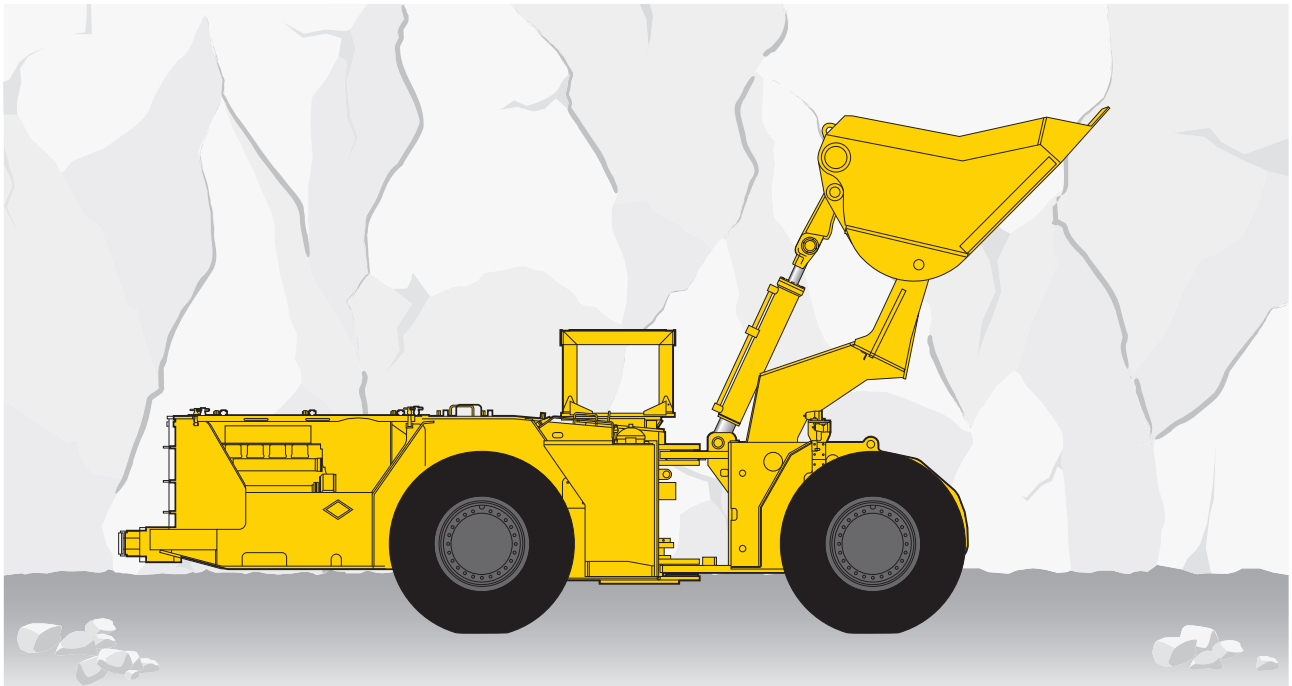


# Scooptram ST3.5

## Technical specification



The Scooptram ST3.5 is a 6 000 kg tramming capacity underground loader designed for small to medium sized operations that include development work, production mining, construction sites, and site clean-up activities. The Scooptram ST3.5 has a strong, positive reputation built over time, bucket by bucket.

## Features

### Load frame

- A parallel boom design matched to an aggressive bucket configuration provide for efficient mucking operations
- Boom support and lock for safe work under boom

### Operator's compartment

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

### Power frame

- Conventional and proven components are well protected within the frame

- Optional turbo charged engine for high altitude applications

- High ground clearance protects the machine from damage

### General

- Long life roller bearing centre articulation joint
- Central manual lubrication
- Hydraulic hoses, electrical cables and hot surfaces are well protected
- Three point mounting and anti-skid protection provides safe access for operators and service personnel

# Specifications

Capacities	
SAE regulations	
Tramming capacity	6000 kg
Breakout force, hydraulic	9300 kg
Breakout force, mechanical	7915 kg

## Engine

- Deutz Diesel ..... F8L-413FW, EPS Tier 1/EUStage I
- MSHA Rating at 2 300 rpm ..... 136 kW/185hp
- Maximum torque at 1 500 rpm ..... 617 Nm
- Number of Cylinders ..... 8 in “V”
- Displacement ..... 12.8 L (779 in<sup>3</sup>)
- Cooling ..... Air
- MSHA Part 7 ventilation:
  - Ventilation rate ..... 297 m<sup>3</sup>/min
  - Particulate index ..... 269 m<sup>3</sup>/min

## Transmission

- Modulated power shift, with 3 speeds forward and reverse
- Dana ..... Series 32000

## Converter

- Single stage
- Dana ..... C-270 series

## Axles

- Spiral bevel differential, full floating, planetary wheel end drive
- Rock Tough ..... 406
- Rear axle, trunnion-mounted, self-lubricating bushings
- Degree of oscillation ..... 14° (7° on each side)
- Differentials:
  - Front ..... No spin
  - Rear ..... Standard

