

LIFTING AND TRANSPORTING EQUIPMENT



➤ CRANES



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SYMBOLOLOGY

- | | | | | |
|--------|--------|------|----------|------------------|
| Hook | Magnet | Arm | Traverse | Special traverse |
| Pliers | Wing | Grab | Tilter | |

ABOUT COMPANY

PRODUCTION ASSOCIATION "TEHNOROS" WAS ESTABLISHED IN 1991. NOWADAYS "TEHNOROS" IS ONE OF THE LEADING RUSSIAN DESIGNERS AND MANUFACTURERS OF COMPLICATED MATERIALS' HANDLING AND TRANSPORT EQUIPMENT OF VARIOUS APPLICATION.

OUR SPECIALIZATION IS CUSTOM-TAILORED DESIGN AND IMPLEMENTATION OF UNIQUE ENGINEERING SOLUTIONS BASED ON DETAILED ANALYSIS OF TECHNICAL FEATURES OF EVERY PROJECT, OPERATION CONDITIONS AND INDIVIDUAL NEEDS OF THE CUSTOMER.

PA "TEHNOROS" opportunities fully meet the requirements of the modern market and allow to design, manufacture, deliver and maintain sophisticated and non-standard equipment.

The design is carried out in the automatic designing automatic system CREO. Each project is developed in 3D, with the strength analysis of structures finite elements using special techniques and software, risk management and reliability analysis. All the products have necessary certificates.

Over the years the "TEHNOROS" specialists successfully implemented more than 100 complex projects for strategic enterprises in the mining, oil and gas, metallurgical, chemical and atomic industries, shipbuilding, military-industrial complex and large objects of transport and logistics infrastructure.

"TEHNOROS" established itself as a reliable and stable partner. Our regular customers are the largest companies of Russian and foreign companies.

ABOUT COMPANY

> ENGINEERING

> MANUFACTURING

> ASSEMBLING





01

PORTAL CRANES

PORTAL CRANES

PORTAL CRANE IS A FULL-CIRCLE BOOM CRANE, WHICH SLEWING SUPERSTRUCTURE IS INSTALLED ON THE PORTAL, MOVING ON RAILS WHICH IS LAID ON THE GROUND OR ON THE OVERPASS.

Cranes are subdivided into the assembly, transshipment and dock. In particular, line of portal cranes «Kirovets» for several decades has been successfully used for cargo handling operations at sea and river ports, at open warehouses, shipbuilding and shiprepair yards, as well as at floating docks and in construction of hydraulic structures. Modern range of gantry cranes «Zubr» and «Voskhod» presents installation, handling and dock cranes lines.

Portal crane types:

— Assembly cranes

Assembly portal cranes are used for the production, installation and assembly work at the shipbuilding and ship repair enterprises, as well as for handling heavy loads.

— Transshipment cranes

Portal cranes of this type are designed for handling bulk and piece cargoes (including containers) when using, respectively, the grapple or hook as well as metal scrap and rolled metal products when working electromagnets. Transshipment gantry cranes are designed to work in heavy (A7) and very heavy (A8) modes overload.

— Dock cranes

Dock portal cranes are assembly cranes and designed to provide assembly and installation works in repair of vessels installed in the dock.



Portal assembly crane
«Zubr-M-550»,
Vietnam port «Vung Tau»

Depending on the purpose and technical requirements of the supply crane can be equipped with various types of lifting devices that can be interchangeable:

- **Hook suspension** with one or two horns hook, with electrical connection on the suspension, if necessary compatmode for it or with the mechanism of rotation of the hook
- **Rope, motor or hydraulic grap, clamps for handling steel coils**
- **Spreader** (rotary and fixed), which can be: manual, semi-automatic, electric or hydraulic, and constant along the length, telescopic or under the specific size of the container

- Automatic system for anti-sway system significantly reduces the handling time and helps to position the load accurately.
- Many years of supply and running experience, using of 3D modeling and three-dimensional design programs when designing cranes steel structures for cranes provide long crane work in very heavy-duty operating conditions.
- Modular principle layouts of all models of cranes, their components and systems provides easy access to all places of service, ease of repair and replacement of worn or worn-out items.



