



since 1988



80m
90m
100m
112m
125m
150m
175m
200m

2024

PANORAMIC WHEEL

The Panoramic wheel is protected by a patent. The use of images without the permission of the owner is prosecuted by law.





Dear Sirs!

We present to You a Panoramic wheels 80-90-100-112-125-150-175-200 meters high.

The Panoramic wheel is one of the most profitable and attractive entertainment facilities, which attracts tourists with beautiful bird's-eye views combined with interactive entertainment in the cabins, and for residents and tourists, the wheel is a symbol of the city.

We offer you panoramic wheels with a height of 100-200 meters, which will open beautiful panoramas to passengers and allow them to enjoy the sensations of height.

Such objects have a high payback with a large flow of tourists, but even for the initial flow of tourists from a million people a year, it will pay off in 2-4 years. Projects of giant wheels from 100 m high with infrastructure are expensive, but they allow creating new tourist attractions for millions of people.

There have been no incidents with our products, we have ISO 9001 design and production quality management system certificates from TÜV SÜD, Germany, and the wheel itself will be manufactured in Europe, certified by Leisure Technical Consultants, UK.

Main features and profitability of Pax panoramic wheels (prices under discussion)

Height, meters	Dia-meter, m	One rotation, min	Number of cabins	People in cabin	Passengers in year, millions	Ticket price, USD	Income on load of 50% - M USD	Price of the wheel - M USD
200	185	24	60	18	11,7	40	234	300
175	160	21	54	15	10,15	30	152	150
150	135	17,6	48	12	8,4	20	84	75
125	110	14,4	42	10	7,67	12	46	30
112	98	12,8	36	8	6,0	8	24	20
100	97	11,1	30	6	4,2	6	12,6	12
90	87	10	30	6	4,5	5	11,25	9
80	77	8	24	6	5	4	10	6

The price of panoramic wheels is reduced in accordance with the share of manufacturers in the project. The desired share size is 20%, the discount from the price is 30%. Operating costs - on page 26.



Daylight view of the wheel 150m



Night view of the wheel 150m



Panoramic wheel station



Advantages of the proposed construction of a panoramic wheel :

- the design is 6 times lighter and 4 times more rigid than the London wheel;
- the drive is mechanically engaged with the drive ring - no slippage;
- air-conditioned cabins are suspended and protected from swinging and complete overturning;
- the wheel has 2 duplicated drives, taking into account uneven loading and wind;
- a standby generator is used to back up the power supply;



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Panoramic wheel cabins

- air-conditioned cabins are suspended and protected from swinging and complete overturning;
- cabin frame - steel, weighted bottom, 2 independent air conditioners, collectors;
- triplex glass, doors open inwards and are closed by actuators;
- glass - cylindrical, panoramic, railings run along the glass, doors with handles.



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Panoramic wheel cabins - regular - 12 people

- passengers can walk freely along the windows;
- for passengers with children and the elderly, four rotating chairs are installed;
- the cabin can be equipped with video monitors and paid spyglasses;



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Panoramic wheel cabins - cafe - 8 people

- passengers can walk freely along the cabin and windows,
- installed 8 rotating chairs with tables along the windows;
- there is a buffet with a capsule coffee machine, a kettle, microwave and a trash can;
- passengers buy cold drinks and snacks at the station and carry them into the cabin;
- the cabin can be equipped with video monitors and paid spyglasses.



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Panoramic wheel cabins - for VIPs - 6 people

- passengers can walk freely along the cabin and windows,
- 6 rotating chairs are installed around the table in the center of the cabin;
- there is a buffet with a capsule coffee machine, kettle, microwave and an trash can;
- passengers buy cold drinks and snacks at the station and carry them into the cabin;
- waiter service available.



**General view of the station and panoramic wheel cabins:
boarding platforms, buffet, cash desks, control frames, luggage storage**