## Brakes

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

## Electrical system

- System voltage ..... Start & accessories 24 V

## Motion times

Boom	
Raising	4.7 seconds
Lowering	5.0 seconds
Bucket	
Dumping	3.6 seconds
Rolling back	3.2 seconds

## Tyres

- Tubeless, nylon, smooth tread design for underground mine service
- Tyre size ..... 17.50 x 25 20 ply L-5S

\* 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-ISO ROPS/FOPS certified

## Hydraulic system

- Filtration, suction line ..... 25 micron
- Dump /hoist system pressure ..... 13.8 MPa
- Dump and hoist control; pilot operated, single lever
- Cylinders, double acting, chrome plated stems, diameter:
  - Steer cylinders (2) ..... 89 mm
  - Hoist cylinders (2) ..... 152 mm
  - Dump cylinder (1) ..... 152 mm
- Pumps:
  - Dump /hoist ..... 158 L/min at 2,400 rpm
  - Steering ..... 129 L/min at 2,400 rpm

## Tank capacities

- Fuel tank capacity ..... 216 litres
- Hydraulic tank capacity ..... 170 litres

## Exhaust system

Catalytic purifier plus exhaust silencer

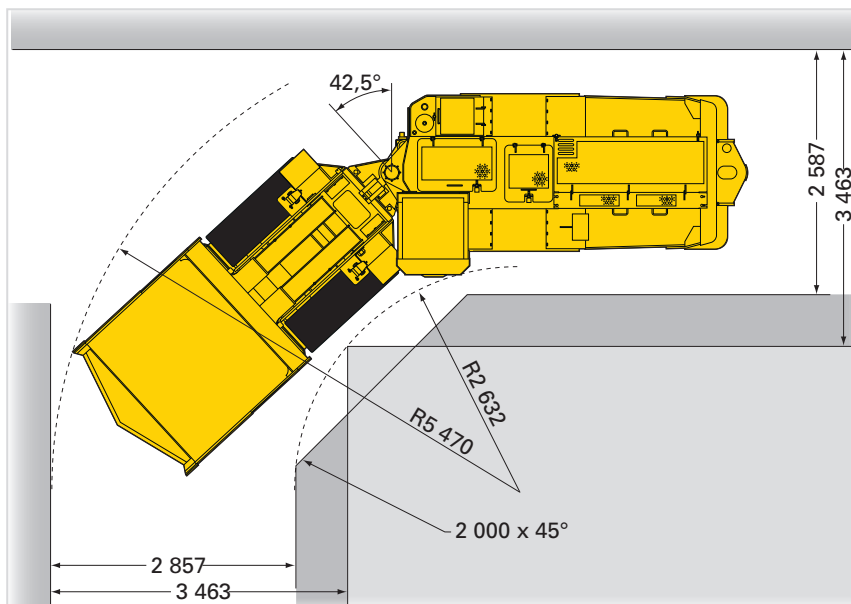
## Steering

- Articulated hydraulic power steering, mono-stick control
- System pressure ..... 15.9 Mpa (2,300 psi)

## Other

- Fire extinguisher, 6 kg
- Central manual lubrication

## Turning radius



- Turning angle +/-42.5°
- Dimensions shown are based on standard vehicle configuration with 27 mm tyre deflection, unloaded
- All dimensions are shown in millimetres

## Grade performance

### Standard configuration, bucket empty

Percent 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	30.0
Ratio					1:12	1:10	1:8	1:7			1:5	1:4	
1st gear (km/h)	4.7	4.7	4.7	4.5	4.5	4.3	4.3	4.1	4.1	4.1	4.0	3.9	3.9
2nd gear (km/h)	9.7	9.5	9.2	8.8	8.7	8.3	8.0	7.7	7.2	6.8	6.3	5.0	
3rd gear (km/h)	18.9	17.8	16.7	15.1	13.1	10.9	8.4						

### Standard configuration, bucket loaded

Percent 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	30.0
Ratio					1:12	1:10	1:8	1:7			1:5	1:4	
1st gear (km/h)	4.7	4.7	4.5	4.3	4.3	4.1	4.1	4.0	4.0	4.0	3.9	3.5	3.2
2nd gear (km/h)	9.5	9.1	8.8	8.6	8.1	7.7	6.9	6.3	5.6	5.0	4.3		
3rd gear (km/h)	18.3	16.9	14.8	12.1	9.1	6.5							

## Optional equipment

### Main frame

- Wheel chocks and chock brackets
- Knockdown construction - specify weight and dimension limitations
- Shipping covers
- EOD buckets, recommended for truck loading

### Ergonomic

- Wheel steering control

### System

- Ansul Checkfire auto fire suppression
- Ansul single bottle fire suppression with engine kill
- Lincoln auto lube with timer
- Manual hydraulic tank fill pump
- Hydraulic oil fill cap retainer

