

Adroit 520W

4x4 Basket Platform



Adroit 520W is designed to facilitate the applications in underground mines, metro tunnels, highway and railway tunnels rail systems, tunnel face and ceiling. It's ideal for ventilation systems, electromechanical installations as well as grouting and dynamite charging applications. When the boom is fully opened the lifting capacity of the basket is 300 kg + 2 persons and reaching height is 11 m. Using the basket when the boom fully closed, carrying capacity is 1000 kg load + 2 persons. The vehicle haulage has a carrying capacity of 2 tons. Audible and visual warning system of the basket ensures safe operation during the application. 4WD powershift drive system and suspended seat provides safe and comfortable drive for the operator in difficult ground conditions.

GENERAL SPECIFICATIONS

- > Led control panel showing fault, warning and driving info
- > Rearview camera
- > 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
- > Fire extinguisher

DIMENSIONS AND WEIGHT

- > Length 8000 mm
- > Width 2350 mm
- > Height 2900 mm
- > Weight 6000 kg

SERVICE BASKET

- > Complies with EN280 standards
- > Basket sizes 1.2 m x 2 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 lifting capacity of 1000 kg + 2 persons when boom fully closed and 300 kg + 2 persons when boom extended fully
- > 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 -180° +180°
- > Boom movement / down - up -10° +65°
- > Max. lifting height (basket floor) 9 m
- > Max. vertical reach 11 m

OPERATOR CABIN

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

ENGINE

- > Perkins 1104D - 44T 74.5 kW@2200 rpm
Diesel engine EU Stage 3A

TRANSMISSION

- > Powershift system : Dana T12000 transmission
- > 4 speed forward and 3 speed reverse
- > 4 wheel drive

AXLE SYSTEM

- > Planetary type Dana 211
- > Oscillating front axle $\pm 8^\circ$

TIRES

- > 12.5 / 80 - 18 size heavy duty tires, suitable for underground work

PERFORMANCE

- > Max. speed 30 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

STEERING

- > Four wheel steering, crab steering, front wheel steering

FUEL SYSTEM

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

HYDRAULIC SYSTEM

- > Tank capacity 50 L
- > Hydraulic filtration, fluid temperature and tank fluid level sensing and warning system
- > Central pressure control point for system pressure measurement

