

# KPDZ flat carts

## Brief introduction for KPDZ series’ railway flat carts powered by low voltage electricity from the railways.



KPDZ series railway flat carts are powered by the low voltage electricity from the railways. The power source AC 380V is transformed into AC 36V two-phase and are respectively connected to the two rails. Then the flat trolley’s wheels conduct the AC36V on rail into the electrical appliance box at the bottom of the carts. And then the AC 36V is transformed into DC 36V and then control the DC and adjust the speed and so on. KPDZ flat carts can be used both on the ‘S’ and arc-shaped railways. They also can be used in the high-temperature environment. The hydraulic lifting device can be installed on the flat carts. The dc motor has the advantages of safety, flexibility, stable start, big starting torque, small impact to the gear reducer, low voltage, long lifetime and so on. But this series have strict requirement on the construction of the railways which need to be insulated. The rated load can not be more than 50T. This series’ flat carts are suitable to be used in such condition: higher using frequency, not too short running distance. The running distance is not limited. When running distance is more than 70m, you need to increase the transformers to make up the voltage which has been lowered.

## Technical Parameters for KPDZ Series Rail Transfer Carts Powered by Conducting Rail

Model		KPDZ -2t	KPDZ -5t	KPDZ - 10t	KPDZ -16t	KPDZ -20t	KPDZ -25t	KPDZ -30t	KPDZ -40t	KPDZ -50t	KPDZ -63t
Rated load(t)		2	5	10	16	20	25	30	40	50	63
Table size(mm)	Length	2000	3500	3600	4000	4000	4500	4500	5000	5500	5600
	Width	1500	2000	2000	2000	2200	2200	2200	2500	2500	2500
	Height	450	450	500	500	550	600	600	650	650	750
Wheel Base(mm)		1200	2500	2600	2800	2800	3200	3200	3800	4200	4300
Rail Inner Gauge(mm)		1200	1435	1435	1435	1435	1435	1435	1435	1435	1435
Wheel Diameter(mm)		Φ270	Φ300	Φ300	Φ350	Φ350	Φ400	Φ400	Φ500	Φ500	Φ600
Wheel Quantity		4	4	4	4	4	4	4	4	4	4
Ground Clearance(mm)		50	50	50	50	50	50	50	50	50	75
Running Speed(mm)		0-25	0-25	0-25	0-20	0-20	0-20	0-20	0-20	0-20	0-20
Motor Power(kw)		1	1.2	1.6	2	2.2	3	3.5	4	5	6.3
Transformer Power(KVA)		3	5	5	6.8	6.8	6.8	10	10	10	20
Transformer Quantiry(Pcs)		1	1	1	1	1	1	1	1	1	1
Running distance(m)		80	80	80	80	80	80	80	60	50	50
Max Wheel Load(KN)		14.4	25.8	42.6	64.5	77.7	94.5	110.4	142.8	174	221.4
Reference Weight(t)		2.8	3.6	4.2	5.5	5.9	6.5	6.8	7.6	8	10.8
Recommended Rail Model		P15	P18	P18	P24	P24	P38	P38	P43	P43	P50

Notes: 1.Load Capacity, table size and rail gauge can be customized. 2. Options: a. Remote radio control(imported or made in China); b. Automatic stop when detecting obstacle or person, limit switches(to limit travel); c. Automatic cutting off power on rail; d. motor(DC motor with brush and DC motor brushless; e. Electrical parts(imported or made in China); f. Can be designed to meet special working environment such as high temperature.

# KPDS flat carts

## Brief introduction for KPDS series’ railway flat carts powered by low voltage electricity from the railways.



KPDS series’ railway flat carts are powered by the low voltage electricity from the railways. The power source AC 380V is transformed to AC 36V three-pharse through transformer. Then they are connected to the three rails respectively(add a conducting rail). The flat carts’ wheels and conducting plate lead the AC 36V electricity to the electrical appliance box which is installed on the carts. And AC 36V is transformed to AC 380V through the transformer. Then controls AC Metallurgy motor through AC control system to make the transfer cart start, stop, go forward and backward and so on. This series’ transfer cart can be used both on “S” and arc-shaped rails, and high temperature. There can be attached with hydraulic elevator system and lifting system. The cart has the vantages of safety and flexibility. But this series have strict requirement on the construction of the railways which need to be insulated. This series’ transfer carts are suitable for the environment of heavy load capacity(>50t),high using frequency and not too short running distance. It is not limited by running distance, but if the running distance exceeds 70m,you need to increase the transformers to make up the voltage which has been lowered.

