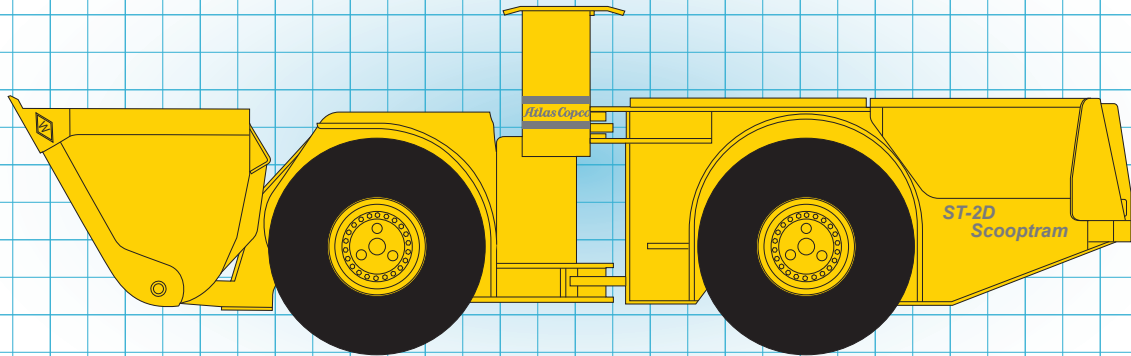


Scooptram® ST2D

Technical specification



The Scooptram ST2D is a reliable 3600 kg tramming capacity Scooptram 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
- High ground clearance protects the machine from damage
- Three point mounting and anti-skip protection provides safe access for operators and service personnel

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

General:

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

Power frame:

- Conventional and proven components are well protected within the frame

Specifications

Capacities		Motion times	
SAE regulations		Boom	
Tramming capacity	3600 kg	Raising	3.7 seconds
Breakout force, hydraulic	9060 kg	Lowering	3.0 seconds
Breakout force	5936 kg	Bucket	
		Dumping	6.4 seconds

Engine (standard)

- Deutz Diesel F6L-912W
- MSHA Rating at 2,300 rpm 63 kW
- Maximum torque at 1,500 rpm 292 Nm
- Number of Cylinders 6 in line
- Displacement 5.6 L
- Cooling Air
- MSHA Part 7 ventilation
 - Vent Rate 127 m³/min
 - Particulate index 142 m³/min

Axles

- Spicer 14D: Spiral bevel differential, full floating, planetary wheel end drive
- Differentials:
 - Front no spin
 - Rear standard
 - Degree of rear axle oscillation Total 16° (8° on each side)

Brakes

- Service LCB
- 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

System

- Fire extinguisher, 6 kg
- Central manual lubrication

Torque converter

- Single stage
- Spicer C-270 Series

Transmission

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

Exhaust system

Catalytic purifier plus exhaust silencer

Electrical system

- System Voltage 24 Volt starting, 24 Volt accessories

Tires

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

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

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
- Cylinders Double acting, chrome plated stems
- Cylinder diameter
 - Steer cylinder (1), diameter 127 mm
 - Hoist cylinder (1), diameter 178 mm
 - Dump cylinder (1), diameter 178 mm
- Pumps
 - Dump /hoist 91 + 91 L/min (at 2,300 rpm)
 - Steering 91 L/min (at 2,300 rpm)
- Filtration Suction line: 25 micron
- Dump /hoist system pressure 11.4 MPa

