

电气参数

ELECTRIC PARAMETERS

输入电压 Supply Voltage	3KV~11KV, 3相50Hz 或60Hz	推压电动机峰值功率 (690VAC) Crowd Motor, Peak Power	1150KW
应承受的最小短路容量 Minimum Short Circuit VA	42MVA	回转电动机额定功率 (690VAC) Swing Motor, Rated Power	3X700KW
供电变压器最小容量 Supply Transformer (minimum)	4500KVA	回转电动机峰值功率 (690VAC) Swing Motor, Peak Power	3X875KW
提升电动机额定功率 (690VAC) Hoist Motor, Rated Power	2X1800KW	行走电动机额定功率 (690VAC) Propel Motor, Rated Power	2X900KW
提升电动机峰值功率 (690VAC) Hoist Motor, Peak Power	2X2250KW	行走电动机峰值功率 (690VAC) Propel Motor, Peak Power	2X1125KW
推压电动机额定功率 (690VAC) Crowd Motor, Rated Power	900KW		

- 注：1. 本产品技术参数将随着科学技术的进步和采矿工艺的发展而不断改进和完善，恕不通知。
2. 所有参数只适用于产品推介，不能用于对设备的工作性能进行评估。
3. 电气参数均基于额定电压690V及环境温度50℃。
4. 如需更多技术参数，请咨询厂家。

- Note: 1. This WK-75 is reliability and improved the performances with the progress of cutting edge technology in design and the development of mining technology. All technical specification are subject to variation without notice.
2. The parameters are suitable for WK-75 standard application design and promotion, can't be used to evaluate the equipment performance.
3. The electrical parameters are based on environmental temperature 50℃ and rated voltage 690V.
4. For further information please contact our TZ office in China or consult with TZ agents at your locations.



WK-75挖掘机

WK-75 EXCAVATOR



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WK-75 挖掘机

WK-75矿用机械正铲式挖掘机为我公司研制的大型露天矿山采装设备，它汇集了我公司多年矿用挖掘机设计、制造的成功经验，采用国内外先进技术，适用于大型露天煤矿、铁矿及有色金属矿山的剥离和采装作业。

WK-75挖掘机采用三维仿真和有限元分析等现代设计方法，对整机性能和工作尺寸进行合理的优化；充分发挥自身的效力，提高了挖掘机与矿用自卸卡车、自移式破碎站的匹配性，更好地满足用户高效装载、降低单位生产成本的要求。

电气系统采用整流/回馈公用直流母线变频调速系统，控制上以PLC为核心，采用上位监控、现场总线、变频调速的三级控制系统。具有：对电网扰动小、允许电压波动范围宽、功率因数高等特点；具有推压自适应控制、大臂软着陆等功能；同时电铲具有故障自诊断和运行状态显示、电能计量等功能。这种系统技术先进、运行可靠、传动效率高、耗能低。

WK-75挖掘机与291t以上的矿用汽车配套使用，同时可以满足9000吨/小时及以上自移式破碎站系统的需要，最大生产率可达到12000吨/小时。

技术特点：

- 齿轮齿条推压方式，切入性强，效率高；
- 硬齿面齿轮传动，齿轮寿命长；
- 回转、行走采用行星减速机；
- 高位驱动，延长驱动系统寿命；
- 采用全盘式气动制动器；
- 开斗机构采用交流变频电机和行星减速机；
- 除尘效率高的滤筒式除尘装置；
- 高低压集电环集成在一起；
- 配置两个司机室，方便操作，更加的人性化；
- 稀油润滑装置设有油温油位监测装置；
- 提升和推压减速机设有轴承测温装置；
- 提升润滑系统设有风冷系统。

WK-75 EXCAVATOR

WK-75 excavator is the large excavating equipment for open-pit mine developed by TZ. It combines the successful experience accumulated for years from manufacturing of mining shovels, at the meanwhile absorbs lots of advanced technology for design, processing, manufacturing and control from home and abroad. It is suitable both for stripping and excavating on open-pit coal mine, iron mine and ferro-metal mine.

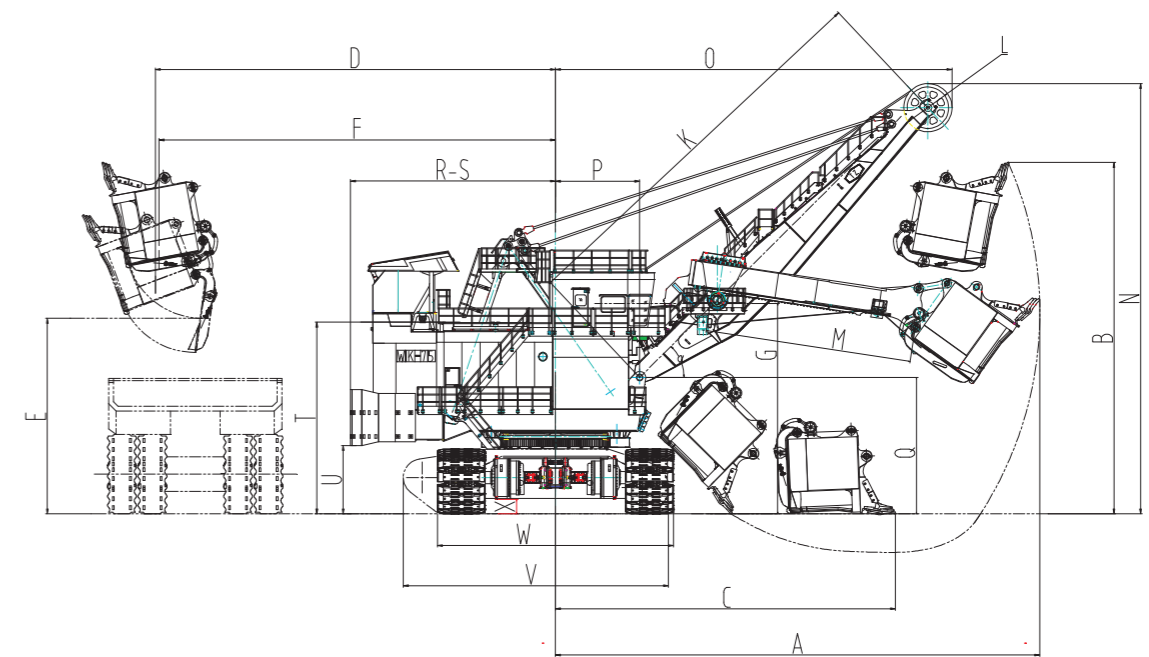
WK-75 excavator has adopted state-of-art technology, like three-dimension imitation and definite circle analysis. It is of reasonable performance, working dimensions and exerts its efficiency to fully play to enhance the matching ability with all sorts of haul trucks and crush station to better satisfy end-users' requirements of higher loading and lowest producing cost.

