—	—	—	—	—	—
	4th gear	33.8	29.2	22.2	—	—	—	—	—	—	—	—	—

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

STANDARD CONFIGURATION, BUCKET LOADED

%	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
km/h	1st gear	5.5	5.4	5.3	5.2	5.1	5.0	4.9	4.8	4.7	4.6	4.4	4.0
	2nd gear	10.7	10.3	9.9	9.5	8.9	8.4	7.5	6.7	5.9	5.0	—	—
	3rd gear	18.1	16.8	15.1	12.9	9.6	—	—	—	—	—	—	—
	4th gear	29.2	23.2	14.8	6.7	—	—	—	—	—	—	—	—

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
- Shipping covers
- Knockdown construction

» Ergonomics

- Enclosed operator cabin
- Heater (cab/cabin)
- Air conditioner (cabin only)
- KAB Operators seat

» System

- Ansul manual fire suppression system with engine shutdown
- Ansul automatic fire suppression
- Electric fill pump for hydraulic oil
- Fire extinguisher - 4.5 kg
- Lincoln auto lube with timer
- Loadrite payload weighing system
- Wiggins fast fuel fill
- Scooptram RRC interface only
- Scooptram RRC (line of sight radio remote control)

» Electrical system

- Amber strobe light - power on

» Controls and instruments

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

» Power unit

- Corrosion resistant radiator
- Cold weather package 120V or 240V:
 - Block heater
 - Battery warmer
 - Fuel heater
 - Arctic oil

