

Adroit 520AH

4x4 Articulated Basket Platform



Adroit 520AH is designed as basket platform which has a self propelled articulated frame. It is manufactured in compliance with EN280 Standards. It is driven by Deutz 103 kW Euro Stage III diesel engine and has Dana 4x4 hydrostatic drivetrain axle and transmission system. It has been reinforced with S.A.H.R brake system which has 40% gradient climbing. The machine which have all types of necessary safety systems such as stabilizer cylinders, automatic basket stabilization, momentum sensing and overload sensing, provides 5.8 m boom lifting and 7,8 m ceiling access with its 2 m x 2 m x 1,1 m basket size. It has the capacity of 1500 kg + 2 personnel when boom is fully closed and 500 kg + 2 personnel when boom is fully opened telescope position with the help of $\pm 30^\circ$ right - left and $-15^\circ / +65^\circ$ down - up boom movements. It has the bearing capacity of 500 kg + 2 personnel while the boom is closed without using the stabilizer cylinders. Adroit 520AH, with its Level 2 FOPS and ROPS certified cabin, is ideal for the mines, metro tunnels and all underground operations in ventilation systems, electro-mechanical installations, injection and dynamite placing applications.

GENERAL SPECIFICATIONS

- > Led control panel showing fault, warning and driving info
- > Cameras and recording system
- > Reversing audible and visual warning system
- > Eyebolts and towing hooks to use in loading and transporting the machine
- > Overload sensing and warning system
- > Anti-rollover momentum stabilization system
- > All safety cylinders, including basket and boom system, have locking valves
- > 4000 psi pressure resistant main pressure lines
- > Stabilizer cylinders
- > Payload and stabilization diagrams inside the basket and cabin
- > 12VDC output inside the cabin for vehicle radio
- > Fire extinguisher

DIMENSIONS AND WEIGHT

- > Length 8545 mm
- > Width 2330 mm
- > Height 2870 mm
- > Weight 13850 kg

SERVICE BASKET

- > Complies with EN280 standards
- > Basket sizes 2 m x 2 m x 1.1 m
- > Basket door opens to inside, it can not be moved unless the door is closed. The machine stops if the door is opened while moving
- > The machine gives off audible and visual warning when the door is open
- > The basket has the bearing capacity of 1500 kg + 2 personnel when boom fully closed and 500 kg + 2 personnel when boom fully opened
- > 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
- > Security handle and security belt connection hooks inside the basket
- > Boom movement / right - left $-30^\circ +30^\circ$
- > Boom movement / down - up $-15^\circ +65^\circ$
- > Toolbox inside the basket
- > Max. lifting height (basket floor) 5,8 m
- > Max. vertical reach 7.8 m

OPERATOR CABIN

- > FOPS - ROPS level 2 certified closed operator cabin
- > Air conditioner inside the cabin
- > Laminated and tempered glasses
- > Heated glasses and side-view mirrors
- > Washable cabin upholstery
- > 3 points contacted, non-slippery stairs
- > Emergency stop button inside the cabin
- > Operator seat
 - Suspended
 - Retractable seat belt
 - Sensor that activates the park brakes when the operator stand up

ENGINE

- > Deutz TCD 2012 L4 103 kW@2400 rpm Diesel engine EU Stage 3A
- > Engine / radiator fluid level warning

EXHAUST SYSTEM

- > Catalytic converter with diesel particle filter

TRANSMISSION

- > Hydrostatic system : Dana 357 dropbox
- > 4 speed forward and 4 speed reverse
- > 4 wheel drive

AXLE SYSTEM

- > Planetary type Dana 112
- > Oscillating rear axle $\pm 8^\circ$

TIRES

- > 10.00 - 20 size heavy duty tires, suitable for underground work

PERFORMANCE

- > Fast 1st gear : 12 km/h
- > Fast 2nd gear : 33.7 km/h
- > Slow 1st gear : 4.2 km/h
- > Slow 2nd gear : 11.8 km/h
- > Max. climb gradient 40%

BRAKE SYSTEM

- > Service brake: Hydraulically powered two circuit oil immersed multidisc brake in both axles
- > Parking brake: S.A.H.R fail safe brake
- > Brake systems test set-up in cabin

FUEL SYSTEM

- > Tank capacity 120 L
- > Fuel hose securely fixed and isolated from the hot surfaces

HYDRAULIC SYSTEM

- > Tank capacity 320 L
- > Hydraulic filtration, fluid temperature and tank fluid level sensing and warning system
- > Central pressure control point for system pressure measurement

