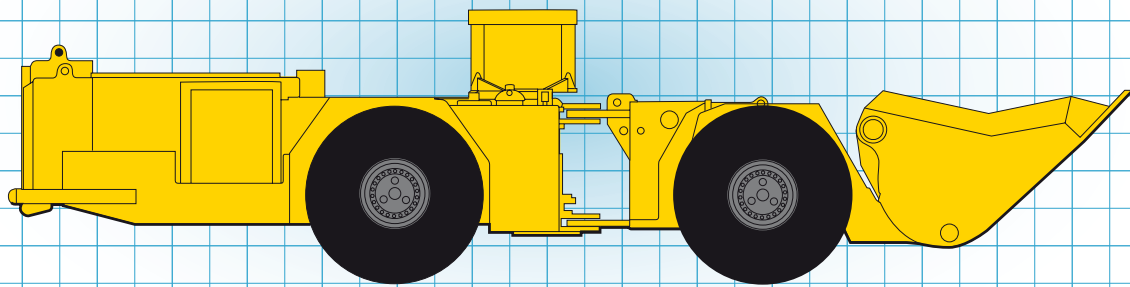


# Electric Scooptram EST3.5

## Technical specification



The Electric Scooptram EST3.5 is a reliable 6000 kg capacity underground loader that has been proven in mines around the world where local conditions such as reduced mine ventilation or high ambient temperatures make the use of diesel powered units impractical.

### Features

#### Load frame:

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

#### 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
- ABB electric motor with overload protection and onboard start is offered with various voltages and electrical frequencies

- Ground fault/ground check systems protect mine personnel
- Random wrap cable reel with automatic tensioning offered for different cables specifications matched to the mine electrical system
- High ground clearance protects the machine from damage
- Three point mounting and anti-skip protection provides safe access to operators and service staff

#### General:

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

# Specifications

Capacities	
SAE regulations	
Tramming capacity	6000 kg
Breakout force, hydraulic	9960 kg
Breakout force	8180 kg

Motion times	
Boom	
Raising	6.0 seconds
Lowering	4.0 seconds
Bucket	
Dumping	4.0 seconds

## Motor

- ABB Electric motor.....3 phase, 50 and 60 Hz, 1000V
- Power rating..... 74.6 kw/100 hp
- On board start system
- Ground fault system

## Transmission

- Full power shift, 3 speeds forward and reverse, integral single stage converter
- Dana..... 32 000 Series

## Axles

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

## Brakes

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

## Electrical system

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

## Tyres

- Tubeless, nylon, smooth tread design for underground mine service, on demountable rims
- Tyre size..... 17.50x25,20 ply, L5S \*

\* 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 entry and side seated for bi-directional operation and maximum visibility

## Hydraulic system

- Filtration, suction line..... 25 micron
- Dump /hoist system pressure..... 13.8 MPa
- Hydraulic tank capacity..... 273 litres
- Cylinder, double acting, chrome plated stems, diameter:
  - Steer cylinders (2)..... 89 mm
  - Hoist cylinders (2)..... 152 mm
  - Dump cylinder ..... 152 mm
- Pumps:
  - Dump /hoist..... 92+92 lpm at 2,100 rpm
  - Steering ..... 61 lpm at 2,100 rpm

## Steering

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

## Cable reel

- Random wrap with automatic tension control
- Standard reel diameter ..... 1.37m

## Other

- Fire extinguisher, 6 kg
- Central manual lubrication

# Optional equipment

## Main frame

- Various bucket sizes
- Boom up lock device
- Knockdown construction - specify weight and dimension limitations
- EOD buckets, recommended for truck loading

## Ergonomic

- Wheel steering control

## System

- Single bottle fire suppression
- Lincoln auto lube with timer
- Manual hydraulic tank fill pump

## Hydraulic system

- EOD hydraulics & controls only

## Electrical system

- Ground fault box not included
- Shielded trailing cable
- Zig Zag transformer
- Audio-visual reverse alarm

