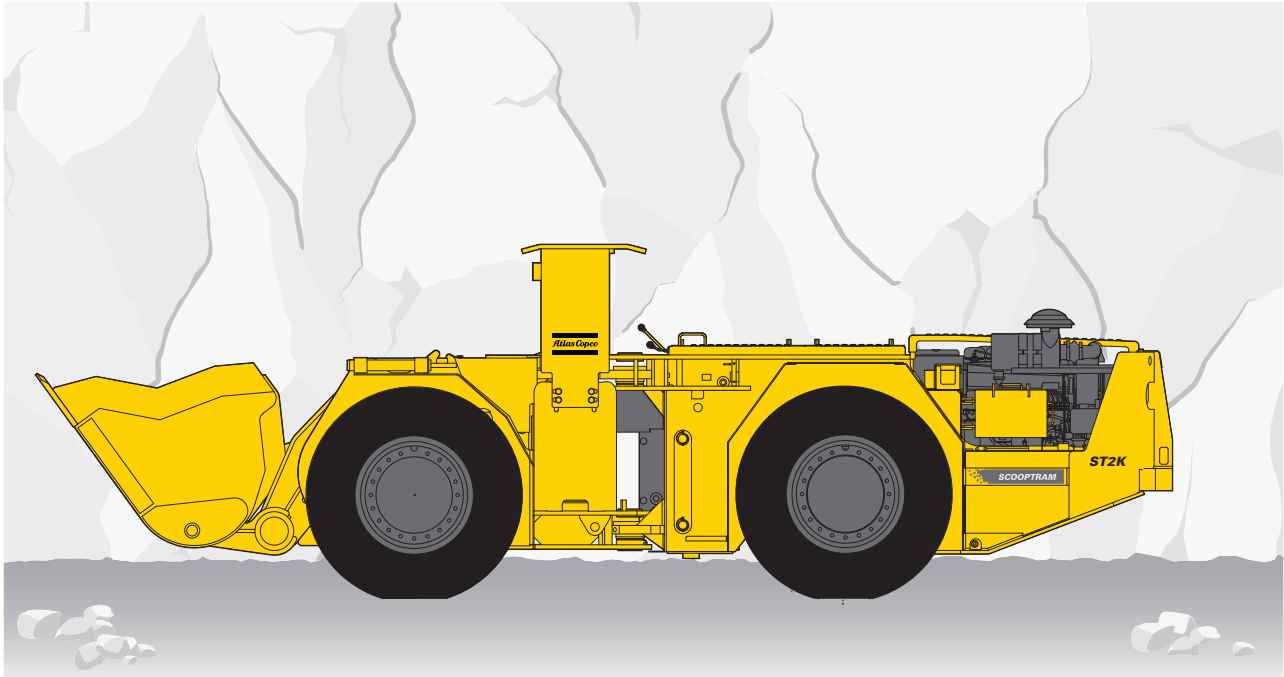


# Scooptram ST2K

## Technical specification



The Scooptram ST2K 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

<b>kg</b>	Tramming capacity	3 600
	Breakout force, hydraulic	9 060
	Breakout force, mechanical	6 138

## MOTION TIMES

<b>sec</b>	Boom raising	3.8
	Boom lowering	2.8
<b>sec</b>	Dumping	4.5

## WEIGHTS

Standard equipped vehicle (EVW)		
<b>kg</b>	Approximate weight	12 160
	Axle load, front end	6 020
	Axle load, rear end	6 140

## Engine

- Deutz Diesel .....F5L914, Tier/Stage 2
- Power at 2 300 rpm..... 63 kW/85.7 hp
- Maximum torque at 1 500 rpm ..... 315 Nm
- Number of cylinders ..... 5 in line
- Displacement ..... 5.4 L
- Cooling ..... Air
- Ventilation:
  - Ventilation rate..... 6 000 cfm
  - Particulate index ..... 3 500 cfm

## 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

- 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..... 12.00R24 L5S TT

*\* As applications and conditions vary, Atlas Copco recommends that the user consults with tyre suppliers to obtain the optimum tyre 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
- Filtration, suction line..... 25 micron
- Dump /hoist system pressure..... 11.4 MPa
- Cylinder, double acting, NiCr plated cylinder, rod and ear is forged, 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