### Electrical system

- Audio-visual reverse alarm

### Hydraulic system

- EOD hydraulics & controls only
- Brake release tow hook

### Controls and instruments

- Low hydraulic level warning
- Scooptram RRC (Line of Sight Radio Remote Control)
- RRC interface only
- Bucket Float
- Block out 3rd gear

### Documentation

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

### Other

- Tool box

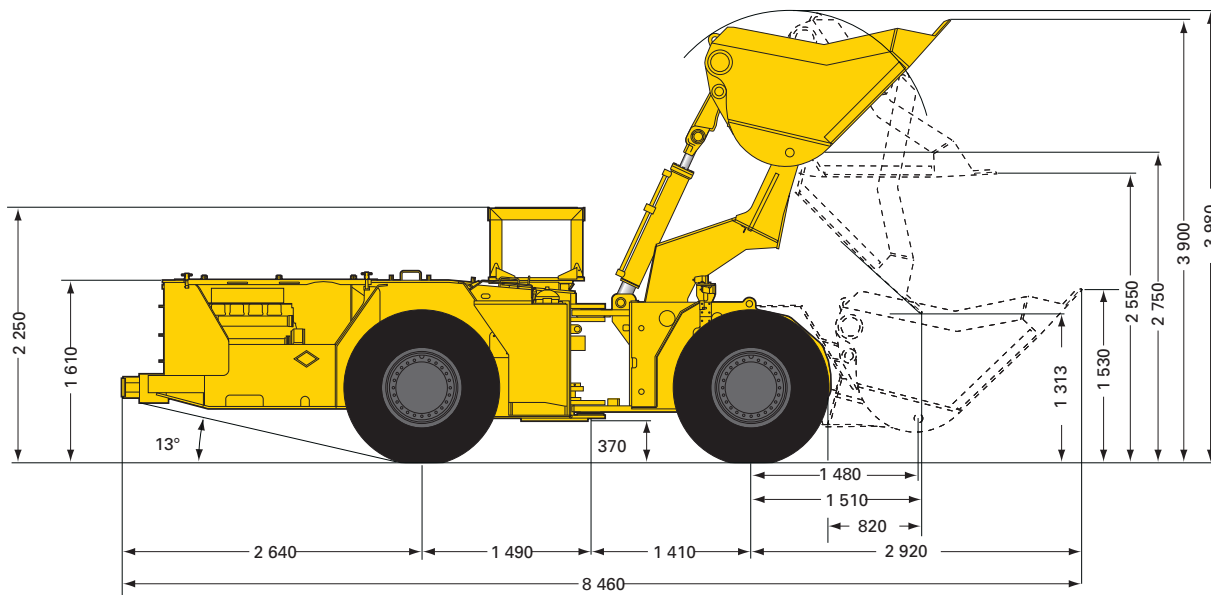
# Buckets

Bucket data		STD					
Volume, nominal heaped (m <sup>3</sup> )	3.4	3.1	2.7	2.3	2.1	1.9	
Material density (t/m <sup>3</sup> )	1.8	2.0	2.2	2.6	2.8	3.0	
Width, bucket (mm)	W	2 121	1 960	1 956	1 956	1 956	1 956
Tramming position: Axle centreline to bucket lip (mm)	T	2 890	2 916	2 788	2 678	2 798	2 697
Truck loading: Reach (mm)	L	793	820	695	587	698	605
Raised position: Back height, max. (mm)	H1	3 967	3 984	3 870	3 844	3 783	3 744
Dump position: Bucket tip, height (mm)	H2	1 338	1 313	1 439	1 546	1 428	1 528

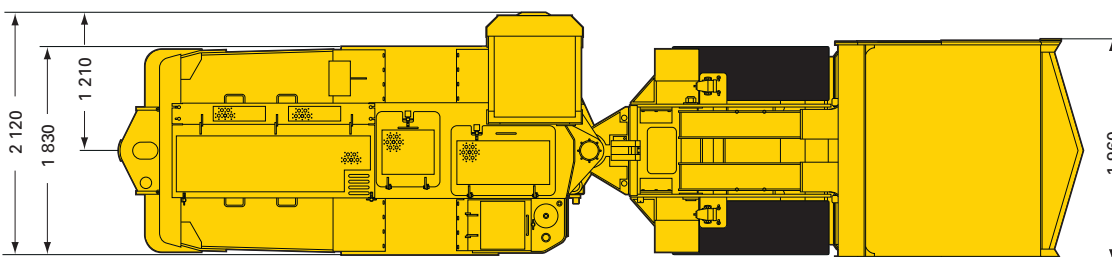
## Dimensions and weights\*

- Approximate weight .....17 100 kg
- Axle load, front .....8 000 kg
- Axle load, rear .....9 100 kg

\*Standard equipped vehicle with empty bucket



Side view



Top view

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