

Adroit 2230

Slope Stabilization Vehicle



Adroit 2230 is designed to be used for slope stabilisation applications. Especially taking into consideration all challenging situations that might be encountered during highway and railway construction, it's developed to operate at elevations difficult to reach. The most important feature of Adroit 2230 is its multifunctionality. Four functions including bolt drilling, basket platform, grouting and shotcrete application all are in one single vehicle.

One of two booms on the frame with driller does drilling jobs up to 20 m height in areas difficult to reach. The other boom has a basket platform, concrete spraying unit and grouting system can work up to 25 m height.

GENERAL SPECIFICATIONS

- > All equipments are sheltered by cabinet
- > Proportional boom control valve group with load sensing
- > Led control panel showing fault, warning info
- > Stabilizer cylinder and valve group
- > Radio remote control
- > Reversing audible and visual warning system
- > Automatic lubrication system
- > Handheld fire extinguisher

DIMENSIONS AND WEIGHT

- > Length 13500 mm
- > Width 2570 mm
- > Height 4000 mm
- > Total weight 50000 kg

COMPRESSOR

- > Electrically operated screw compressor
- > Capacity : 9,2 m³/min.
- > Pressure : 8 bar
- > Electric motor : 55 kW

CONCRETE PUMP

- > Theoretical max. capacity of pumping shotcrete : 26 m³/h
- > Shotcrete flow control system
- > Pumping pressure : max. 60 bar
- > Hydraulic pressure : max. 250 bar
- > Aggregate size : max. 16 mm
- > Adroit shotcrete machines are able to pump all type of fibers
- > Hydraulically driven hopper vibrator
- > Hydraulically controlled hopper drain cover

ACCELERATOR SYSTEM

- > Electrically driven accelerator peristaltic pump
- > Dosing rate : max. 0 to 20 L/min.
- > Pumping pressure : max. 15 bar
- > Accelerator tank : 1100 L
- > Dosing rate can be controlled manually, flow rate (L/min) and dosing percentage (%) readable on the display.

DIESEL GENERATOR

- > Stand by power : 290 kVA
- > Voltage : 400 V

BASKET PLATFORM

- > Complies with EN280 standards
- > Basket sizes 1,6 m x 1,2 m x 1,1 m
- > Basket door opens to inside, it cannot be moved unless the door is closed. The machine gives off audible and visual warning when the door is open.
- > The basket has the bearing capacity of max. 250 kg
- > It has a powerpack system to lower the basket in case of malfunction.
- > Grate floor
- > Basket and boom movements can be controlled both from the chassis and inside the basket.
- > Intercom communication system between the basket and the operator cabin.
- > Grab bars and security belt connection hooks inside the basket.
- > Max. lifting height (basket floor) 24,6 m

CEMENT GROUTING PUMP

- > Pumping capacity : 35 L/min.
- > Pumping pressure : 40 bar

ROCK DRILL

- > Drill bits diameter : 45 - 76 mm
- > Impact power : 19,4 kW
- > Percussion pressure : 140 bar
- > Rotation speed : 190 - 220 rpm
- > Max. torque : 1000 Nm
- > Max. height : 20 m

WATER PUMP AND TANK

- > Water pump : 30 L/min.
- > Tank capacity : 1100 L

HYDRAULIC SYSTEM

- > Tank capacity 900 L
- > Hydraulic filtration, fluid temperature and tank fluid level sensing and warning system