- Integrated catalytic purifier and exhaust silencer

## Steering

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

## Other

- Fire extinguisher, 6 kg
- Central manual lubrication
- Boom up lock device

# Grade Performance

## GRADE PERFORMANCE - EMPTY BUCKET

%	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	Grade	–	–	–	–	1:12	1:10	1:8	1:7	–	–	1:5	1:4
km/h	1st gear	3.3	3.2	3.3	3.3	3.3	3.3	3.3	3.3	3.2	3.2	3.2	3.2
	2nd gear	6.9	6.9	6.8	6.8	6.8	6.7	6.0	4.8	4.6	4.3	4.1	3.9
	3rd gear	11.9	10.9	10.5	9.8	7.8	7.3	6.8	6.3	–	–	–	–
	4th gear	19.1	18.0	16.9	–	–	–	–	–	–	–	–	–

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	8.3	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	3.0	3.0	3.0	3.0	2.9	2.9	2.9	2.8	2.8	2.7	2.7	2.6
	2nd gear	6.3	6.1	5.9	5.8	5.6	5.4	5.1	4.5	4.4	3.9	3.3	2.5
	3rd gear	10.5	9.8	9.2	9.0	6.9	5.9	5.3	3.6	3.3	2.4	1.3	–
	4th gear	17.1	15.2	9.8	9.1	3.8	2.8	–	–	–	–	–	–

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

# Optional Equipment

### Main frame

- Various bucket sizes
- Dump cylinder rod protector
- Wheel chocks and chock bracket
- EOD buckets, recommended for truck loading