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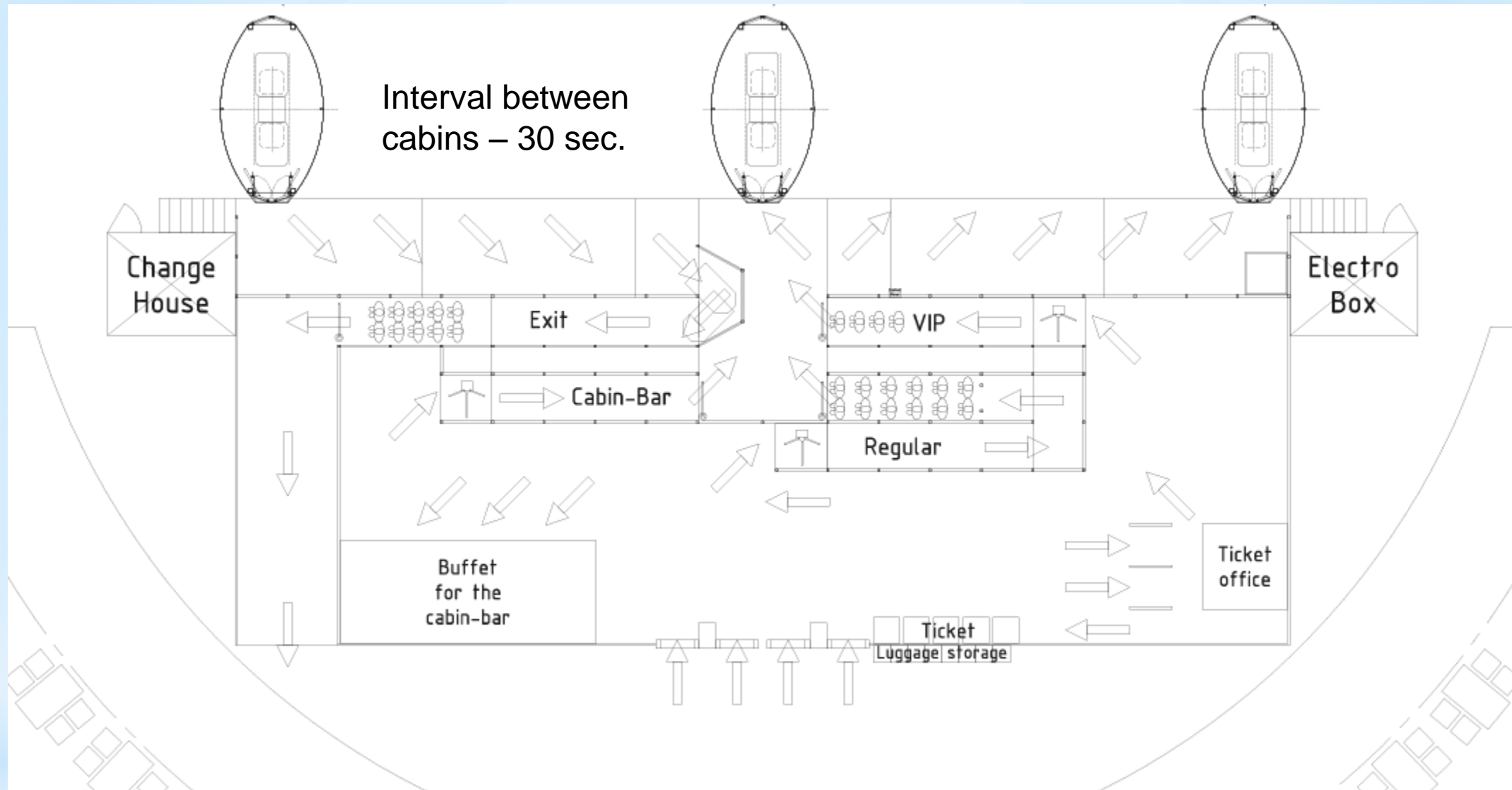
Entrance to Panoramic Wheel Station



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Panoramic wheel station - top view



Embarkation and disembarkation of passengers in cabins

- regular passengers with tickets pass through the “Regular” entrance;
- passengers of cabins-cafes (bars) pass by the buffet to the “Cafe” entrance;
- VIP passengers go through the “VIP” entrance, drinks and snacks - in the cabin;
- passengers with limited mobility are brought in in wheelchairs through the exit;
- all passengers leave the cabins through a common exit.



Panoramic wheel station platforms



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Exit from Panoramic Wheel Station



Pax Group experience

Over 35 years, we have constructed more than 520 objects in Europe, Asia, and America

- Over 112 major rides around the world;
- 212 telecommunications and TV towers up to 84 meters in height.
- “Moscow - 850” Panoramic Wheel 70m - the highest in Europe in 1995. Panoramic Wheel 90 m in height for Mirabilandia park, Italy - the highest in Europe in 1998.
- Panoramic wheel in Ulsan (South Korea) 128 m high (on the top of the parking roof of 48 m height).
- Roller Coasters for Saudi Arabia, France (Parc Saint-Paul); Austria (Erlebnispark).
- Mobile Gantry for pre-launch preparation of "Soyuz-CT" launchers for Guiana Space Center, France, in 2011. Up to 2022 there were 27 successful launches of Soyuz rockets.
- Set of containers for "Soyuz-ST" launchers transportation from Russia to Guiana Space Center.
- In 2011-15, ISO TC 254, which is headed by Vladimir Gnezdilov developed 3 new world standards "Safety of amusement rides and amusement devices“.
- In 2018, the EAEU Technical Regulation 038/2016 "On the Safety of Attractions" developed by Pax Company came into force.