Electric system adopts Rectifier/Regeneration to common DC Bus-bar and variable frequency speed adjustment. The electric control, taking PLC as the core, is a 3-stage system of up-position monitoring, field bus and frequency variable speed control. It is of futures of no disturbance to power grid allowing wider range of power voltage fluctuation and high power factor. The system is loaded with software to optimize the dig/cut curve and automatically optimization of hoist and dig power distribution. The system can realize self troubleshooting and running status display, electric power calculating and so on. This system has the advantages of state-of-art technology, reliable operation, high transmission efficiency and low power consumption.

WK-75 excavator is designed to match with mining trucks with capacity above 291MT and mobile crusher station with capacity above 9000t/h, its maximum productivity can reach 12000t/h.

Technical characteristic:

- Gear-rack crowding, powerful penetration, high efficiency;
- The transmission gears use carburizing treatment to increase the surface hardness and lifetime ;
- Swing and propel mechanism adopt planetary reducers;
- The Propel mechanism adopts higher position drive to improve cycle life;
- Air-release-spring-set disc brakes are applied;
- Dipper trip mechanism adopts AC motor frequency variable motor and planetary reducer;
- High efficiency cartridge filter for ventilation use;
- HV and LV collector rings both on platform for better maintenance;
- Two cabs for convenient operation and better view;
- Oil temperature and position monitor device applied on the lube system;
- Bearing temperature on the hoist and crowd reducer monitored;
- Cooling system applied on the hoist lube system.



作业范围

WORKING RANGES

单位:m

A	最大挖掘半径 Digging Radius (max)	26.36	E	最大卸载高度 Dumping Height (max)-Door Open	10.65
B	最大挖掘高度 Height of Cut (max)	19.20	F	最大卸载高度时的卸载半径 Dumping Radius at Max. Dumping Height	21.58
C	水平清道半径 Floor Level Radius	18.51	G	司机水平视线至停机面高度 Height-Ground to Operator's Eye Level	11.48
D	最大卸载半径 Dumping Radius (max)	21.78			

性能参数

MAIN PERFORMANCE PARAMETERS

1	额定载荷	Nominal Payload	135	t
2	斗容范围	Dipper Capacity	46~100	m ³
3	最大提升速度	Hoist Speed (max)	1.84	m/s
4	最大推压速度	Crowd Speed (max)	0.75	m/s
5	最大行走速度	Propel Speed (max)	1.60	km/h
6	最大提升力	Max. Hoist Force	4219	kN
7	最大推压力	Max. Crowding Force	1354	kN
8	履带最大牵引力	Max. Crawler Dragging Force	8233	kN
9	最大爬坡角度	Max. Gradeability (degree)	13	°
10	履带板平均接地比压 (履带板宽度=2600mm) Bearing Area-Ground Pressure (width of crawler shoes=2600mm)		327	kPa
11	工作重量	Working Weight	1988	t
12	配重	Counterweight	190	t

主要尺寸

GENERAL DIMENSIONS

单位:m

α	起重臂对停机平面的倾角 Boom Angle	45°	R	机棚尾部回转半径 Radius of Rear End	11.16
K	起重臂长度 Boom Length	21.50	S	机棚宽度 Width of Cab	11.69
L	起重臂顶部滑轮直径 Diameter of Boom Top Sheave	2.628	T	机棚顶至停机面的高度 Height-Ground to Top of Main Cab	10.46
M	斗杆有效长度 Effective Dipper Handle Length	11.24	U	配重箱底面至停机面高度 Height-Ground to Bottom of Counterweight	3.73
N	顶部滑轮上缘至停机平面高度 Clearance Height of Boom Point Sheave	23.47	V	履带部分总长度 Overall Length of Crawlers	14.36
O	顶部滑轮外缘至回转中心的距离 Clearance Radius of Boom Point Sheave	21.59	W	履带部分宽度 Overall Width of Crawlers	12.84
P	起重臂支脚中心至回转中心的距离 Centre of Rotation to Boom Foot Pin	4.59	X	履带驱动装置最低点距停机面高度 Height-Ground to Bottom of Crawler Drive Device	0.80
Q	起重臂支脚中心高度 Height-Ground to Boom Foot Pin	7.43			