

MINELIFT 4



SCISSOR LIFT PLATFORM FOR MINING



BEST
SUPPORT
UNDERGROUND



Putzmeister

Underground Technology

- 1 LED driving and working lights
- 2 Easily accessible maintenance service points
- 3 Control and display panel for recording and diagnosing errors
- 4 The rear camera with night vision makes reversing easier, increasing security
- 5 4 emergency stop buttons (vehicle sides, cab, and platform)
- 6 Fire suppression system (optional), automatic / manual activation



1 Front driving and working lights



2 Easy access service points



3 Controls and displays in the driving cab



4 Rear camera with night vision



5 Emergency stop button (side)



6 Fire suppression system (optional)

PUTZMEISTER UNDERGROUND MINING EQUIPMENT



PUTZMEISTER MINELIFT 4: SAFE, EFFICIENT AND FAST

The MINELIFT 4 scissor lift platform has been designed and developed to optimize the logistics of underground mining operations. With a lifting height of 4 meters and 4 ton capacity, the equipment is available in two configurations. In its basic configuration, MINELIFT 4 provides a safe working platform for the elevation of personnel and cargo in underground works, while the configuration for piping installation additionally includes an extendable platform, a crane with high load capacity and a pipe handling system. There's also the option to configure

the equipment for ventilation system installation, including an auxiliary lift table. The 6-cylinder, 130 kW (174 HP) engine gives the equipment great climbing and driving capacity, as well as the potential to be used at high altitude. A compact design with 4-wheel drive and 4-wheel steering provides excellent traction and maneuverability in small galleries and tunnels, with a maximum speed of 20 km/h. In this way, Minelift is the perfect solution for lifting and installations in underground mining.