## Technical Parameters for KPDZ Series Rail Transfer Carts Powered by Conducting Rail

Model		KPDS-2t	KPDS-5t	KPDS-10t	KPDS-16t	KPDS-20t	KPDS-25t	KPDS-30t	KPDS-40t	KPDS-50t	KPDS-63t	KPDS-80t	KPDS-100t	KPDS-150t
Rated load(t)		2	5	10	16	20	25	30	40	50	63	80	100	150
Table size(mm)	Length	2000	3500	3600	4000	4000	4500	4500	5000	5500	5600	6000	6500	10000
	Width	1500	2000	2000	2000	2200	2200	2200	2500	2500	2500	2600	2800	3000
	Height	450	450	500	500	550	600	600	650	650	750	800	850	1200
Wheel Base(mm )		1200	2500	2600	2800	2800	3200	3200	3800	4200	4300	4700	4900	7000
Rail Inner Gauge(mm)		1200	1435	1435	1435	1435	1435	1435	1435	1435	1435	1800	2000	2000
Wheel Diameter(mm)		Φ270	Φ300	Φ300	Φ350	Φ350	Φ400	Φ400	Φ500	Φ500	Φ600	Φ600	Φ600(Heavy)	Φ600
Wheel Quantity		4	4	4	4	4	4	4	4	4	4	4	4	8
Ground Clearance(mm)		50	50	50	50	50	50	50	50	50	75	75	75	75
Running Speed(mm)		0-25	0-25	0-25	0-20	0-20	0-20	0-20	0-20	0-20	0-20	0-20	0-20	0-18
Motor Power(kw)		0.8	1.5	1.5	2.2	2.5	3	4	5.5	5.5	7.5	7.5	11	15
Transformer Power(KVA)		3	5	5	6.8	6.8	6.8	10	10	10	20	20	30	30
Transformer Quantity(Pcs)		1	1	1	1	1	1	1	1	1	1	1	1	1
Running distance(m)		80	80	80	80	80	80	80	60	50	50	50	50	50
Max Wheel Load(KN)		14.4	25.8	42.6	64.5	77.7	94.5	110.4	142.8	174	221.4	278.4	343.8	265.2
Reference Weight(t)		2.8	3.6	4.2	5.5	5.9	6.5	6.8	7.6	8	10.8	12.8	14.6	26.8
Recommended Rail Model		P15	P18	P18	P24	P24	P38	P38	P43	P43	P50	P50	QU100	QU100

Notes: 1.Load Capacity, table size and rail gauge can be customized. 2. Options: a. Remote radio control(imported or made in China); b. Automatic stop when detecting obstacle or person, limit switches(to limit travel); c. Automatic cutting off power on rail; 3. Variale speed device(VFD); 4.Electrical parts can be optional(made in China or imported); 4. Can be designed to meet special working environment such as high temperature.

# KPX flat carts

## Brief introduction for KPX series’ flat carts powered by battery.



KPX Series flat trolley are battery powered. The batteries are installed in the carts. The batteries supply electricity to the DC motor through the electrical control system. We use this principle to operate the carts, for example, start, stop, go forward and backward, adjust the speed and so on. KPX flat carts can be used both on the ‘S’ and arc-shaped railways. They also can be used in the ferry condition and flammable, explosive environment. The hydraulic lifting device can be installed on the flat carts. The DC motor has the advantages of stable start, big starting power, small impact to the gear reducer, low voltage, long lifetime and so on. Compared with the KPJ and KPD flat carts, the KPX series are more safe and flexible. The running distance is not limited. It has no strict requirement for the construction of the railway. KPX series are suitable to be used in the long distance transportation and low using frequency. The batteries need maintenance once a regular time. The lifetime of the batteries is about 2.5 years. The using time after once charge is limited.