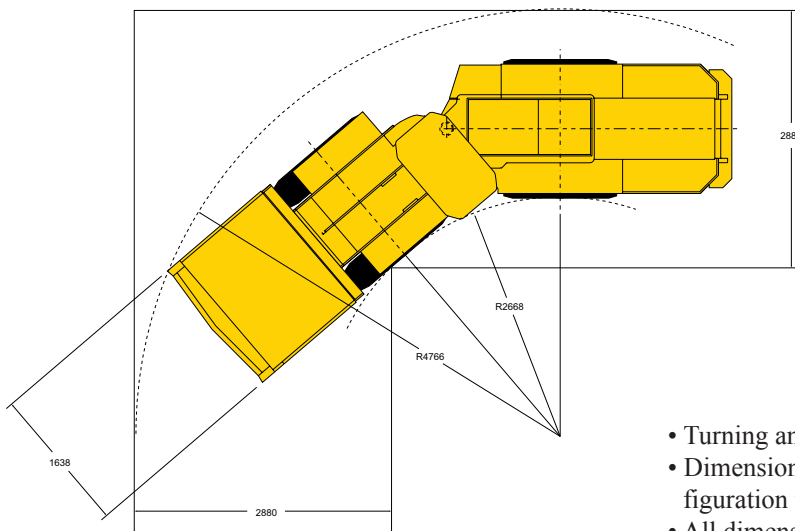
Tank capacities

- Fuel 148 litres
- Hydraulic 144 litres

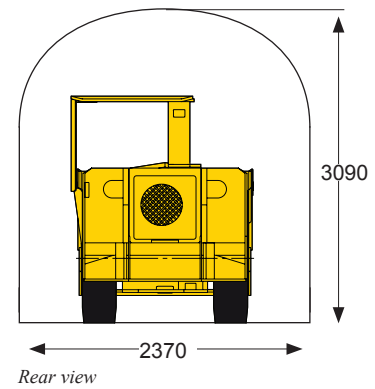
Steering

- Articulated hydraulic power steering, pilot operated monostick control
- Turning angle 81° (40.5° each way)
 - System pressure 13.1 Mpa (1,900 psi)

Left turning radius



Drift size



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

Grade performance

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	30.0
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	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	3.2
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 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	30.0
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	2.5
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	2.0
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							

Standard configuration, bucket loaded

Optional equipment

Main frame options

- Boom Up Lock device
- Wheel Chocks and Chock Brackets
- Dump cylinder rod protector
- Knockdown - Specify weight and dimension limitations
- Shipping covers
- EOD bucket

Ergonomic option

- Wheel Steering Control

Tires

- 12.00R24 Michelin X Mine D2

- 12.00R24 Michelin X Mine D2+
- 12.00x24 Bridgestone MLS

System options

- Annual Single bottle fire suppression w/Engine kill
- Lincoln auto lube w/Timer
- Manual hydraulic tank fill pump

Electrical system options

- Audio - visual Reverse Alarm
- Gauge Lights

Control and instruments options

- Block out 3rd and/or 4th gears
- Low hydraulic level warning
- Single Lever Dump and Hoist Control

Power unit options

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

Documentation options

- LinkOne parts book CD
- LinkOne viewer

- Parts manual - Plasticised
- Service manual - Plasticised

Hydraulic system options

- EOD hydraulics & controls only

Drive train options

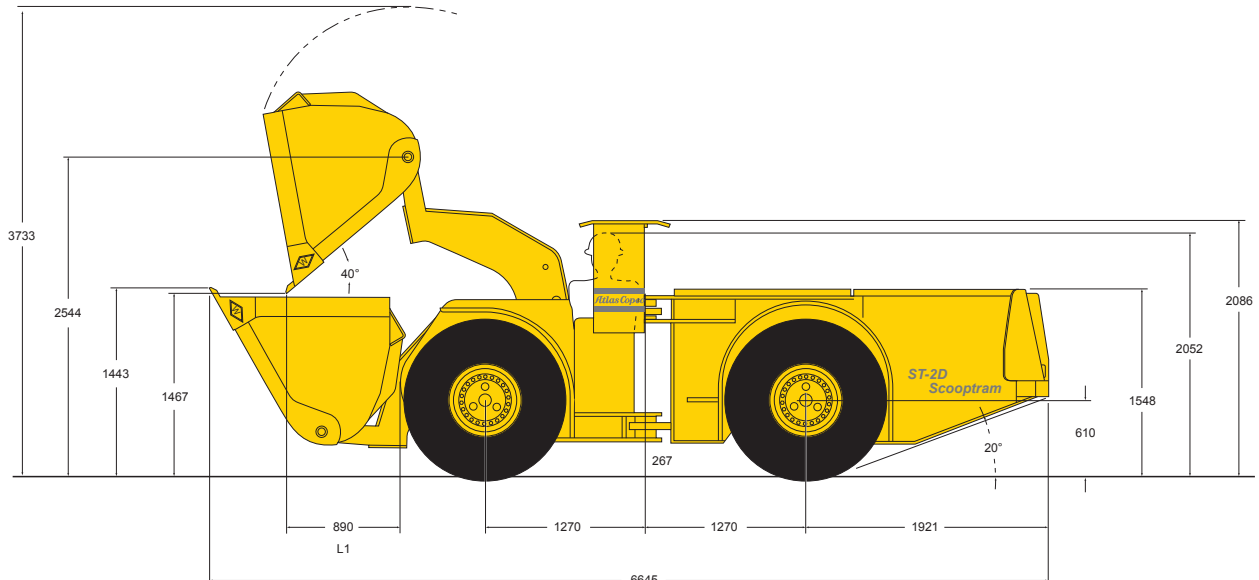
- Posi-Stop Brakes

Miscellaneous options

- Tool box

Dimensions and weights

- Approximate net weight11 540 kg*
- *Standard equipped vehicle with empty bucket



Side view

- Dimensions shown are based on standard vehicle configuration with 27 mm tire deflection.
- All dimensions are shown in millimeters.