Assembly portal crane 16 / 20 / 32 T, A5
Customer: «Gazprom»

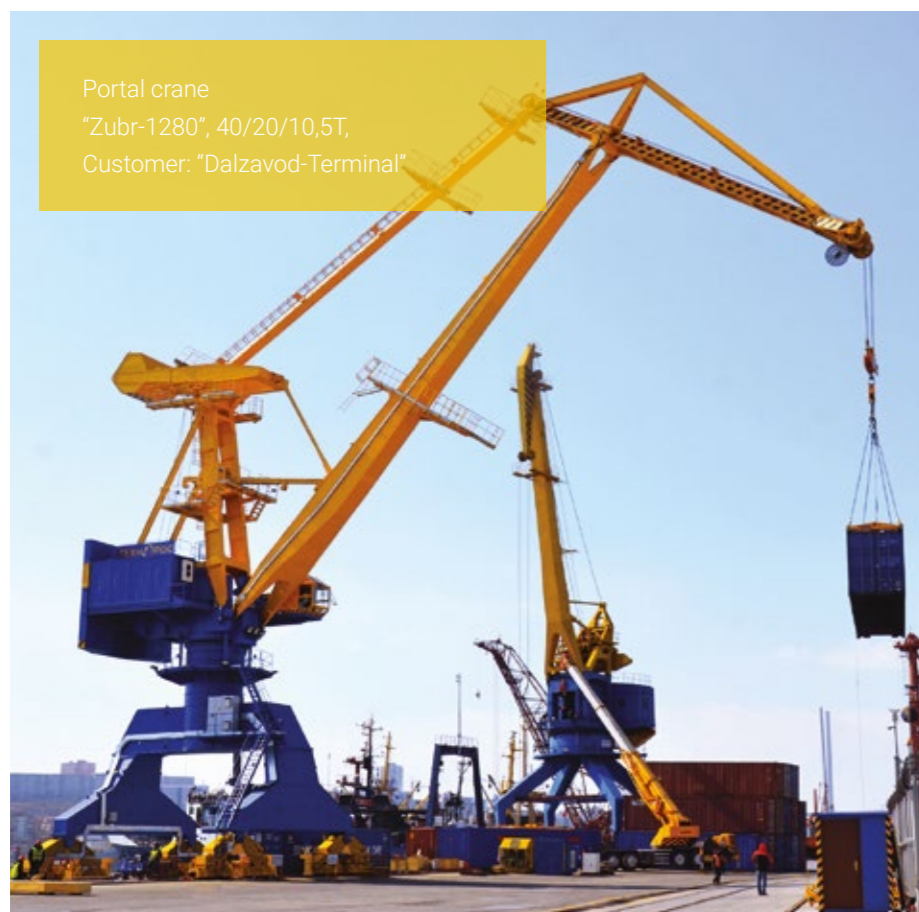
PORTAL CRANES “ZUBR”

“ZUBR” IS LINE OF PORTAL CRANES WITH ARTICULATED BOOM AND A RIGID GUY.

FEATURES:

- Precise positioning of the load with a minimum swaying amplitude of the swing when derricking or boom swinging
- Have no restrictions on combining functional movements
- High performance while working with bulk cargo and containers, where crane radius up to 45 meters allows to handle vessels with a large displacement

Portal crane “ZUBR” performs the lifting operations in hook, spreader and grab modes, carries out cargo handling work in the sea river ports and is also designed for construction, assembly and outfitting work in shipbuilding and ship-repair enterprises.



Portal crane
“Zubr-1280”, 40/20/10,5T,
Customer: “Dalzavod-Terminal”

PORTAL CRANES “VOSKHOD”

«VOSKHOD» IS A LINE OF PORTAL CRANES WITH SINGLE LINK STRAIGHT BOOM.

