

SITON

Small and Medium

Crawler Mucking Loader



Small and Medium crawler mucking loader

Models of small and medium crawler mucking loaders are mainly ZWY60-ZWY150, specially designed for mines, water diversion, national defense and high-speed railway or auxiliary tunnels. It has high cost performance and good flexibility.

There are different models to choose, including specialized model for large slope of 32°, ordinary model for horizontal drift, dual power, plateau-specific and other functional models. It can work on the entire cross-section without leaving any blind spots and does not require manual cleaning. Mucking adopts chain scraper, which has stable conveyance, excellent ability in mucking. Besides, it adopts semi-enclosed loading method, which is easy to maintain.



Note: This picture is for reference only. Different or optional configuration will make it looks different.

Hydraulic system

- After upgrades of several generations, the overall design of the hydraulic system is reasonable, and the main components are all from well-known domestic and foreign brands to ensure working stability;
- The hydraulic system adopts two-level control and is equipped with imported hydraulic pilot joystick, which has characteristics of good proportional control and easy operation;
- The hydraulic system adopts high-power air-cooled radiator to ensure constant oil temperature for the entire system;
- Precise filter can effectively control pollution to protect the oil pump and other hydraulic components and improve the cleanliness of the hydraulic system.

Convey chute

- It is welded with high rigidity materials and uses imported wear-resistant transport bed or domestic NM500 to increase service life. The unique arc-shaped design of transport bed ensures the normal transportation of rocks with hardness $\leq f18$;
- The "duckbill" design of the conveyor chute gives full play to the effect of collection and feeding. The trough is segmented and connected with rust-proof bolts. The length will not affect the operation under mine;
- If a larger mucking device is used, a special conveyor chute can be customized (with a higher unloading height and longer unloading distance) to improve the conveying effect and efficiency.

Working arm

- The independent gantry is connected with the conveyor chute, which greatly shortens the distance between the rotation center of the working arm and the feeding port, maximizing the working range and increasing the dump height of the arm; The transport bed, side bed and reinforcement bed of the wear-resistant bucket are all made of imported wear-resistant materials, which reduces the friction of the bucket side wall, reduces the loss, and improves the durability of the bucket; the bucket teeth are made of excavator-specific forging materials with good interchangeability;
 - The working arm is large-section box-shaped design, the main stress-bearing parts are strengthened, and the stress concentration parts are welded with thick steel plates. Strong. More reliable when working with high-hardness rocks;
 - The working frequency of the working arm is fast and the impact force is large, which makes the working arm pin shaft hole easy to deform, which will cause the entire arm frame to be scrapped.
- Based on years of experience, our company adds steel sleeves to the non-rotating parts of the working arm for protection. After impact and wear, only replacement is needed. Steel sleeve without having to replace the entire boom structure.

Optional

Dual power model

· In non-coal mines, crawler mucking loader can be equipped with diesel power for tramming. The equipment has strong mobility, and is suitable for frequent transition and long-distance tunnels.

Breaker (Switchable)

- The machine is equipped with a quick connector, and the bucket and breaker can be quickly switched within one minute;
- The breaker performs broken maintenance on the floor of the tunnel and the bottom of the side ;
- Break the large rocks and coal blocks after blasting without additional blasting.

Project	Breaker parameters
Weight	120kg
Working pressure	13 MPa
Breaking speed	600-1 100BPM
Drill rod diameter	53mm
Dimensions (Length/Width)	1230mm / 220mm

Drum cutter(Equipped in models of ZWY80 and above

- For milling soft rock without blasting

Item	Unit	Parameters
Rotation speed	r/min	80
Flow	L/min	60
Max. flow	L/min	100
Max. working pressure	Pa	350
Torque	N · M	5320
Max. power	KW	50
Dimensions(L*W*H)	mm	850X780X470

Three-section working arm

- Three-section arm (With back-type breaker) can be used for coal tunnel excavation, repairing, opening and quickly mucking. The three-section arm can change the position of the bucket and the breaker through the handle operation, and the work does not interfere with each other. The working range is wider than that of the two-section arm;
- The three-section arm (With switchable breaker) increases the elevation angle of the small arm and the height of the hazard elimination through the adjustment of the middle arm cylinder. It can replace manual hazard elimination, improve the safety and reduce labor intensity.

Cable reel

- Specialized cable reel can realize flexible transition, automatically retract and release cables, save manpower and material resources, improve safety, and have a higher degree of automation.



Specifications

Parameters	Unit	ZWY-60/30L	ZWY-80/37L	ZWY-80/45L	ZWY-100/45L	ZWY-120/55L	ZWY-150/55L
Dimensions	mm	6750×1600×1650	6950×1682×1750	7718x1910x1990	8100×1910×2100	9200x1900x2350	9500×2360×2450
Cross-sectional size	m	2.2×2.2	2.4×2.4	2.4×2.4	2.5×2.5	3.0×3.0	3.2×3.2
Weight	kg	7800	8300	11860	12200	13600	15300
Motor power	KW	30	37	45	45	55	55
Loading capability	m³/h	60	80	80	100	120	150
System pressure	MPa	25	25	32	32	32	32
Excavation width	mm	3100	4100	4800	5300	5900	6870
Excavation height	mm	1530	1800	2570	1970	3330	2950
Excavation distance	mm	2300	2400	1820	2940	2470	3563
Excavation depth	mm	500	600	480	540	800	915
Crawler plate width	mm	350/400	350/400	350/450	350/450	500	500
Crawler inner width	mm	900	982	941	941	1050	1360
Gradeability	(°)	≤30	≤30	≤35 (Hard ground)	≤30	≤35 (Hard ground)	≤30
Tramming speed	km/h	0-1.1	0-1.1	0-1.8	0-1.8	0-1.8	0-1.8
Ground clearance	mm	280	280	310 (可加高)	310	350	350
Conveyor chute	mm	488	570	580	580	620	780
Scraper chain speed	m/min	25	25	27	30	30	34
Conveyor chute mode	/	Single chain Single drive				Double chain Double drive/ Single chain Single drive	
Unloading distance (Variable)	mm	1600	1600	1700	1700	Based on subsequent supporting design	3170
Unloading height (Variable)	mm	1350	1350	1670	1670		1770

Note: This data sheet is for reference only. Due to different or optional configuration, Siton reserves the right to make changes to the information without prior notification to users.



JIANGXI SITON MACHINERY MANUFACTURING CO., LTD.

Address: North of High-Tech Development Zone, Pingxiang, Jiangxi, P. R. China

Tel: +86 799 3671932

Fax: +86 799 3671922

E-mail: export@sitoncn.com

Website: www.sitonchina.com/www.globalsiton.com



Siton Machinery