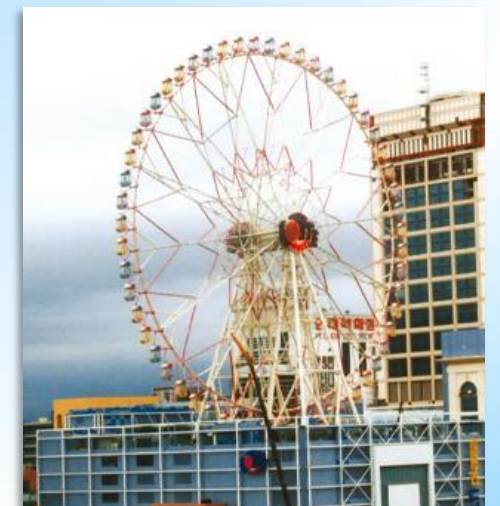
Mobile Gantry



Cobra, UAE



Wheel 90m, Italy



Wheel 80m, S.Korea

Installation of a wheel 80m





Completeness, characteristics, and cost of 80 m wheel

Advantages: European quality; spacious cabins;
uneven loading of cabins up to 50% does not cause wheel slippage;
Session: 1 rotation per 8 minutes. Service (max) - up to 770 pers./hour (5 mil./year).

BASIC COMPLETENESS OF A PANORAMIC WHEEL

Cabins: 24 spacious panoramic cabins Ø 2,4X2,7m. designed for 6 persons. 12 - regular, 8 café-cabins, 3 extreme cabins, 1 VIP cabin.

Transmission : gear drives supplied with a gear (pinion) engagement to a wheel arc, the system eliminates slipping of the gear drive with a drive arc in the rain and uneven loading up to 50%.

Metal structures: Two pyramidal supports with technological ladders and platforms; 10 trusses of the rotating part; bearing units; a landing platform with three entrances and an exit.

Electrical equipment : Control boxes and operator consoles; cable set, sensors - in accordance with the “Low voltage equipment” section of GOST 33807 or EN 13814. Pavilion for a control panel and an operator.

Painting of metal structures: a 3-layer painting system with protection from the marine climate.

Installation supervision, adjustment, tests, putting into operation, instructing the staff of the wheel.

Operational documentation in accordance with requirements ISO 17842;

A set of spare parts and tools for the first year of operation of the Ferris wheel; spare parts supply and technical support for at least 10 years
ISO 17842 certificate of Conformity.

MAIN TECHNICAL CHARACTERISTICS (APPROXIMATE)

Dimensions : height - 80m, diameter - 77 m, weight - 200 tn,
site for supports - 28x35m; volume of foundations ~ 650 m³.

Speed of cabins at the station: 0 m/s-0,27 m/s; resource - 35 000 hours (3 500 days)

Electrical equipment (all data are preliminary): - gear drives: while fully loaded - not more than 2x14 kW , average per hour - 7 kW, drive power source - V/phase/Hz/A 380/3/50/80; conditioning - up to 1 kW per cabin, cabin power source V/phase/Hz/A 220/1/50(60)/6 per cabin.; dynamic illumination - up to 50 kW, power supply source V/phase /Hz/A 220/1/50/250.

Back up electricity supply for evacuation of passengers: is produced by the 15 kW power generator (to be purchased by buyer), which is required in case of power outage.

External effects: IV wind area; earthquake - up to 8,5 magnitude of the Richter scale.

Temperature: from -5 up to +50 Celsius, humidity - up to 99%.

Number of 40-foot containers for transporting a wheel - 40;

Options on request: dynamic illumination - \$ 50/meter, LED screen for advertising - on request.

PRICE WITH INSTALLATION, WITHOUT VAT = USD 6 million.

Buyer's responsibility: transportation, storage (1-3%), foundations and platform (2-3%), electricity, ticket system, security system, service rooms at the station, ticket offices, storage rooms, buffet, fences, permits.



Completeness, characteristics, and cost of 90 m wheel

Advantages: European quality; spacious cabins;
uneven loading of cabins up to 50% does not cause wheel slippage;
Session: 1 rotation per 10 minutes. Service (max) - up to 960 pers./hour (4,5 mil./year).

BASIC COMPLETENESS OF A PANORAMIC WHEEL

Cabins: 30 spacious panoramic cabins Ø 2,4X2,7m. designed for 6 persons. 16 - regular, 10 café-cabins, 3 extreme cabins, 1 VIP cabin.