FEATURES:

- Overload capability of single-piece cargoes transshipment and loading and unloading works with the use of grabs, electromagnet and other removable load-handling devices
- Lifting height of the hook is more than the crane’s with articulated boom one, increased productivity in grab mode


















Portal crane “Voskhod” is designed as a U-shaped configuration with a cylindrical stand at the top chord. This portal is easy to install, and allows you to use a slewing ring bearing with large carrying capacity.

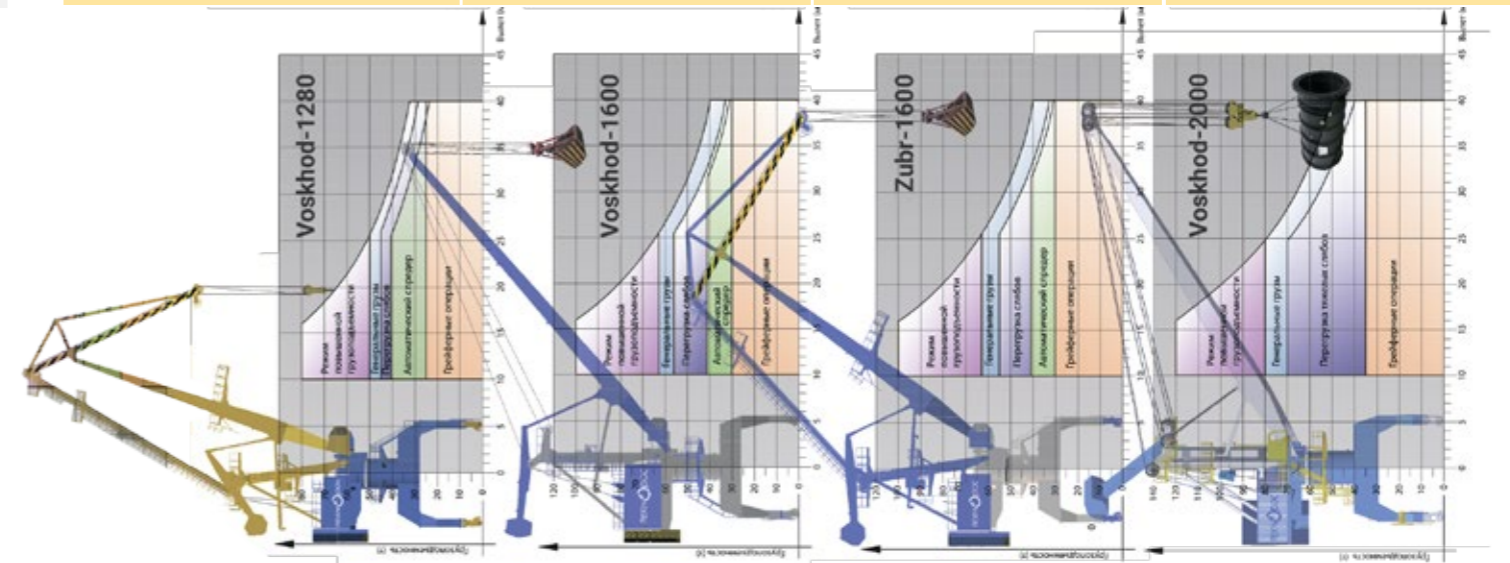
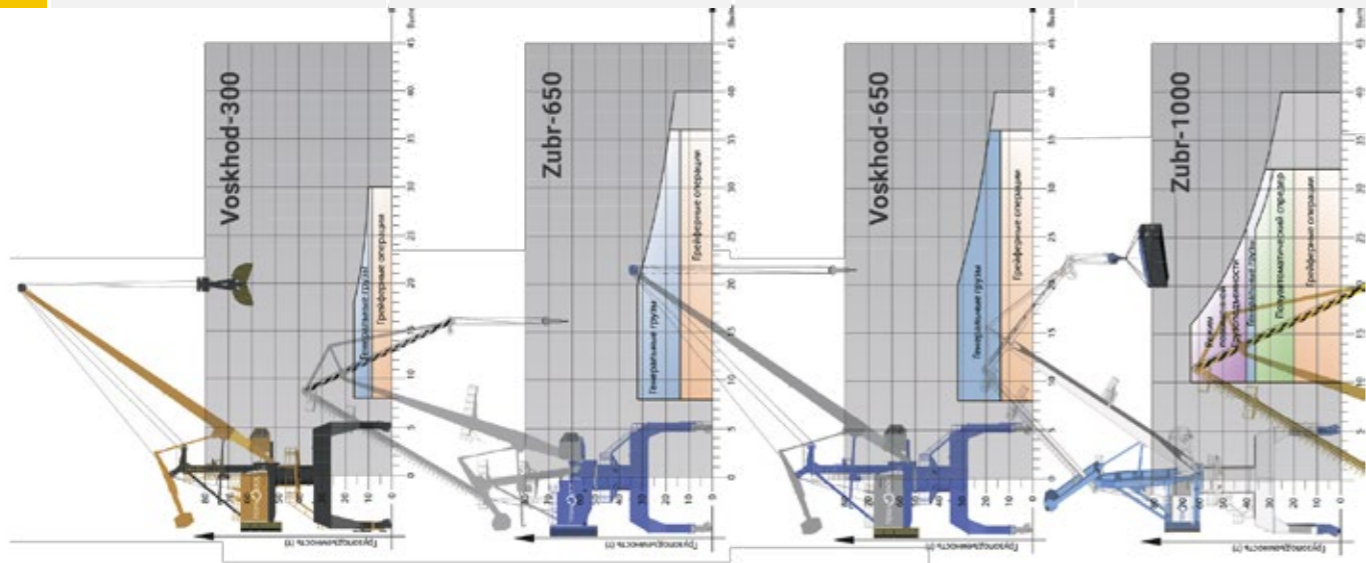


