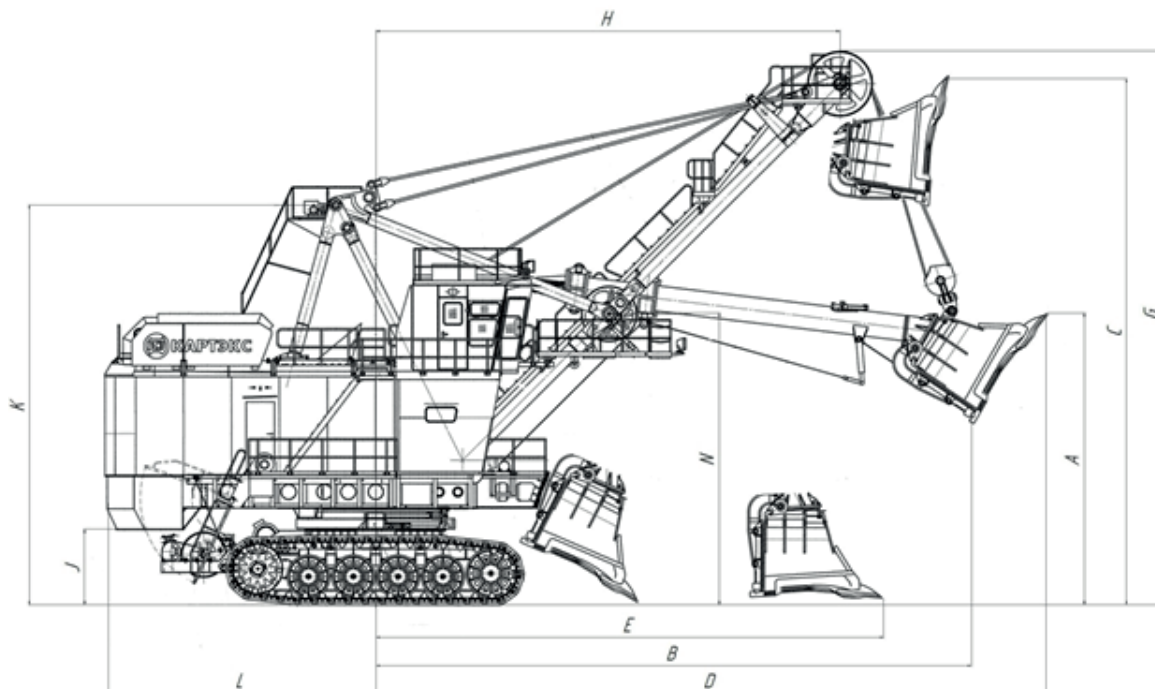


EKG-10

Crawler-mounted electric shovel



Performance parameters

Parameters	Modifications		
	EKG-10	EKG-8US	EKG-5U
Main bucket capacity, m ³	10	8	5
Optional bucket capacity range, m ³	5-12,5		
Bucket payload, t	20	16	10
Maximum hoist force, t	100	78	49
Maximum crowd force, t	50	50	50
Operation cycle time, sec.	26	28	30
Maximum digging height, m	C 13,5	17,6	22,2
Maximum digging radius, m	D 18,4	19,8	23,7
Digging radius at floor level, m	E 12,6	13,5	14,5
Maximum dumping radius, m	B 16,3	17,9	22,1
Maximum dumping height, m	A 8,6	12,5	17,5

Weight and dimensions

Working weight of shovel, t		410	415	410
Counterbalance weight, t		50	55	55
Ground pressure, MPa		0,215	0,225	0,210
Clearance height	– at head sheaves	G 14,6	17,3	20,7
	– at bipod stand	K 11,5	11,5	11,5
Clearance radius	– at head sheaves	H 12,9	12,9	12,9
	– at turntable		7,8	7,8
Clearance under turntable-to-ground	J	2,8	2,8	2,8
Clear width	L	7,5	7,5	7,5
Operator's eye level	N	8,0	8,0	8,0

The dimensions are basic and can be changed.

Working Equipment

Type of crowd mechanism	Rope type
Dipper handle construction	Single-beam
Boom construction	Double-beam

Electrical equipment

Type of electric drive	DC: Generator-Motor or	DC: Thyristor Converter-Motor/ Transistor Converter-Motor	AC: Frequency rectifier – transistored induction motor
Voltage, kV	6,0	6,0	6,0
Main electric drive power, kW	750	-	-
Power of main transformer, kVA	-	630 (800)	630

Main drives motors*

Drive	Power , kW	Revolutions per minute, r/min	Q-ty per shovel
Hoist	270	800	2
Crowd	200	750	1
Swing	155	710	2
Propel	90	750	2

*parameters for DC excavator

Gear group

Gearbox	Construction design	Q-ty per shovel
-propel	Combined three-stage in-line and planetary gear reduction unit	2
-hoist	In-line double-reduction gear	2
-crowd	In-line triple-reduction gear unit	1
-swing	Planetary double-reduction gear	2

Rotation unit

Construction design	Supporting and turning mechanism with circular rollers
Ring gear - diameter, mm	4320
- number of teeth/module	144/30

Propel mechanism

Construction design	Double crawler track-mounted
Clear length, m	8,47
Clear width, m	6,97
Track gauge, m	5,58
Crawler belt - width, m	1,4
- number of track links	38
- pitch of chain, mm	470
Travel speed, km/h	0,7

Ropes and stays

Units	Q-ty per shovel	Diameter, mm			Length , m		
		EKG-10	EKG-8US	EKG-5U	EKG-10	EKG-8US	EKG-5U
Hoist	1	52	45,5	45,5	120	146	130
Crowd	1	52	52	52	41	46,5	49
Retract	1	52	52	52	41	46,5	49
Boom suspension	2	45,5	45,5	45,5	55,4	69	75
Bucket door trip	1	13	13	13	18	22	25

The dimensions are basic and can be changed.