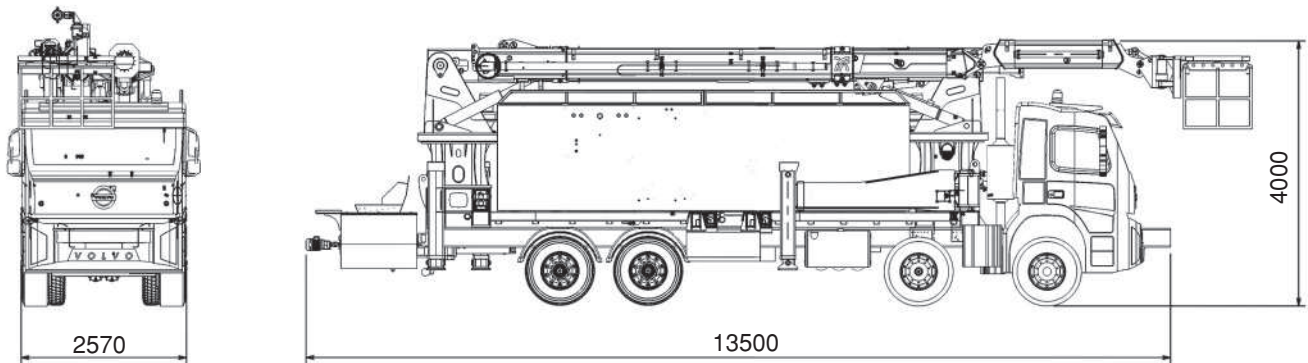
24VDC ELECTRICAL SYSTEM

- > Electrical components with : IP65 and above protection grade
- > Led lighting lamps illuminating the movement direction
- > Led flashing beacon in amber colour