## Technical Parameter for KPX Series Rail Transfer Carts Powered by Battery

Model		KPT-2t	KPT-5t	KPT-10t	KPT-16t	KPT-20t	KPT-25t	KPT-30t	KPT-40t	KPT-50t	KPT-63t	KPT-80t	KPT-100t	KPT-150t
Rated load(t)		2	5	10	16	20	25	30	40	50	63	80	100	150
Table size(mm)	Length	2000	3500	3600	4000	4000	4500	4500	5000	5500	5600	6000	6500	10000
	Width	1500	2000	2000	2000	2200	2200	2200	2500	2500	2500	2600	2800	3000
	Height	450	500	500	550	550	600	600	650	650	700	800	900	1200
Wheel Base(mm)		1200	2500	2600	2800	2800	3200	3200	3800	4200	4300	4700	4900	7000
Rail Inner Gauge(mm)		1200	1435	1435	1435	1435	1435	1435	1435	1435	1435	1800	2000	2000
Wheel Diameter(mm)		Φ270	Φ300	Φ300	Φ350	Φ350	Φ400	Φ400	Φ500	Φ500	Φ600	Φ600	Φ600(Heavy)	Φ600
Wheel Quantity		4	4	4	4	4	4	4	4	4	4	4	4	8
Ground Clearance(mm)		50	50	50	50	50	50	50	50	50	75	75	75	75
Running Speed(mm)		025	025	025	020	020	020	020	020	020	020	020	020	018
Motor Power(kw)		1	1.2	1.6	2	22	3	3.5	4	5	6.3	8	10	15
Battery Capacity(Ah)		180	180	160	180	180	250	250	300	330	400	400	440	600
Battery Voltage(V)		24	36	48	48	48	48	48	48	48	48	72	72	72
Running Time When Full Load		4.32	5.4	4.8	4.3	4	4	3.5	3.6	3.3	3	3.6	3.2	2.9
Running Distance for OneCharge (Km)		6.5	8.1	7.2	5.1	4.8	4.8	4.2	4.3	4	3.6	4.3	3.8	3.2
Max Wheel Load(KN)		14.4	25.8	42.6	64.5	77.7	94.5	110.4	142.8	174	221.4	278.4	343.8	265.2
Reference Weight(t)		2.8	36	4.2	5.5	5.9	6.5	6.8	7.6	8	10.8	12.8	14.6	26.8
Recommended Rail Model		P15	P18	P18	P24	P24	P38	P38	P43	P43	P50	P50	QU100	QU100

Notes: 1.Load Capacity, table size and rail gauge can be customized. 2. Options: a. Remote radio control(imported or made in China); b. Automatic stop when detecting obstacle or person, limit switches(to limit travel); c. Battery type(Free of maintenance Battery, lithium battery, explosion-proof battery, and anti-high temperature battery; d. motor(DC motor with brush and DC motor brushless; e. Electrical parts(imported or made in China).



# KPJ flat carts

## Brief introduction for KPJ series’ railway flat carts powered by cable reels:

KPJ Series railway flat carts are powered by the cable reels. The flat carts get power AC 380V through the device of cable reel which is installed at the bottom of the cart. The motor is controlled by the power through the AC control system. We use this principle to operate the carts, for example, start, stop, go forward and backward and so on. The operation system is low voltage 36V. The hydraulic lifting device can be installed on the flat carts. This series’ flat carts are suitable to be used in the bad environment, for example, high-temperature and anti-explosion condition. With its simple structure and low price, this series are more often used to transfer materials from one workshop to another. Compared with the KPX series, the using time is not limited ; compared with the KPD series, it has no strict requirement for the construction of the railway. The load capacity is not limited and can be used frequently. If the running distance is more than 50m, a cable arranger needs to be installed to arrange the cables. The running distance of KPJ series can reach to 200m.