Portal crane “Voskhod-300”, 8/30/10,5 t Customer: “NK”Rosneft”

PORTAL CRANES “VOSKHOD” AND “ZUBR”

* According to the specifications, parameter values can be changed

High load capacity	Overload of slabs	General loads	Transshipment of containers	Grab operations
<p>load on hook with high multiplicity of pulley: 80 t on crane radius from 10 m to 16 m</p>  <p>80 t</p>	<p>magnetic traverse weight Up to 1,2 t</p> <p>Capacity under traverse Up to 13 t</p>  <p>13 t</p>	<p>Capacity on hook 16 t on crane radius from 8 m to 18 m 10 t on crane radius 30 m</p>  <p>16 t</p>	<p>Grab weight with load 8 t</p> <p>For Example: Load type - coal Bulk density - 0,8-1,0 t/m³ Grab volume - 5,8 m³ Grab weight - 4,4 t</p>  <p>8 t</p>	
<p>load on hook with high multiplicity of pulley: 100 t on crane radius from 10 m to 16 m</p>  <p>100 t</p>	<p>magnetic traverse weight Up to 1,7 t</p> <p>Capacity under traverse Up to 30 t</p>  <p>30 t</p>	<p>Capacity on hook 32 t on crane radius from 8 m to 20 m 18 t on crane radius 36 m Possibility of increasing the boom up to 40 m</p>  <p>32 t</p>	<p>Grab weight with load 13 t</p> <p>For Example Load type - cement Bulk density - 1,6-1,8 t/m³ Grab volume - 5,0 m³ Grab weight - 4,1 t</p>  <p>13 t</p>	
<p>load on hook with high multiplicity of pulley: 120 t on crane radius from 10 t to 16 m</p>  <p>120 t</p>	<p>magnetic traverse weight Up to 3 t</p> <p>Capacity under traverse Up to 35 t</p>  <p>35 t</p>	<p>Capacity on hook 50 t on crane radius from 10 m to 20 m 28 t on crane radius 36 m Possibility of increasing the boom up to 40 m</p>  <p>50 t</p>	<p>Grab weight with load 20 t</p> <p>For Example Load type - cement Bulk density - 1,6-1,8 t/m³ Grab volume - 6,5 m³ Grab weight - 7,5 t</p>  <p>20 t</p>	
<p>load on hook with high multiplicity of pulley: 100 t on crane radius from 10 m to 16 m</p>  <p>100 t</p>	<p>magnetic traverse weight Up to 7 t</p> <p>Capacity under traverse Up to 56 t</p>  <p>56 t</p>	<p>Capacity on hook 63 t on crane radius from 10 m to 20 m 32 t on crane radius 40 m</p>  <p>63 t</p>	<p>Grab weight with load 25 t</p> <p>For Example Load type - coal Bulk density - 0,8-1,0 t/m³ Grab volume - 15 m³ Grab weight - 11,1 t</p>  <p>25 t</p>	