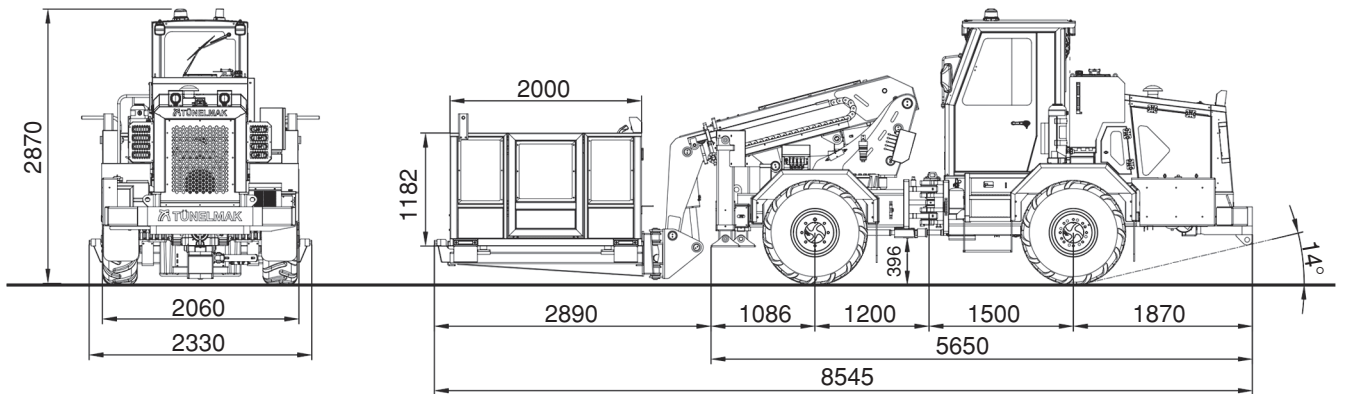
ELECTRICAL SYSTEM

- > Electrical components : IP65 and above protection grade
- > Battery 2 x 135 Ah
- > Led lighting lamps illuminating the movement direction
- > 2 flashing beacon lamps in amber and blue colours
- > Fire - resistant wiring

OPTIONAL COMPONENTS

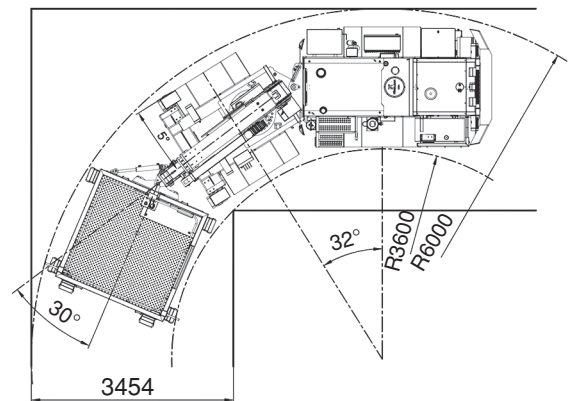
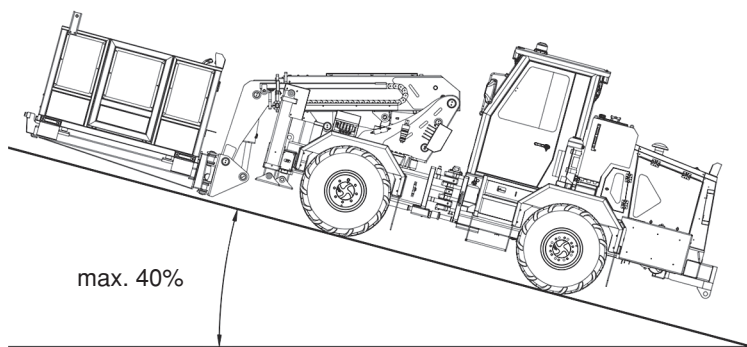
- > EU Stage 5 diesel engine
- > Fork attachment
- > Diesel engine fire suppression system

