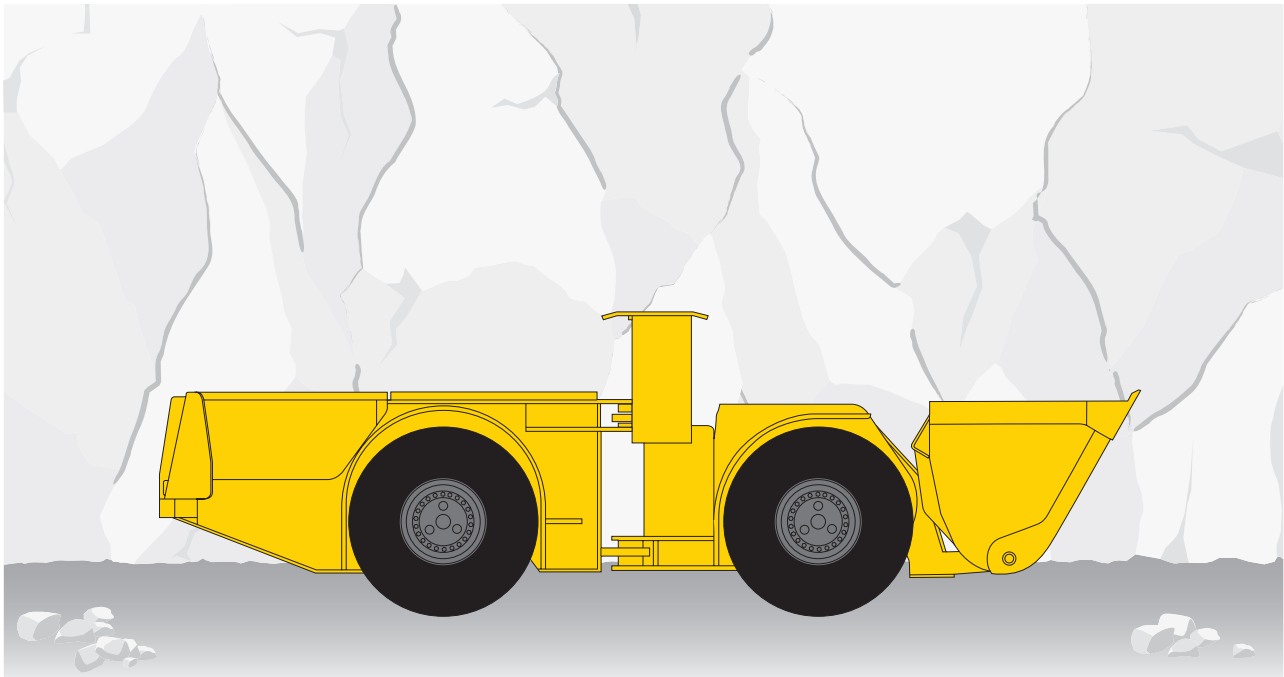


Scooptram ST2D

Technical specification



The Scooptram ST2D is a reliable 3 600 kg tramming capacity underground loader for smaller sized operations that range from narrow vein mines to construction sites. This vehicle has built its reputation bucket by bucket throughout the world.

Features

Load frame

- A parallel boom design matched to an aggressive bucket configuration provide for efficient mucking operations
- Boom up lock device

Operator's compartment

- Side seated operator position for efficient bi-directional operation with maximum visibility
- Ergonomic operator seat with seat belt for comfort during a full operating shift

Power frame

- Conventional and proven components are well protected within the frame
- High ground clearance protects the machine from damage
- Three point mounting and anti-skip protection provides safe access for operators and service personnel

General

- Long life roller bearing centre articulation joint
- Central manual lubrication

Specifications

Capacities	
SAE regulations	
Tramming capacity	3 600 kg
Breakout force, hydraulic	9 060 kg
Breakout force	5 936 kg

Engine

- Deutz Diesel F6L-912W, Tier/Stage 1
- MSHA Rating at 2 300 rpm 63 kW/84 hp
- Maximum torque at 1 500 rpm 292 Nm
- Number of cylinders 6 in line
- Displacement 5.6 L
- Cooling Air
- MSHA Part 7 ventilation:
 - Ventilation rate 127 m³/min
 - Particulate index 142 m³/min

Transmission

- Modulated power shift, 4 speeds forward and reverse
- Dana R32000 Series

Converter

- Single stage
- Dana C-270 Series

Axles

- Spiral bevel differential, full floating, planetary wheel end drive
- Dana 14D
- Degree of oscillation 16° (8° on each side)
- Differentials:
 - Front No spin
 - Rear Standard

