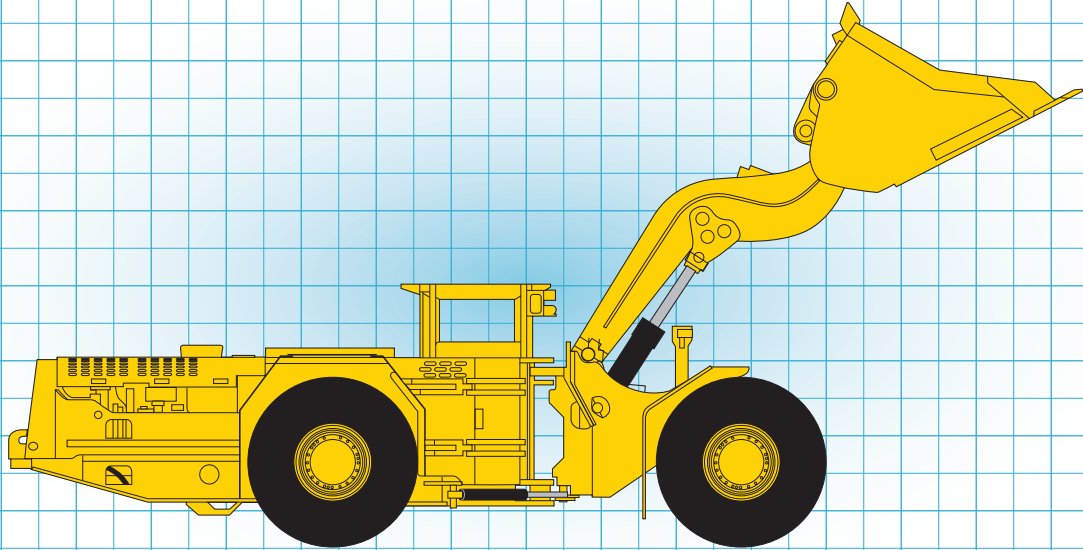


# Scooptram® ST710

## Technical specification



The ST710 is a compact 6.5 metric ton Scooptram with an ergonomically designed operator's compartment especially for narrow-vein mining.

### Features

#### Load frame

- A Z-bar front-end for efficient loading and mucking
- An aggressively designed "high shape" factor bucket, reducing the need for multiple passes to fill the bucket
- Easy to change bucket and cylinders with split-cap pin retention system
- Boom support and lock for safe work under boom

#### Operator's compartment

Ergonomically and spacious designed compartment for maximum safety and minimal operator fatigue with:

- maximized legroom because of the Atlas Copco's "footbox"
- comfortable operator's seat offering improved ergonomic positioning, body orientation and generous shoulder and hip room
- compliant with sound and vibration regulations to minimize operator's fatigue; reduced noise level to 82 dB(A) inside the cab

#### Power frame

- Atlas Copco unique powertrain including an upbox, and a transverter (a combined transmission and converter) - allowing space for the "footbox" plus a low and short rear end
- Electronic transverter and engine control systems for smooth and precise shifting
- A high power-to-weight ratio complemented by a fully integrated powertrain, automatically matching the gear selection to the load - producing a high tractive effort without wheel spin
- Stacked V-core radiator and charge air cooler: easy to replace damaged tubes and to clean

#### General

- Great serviceability with centralized service points
- Long-life roller bearing centre hinge
- Anti skid material at service access points

# Specifications

| Capacities                 |           |
|----------------------------|-----------|
| <b>SAE regulations</b>     |           |
| Tramming capacity          | 6 500 kg  |
| Breakout force, hydraulic  | 14 200 kg |
| Breakout force, mechanical | 10 347 kg |

| Motion times  |             |
|---------------|-------------|
| <b>Boom</b>   |             |
| Raising       | 6.1 seconds |
| Lowering      | 4.6 seconds |
| <b>Bucket</b> |             |
| Dumping       | 1.3 seconds |
| Rolling back  | 1.7 seconds |

| Matching vehicles |
|-------------------|
| <b>Minetruck</b>  |
| Minetruck MT2010  |

## Engine

- Deutz Diesel BF6M1013FC-MVS
- Power Rating at 2300 rpm ..... 149 kW/200 HP
- Maximum torque at 1400 rpm ..... 805 Nm
- MSHA part 32 ventilation rate ..... 481 m<sup>3</sup>/min
- Ventilation particulate index ..... 113 m<sup>3</sup>/min
- Rock Tough purifier and silencer
- Dry type air cleaner
- Exhaust heat protection
- Remote engine oil drain
- Cooling package with v-core radiator

## Upbox

Superior AC826V: Power transmitted through a 1:1 gear ratio box

## Transverter

Funk DF150: Automatic power shift with integral converter, fully modulated 4 speed shifting, forward/reverse

## Axles

Rock Tough 406: Spiral bevel differential, full floating, planetary wheel end drive

- No spin front differential
- Conventional rear differential
- Rear axle, trunnion mounted
- Degree of rear axle oscillation ..... +/-7°

## Brakes

Fully enclosed, force cooled, multiple wet discs at each wheel end

- Service, parking and emergency brakes ..... SAHR system

## Tires

Tubeless, smooth, extra deep tread design for underground mine service on demountable rims

- Tire size, front and rear ..... 17.5x25, 20 ply STMS L-5S

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

## Operator's compartment

- Canopy MSHA-ISO ROPS/FOPS approved
- Side seated operator for bi-directional operation
- Grammer seat with retractable seat belts
- Open door retainer
- Two pilot operated joysticks for steering, dump & hoist control
- Push button transmission control on dump and hoist lever
- Foot-box