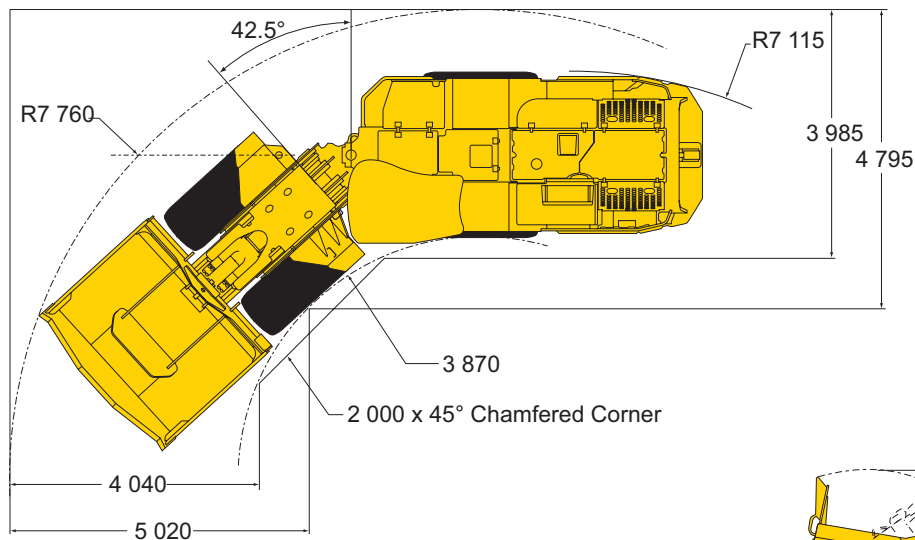
» Documentation

- LinkOne parts catalogue, CD
- Operator's and maintenance manual - plasticized

» Parts and services

- 1 000 hour consumables
- Face mechanics tool set
- Shop mechanics tool set

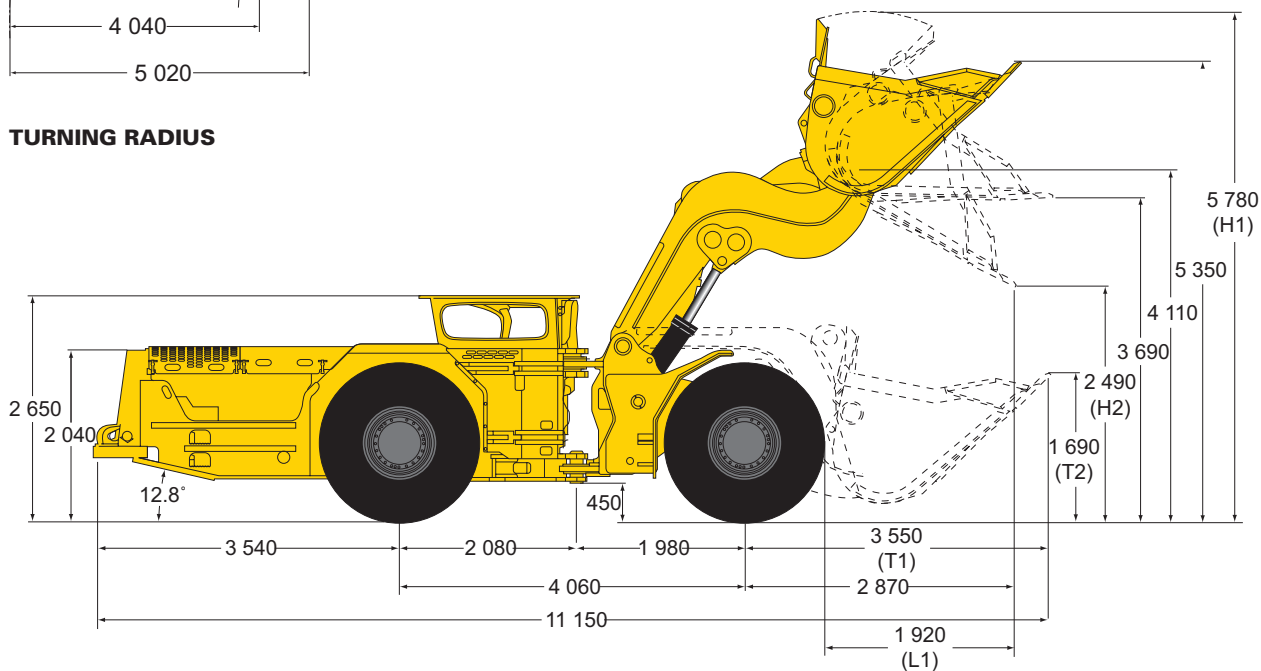
Measurements



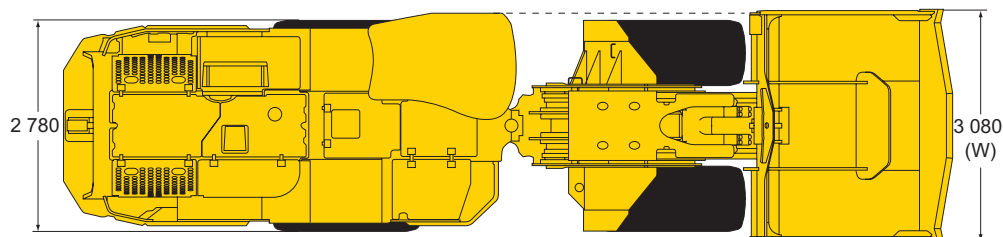
» Dimensions

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

TURNING RADIUS



SIDE VIEW STD



TOP VIEW STD

STANDARD BUCKET DATA				STD			
Volume, nominal heaped (m3)		8.3	7.5	6.8	6.2	5.7	5.0
Maximum material density (t/m3)		1.8	2.0	2.2	2.4	2.6	3.0
Width, bucket (mm)	W	3 080	3 080	3 080	3 080	3 080	3 080
Tramming position: Axle centreline to bucket lip (mm)	T1	3 750	3 650	3 550	3 460	3 390	3 330
Tramming position: Ground to bucket tip (mm)	T2	1 900	1 790	1 690	1 630	1 570	1 500
Reach dimension (mm)	L1	2 140	2 040	1 920	1 810	1 740	1 660
Raised position: Back height, max. (mm)	H1	5 780	5 780	5 780	5 810	5 810	5 750
Raised position: Bucket tip, height (mm)	H2	2 290	2 400	2 490	2 610	2 670	2 730