<p>load on hook with high multiplicity of pulley: 100 t on crane radius from 10 m to 16 m</p>  <p>100 t</p>	<p>magnetic traverse weight Up to 10 t</p> <p>Capacity under traverse Up to 70 t</p>  <p>70 t</p>	<p>Capacity on hook 80 t on crane radius from 10 m to 20 m 40 t on crane radius 40 m</p>  <p>80 t</p>	<p>Grab weight with load 30 t</p> <p>For Example Load type - cement Bulk density - 1,6-1,8 t/m³ Grab volume - 12,0 m³ Grab weight - 9,5 t</p>  <p>30 t</p>	
<p>load on hook with high multiplicity of pulley: 120 t on crane radius from 10 t to 16 m</p>  <p>120 t</p>	<p>magnetic traverse weight Up to 10 t</p> <p>Capacity under traverse Up to 70 t</p>  <p>70 t</p>	<p>Capacity on hook 100 on crane radius from 10 m to 20 m 50 t on crane radius 40 m</p>  <p>80 t</p>	<p>Grab weight with load 35 t</p> <p>For Example Load type - coal Bulk density - 0,8-1,0 t/m³ Grab volume - 21,0 m³ Grab weight - 13,7 t</p>  <p>35 t</p>	





02

GANTRY CRANES

GANTRY CRANES

PRODUCTION ASSOCIATION "TEHNOROS" DESIGNS AND MANUFACTURES GANTRY AND SEMI GANTRY CRANES FOR MOVING SINGLE-PIECE AND BULK CARGOES AT OPEN WAREHOUSES, INDUSTRIAL PLANTS, CRANES FOR EQUIPMENT INSTALLATION AND PREFABRICATED BUILDINGS ASSEMBLING AND PANEL INSTALLATION IN SHIPBUILDING, AS WELL AS GANTRY CONTAINER CRANES FOR CONTAINER STORAGE TERMINALS, PORTS AND RAILWAY STATIONS.

Types of gantry cranes

For general purposes

Equipped with hooks and designed to perform lifting and transport operations, handling and stocking of single-piece cargoes mainly at open areas of industrial plants, railway stations, warehouses and other production facilities.

Special

Equipped with special cargo handling devices (grabs, magnets, traverses, jaws, grabs, paws) for specific lifting operations. Along with special cranes, «Tehnoros» also produces container cranes which are designed for handling and stocking of medium and large tonnage containers by automatic spreaders at container terminals of sea and river ports, railway stations, warehouses of industrial enterprises, as well as at wholesale and supply bases.



Gantry crane 90 (45+45) / 10-42 / 15 VP15VP-24/24-A5,
Customer: «Apatit»

GANTRY CRANE FOR GENERAL PURPOSES

GANTRY CRANES FOR GENERAL PURPOSES ARE EQUIPPED WITH HOOK SUSPENSION AND PERFORM LIFTING, LOADING AND UNLOADING, WAREHOUSING, ASSEMBLY WORK IS OPERATIONS MAINLY OUTDOORS.