Adroit 520AH 4x4 Articulated Basket Platform
Dimensions of Vehicle

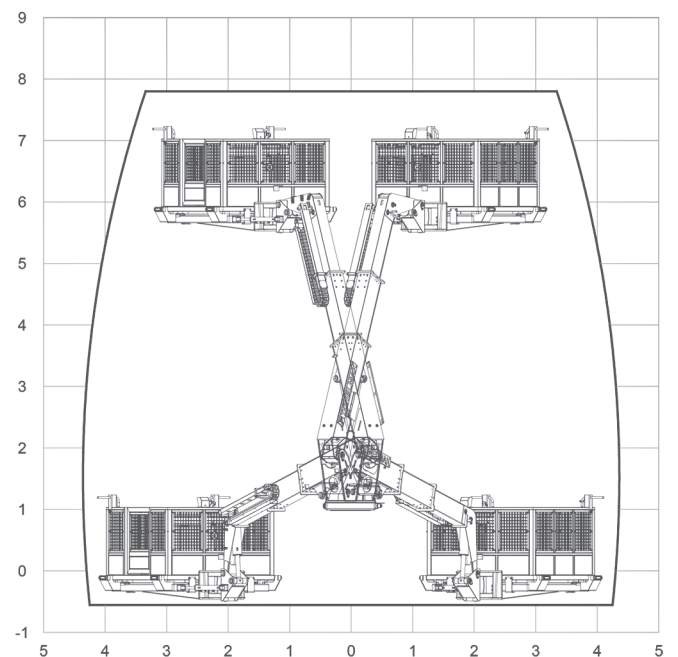
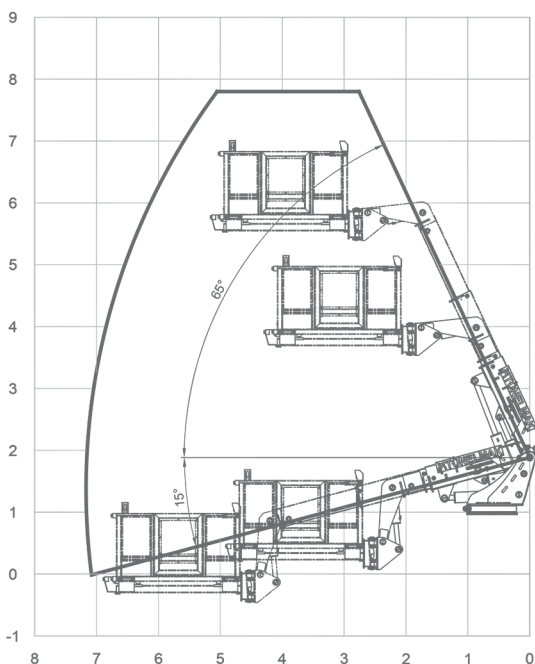


Climbing Capacity

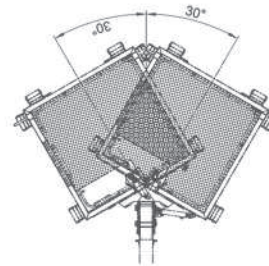
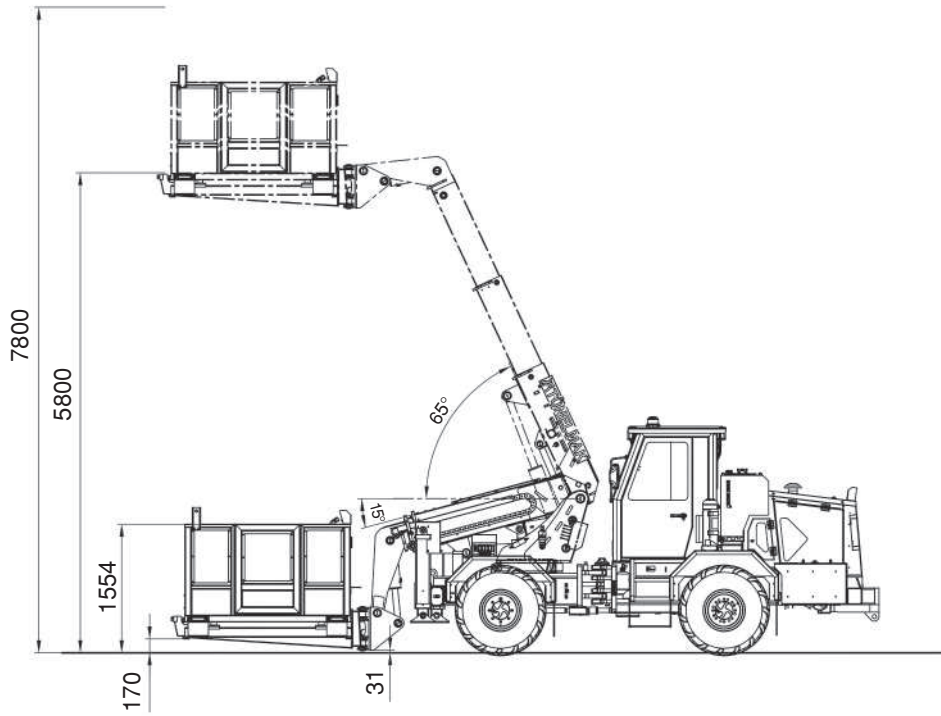
Turning Radius



Operation Diagram



Adroit 520AH 4x4 Articulated Basket Platform
 Minimum and Maximum Reaching Dimensions



Load Chart

