

Alpine Miner AM 105 ICUTROC

The ALPINE MINER AM 105 – an extremely powerful boom type roadheader of the 100 tons class – has proven its unique transverse cutting technology in hard rock applications worldwide. Due to the use of an additional two speed transmission instead of a pole changing motor, full torque to the cutterhead is provided even at speeds below 1.5 m/sec. The AM 105 is a universal piece of equipment with an extended field of operation for mechanized roadway development in hard and abrasive rock formations.



Technical data AM 105 ICUTROC*

Main dimensions

Total weight	120 t
Total length	14700 mm
Height	2350 mm
Width over loading table	6200-6900 mm
Width over crawler tracks	3050 mm
Width of crawler tracks	720 mm
Ground pressure	0.17 MPa

Electrical system

Potential	1000 V / 50 Hz
Total installed electric motor power	471 kW
Cutter motor	300 kW
Hydraulic power pack motor	63 kW
Loader motors	2 x 36 kW

Power demand

via transformer	1000 kVA
via generator set	1500 kVA

Conveying system

Double chain conveyor motor	1 x 36 kW
Chain speed	max 0.8 m / s
Width of conveyor	600 mm
Capacity of conveyor	max 300 m ³ / h

Cutting profile

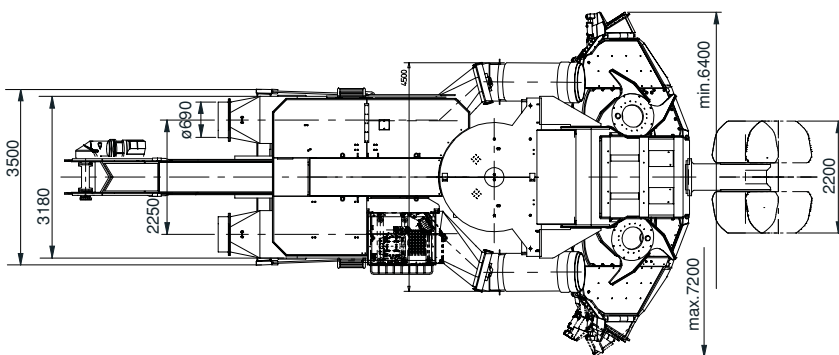
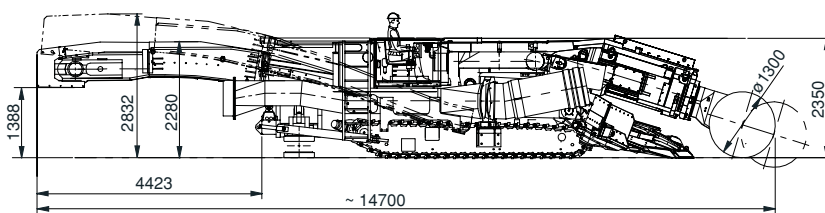
	telescope extended	telescope retracted
Area	50 m ²	41 m ²
Height	5.9 m	5.42 m
Width	8.9 m	9.7 m
Undercut	0.50 m	0.20 m

Negotiable gradients

Without machine support	+/- 20 gon
With machine support	+/- 35 gon

Speed of cutter head	1.4 m / s
Tramming speed	0 – 3.5 m / min

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AM 105 features which are not available on other roadheading machines

- Machine design for economical excavation of rock exceeding 100 MPa uniaxial compressive strength due to maximum robust construction, 300 kW cutting power for different cutting speed by means of intermediate transmission.
- Robust telescopic cutter boom for optimum cutting power application, sump-in without tramming, straight face, even in high profiles.
- Proportional-load-sensing-hydraulic system for optimum utilisation of energy.
- Efficient dust suppression and cooling of cutting tools due to high pressure pick flushing system.
- Modular design facilitates ease of maintenance as well as assembly/disassembly of machine.
- A variety of optional extras make the machine suitable for a wide range of applications.