Transmission : gear drives supplied with a gear (pinion) engagement to a wheel arc, the system eliminates slipping of the gear drive with a drive arc in the rain and uneven loading up to 50%.

Metal structures: Two pyramidal supports with technological ladders and platforms; 10 trusses of the rotating part; bearing units; a landing platform with three entrances and an exit.

Electrical equipment : Control boxes and operator consoles; cable set, sensors - in accordance with the “Low voltage equipment” section of GOST 33807 or EN 13814. Pavilion for a control panel and an operator.

Painting of metal structures: a 3-layer painting system with protection from the marine climate.

Installation supervision, adjustment, tests, putting into operation, instructing the staff of the wheel.

Operational documentation in accordance with requirements ISO 17842;

A set of spare parts and tools for the first year of operation of the Ferris wheel; spare parts supply and technical support for at least 10 years
ISO 17842 certificate of Conformity.

MAIN TECHNICAL CHARACTERISTICS (APPROXIMATE)

Dimensions : height - 90m, diameter - 87 m, weight - 260 tn,
site for supports - 28x35m; volume of foundations ~ 750 m³.

Speed of cabins at the station: 0 m/s-0,23 m/s; resource - 35 000 hours (3 500 days)

Electrical equipment (all data are preliminary): - gear drives: while fully loaded - not more than 2x20 kW , average per hour - 10 kW, drive power source - V/phase/Hz/A 380/3/50/80; conditioning - up to 1 kW per cabin, cabin power source V/phase/Hz/A 220/1/50(60)/6 per cabin.; dynamic illumination - up to 50 kW, power supply source V/phase /Hz/A 220/1/50/250.

Back up electricity supply for evacuation of passengers: is produced by the 15 kW power generator (to be purchased by buyer), which is required in case of power outage.

External effects: IV wind area; earthquake - up to 8,5 magnitude of the Richter scale.

Temperature: from -5 up to +50 Celsius, humidity - up to 99%.

Number of 40-foot containers for transporting a wheel - 46;

Options on request: dynamic illumination - \$ 50/meter, LED screen for advertising - on request.

PRICE WITH INSTALLATION, WITHOUT VAT = USD 9 million.

Buyer's responsibility: transportation, storage (1-3%), foundations and platform (2-3%), electricity, ticket system, security system, service rooms at the station, ticket offices, storage rooms, buffet, fences, permits.



Completeness, characteristics, and cost of 100 m wheel

Advantages: European quality; spacious cabins;

uneven loading of cabins up to 50% does not cause wheel slippage;

Session: 1 rotation per 11 minutes. Service (max) - up to 1150 pers./hour (4,2 mil./year).

BASIC COMPLETENESS OF A PANORAMIC WHEEL

Cabins: 30 spacious panoramic cabins Ø 2,4X2,7m. designed for 6 persons. 16 - regular, 10 café-cabins, 3 extreme cabins, 1 VIP cabin.

Transmission : gear drives supplied with a gear (pinion) engagement to a wheel arc, the system eliminates slipping of the gear drive with a drive arc in the rain and uneven loading up to 50%.

Metal structures: Two pyramidal supports with technological ladders and platforms; 10 trusses of the rotating part; bearing units; a landing platform with three entrances and an exit.

Electrical equipment : Control boxes and operator consoles; cable set, sensors - in accordance with the “Low voltage equipment” section of GOST 33807 or EN 13814. Pavilion for a control panel and an operator.

Painting of metal structures: a 3-layer painting system with protection from the marine climate.

Installation supervision, adjustment, tests, putting into operation, instructing the staff of the wheel.

Operational documentation in accordance with requirements ISO 17842;

A set of spare parts and tools for the first year of operation of the Ferris wheel; spare parts supply and technical support for at least 10 years ISO 17842 certificate of Conformity.

MAIN TECHNICAL CHARACTERISTICS (APPROXIMATE)

Dimensions : height - 100m, diameter - 97 m, weight - 450 tn,
site for supports - 28x35m; volume of foundations ~ 950 m³.

Speed of cabins at the station: 0 m/s-0,26 m/s; resource - 35 000 hours (3 500 days)

Electrical equipment (all data are preliminary): - gear drives: while fully loaded - not more than 2x15 kW , average per hour - 10 kW, drive power source - V/phase/Hz/A 380/3/50/80; conditioning - up to 1 kW per cabin, cabin power source V/phase/Hz/A 220/1/50(60)/6 per cabin.; dynamic illumination - up to 50 kW, power supply source V/phase /Hz/A 220/1/50/250.

Back up electricity supply for evacuation of passengers: is produced by the 15 kW power generator (to be purchased by buyer), which is required in case of power outage.

External effects: IV wind area; earthquake - up to 8,5 magnitude of the Richter scale.