DEVELOPED
TO OPTIMIZE
LOGISTICS
OF UNDERGROUND
MINING OPERATIONS



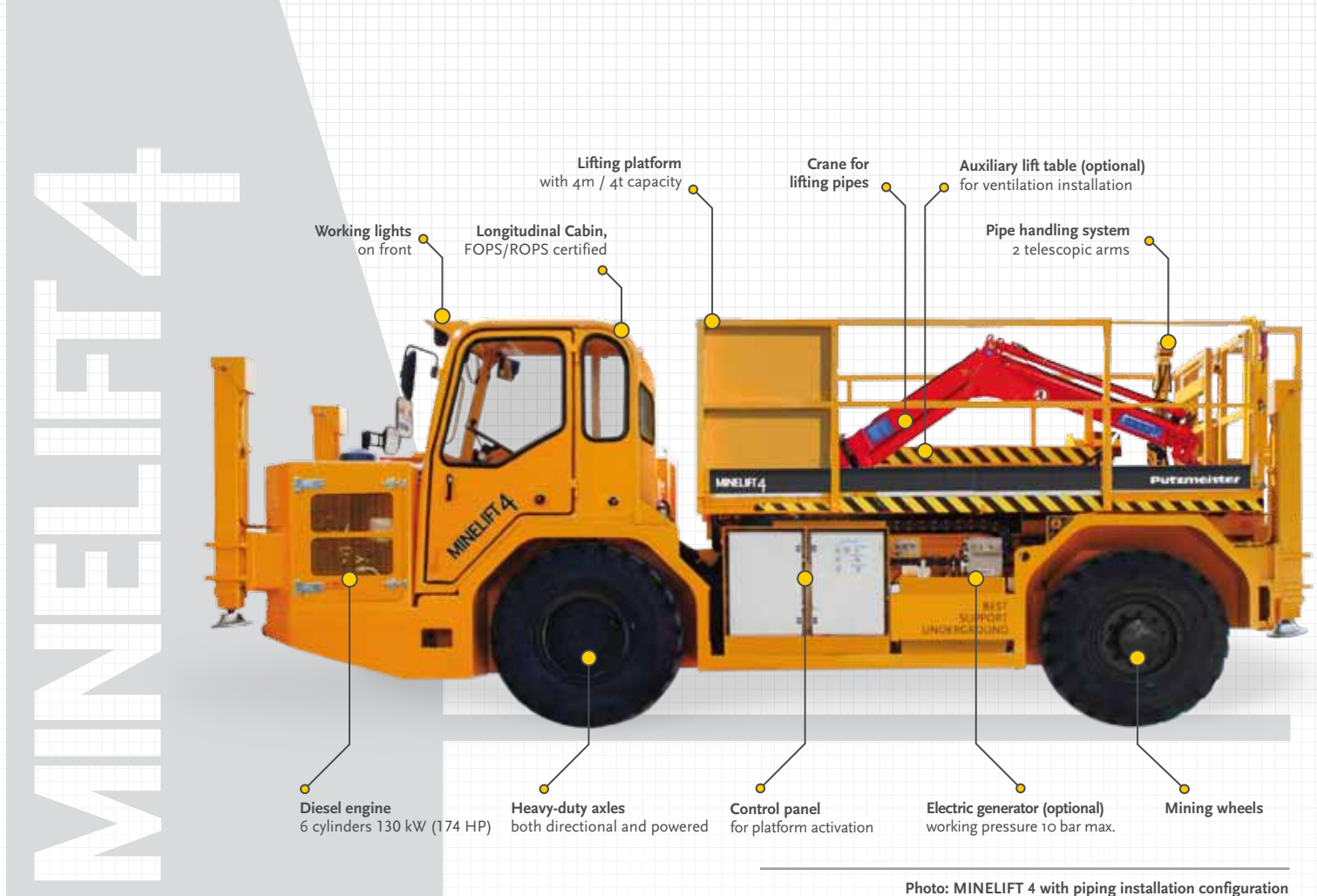


Photo: MINELIFT 4 with piping installation configuration

LIFTING PLATFORM: 4 METER / 4 TON CAPACITY

The platform with a lifting capacity of 4 m / 4 t provides a work surface of 3.400 x 1.850 mm. The railing is easily detachable to use the equipment as a load platform. To make work easier, the platform features LED lighting and a toolbox. The pre-installation for air and water services from the frame of the truck up to the platform itself facilitates the main services during operation. The platform's hydraulic tilting system allows you to tilt the platform with respect to the chassis at an angle of +/- 8°, and the stabilizers provide a leveling of +/- 4° lengthwise and +/- 12° transversely. In this way, you can work in longitudinal and transverse slopes up to 12° with maximum operator safety.

OFF-ROAD VEHICLE 130 kW (174 HP): POWER AND ROBUSTNESS

The compact design with heavy-duty axles and 4 steering and driving wheels (4x4), and the powerful 6-cylinder 130 kW (174 HP) engine give MINELIFT 4 great mobility and maneuverability in small galleries and tunnels. The Integrated Continuously Variable Drive (ICVD) without gear shift

allows you to leverage the maximum engine power at any time without breaks in traction, making operation easier for the driver. The combination of the hydrostatic drive system, slope measurement, and Putzmeister control software form the core of the automatic downhill speed control system. The equipment automatically adapts its maximum speed to the slope, taking full advantage of the engine retention capacity, thereby reducing the probability of operational errors. Service brakes on both axles are multi disc in oil bath, hydraulically operated with two independent circuits. This system provides great stopping power and a long working life, even in the most demanding conditions. This ensures maximum operational safety, performance, and durability of the equipment.

DRIVING CABIN AND WORK LIGHTING: ERGONOMICS AND VISIBILITY

MINELIFT 4 is available with an easy access ROPS/FOPS certified driving cabin with wide visibility, designed according to ergonomic standards to reduce operator fatigue and increase productivity. The equipment has LED working lights both on the platform and the vehicle, providing

operators with a safe environment inside the mine. Thanks to the rear camera with night vision, the operator can maneuver in reverse with confidence and accuracy. At the request of the customer, the equipment is available with an enclosed cabin which can include air conditioning and heating.

CONFIGURATION FOR PIPING INSTALLATION EFFICIENCY AND SAFETY

MINELIFT 4 is available in a configuration set-up for the installation of water, air, drainage, and tailing pipes in underground mining. It incorporates a drop-wing platform extension that expands the wide lateral by 700 mm, providing a work surface total of 3.400 x 2.550 mm. The high load capacity crane allows pipes to be lifted in an easy and safe way. For mounting, MINELIFT 4 incorporates a pipe handling system with two independent telescopic arms, designed for pipes from 4 - 8" (100 - 200 mm) and with load capacities of 300 kg each. In this way, MINELIFT 4 facilitates safe and efficient operation during pipe installation in underground mining.