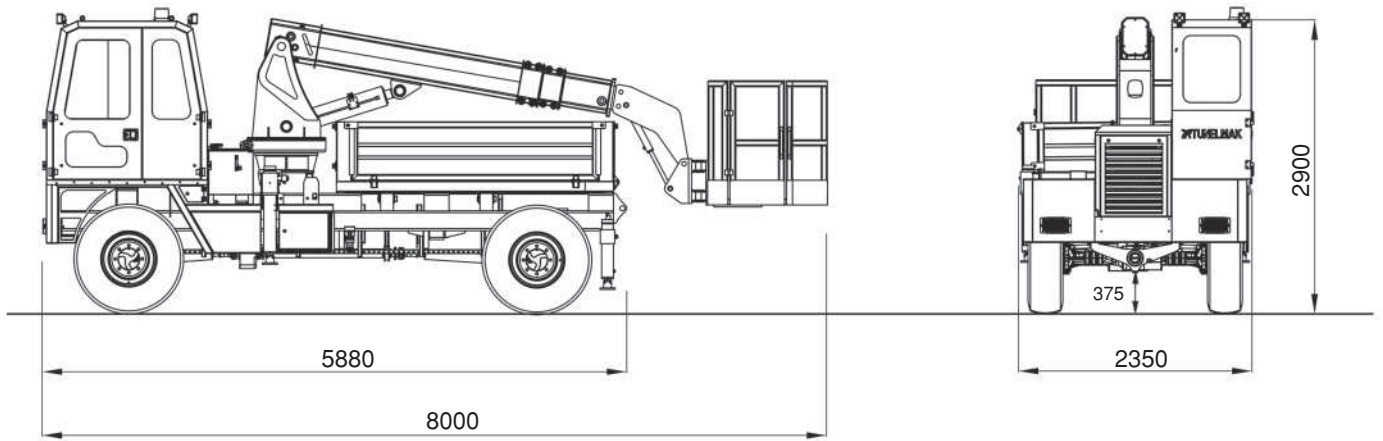
ELECTRICAL SYSTEM

- > 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

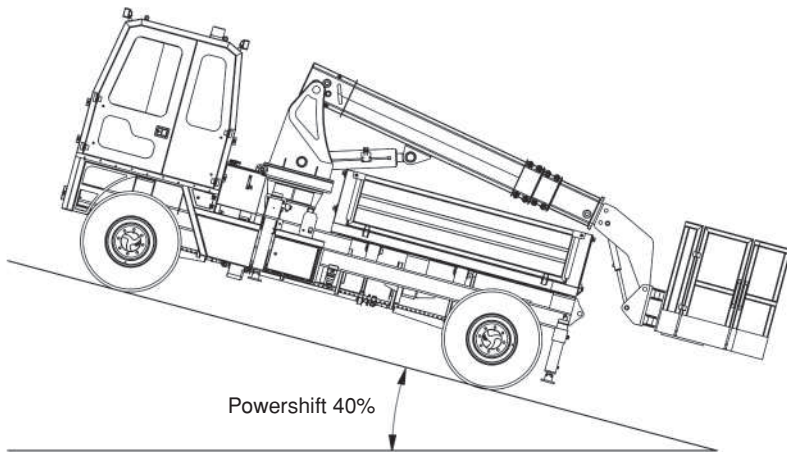
OPTIONAL COMPONENTS

- > EU Stage 5 diesel engine
- > Diesel engine fire suppression system
- > Air conditioner inside the cabin
- > Catalytic converter with diesel particle filter
- > 12VDC output inside the cabin for vehicle radio

Adroit 520W 4x4 Basket Platform
Dimensions of Vehicle



Climbing Capacity

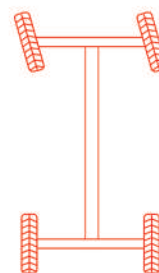
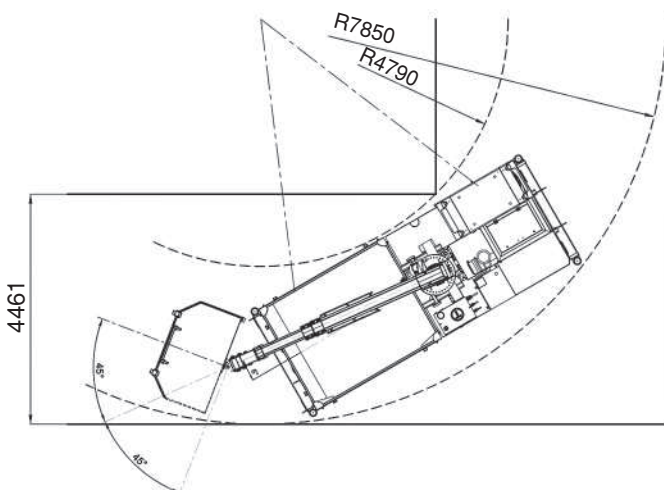


Max. Speed - Max. Power of Climbing

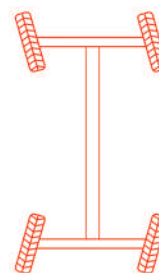
Adroits with 4x4 powershift system offers long distance drives on flat terrains and have capacity of 40% gradient climbing.

Front axle oscillates $\pm 8^\circ$.