Temperature: from -5 up to +50 Celsius, humidity - up to 99%.

Number of 40-foot containers for transporting a wheel - 50;

Options on request: dynamic illumination - \$ 50/meter, LED screen for advertising - on request.

PRICE WITH INSTALLATION, WITHOUT VAT = USD 12 million.

Buyer's responsibility: transportation, storage (1-3%), foundations and platform (2-3%), electricity, ticket system, security system, service rooms at the station, ticket offices, storage rooms, buffet, fences, permits.



Completeness, characteristics, and cost of 125 m wheel

Advantages: European quality; spacious cabins;
uneven loading of cabins up to 50% does not cause wheel slippage;
Session: 1 rotation per 15 minutes. Service (max) - up to 1200 pers./hour (7,67 mil./year).

BASIC COMPLETENESS OF A PANORAMIC WHEEL

Cabins: 42 spacious panoramic cabins Ø 2,4X3,8m. designed for 10 persons. 23 - regular, 15 café-cabins, 4 VIP cabins.

Transmission : gear drives supplied with a gear (pinion) engagement to a wheel arc, the system eliminates slipping of the gear drive with a drive arc in the rain and uneven loading up to 50%.

Metal structures: Two pyramidal supports with technological ladders and platforms; 10 trusses of the rotating part; bearing units; a landing platform with three entrances and an exit.

Electrical equipment : Control boxes and operator consoles; cable set, sensors - in accordance with the “Low voltage equipment” section of GOST 33807 or EN 13814. Pavilion for a control panel and an operator.

Painting of metal structures: a 3-layer painting system with protection from the marine climate.

Installation supervision, adjustment, tests, putting into operation, instructing the staff of the wheel.

Operational documentation in accordance with requirements ISO 17842;

A set of spare parts and tools for the first year of operation of the Ferris wheel; spare parts supply and technical support for at least 10 years
ISO 17842 certificate of Conformity.

MAIN TECHNICAL CHARACTERISTICS (APPROXIMATE)

Dimensions : height - 125m, diameter - 122 m, weight - 800 tn,
site for supports - 30x37m; volume of foundations ~ 1360 m³.

Speed of cabins at the station: 0 m/s-0,3 m/s; resource - 35 000 hours (3 500 days)

Electrical equipment (all data are preliminary): - gear drives: while fully loaded - not more than 2x30 kW , average per hour - 25 kW, drive power source - V/phase/Hz/A 380/3/50/160; conditioning - up to 1 kW per cabin, cabin power source V/phase/Hz/A 220/1/50(60)/6 per cabin.; dynamic illumination - up to 50 kW, power supply source V/phase /Hz/A 220/1/50/250.

Back up electricity supply for evacuation of passengers: is produced by the 25 kW power generator (to be purchased by buyer), which is required in case of power outage.

External effects: IV wind area; earthquake - up to 8,5 magnitude of the Richter scale.

Temperature: from -5 up to +50 Celsius, humidity - up to 99%.

Number of 40-foot containers for transporting a wheel - 55;

Options on request: dynamic illumination - \$ 50/meter, LED screen for advertising - on request.

PRICE WITH INSTALLATION, WITHOUT VAT = USD 30 million.

Buyer's responsibility: transportation, storage (1-3%), foundations and platform (2-3%), electricity, ticket system, security system, service rooms at the station, ticket offices, storage rooms, buffet, fences, permits.



Completeness, characteristics, and cost of 150 m wheel

Advantages: European quality; spacious cabins;
uneven loading of cabins up to 50% does not cause wheel slippage;
Session: 1 rotation per 17 minutes. Service (max) - up to 1400 pers./hour (8,4 mil./year).

BASIC COMPLETENESS OF A PANORAMIC WHEEL

Cabins: 48 spacious panoramic cabins Ø 2,4X3,8m. designed for 12 persons. 24 - regular, 20 café-cabins, 4 VIP cabins.

Transmission : gear drives supplied with a gear (pinion) engagement to a wheel arc, the system eliminates slipping of the gear drive with a drive arc in the rain and uneven loading up to 50%.

Metal structures: Two pyramidal supports with technological ladders and platforms; 10 trusses of the rotating part; bearing units; a landing platform with three entrances and an exit.

Electrical equipment : Control boxes and operator consoles; cable set, sensors - in accordance with the “Low voltage equipment” section of GOST 33807 or EN 13814. Pavilion for a control panel and an operator.

Painting of metal structures: a 3-layer painting system with protection from the marine climate.

Installation supervision, adjustment, tests, putting into operation, instructing the staff of the wheel.

Operational documentation in accordance with requirements ISO 17842;

A set of spare parts and tools for the first year of operation of the Ferris wheel; spare parts supply and technical support for at least 10 years
ISO 17842 certificate of Conformity.