## Controls and instruments

- Block out 3rd gear
- Single lever dump and hoist control

## Power unit

- Various voltage and frequency electrical motors
- Various cable specifications

## Documentation

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

## Other

- Tool box



# Buckets

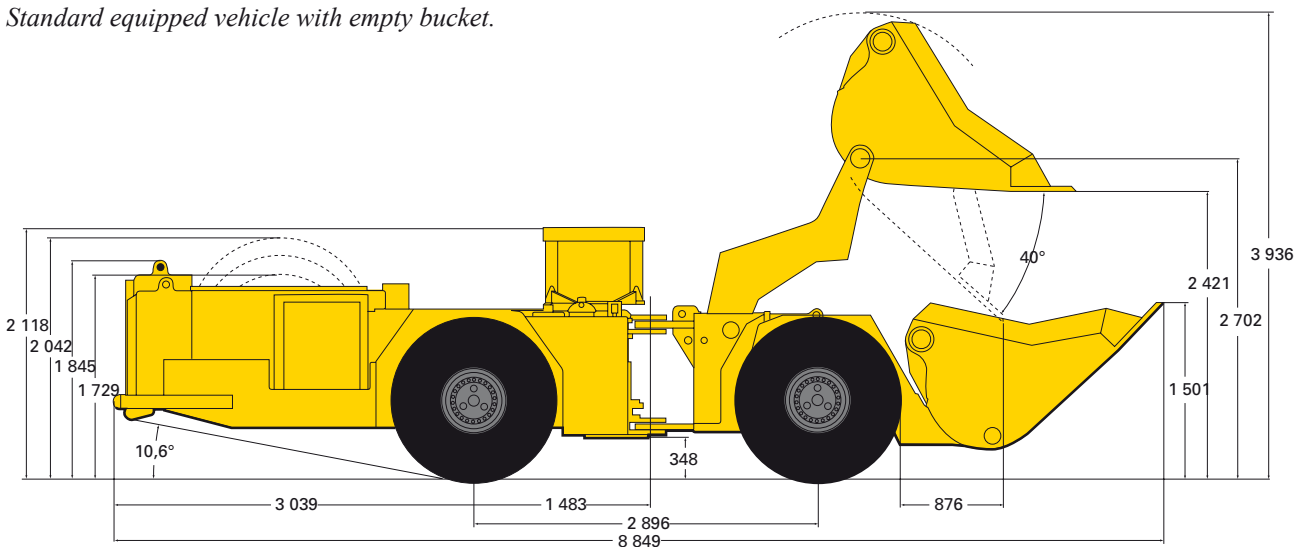
Bucket data		STD					
Material density (t/m <sup>3</sup> )		1.8	2.0	2.2	2.6	2.8	3.0
Volume, nominal heaped (m <sup>3</sup> )		3.4	3.1/3.0*	2.7/2.8	2.3	2.1	1.9/1.8*
Bucket width (mm)	W	2 121	1 956/2159*	1 956/1969*	1 956	1 956	1 956/1969*
Tramming position: Axle centerline to bucket lip (mm)	T1	2 888	2 916/2833*	2 916/2893*	2 678	2 798	2 697/2837*
Truck loading: Reach (mm)	L1	813	812/2548*	711/2548*	579	689	597/2562*
Raised position: Back height, max. (mm)	H1	3937	3984/3972*	3835/4035*	3660	3770	3678/3942*
Raised position: Bucket tip, height (mm)	H2	1321	1313/2548*	1397/2548*	1546	1428	1528/2562*

\* EOD bucket, for sizing of buckets and boxes, please consult your local Customer Center

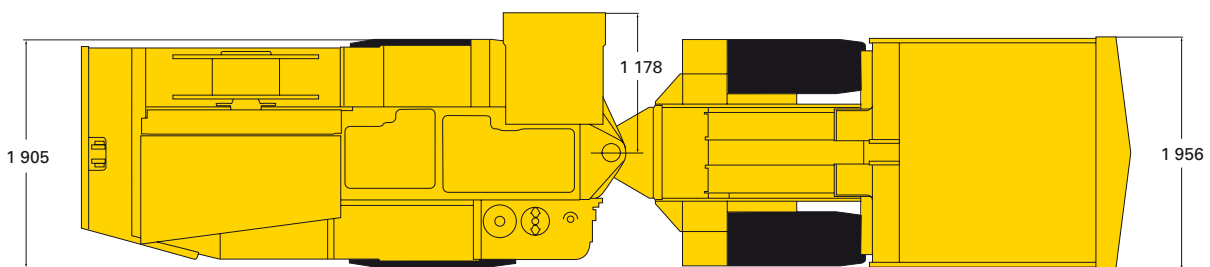
## Dimensions and weights

- Approximate weigh .....17 900 kg
- Axle load, front end.....7 400 kg
- Axle load, back end.....10 500 kg

Standard equipped vehicle with empty bucket.



Side view



Top view

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



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