- The metal structure of the crane may be single girder and double version of the superstructure with one, two console or without them single- or double-legged.
- The crane's load trolley may be supported or suspended and have main and auxiliary lifting mechanism.

Hook gantry cranes for general purposes are widespread because of their versatility of use and capability to handle heavy or long loads working as a pair.

Technical characteristics of the hook gantry cranes for general purposes

Capacity, t	Lifting height, m	Span, m	Cantilever span	Crane operation mode
16 ... 500 / 3,2 ... 50	Up to 32	16,0	Up to 15	A2 – A6
		25,0		
		32,0		
		40,0		



Hook gantry crane 100/10-32/0/15-18/16, 5-A4
Customer: «NIAEP»

SPECIAL GANTRY CONTAINER CRANES

CONTAINER CRANES RMG TYPE

RAIL MOUNTED GANTRY

Such cranes operate on railway terminals. The RMG crane can perform the full range of containers transshipment from unloading the flat-cars to stocking within the crane's portal till loading them on trucks.

All types of containers are travelled between the crane's legs without slewing at a height that automatically prevents interference of the sill beam, because of U – shaped design of the crane.

As power supply the crane is equipped with a flexible supply cable spooled on the drum, or trolley feeding system. Cranes are equipped with swiveling traverse and swivel truck towards carrying out the containers slewing.

Technical characteristics of container gantry cranes RMG						
Capacity, t	Lifting height, m/cont.	Span, m	The working length of the consoles of the crane, m	Lifting speed, m/min	The speed of movement of the crane, m/min	The speed of trolley movement, m/min
36	9,5 (1 on 2)	from 25 to 65	Up to 26	Up to 40	Up to 80	Up to 70
41	12,5 (1 on 3)					
45	15,2 (1 on 4) 18,1 (1 on 5)					



Special gantry container cranes 45-42 / 10 / 5,5-12,5, A6.
Customer: "Transcontainer"

CONTAINER CRANES RTG TYPE

RUBBER TYRED GANTRY

GANTRY CONTAINER CRANES ARE DESIGNED FOR HANDLING AND STOCKING CONTAINERS OF ALL TYPES AND SIZES.

This type cranes are designed to service the rear area of the container terminals. Crane's travel mechanisms have pneumatic chassis, which have high mobility when changing positions. Power supply of the RTG crane can be the energy-efficient diesel generator, and the alternative current lead system: cable drum with feeding cable, and current collector, automatically connected to the terminal trolley busses equipped with a removable low power diesel generators or battery bank which turns the crane to wholly electrical FULL E-RTG.

Technical characteristics of container gantry cranes RTG						
Capacity, t	Lifting height, m	Span, m	Lifting speed, m/min	The speed of movement of the crane, m/min	The speed of trolley movement, m/min	Notes
41	15,2 (1 on 4)	20,8 (5+1)	up to 60	up to 140	70	Electromechanical (without the use of hydraulic drive)
45	18,1 (1 on 5)	23,7 (6+1)				
50	21,0 (1 on 6)	26,5 (7+1)				
	23,9 (1 on 7)	29,3 (8+1)				
		32,2 (9+1)				



Special container gantry crane RTG

SPECIAL GANTRY GRAB CRANES

SPECIAL GRAB GANTRY CRANES ARE DESIGNED FOR CARRYING OUT CARGO HANDLING OPERATIONS WITH A VARIETY OF BULK CARGOES (COAL, COKE, ORE) AND ARE WIDELY USED IN VARIOUS RELOADING SITES, INCLUDING WAREHOUSES, BULK TERMINALS, ORE AND SCRAP STOCKYARDS OF METALLURGICAL PLANTS AND COAL STORAGE YARDS OF POWER PLANTS.