Brakes

- Hydraulically applied spring released; fully enclosed wet discs at each wheel end
- Parking and emergency; spring applied, hydraulically released, multiple wet discs, built into transmission
- Service LCB

Electrical system

- System voltage Start & accessories 24 V

Tyres

- Nylon, smooth tread design for underground mine service, on demountable rims
- Tyre size 12.00x24, 16 ply STMS L-5S, TT

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

Motion times	
Boom	
Raising	3.7 seconds
Lowering	3.0 seconds
Bucket	
Dumping	6.4 seconds

Operator's compartment

- Side seated operator for bi-directional operation and maximum visibility
- Canopy: MSHA approved
- Monostick steering control
- Dual lever dump and hoist control

Hydraulic system

- Heavy duty gear type pumps
- Filtration, suction line 25 micron
- Dump /hoist system pressure 11.4 MPa
- Cylinder, double acting, chrome plated stems, diameter:
 - Steer cylinder 125 mm
 - Hoist cylinder 180 mm
 - Dump cylinder 180 mm
- Pumps:
 - Dump /hoist 91 + 91 L/min (at 2 300 rpm)
 - Steering 91 L/min (at 2 300 rpm)

Tank capacities

- Fuel 148 litres
- Hydraulic 144 litres

Exhaust system

- Catalytic purifier plus exhaust silencer

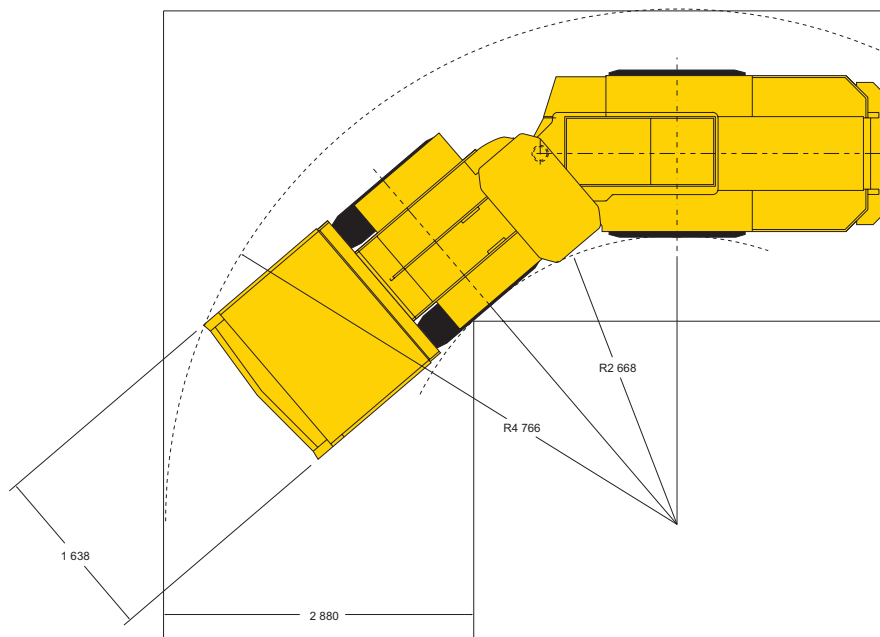
Steering

- Articulated hydraulic power steering, pilot operated monostick control
- System pressure 13.1 Mpa (1 900 psi)

Other

- Fire extinguisher, 6 kg
- Central manual lubrication

Turning radius



- Turning angle +/-40.5°
- Dimensions shown are based on standard vehicle configuration with 27 mm tyre deflection
- All dimensions are shown in millimetres

Grade performance

Standard configuration, bucket empty

Percent grade	0.0	2.0	4.0	6.0	8.3	10.0	12.5	14.3	16.0	18.0	20.0	25.0
Ratio					1:12	1:10	1:8	1:7			1:5	1:4
1st gear (km/h)	3.4	3.3	3.2	3.2	3.1	3.1	3.1	3.0	3.1	2.9	2.9	2.8
2nd gear (km/h)	6.9	6.6	6.5	6.3	6.1	6.0	5.8	5.7	5.6	5.2	4.9	4.0
3rd gear (km/h)	11.4	10.9	10.5	10.1	9.5	8.6	7.2	6.3				
4th gear (km/h)	19.5	18.2	15.8									