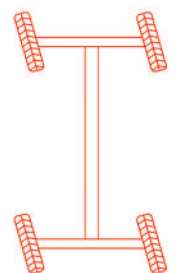
Turning Radius



Front Wheel Control

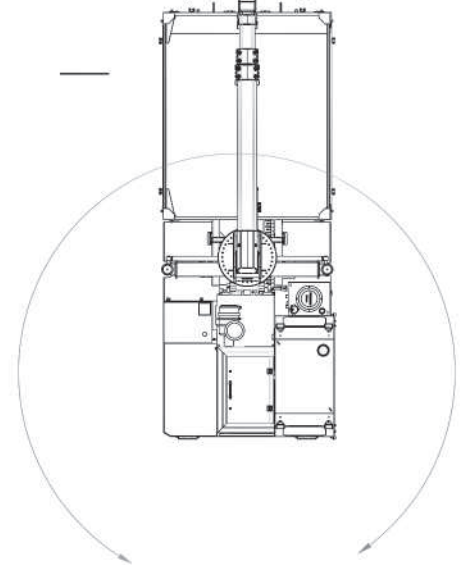
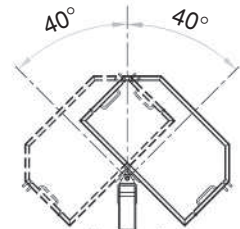
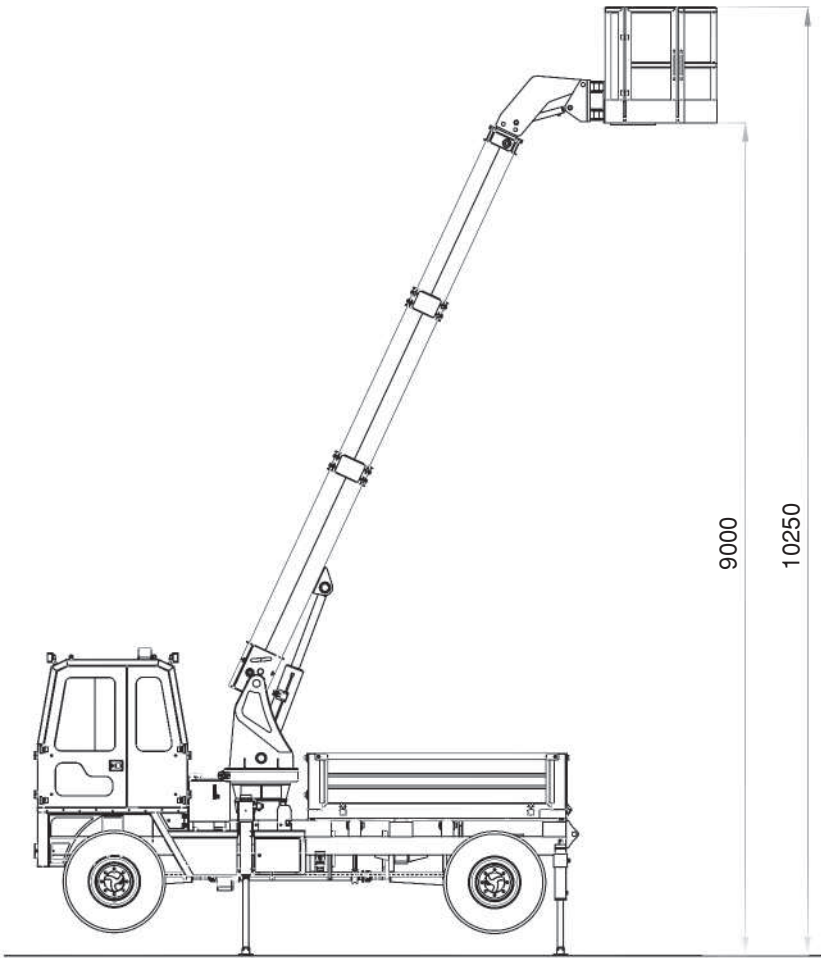


Four Wheel Steering



Crab Steering

Adroit 520W 4x4 Basket Platform
 Minimum and Maximum Reaching Dimensions



Load Chart