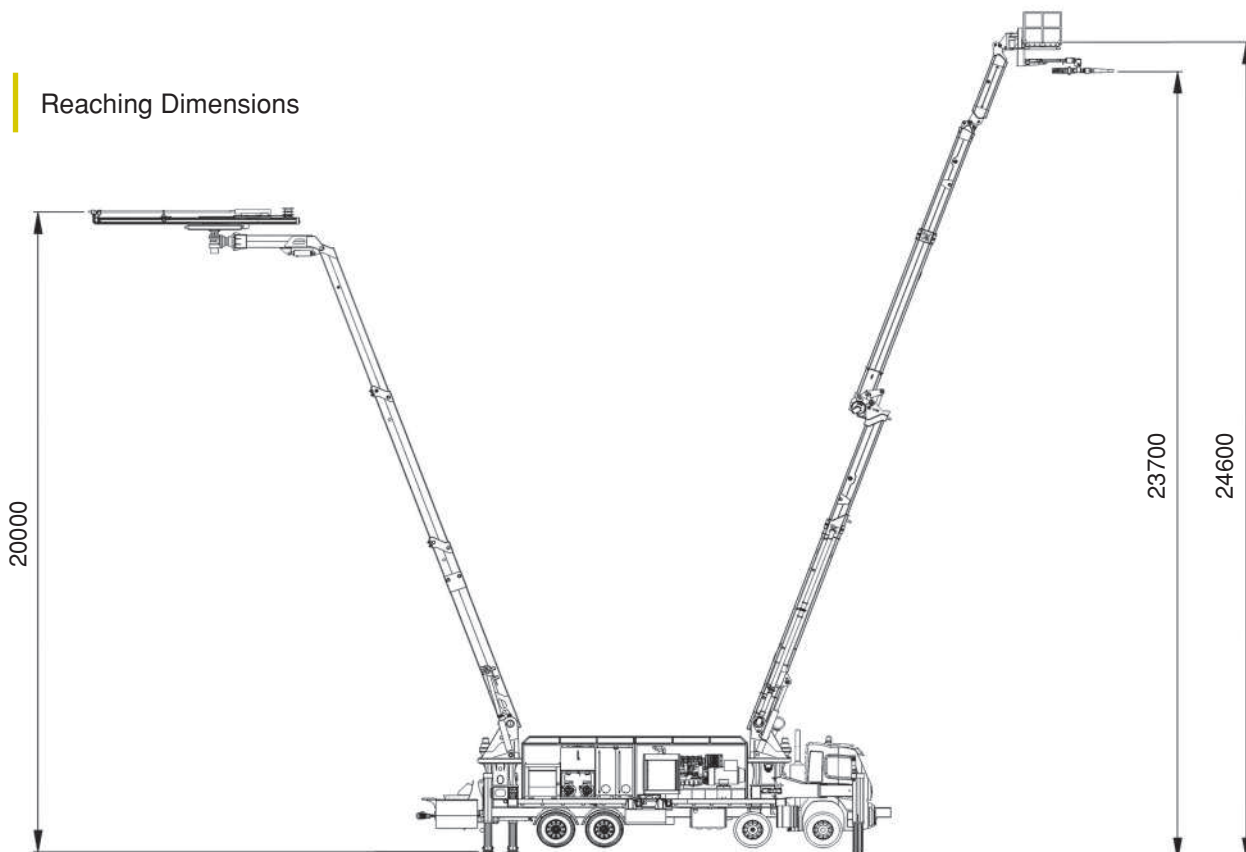
HIGH VOLTAGE ELECTRICAL SYSTEM

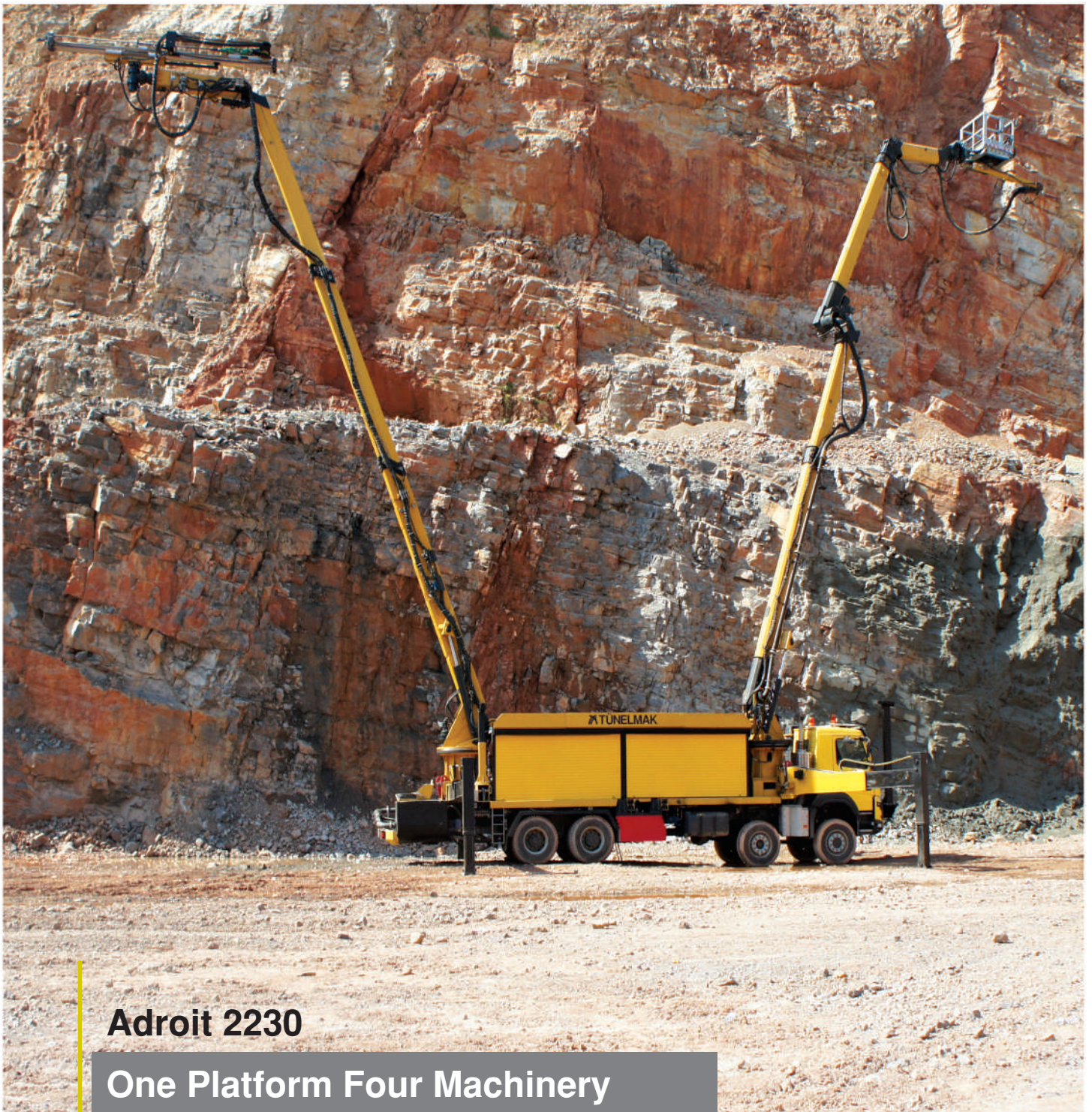
- > 380 V, 50 Hz. cable type 3 x 50 mm² + 25 mm²
- > Power pack : 37 kW electrical motor

Slope Stabilization Vehicle Dimensions of Vehicle



Reaching Dimensions





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One Platform Four Machinery

- Shotcrete Pump
- Cement Grouting Pump
- Rock Drilling Rig
- Basket Platform