## Hydraulic system

- Bucket float
- Cylinders: Double acting, chrome plated stems
- Two steer cylinders diameter ..... 80 mm
- Two hoist cylinders diameter ..... 160 mm
- Stabilizer cylinder diameter ..... 180 mm
- System pressure, dump and hoist ..... 20.7 MPa
- System pressure, steering ..... 22.4 MPa
- Hydraulic tank capacity ..... 87 liters
- Filtration, return line ..... 4.0 µm
- Heavy duty gear type pumps
- Door steering interlock

## Electrical system

- Voltage, system start & accessories ..... 24 V
- Alternator, high output
- Hydraulic warning system
- Rock Tough protection lights
- Isolation switch lockout

## Fuel

- Fuel tank capacity ..... 191 liters
- Fuel consumption, full load ..... 41 litres/hour
- Fuel filtration ..... 3.0 µm
- Anti-siphon fuel supply

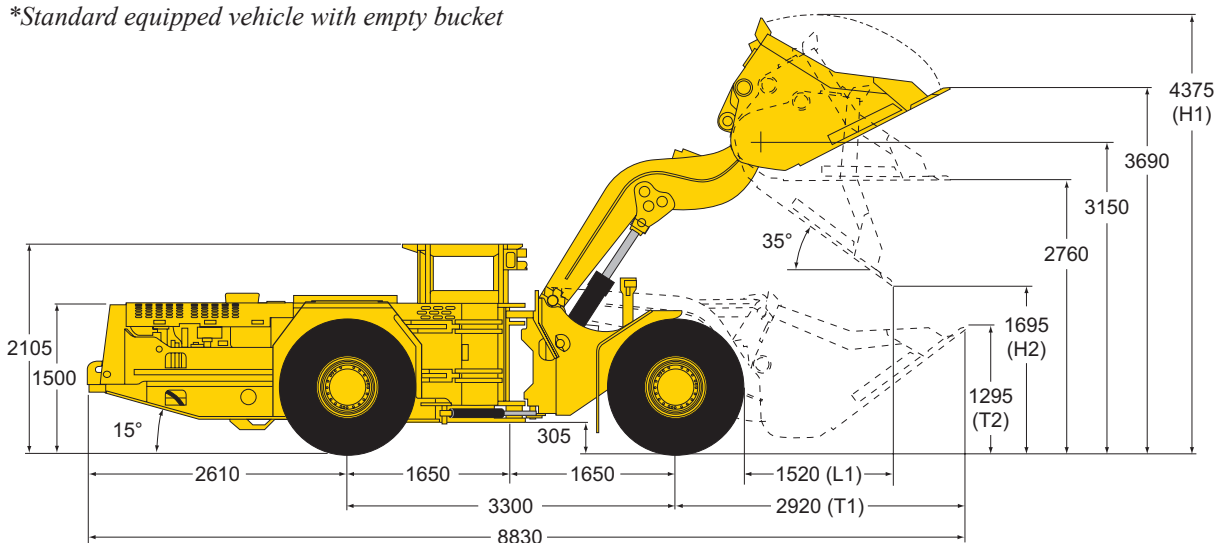
# Buckets

| Bucket data   |    | STD   |       |       |       |       |
|---|----|-------|-------|-------|-------|-------|
| Material density (t/m <sup>3</sup> )                  |    | 1.8   | 2.0   | 2.2   | 2.4   | 2.6   |
| Volume, nominal heaped (m <sup>3</sup> )              |    | 3.4   | 3.2   | 3.0   | 2.8   | 2.6   |
| Width, bucket (mm)                                    | W  | 2 040 | 2 040 | 2 040 | 2 040 | 2 040 |
| Tramming position: Axle centerline to bucket lip (mm) | T1 | 3 000 | 2 920 | 2 895 | 2 830 | 2 750 |
| Tramming position: Ground to bucket tip (mm)          | T2 | 1 340 | 1 295 | 1 280 | 1 220 | 1 135 |
| Truck loading: Reach (mm)                             | L1 | 1 590 | 1 520 | 1 500 | 1 440 | 1 360 |
| Raised position: Back height, max. (mm)               | H1 | 4 375 | 4 375 | 4 375 | 4 375 | 4 375 |
| Raised position: Bucket tip, height (mm)              | H2 | 1 635 | 1 695 | 1 705 | 1 750 | 1 825 |

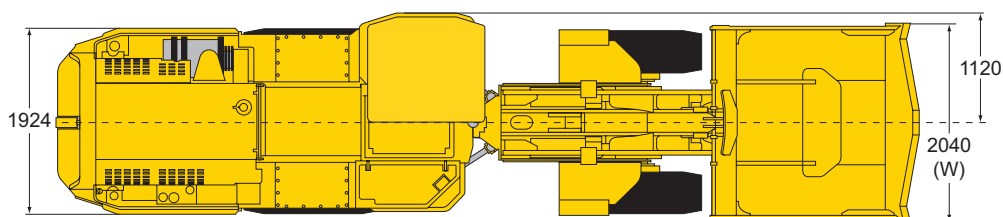
## Dimensions and weights

- Approximate gross weight ..... 18 200 kg\*
- Axle load, front end ..... 8 372 kg\*
- Axle load, back end ..... 9 828 kg\*

\*Standard equipped vehicle with empty bucket



Side view



Top view

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