### Hydraulic system

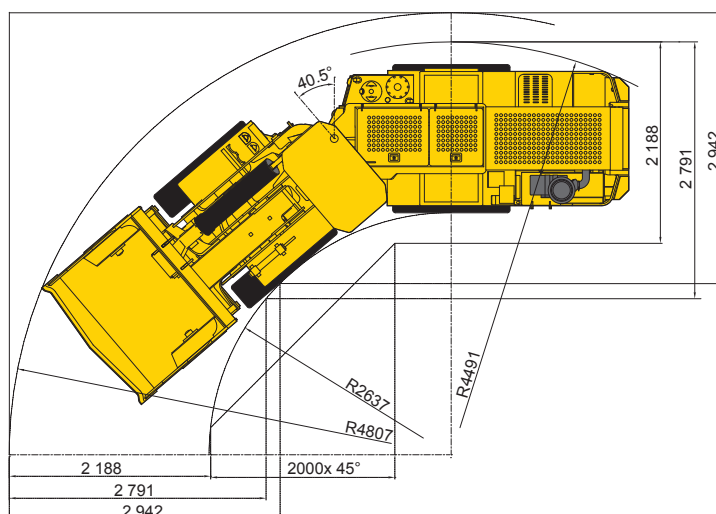
- EOD hydraulics & controls only

### Documentation and services

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

# Measurements

## LEFT TURN STD BUCKET

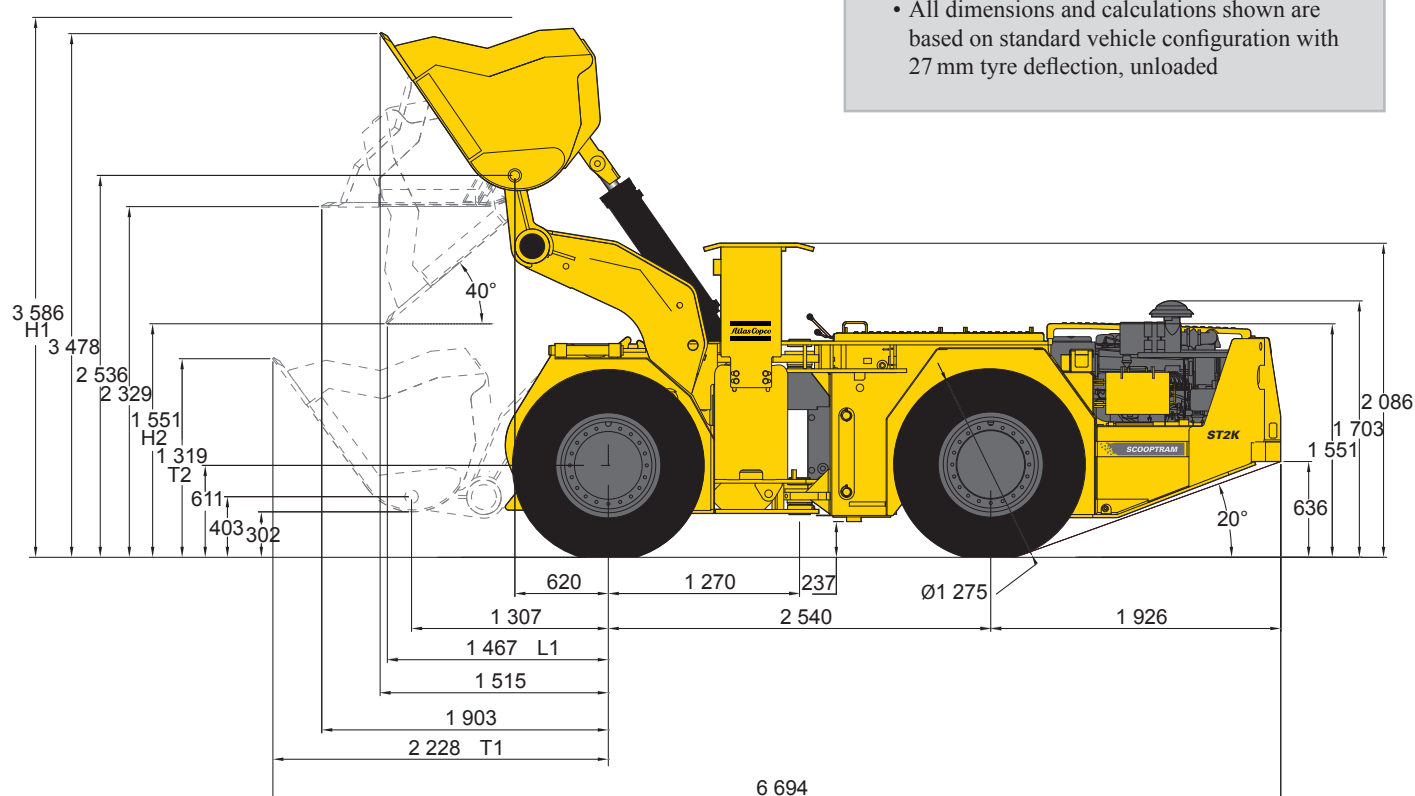


### » Dimensions

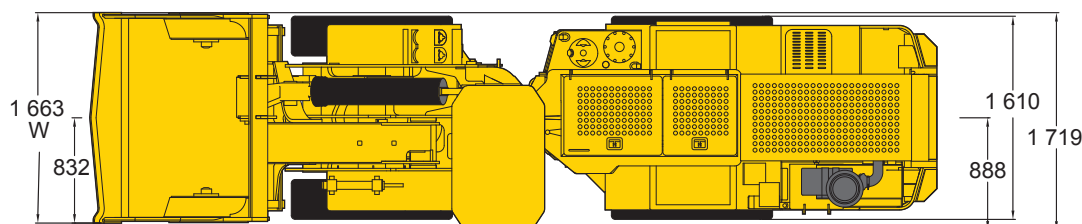
- All dimensions are shown in millimetres
- All dimensions and calculations shown are based on standard vehicle configuration with 27 mm tyre deflection, unloaded

# Measurements

## SIDE VIEW STD BUCKET



## TOP VIEW



### STANDARD BUCKET DATA STANDARD

		2.3	2.1	1.9	1.7	1.5
Volume, nominal heaped (m3)		2.3	2.1	1.9	1.7	1.5
Maximum material density (t/m3)		1.6	1.7	2.0	2.1	2.4
Width, bucket (mm)	W	1 663	1 663	1 663	1 663	1 663
Tramming position: Axle centreline to bucket lip (mm)	T1	2 415	2 414	2 306	2 254	2 228
Tramming position: Ground to bucket tip (mm)	T2	1 515	1 372	1 449	1 368	1 319
Reach dimension (mm)	L1	1 674	1 596	1 584	1 511	1 467
Raised position: Back height, max. (mm)	H1	3 838	3 816	3 725	3 669	3 586
Raised position: Bucket tip, height (mm)	H2	1 372	1 372	1 456	1 518	1 551

### EOD BUCKET DATA

Volume, nominal heaped (m3)		1.9	1.8	1.5	
Maximum material density (t/m3)		2.0	2.1	2.4	
Width, bucket (mm)	W	1 662	1 615	1 537	
Tramming position: Axle centreline to bucket lip (mm)	T1	2 306	2 254	2 229	
Tramming position: Ground to bucket tip (mm)	T2	1 449	1 368	1 315	
Reach dimension (mm)	L1	1 584	1 511	1 460	
Raised position: Back height, max. (mm)	H1	3 725	3 669	3 586	
Raised position: Bucket tip, height (mm)	H2	1 456	1 518	1 546	