## Technical Parameters for KPJ Series Rail Transfer Carts Powered by Cable Reel

Model		KPT-2t	KPT-5t	KPT-10t	KPT-16t	KPT-20t	KPT-25t	KPT-30t	KPT-40t	KPT-50t	KPT-63t	KPT-80t	KPT-100t	KPT-150t
Rated load(t)		2	5	10	16	20	25	30	40	50	63	80	100	150
Table size(mm)	Length	2000	3500	3600	4000	4000	4500	4500	5000	5500	5600	6000	6500	10000
	Width	1500	2000	2000	2000	2200	2200	2200	2500	2500	2500	2600	2800	3000
	Height	500	550	550	600	600	650	650	700	700	800	900	1000	1200
Wheel Base(mm)		1200	2500	2600	2800	2800	3200	3200	3800	4200	4300	4700	4900	7000
Rail Inner Gauge(mm)		1200	1435	1435	1435	1435	1435	1435	1435	1435	1435	1800	2000	2000
Wheel Diameter(mm)		Φ270	Φ300	Φ300	Φ350	Φ350	Φ400	Φ400	Φ500	Φ500	Φ600	Φ600	Φ600(Heavy)	Φ600
Wheel Quantity		4	4	4	4	4	4	4	4	4	4	4	4	8
Ground Clearance(mm)		50	50	50	50	50	50	50	50	50	75	75	75	75
Running Speed(mm)		0-25	0-25	0-25	0-20	0-20	0-20	0-20	0-20	0-20	0-20	0-20	0-20	0-18
Motor Power(kw)		0.8	1.5	1.5	2.2	2.5	3	4	5.5	5.5	7.5	7.5	11	15
Running distance(m)		25	25	25	25	30	30	50	50	50	50	50	50	50
Max Wheel Load(KN)		14.4	25.8	42.6	64.5	77.7	94.5	110.4	142.8	174	221.4	278.4	343.8	265.2
Reference Weight(t)		25	35	4	5.2	56	62	65	73	78	105	123	141	262
Recommended Rail Model		P15	P18	P18	P24	P24	P38	P38	P43	P43	P50	P50	QU100	QU100

Notes: 1.Load Capacity, table size and rail gauge can be customized.  
2. Options: a. Cable reel(Spring type, magnetic coupling type, motor-driven type); b. Automatic stop when detecting obstacle or person, limit switches(to limit travel); c. Operation way(hand held control pendant, remote radio control or operation platform with the cart); d. Electrical parts(imported or made in China); e. power supply position(middle or two ends); f. Variable speed device(VFD); g. Can be designed to meet special working environment such as high temperature.

# KPT flat carts

## Brief introduction for KPT series’ railway flat carts powered by mobile cable.

KPT series’ rail transfer carts are powered by the mobile cable. It conducts AC 380V directly into the electrical control system of the transfer cart to let it start, stop, go forward and backward and so on. The cart is powered by dragging cable which is laid on the ground. The cable line is placed between the two rails. The operation system is low voltage 36V power. The hydraulic lifting device can be installed on the flat carts. This series’ flat carts are suitable to be used in the bad environment, for example, high-temperature and anti-explosion condition. With its simple structure and low price, this series is more often used to transfer materials for a short distance from one workshop to another. Compared with KPX series transfer cart, the using time is not limited. Compared with KPD series transfer cart, it has no strict requirement on the rail’s installation. Compared with KPJ series transfer cart, the cost is lower. This series’ transfer cart is suitable for the environment of short running distance(≤20m), high using frequency, and low cart’s height. For the condition of short running distance and lower speed, the chain can be used to reduce the abrasion of the cable.



## Technical Parameter for KPT Series Rail Transfer Carts Powered by Dragged Cable

Model		KPT-2t	KPT-5t	KPT-10t	KPT-16t	KPT-20t	KPT-25t	KPT-30t	KPT-40t	KPT-50t	KPT-63t	KPT-80t	KPT-100t	KPT-150t
Rated load(t)		2	5	10	16	20	25	30	40	50	63	80	100	150
Table size(mm)	Length	2000	3500	3600	4000	4000	4500	4500	5000	5500	5600	6000	6500	10000
	Width	1500	2000	2000	2000	2200	2200	2200	2500	2500	2500	2600	2800	3000
	Height	450	450	500	500	550	600	600	650	650	750	800	850	1200
Wheel Base(mm)		1200	2500	2600	2800	2800	3200	3200	3800	4200	4300	4700	4900	7000
Rail Inner Gauge(mm)		1200	1435	1435	1435	1435	1435	1435	1435	1435	1435	1800	2000	2000
Wheel Diameter(mm)		Φ270	Φ300	Φ300	Φ350	Φ350	Φ400	Φ400	Φ500	Φ500	Φ600	Φ600	Φ600ΦHeavy)	Φ600
Wheel Quantity		4	4	4	4	4	4	4	4	4	4	4	4	8
Ground Clearance(mm)		50	50	50	50	50	50	50	50	50	75	75	75	75
Running Speed(mm)		0-25	0-25	0-25	0-20	0-20	0-20	0-20	0-20	0-20	0-20	0-20	0-20	0-18
Motor Power(kw)		0.8	1.5	1.5	2.2	2.5	3	4	5.5	5.5	7.5	7.5	11	15
Max Wheel Load(KN)		14.4	25.8	42.6	64.5	77.7	94.5	110.4	142.8	174	221.4	278.4	343.8	265.2
Reference Weight(t)		2.3	3.3	3.8	5	5.5	6	6.3	7.2	7.6	10.3	12.1	13.9	26
Recommended Rail Model		P15	P18	P18	P24	P24	P38	P38	P43	P43	P50	P50	QU100	QU100