MAIN TECHNICAL CHARACTERISTICS (APPROXIMATE)

Dimensions : height - 150m, diameter - 147 m, weight - 1200 tn,
site for supports - 30x37m; volume of foundations ~ 2660 m³.

Speed of cabins at the station: 0 m/s-0,29 m/s; resource - 35 000 hours (3 500 days)

Electrical equipment (all data are preliminary): - gear drives: while fully loaded - not more than 2x47 kW , average per hour - 35 kW, drive power source - V/phase/Hz/A 380/3/50/250; conditioning - up to 1 kW per cabin, cabin power source V/phase/Hz/A 220/1/50(60)/6 per cabin.; dynamic illumination - up to 50 kW, power supply source V/phase /Hz/A 220/1/50/250.

Back up electricity supply for evacuation of passengers: is produced by the 35 kW power generator (to be purchased by buyer), which is required in case of power outage.

External effects: IV wind area; earthquake - up to 8,3 magnitude of the Richter scale.

Temperature: from -5 up to +50 Celsius, humidity - up to 99%.

Number of 40-foot containers for transporting a wheel - 62;

Options on request: dynamic illumination - \$ 50/meter, LED screen for advertising - on request.

PRICE WITH INSTALLATION, WITHOUT VAT = USD 30 million.

Buyer's responsibility: transportation, storage (1-3%), foundations and platform (2-3%), electricity, ticket system, security system, service rooms at the station, ticket offices, storage rooms, buffet, fences, permits.



Completeness, characteristics, and cost of 175 m wheel

Advantages: European quality; spacious cabins;
uneven loading of cabins up to 50% does not cause wheel slippage;
Session: 1 rotation per 21 minutes. Service (max) - up to 1600 pers./hour (10 mil./year).

BASIC COMPLETENESS OF A PANORAMIC WHEEL

Cabins: 54 spacious panoramic cabins Ø 2,4X3,8m. designed for 15 persons. 30 - regular, 20 café-cabins, 4 VIP cabins.

Transmission : gear drives supplied with a gear (pinion) engagement to a wheel arc, the system eliminates slipping of the gear drive with a drive arc in the rain and uneven loading up to 50%.

Metal structures: Two pyramidal supports with technological ladders and platforms; 10 trusses of the rotating part; bearing units; a landing platform with three entrances and an exit.

Electrical equipment : Control boxes and operator consoles; cable set, sensors - in accordance with the “Low voltage equipment” section of GOST 33807 or EN 13814. Pavilion for a control panel and an operator.

Painting of metal structures: a 3-layer painting system with protection from the marine climate.

Installation supervision, adjustment, tests, putting into operation, instructing the staff of the wheel.

Operational documentation in accordance with requirements ISO 17842;

A set of spare parts and tools for the first year of operation of the Ferris wheel; spare parts supply and technical support for at least 10 years
ISO 17842 certificate of Conformity.

MAIN TECHNICAL CHARACTERISTICS (APPROXIMATE)

Dimensions : height - 175m, diameter - 172 m, weight - 2200 tn,
site for supports - 30x37m; volume of foundations ~ 3950 m³.

Speed of cabins at the station: 0 m/s-0,32 m/s; resource - 35 000 hours (3 500 days)

Electrical equipment (all data are preliminary): - gear drives: while fully loaded - not more than 2x58 kW , average per hour - 40 kW, drive power source - V/phase/Hz/A 380/3/50/310; conditioning - up to 1 kW per cabin, cabin power source V/phase/Hz/A 220/1/50(60)/6 per cabin.; dynamic illumination - up to 50 kW, power supply source V/phase /Hz/A 220/1/50/250.

Back up electricity supply for evacuation of passengers: is produced by the 40 kW power generator (to be purchased by buyer), which is required in case of power outage.

External effects: IV wind area; earthquake - up to 8,3 magnitude of the Richter scale.

Temperature: from -5 up to +50 Celsius, humidity - up to 99%.

Number of 40-foot containers for transporting a wheel - 95;

Options on request: dynamic illumination - \$ 50/meter, LED screen for advertising - on request.

PRICE WITH INSTALLATION, WITHOUT VAT = USD 30 million.

Buyer's responsibility: transportation, storage (1-3%), foundations and platform (2-3%), electricity, ticket system, security system, service rooms at the station, ticket offices, storage rooms, buffet, fences, permits.



The profitability of Panoramic wheels.

