

# EBZ55 ROAD HEADER FOR COAL MINING

(EXTREMELY SMALL TUNNEL)



### **Product introduction:**

EBZ series roadheader is a new roadheader independently developed and designed by our company.

It is a comprehensive roadheader integrating continuous cutting, loading, transportation and walking. It is suitable for small sections. The key parts are imported with high quality. The electrical system is simple and practical, with complete functions.

EBZ55 roadheader adopts double speed constant power cutting motor, with large cutting force of single knife; The hydraulic system adopts Rexroth constant power load sensitive variable pump, which is economical and reliable.

#### **Technical features:**

> Internal and external spray design

The combination of internal and external spray reduces dust concentration and improves the working face environment.

> Parametric design of cutting head

Parametric design of cutting head can reduce the loss of pick and improve cutting efficiency.

> Multiple protection

Temperature rise, overload, overvoltage, undervoltage, leakage locking, phase failure protection, emergency stop and other alarm and protection functions.

Self-diagnosis

During operation, always detect the feedback signal of each element and judge the running state of the equipment in real time.



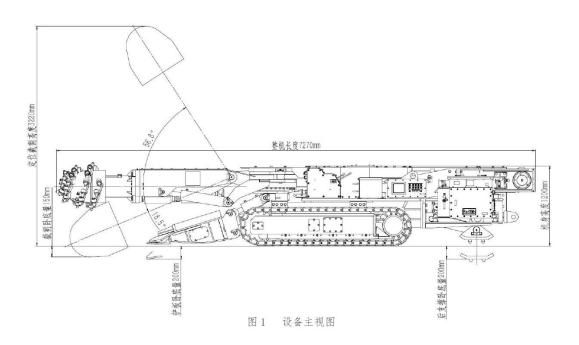
#### > Unique oil absorption structure design

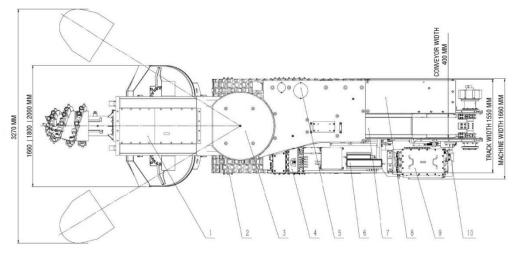
Liquid level sensing technology is adopted to ensure that the oil pump can absorb oil smoothly when going up and down the mountain.

#### Strong adaptability

Reduce the grounding specific pressure of the whole equipment to the minimum, adapt to the working conditions of soft bottom, and increase the anti-interference technology between the cutting part and the spade board part and the anti-transportation jamming technology.

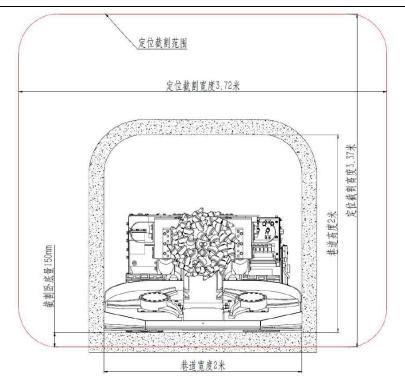
#### Sizes





<sup>1.</sup> CUTTER 2. CRAWLER 3. BODY 4. OPERATE STATION 5. OIL TANK 6 OPERATION BOX 7. FIRST CONVEYOR 8. PUMP STATION 9. ELE. CTRL. BOX 10. REAR SUPPORT 1. 截割部 2. 行走部 3.本体部 4. 操作台 5. 油箱 6. 操作箱 7. 第一运输机 8. 泵站 9. 电控箱 10. 后支撑





Main technical features	
External dimensions	7,270mm×(1,660   1800 2,000)mm×1,200mm
Empty weight	17,000 kgs
Cutting power installed	55 kW
Pump station power installed	30 kW
Cutting height (Max.)	3.22 m
Cutting width (Max. )	3.72 m
Cutting area	≈12.5 m <sup>2</sup>
Cutting hardness	F≤5
Grade ability	± 18°
Ground clearance	180 mm

Cutting head	
Cutting ELE. Motor power (rated)	55 kW
Cutting ELE. Motor voltage (rated)	440V/ 60Hz
Cutting ELE. Motor turning speed	1,770 rpm
Cutting head rotate speed	53 rpm
Cutting depth	150 mm
Reducer ratio	1: 32
Pick type	Draft pick
Pick quantity	31 ea



Feeder & Conveyor	
Feeder width	1,800 mm   2,000 mm
Loading type	Independent start wheel
Feeder star wheel / first conveyor	Hydraulic motor drive
Feeder blade cutting depth	200 mm
Feeder star wheel rotate speed	30 rpm
1 <sup>st</sup> conveyor transport method	Dual chain scraper+conveyor
Scraper distance	450 mm
Chain tightening method	Spring
Chain speed	60 m/min
Conveyor ability	2.5 m/min

Travelling	
Drive method	HYD. Motor+ Planetary reducer
Travel method	Crawler
Crawler width	370 mm
Crawling speed	0~9 m/min
Ground contact pressure	0.12 MPa

HYD. system	
Pump station ELE. Motor power	30 kW
Pump station ELE. Motor voltage	440 V/60 Hz
Pump station ELE. Motor turning speed	1770 rpm
HYD. System pressure	18 MPa
Conveyor return HYD. Oil System pressure	16 MPa
Cylinder return HYD. Oil System pressure	16 MPa
Crawling return HYD. Oil System pressure	18 MPa

Water system	
Dedusting system	Inner   External spray system
Inner spray pressure	3 MPa
External spray pressure	1.5 MPa
Water supply pressure requirement	≥3 MPa
Water supply flow requirement	≥80 L/min

ELE. system	
Electric control box	Mining Exdl type (flame-proof)
Console box	Mining Exdl type (flame-proof)
Main control circuit quantity	3
Main input power voltage	440 V   60 Hz
Main input allowed power load	> 100 kW ELE. motor



PICTURE REFERENCE

























## FLAME PROOF REMOTE CONTROLLER