Notes: 1.Load Capacity, table size and rail gauge can be customized. 2. Options: a. Cable protection(cable within chain or cable hanging); b. Automatic stop when detecting obstacle or person, limit switches(to limit travel); c. Operation way(hand held control pendant, remote radio control or operation platform with the cart); d. Electrical parts(imported or made in China); e. Variable speed device(VFD); f. Can be designed to meet special working environment such as high temperature, explosion proof and so on.



# KPC flat carts

## Brief introduction for KPC series’ rail flat carts powered by sliding wire.

KPC series’ rail transfer carts are powered by the sliding line. It conducts AC 380V sliding wire directly into the AC electrical control system of the transfer cart to let it start, stop, go forward and backward and so on. The cart gets power from the slider of the safe sliding line which is moved by the cart’s running. The sliding line is limited by the installation position. It can be installed between the two rails or in the channel outside the track. For your safety and convenience, you can add boards on the channel. Through the automatic device to conduct the power in the channel directly to the rail cart. The operation system is low voltage 36V power. The hydraulic lifting device can be installed on the flat carts. The series’ flat carts are suitable to be used in the bad environment, for example, high-temperature condition. Because of its simple structure, low cost and not so strict requirement on the construction of the rails, it is the first choice for the assembly lines of the workshops. This series transfer cart is suitable for the conditions of short running distance(≤50m), high using frequency, low cart’s height and assembly line works.



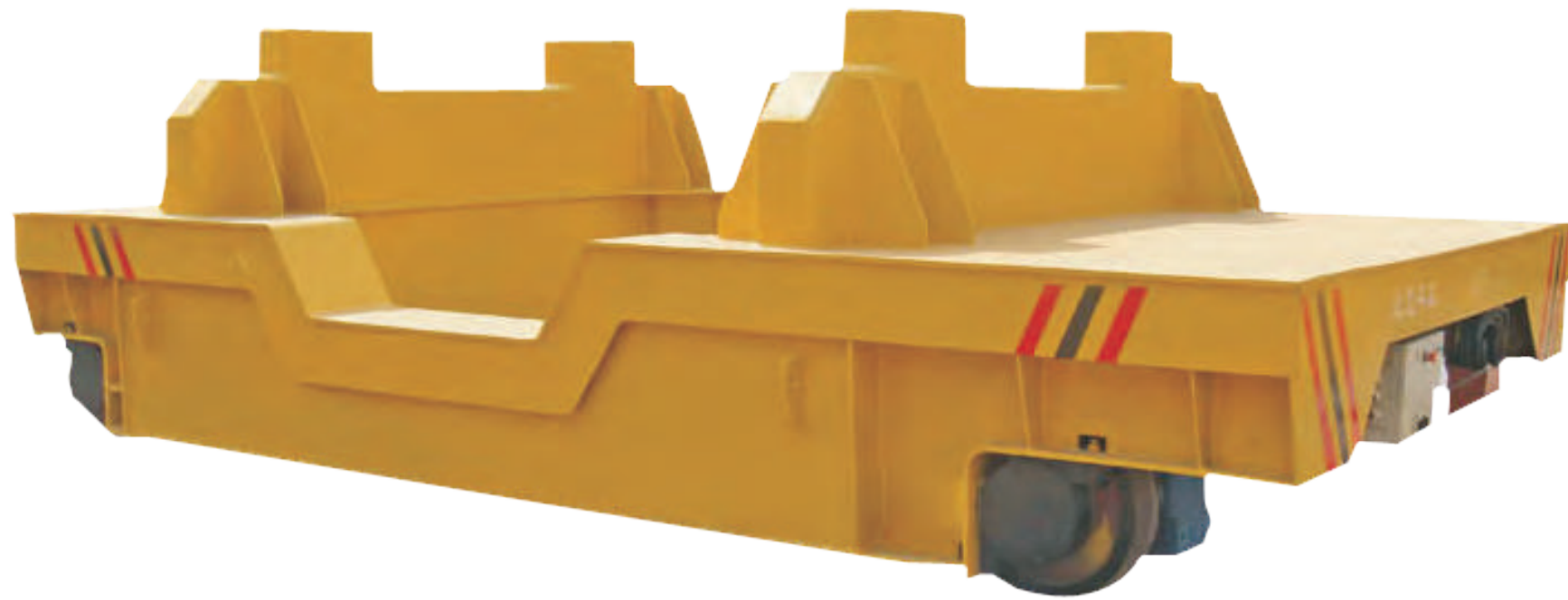
## Technical Parameters for KPC Series Rail Transfer Carts Powered by Safe Slid Line