Panoramic wheels have gained immense popularity in the world after the construction of the Eye of London wheel in 2000 with a height of 135 meters. With a ticket price of \$40 and attendance of 4.5 million people a year, together with the sale of souvenirs, the income is more than \$200 million. Wheels were built in Singapore - 165m, in Las Vegas - 167.5m, in Dubai - 210m. (Under renovation since March 2022) The cost of creating wheels is from \$150 million to \$600 million.

Each wheel is a new symbol of the states and attracts many new tourists. (Wheels from China are not bought on the world market due to low quality.)

The dimensions of the wheels should correspond to the tourist flow in the region.

To implement the project, it is necessary to allocate land for a wheel for 99 years as close as possible to the historical zone of the city, and the project must be approved.

The price of manufacturing and erecting a 100m wheel with 36 cabins is 12 million USD. Payback period - 1.5 years

Discount of 30% from the price for a share of income = 20%, the final price = 8.4 million USD.

The price of manufacturing and erecting a 125m wheel with 42 cabins is 30 million USD.

Discount of 30% from the price for a share of income = 20%, the final price = 21 million USD.

The price of manufacturing and erecting a 150m wheel with 50 cabins is 75 million USD.

Discount of 30% from the price for a share of income = 20%, the final price = 52,5 million USD.

The price of manufacturing and erecting a 175m wheel with 60 cabins is 150 million USD.

Discount of 30% from the price for a share of income = 20%, the final price = 105 million USD.

The production period is 15-24 months, the installation period is 40-180 days. The company's expenses for the operation of the wheel are approximately 15% of the annual income, excluding taxes.

When visiting the wheel 100m from 1 million passengers per year and the ticket price is USD 8\$ and income of 20% from souvenirs, food, binoculars, photos, the payback of the wheel itself will be ~ 1.5-2 years.

For a 125m wheel, 2 million passengers, with a ticket price of \$ 12, the payback of the wheel will be ~ 1.5-2 years. For a 150m wheel, 3 million passengers, with a ticket price of \$ 20, the payback of the wheel will be ~ 1.5-2 years. For a wheel of 175m, 4 million passengers, with a ticket price of \$ 30, the payback of the wheel will be ~ 1.5-2 years.



**The cost of foundations and platforms – 5%, transportation – 3%, the station – 2 floors of 6 m.– the cost depends on the area
Operating expenses (approximately 15%)**

SERVICE WHEEL STAFF 100m - high season.

Position	#of shifts	#of people	functions	Area of work place,
ADMINISTRATIVE STAFF = 13 people.				
Director	1	1	management	office
Assistant/manager	1	2	personnel, marketing, advertising, household	office and warehouse
Sis. Admin	1.5	2	working billing system, video control, music	office
Electrician	1.5	2	control of electrical systems	office
Accountant	1	1	fin. control, tickets, reporting, taxes	office
Security chief	1	1	supervision of the security staff	office
Chief mechanic/ mechanic	1.5	4	technical condition of the wheel, repairs	workshop
OPERATIONAL STAFF = 24 people (2x12 people).				
Duty Admin	1.5	2	pm wheel reception, organization of operations by personnel	
Operators No.1	1.5	2	operator disembarking from cabs	
No.2	1.5	4	operator boarding the cabins and storage	
No.3	1.5	2	cafes, VIP, invalids, weddings, birthdays	
cashiers	1.5	4	tickets, cash collection control	
SECURITY STAFF = 6 people (2x3 people).				
Guards	1.5	6	screening visitors, order at the station	
CLEANING STAFF = 4 people (2x2 people).				
Cleaners	1.5	2	cleaning booths, platforms and accesses	
	1.5	2	cleaning in front of the station area	

Total 37 people, taking into account weekends, holidays (partially - seasonal employment).

For higher wheels, the number of personnel increases in proportion to the height of the wheel.

Spare parts and expenses: el./energy, spare parts, households. expenses, technical services, checkups
Commercial personnel: souvenirs, photos, binoculars, entertainment, advertising, contracts with travel agencies

Meals in the cabins, meals outside the station.

Premises: offices, medical office, toilets, workshop, warehouse, locker rooms.

Pax Company Group Profile



Since 1988



Golden Medal
named after V.G.
Shukhov, 2013



American
Chamber of
Commerce in
Russia



542 facilities designed and built in Europe, Asia, USA for **35** years
65 large attractions have been created for Russia and **57** for foreign countries, more
than **420** high-rise communication towers



- In 2018-2021, Pax-Design developed a project of a mobile complex for the assembly and maintenance of a promising multi-stage rocket “Yenisei”.
- 2013 - the Russian and International Union of Scientific and Engineering Public Associations has awarded the specialists of Pax Design with the Golden Medal named after V.G. Shukhov for the creation of the Mobile Gantry for SOYUZ space vehicles in Guiana Space Center (GSC), Kourou, French Guiana, 2005-2011.