Standard configuration, bucket loaded

Percent grade	0.0	2.0	4.0	6.0	8.3	10.0	12.5	14.3	16.0	18.0	20.0	25.0
Ratio					1:12	1:10	1:8	1:7			1:5	1:4
1st gear (km/h)	3.3	3.2	3.2	3.1	3.0	3.0	2.9	2.9	2.9	2.8	2.8	2.7
2nd gear (km/h)	6.7	6.5	6.3	6.1	5.9	5.8	5.3	4.9	4.5	4.0	3.6	2.7
3rd gear (km/h)	11.2	10.6	10.1	9.2	7.6	6.4	5.1	4.2	3.5	2.6	1.7	
4th gear (km/h)	18.9	16.6	12.0	8.4	5.2	2.6						

Optional equipment

Main frame

- Various bucket sizes
- Wheel chocks and chock bracket
- Dump cylinder rod protector
- Knockdown construction - specify weight and dimension limitations
- Shipping covers
- EOD buckets, recommended for truck loading

Ergonomics

- Wheel steering control

System

- Ansul single bottle fire suppression with engine kill
- Lincoln auto lube with timer
- Manual hydraulic tank fill pump

Hydraulic system

- EOD hydraulics & controls only

Electrical system

- Audio-visual reverse alarm

- Gauge lights

Control and instruments

- Block out 3rd and/or 4th gears
- Low hydraulic level warning
- Single lever dump and hoist control

Power unit

- Engine shutdown system
- Oil bath air cleaner
- Exhaust purifier and fume diluter

Drive train

- Posi-Stop brakes

Documentation

- LinkOne parts book CD
- LinkOne viewer
- Parts manual - plasticized
- Service manual - plasticized

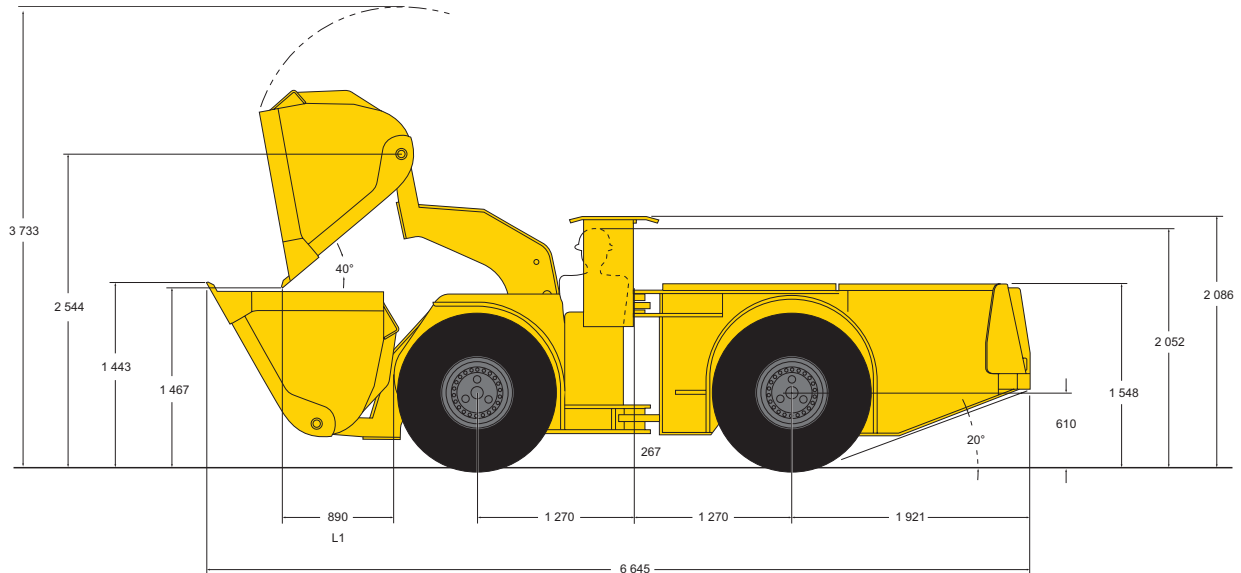
Other

- Tool box

Dimensions and weights*

- Approximate weight12 320 kg
- Axle load, front5 960 kg
- Axle load, rear6 360 kg

*Standard equipped vehicle with empty bucket



Side view.

- Dimensions shown are based on standard vehicle configuration with 27 mm tyre deflection
- All dimensions are shown in millimetres
- For sizing of buckets and boxes, please consult your local Customer Center