VENTILATION INSTALLATION WITH AUXILIARY PLATFORM

For ease of operation in ventilator mounting, MINELIFT 4 is available with an auxiliary lift platform that provides a load capacity of 2,500 kg and lifts up to 1.100 mm from the main platform. By incorporating this optional equipment, MINELIFT 4 becomes a complete solution for lifting and installation work in underground mining.

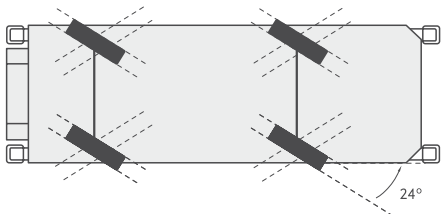
OPTIONAL EQUIPMENT FOR AUXILIARY SERVICES AUTONOMY AND FLEXIBILITY

MINELIFT 4 is also available with air compressor and / or electric generator on board, providing independence of the auxiliary services of the mine. Hydraulically operated, these optional items assure the services of compressed air and electricity at any point in the mine, allowing workers to perform maintenance work with pneumatic tools, welding, etc. autonomously.

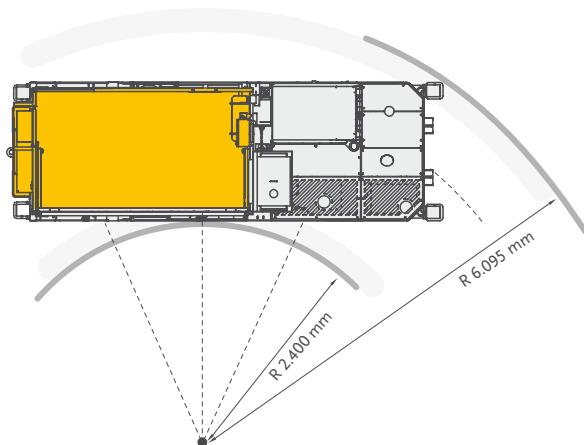


Photo: MINELIFT 4 with basic configuration

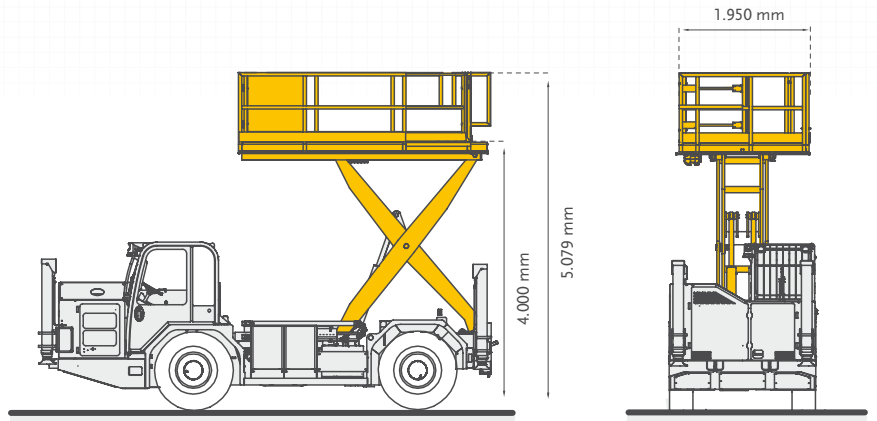
DIMENSIONS AND TURNING RADIUS



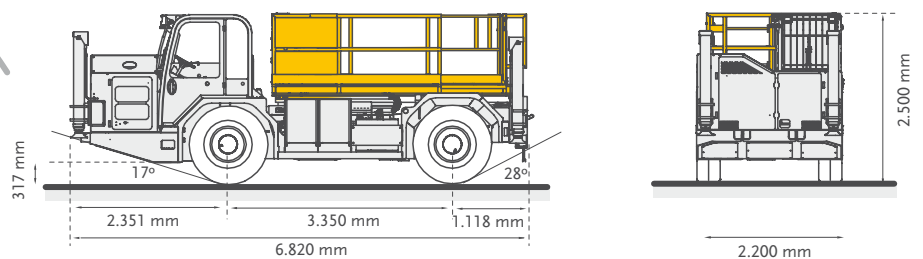
4 - WHEEL STEERING WITH CRAB MODE



TURNING RADIUS



DIMENSIONS ELEVATED PLATFORM



TRANSPORT DIMENSIONS

DATA SHEET

ELEVATING PLATFORM

Max. lifting height	4.000 mm
Lifting capacity	4.000 kg
Dimensions	3.500 x 1.950 mm
Longitudinal tilt	+/- 8°
Control panel	On platform and chasis
Preinstallation of air/water distribution	Connection on right side of chasis, service on the platform
Max. operational pressure	10 bar