Features:

- High speed of trolley movement (up to 240 m/min)
- High lifting speed (up to 65 m/min)
- Large spans and cantilevers (up to 70 m/20m)
- The use of rope grabs lifting capacity 32 t
- The use of only electric drives with frequency regulation and automation of standard crane processes

Cranes with hopper under one it's legs, especially large cranes (over 45 metres) with track, rationally fit into the conveyor system. Cranes can be equipped with rope or driven grabs.

Technical characteristics of special grab gantry cranes					
Capacity, t	Type of gripping device	Lifting height, m	Span, m	Cantilever span in working mode, m	Type of working mode
10	Grab	Up to 30	8 ... 70	Up to 15	A6 – A8
16					
20	Hook				
32					



Special gantry grab crane 16-35/12/13-5,5/10-A8
Customer: "Chusovskoy metallurgical factory"

SPECIAL GANTRY CRANE WITH TRAVERSE

SPECIAL GANTRY CRANES WITH A TRAVERSE ARE INTENDED FOR LIFTING AND MOVING LONG LOADS IN THE STEEL, SHIPBUILDING AND TIMBER INDUSTRIES, AS WELL AS AT MAJOR STEEL AND METAL WAREHOUSES AND REINFORCED CONCRETE PLANT.

Features:

- Special gantry cranes with a traverse can be supplied with rigid or flexible suspension traverse.
- Can be equipped with swiveling traverse and swivel truck.

These cranes are used in industries with large traffic, for example, to overload a sheet or profile rolling, using magnetic or vacuum traverses that require minimal time grip.

Technical specifications of special gantry cranes with traverse					
Capacity, t	Type of gripping device	Lifting height, m	Span, m	Cantilever span in working mode, m	Type of working mode
10		Up to 20	25 ... 70	Up to 15	A6 – A8
20					
32					
50					
90					




Special gantry crane with traverse 20-32 / 8,5 / 8,5-6, A7
Customer: "Volzhskiy trubny zavod"

GANTRY AND SEMI GANTRY SPECIAL CRANES FOR METALLURGY

Special semi gantry cranes are designed for running at high temperatures (over +40°C) or in the presence of heat strokes at high-temperature productions. This special version includes:

- Special calculation and selection of appropriate electric motors, electrical equipment and cable products protective screens
- Protective screens
- Heavy-duty metal structures of special steel quality


Technical specifications of gantry and semi gantry special cranes for metallurgy

Capacity , t	Gripping device type	Lifting height, m	Span,m	Cantilever span in working mode , m	Type of working mode
10		Up to 8	8 ... 20	Up to 15	A6 – A8
20					
32					
40					
50					
75					



SPECIAL GANTRY MAGNETIC GRAB CRANES

Technical specifications of special gantry magnetic grab cranes

Capacity, t	Gripping device type	Lifting height, m	Span, m	Cantilever span in working mode, m	Type of working mode
5 + 5		Up to 20	24 ... 42	Up to 1/3 from span	A6 – A8
10 + 10					
16 + 16					
20 + 20					
32 + 32					



Gantry and semi gantry cranes can be made to operate at low temperatures (below - 40° C), with seismicity more than 6 magnitudes and in an area with high wind loads.



03

BRIDGE CRANES

BRIDGE CRANES

PRODUCTION ASSOCIATION "TEHNOROS" DESIGNS ACCORDING TO CUSTOMER'S INDIVIDUAL REQUIREMENTS AND MANUFACTURES BRIDGE CRANES, WHICH ARE ONE OF THE MOST COMMON AND BASIC TYPES OF CRANE EQUIPMENT IN ALL INDUSTRIES AND CAN BE DESIGNED FOR HEAVY AND VERY HEAVY WORKING MODES FOR ALL CLIMATIC REGIONS AND CATEGORIES OF ACCOMMODATION.