Model		KPT-2t	KPT-5t	KPT-10t	KPT-16t	KPT-20t	KPT-25t	KPT-30t	KPT-40t	KPT-50t	KPT-63t	KPT-80t	KPT-100t	KPT-150t
Rated load(t)		2	5	10	16	20	25	30	40	50	63	80	100	150
Table size(mm)	Length	2000	3500	3600	4000	4000	4500	4500	5000	5500	5600	6000	6500	10000
	Width	1500	2000	2000	2000	2200	2200	2200	2500	2500	2500	2600	2800	3000
	Height	450	450	500	500	550	600	600	650	650	750	800	850	1200
Wheel Base(mm)		1200	2500	2600	2800	2800	3200	3200	3800	4200	4300	4700	4900	7000
Rail Inner Gauge(mm)		1200	1435	1435	1435	1435	1435	1435	1435	1435	1435	1800	2000	2000
Wheel Diameter(mm)		Φ270	Φ300	Φ300	Φ350	Φ350	Φ400	Φ400	Φ500	Φ500	Φ600	Φ600	Φ600(Heavy)	Φ600
Wheel Quantity		4	4	4	4	4	4	4	4	4	4	4	4	8
Ground Clearance(mm)		50	50	50	50	50	50	50	50	50	75	75	75	75
Running Speed(mm)		0-25	0-25	0-25	0-20	0-20	0-20	0-20	0-20	0-20	0-20	0-20	0-20	0-18
Motor Power(kw)		0.8	1.5	1.5	2.2	2.5	3	4	5.5	5.5	7.5	7.5	11	15
Max Wheel Load(KN)		14.4	25.8	42.6	64.5	77.7	94.5	110.4	142.8	174	221.4	278.4	343.8	265.2
Reference Weight(t)		2.3	3.3	3.8	5	5.5	6	6.3	7.2	7.6	10.3	12.1	13.9	26
Recommended Rail Model		P15	P18	P18	P24	P24	P38	P38	P43	P43	P50	P50	QU100	QU100

Notes: 1.Load Capacity, table size and rail gauge can be customized. 2. Options: Slid Line(slid line with seam or seamless slid line); b. automatic stop when detecting obstacle or person, limit switches(to limit travel); c. Operation way(hand held control pendant, remote radio control or operation platform with the cart); d. Electrical parts(imported or made in China); e. Slid line installation(in the trench on the ground, on the wall and on the ceiling); f. Variable speed device(VFD); g. Can be designed to meet special working environment such as high temperature.

## Ladle transfer cart (配钢包车图片)

Ladle transfer cart is specially designed to transfer the high-temperature ladle. This kind of cart has strict requirements on safety and anti-high temperature, so the material, driving system and electrical parts of the cart should be specially designed. Both the start and stop of the cart should be slowly to prevent the molten steel and slag running out of the ladle. The heat insulating material is used in the cart to resist the high temperature. Usually two motors are prepared, when one is damaged by the ladle's high temperature, the other can be used to continue the work.



## The turning rail transfer carts (转弯电动平车)

The turning rail transfer carts are our company's patented products which can run on the rails 'S', arc-shaped and so on. The turning radius is small and the turning is stable and flexible. Our superiority is that we don't use the traditional complex mechanical structure for the turning and controlling. The thing we do is to optimize structure of the driving parts. By this method, the cost can be greatly reduced, so does the maintenance work.