VEHICLE

Diesel engine	6 cylinders
Maximum power	130 kW a 2.200 rpm
Cooling	By water
Engine emissions	In accordance with EU-Stage IIIA / EPA Tier 3
Catalyst	DCL Int. MINE-X DC8
Fuel tank	160 l
Maximum speed	20 Km/h
Max. longitudinal gradient while driving	30%
Max. transversal gradient while driving	10%
Driving and steering	Four-wheel drive and four-wheel steering (4WD / 4WS)
Transmission	Hydrostatic progressive system with continuous variation (ICVD), no gears to change
Service brakes	Multi-disc in oil bath on both axles
Parking brakes (negative)	Internal SAHR discs on both axles
Axles	Heavy-duty directional planetary axles
Tyres Michelin MINE-X / Wheel rims	12.00-R20
Rear camera	Night-vision
Automatic centralized greasing system	

DRIVING CABIN

Cabin	FOPS/ROPS certified
Glazing	Front (with wipers and water tank) and right side
Driver seat	Adjustable, mechanical and air suspension, seat belt

LIGHTING

Working lights on platform	LED, 2 mobile lights
Driving lights	LED, 2 front + 2 rear
Working lights	LED, 4 front + 2 rear
Indicator and position lights	LED, 2 front + 2 rear
Braking lights	LED, 2 rear
Rotative omnidirectional beacon (optional flashing)	Amber

WEIGHT

12.000 kg

CONFIGURATION FOR PIPE INSTALLATION

EXTENDABLE PLATFORM (DROP WING)

Max. lifting height	4.000 mm
Lifting capacity	4.000 kg
Additional width	700 mm
Max. load on drop-wing	200 kg
Dimensions	3.500 x 2.650 mm
Longitudinal tilt	+/- 8°

PIPE HANDLING SYSTEM

Max. reach from platform	1.820 mm
Max. load capacity per arm	300 kg
Pipes	4 - 8" (100 - 200 mm)

CRANE

Max. lifting capacity / at peak	2.150 kg / 810 kg
Reach	3,2 m
Proportional remote control	

OPTIONAL EQUIPMENT

FOR INSTALLATION OF VENTILATION

AUXILIARY ELEVATING PLATFORM

Maximum load capacity	2.500 kg
Max. reach from platform	1.100 mm
Dimensions	1.600 x 700 mm

FOR AUXILLARY SERVICES

AIR COMPRESSOR

Power	13 kW
Max. working pressure	10 bar
Airflow	0,8 - 1,3 m ³ /min (28 - 46 cf/m)

ELECTRICAL GENERATOR

Power	5 kW
Tension	4 x 230 V + 2 x 400 V

FOR VEHICLE / CABIN

Fire suppression system, automatic / manual operation

Closed driving cabin

Air conditioning and heating

PUTZMEISTER:
UNDERGROUND MINING TECHNOLOGY

For more than 30 years Putzmeister has designed, developed, and produced concrete spraying equipment for mines and tunnels, combining excellence in concrete pumping with experience in the field of shotcrete, acquired in many tunneling and mining projects throughout the world. The range of equipment for shotcrete is complemented by transportation equipment for concrete and cement.

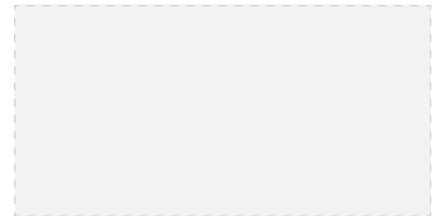
To continue optimizing logistics of underground mining operations, Putzmeister has developed the MINELIFT 4 scissor lift platform. The equipment provides a mobile and secure working platform for load- and personnel lifting, and is also available for the handling and installation of piping and ventilation. In this way, MINELIFT 4 completely adapts to your needs.



MINELIFT 4

putzmeisterunderground.com
info@putzmeisterunderground.com

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PUTZMEISTER IBÉRICA S.A., **PUTZMEISTER UNDERGROUND DIVISION**. CAMINO DE HORMIGUERAS 173, 28031 MADRID, SPAIN - TEL. +34 91 428 81 00 - INFO@PUTZMEISTER.ES

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