Cobra, Dammam



2013

- 1998 – major Roller Coaster for Saudi Arabia in King Fahad Park. Later, due to high popularity of the coaster, the park was renamed into Cobra Amusement Park.
- 1998 – the highest Panoramic Wheel in Europe in Mirabilandia park, Ravenna, Italy.
- 2001 - Panoramic Wheel 80 m in height on the roof of the 40 meters-building, Ulsan, South Korea
- 2012-13 - ISO/TC 254 under the guidance of Dr. V.Gnezdilov has developed 3 new world standards “Safety of Amusement Rides”.



Mobile Gantry in GSC



Wheel 90 m, Italy



- PAX Group of Companies was established in July 15, 1988;
- Pax Group of Companies has been on the International market since 1993;
- PAX Group of Companies base is the specialists with huge work experience in the aerospace industry;
- We create amusement rides and aerospace equipment;
- Our products are certified by TÜV SÜD (Munich) and by the Central Research Institute of Construction Structures named after Kucherenko (Russia), as well as by ISO 9000 in accordance with the Russian and European standards;
- PAX Group of Companies is the base organization for ISO/TC 254 Committee “Safety of Amusement Rides and Devices” of the International Standardization Organization (ISO);
- PAX Group of companies consists of:
 - Pax Design – design facility,
 - Pax manufacturing company – manufacturing facility,
 - Pax Company – transportation and assemble facility,
 - “Wheel at the All-Russian Exhibition Center (VVC)”,
 - Amusement rides park in Yaroslavl.
 - In 2018-2020, Pax-Design developed a project of a mobile complex for the assembly and maintenance of a promising multi-stage rocket “Yenisei”.





Product safety

The Pax Group of Companies' amusement design and production system is certified by the world's leading expert, the German company TUV SUD. We have a license from Roscosmos for the production of space technology. There have been no incidents or accidents with our products.

The Pax group of companies pays the most serious attention to the safety of the created attractions. Back in 1989-90, we conducted tests on centrifuges at the Center. Gagarin people of different ages from 6 to 78 years with various health pathologies to establish standards for the safety of attractions, the data from which we used to create the international standard ISO 17842 "Safety of attractions".

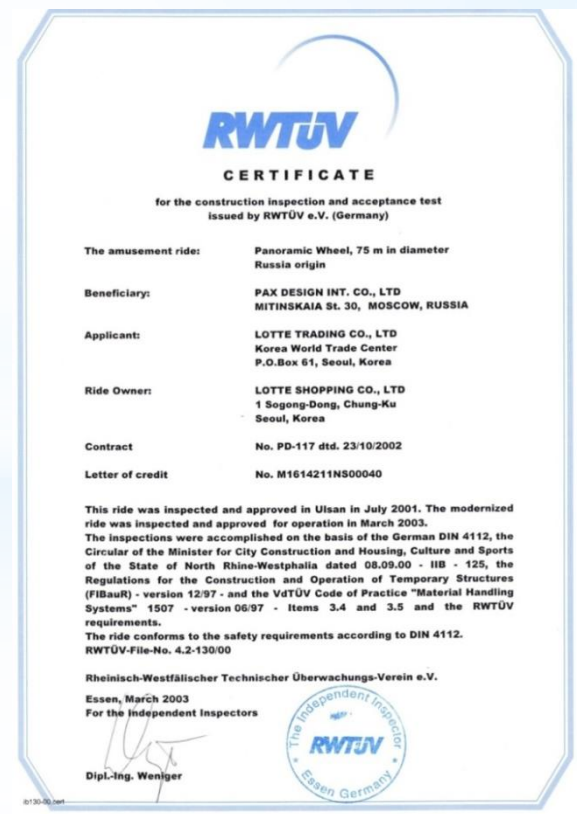
The head of the Pax Group of Companies, V.A. Gnezdilov, is the head of the Department of Strength of Aviation and Rocket-Space Structures of the Moscow Aviation Institute (University), Chairman of TC 254 "Safety of Attractions" of ISO – the International Organization for Standardization, Chairman of TC 427 of Rosstandart.

License for space activity

TUV SUD certificate of the quality management system of MIR Group of Companies

TUV NORD (Germany) certificate for the Ferris wheel of Ulsan, Korea

TUV SUD Certificate (Germany) for a Mobile Tower at the Guiana Space Center





Panoramic Wheel 80 m on the roof of the 40 m building in Ulsan, South Korea, assembled in 2001 in co-operation with Lotte corporation.



Наш опыт: к

Panoramic Wheel 90 m in Mirabilandia park, Ravenna, Italy, was the highest wheel in Europe since 1998 till 2000.