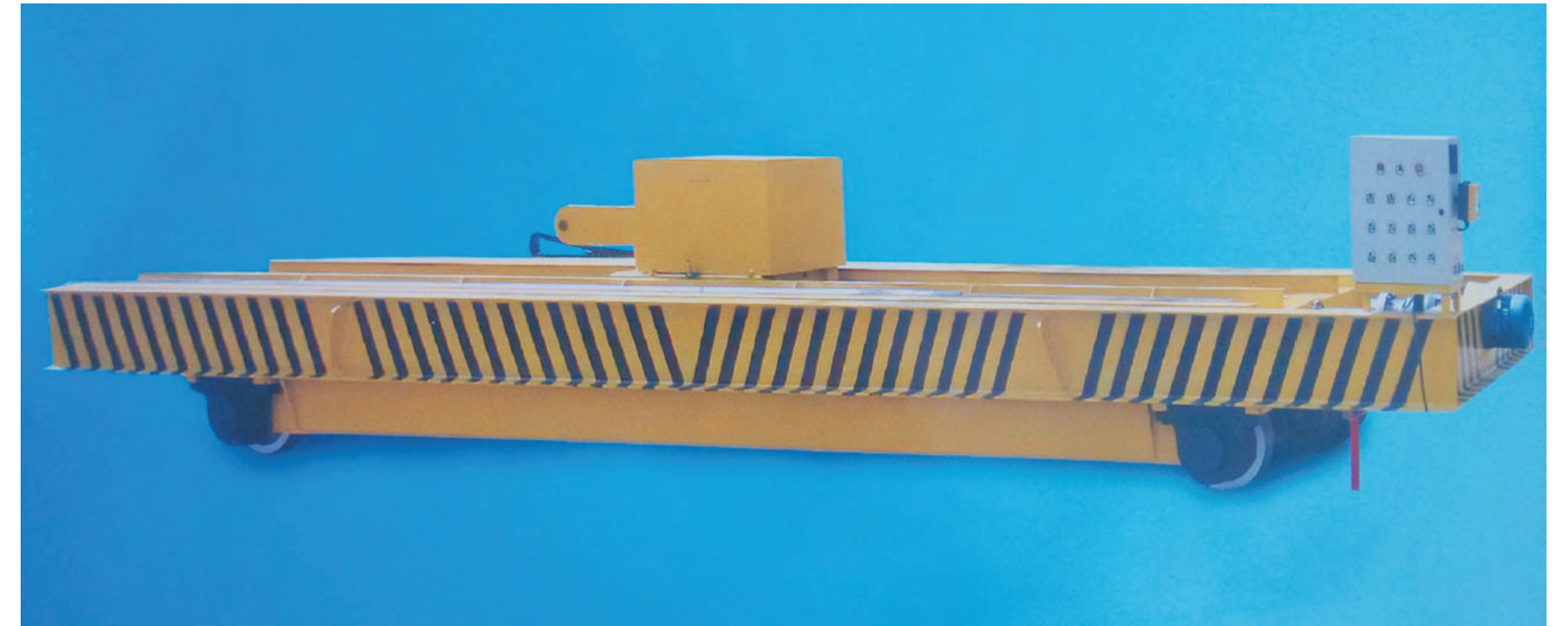
## Turnplate rail transfer cart (转盘电动平车)



Turnplate rail transfer cart is a kind of transfer cart which can run on the 90o turning railway. Working principle: when the transfer cart runs on the turnplate, turn the turnplate automatically or with manpower to connect the railway on the turnplate with the 90o turning railway, and then the transfer cart will run on the 90o turning railway. This turnplate rail transfer cart is suitable to be used on the annular railway and crossing railway for the equipment's producing line. The turnplate system has the features of stable driving, high accuracy of rail connection and can be totally automatically operated.

## Vacuum furnace using ferry transfer cart (真空炉摆渡电动平车)

Vacuum furnace using ferry transfer cart is made of three carts. The cart on the surface of the trench is used to transport the above two carts for a long distance. The second cart above the ground cart is equipped with rails and operated by the ball screw the cart is connected with the rails in the vacuum furnace. The third layer is gear and rack driven. It can automatically connects with the skip car within the vacuum furnace, then pull the skip car out of vacuum furnace. In order to make the connection safe, stable and without impact, frequency changing device is used.





# Railway flat carts KPJ-200T (电缆卷筒电动平车)

Capacity: 200t

Height(mm): 1000

Running Speed: 30m/min

Table size(mm): 12000X4000

Running Distance(m): 100

Power supply: Cable reel



## Transfer Cart Pictures for your reference