Bridge cranes are classified in three versions:

- general (OPI)
- fireproof (PBI)
- or explosion proof (VBI)

Types of bridge cranes «TEHNOROS»:

- **General purpose**
designed to operate in closed industrial and warehouse facilities and open areas.
- **Special**
equipped with grabs, magnets, traverses, jaws, paws for a special hoisting and manufacturing operations.
- **Metallurgical**
used in metallurgical enterprises for transporting, pouring and casting molten metal.
- **Mine**
Designed for mechanization of operations in underground mining, particularly for transporting (lowering and lifting) heavy and large mining equipment in the vertical shaft on the depth up to 600 meters



Special bridge mine crane 60-13-A3
Customer: «Apatit»

BRIDGE CRANES FOR GENERAL PURPOSES

BRIDGE (HOOK) CRANES FOR GENERAL PURPOSES ARE DESIGNED FOR EQUIPMENT MAINTENANCE IN METALLURGY, ENERGY AND OTHER INDUSTRIES, AS WELL AS FOR USE IN THE ASSEMBLY OF THE EQUIPMENT AND ITS SHIPMENT AT THE ENGINEERING AND SHIPBUILDING ENTERPRISES, LOADING AND UNLOADING OPERATIONS AT THE WAREHOUSES OF ALL ENTERPRISES.

Cranes can have up to four trolleys, designed to work together (combining of capacities, synchronization of lifting speed and speeds of the trolley travelings). Cranes of this type can be supported or suspended; single/double girder, and in justified cases three girder as well. The suspensions of these cranes are available with one/two-horned forged or laminated hooks. Only electric drives with frequency regulation and crane standart processes automation are used.

Features:

- In case of double lifting the hook of greater capacity is called main, lower is auxiliary one
- Drums of the main and auxiliary hoists get the rotation from individual motors through gear reducers

Technical specifications of double-girder bridge cranes			
Carrying capacity, t on the main/ auxiliary hoist	Lifting height, m	Span, m	Type of working mode
50 ... 500 / 10 ... 50	Up to 40	16 ... 42	A2 – A7



Bridge crane 200 / 50-34-A5
Customer: "Petrozavodskmash"

SPECIAL BRIDGE CRANES

SPECIAL BRIDGE CRANES ARE DESIGNED FOR HIGH-PERFORMANCE HANDLING OF BULK MATERIALS AND ARE EQUIPPED WITH ALL TYPES OF LIFTING DEVICES.



Technical specifications of bridge magnet grab cranes	Capacity, t	Gripping device type	Lifting height, m	Span, m	Type of working mode
	5 + 5		Up to 32	16 ... 42	A6 – A8
	10 + 10				
	16 + 16				
	32 + 32				
	40 + 12,5				
	63 + 20				

Technical specifications of bridge grab cranes	Capacity, t	Gripping device type	Lifting height, m	Span, m	Type of working mode
	10		Up to 32	16 ... 42	A6 – A8
	16				
	20				
	32				

SPECIAL BRIDGE CRANES

Technical specifications	Capacity, t	Gripping device type	Lifting height, m	Span, m	Type of working mode		
Bridge crane with two trolleys	25 / 5 + 25		Up to 50	16 ... 42	A3 – A7		
	50 / 10 + 50						
	125 / 20 + 125						
	250 / 20 + 250						
Bridge crane with traverse	10		Up to 32	16 ... 42	A6 – A8		
	20						
	32						
	50						
	90						
Bridge magnetic crane	10		Up to 32	16 ... 42	A6 – A8		
	16						
	20						
	32						
	40						
Bridge claw crane	16		Up to 12	16 ... 42	A6 – A8		
	32						
Bridge moldo-magnetic crane	20 + 5		Up to 18	16 ... 42	A6 – A8		
	40 + 12,5						
	63 + 25						
Bridge grab crane	Capacity, t	Gripping device type		Lifting height, m		Span, m	Type of working mode
	16 / 20	main	auxiliary	main	auxiliary		
	20 / 50			6,5 ... 8 6,5 ... 8		16 ... 42	A7 – A8
	32 / 50						
	40 / 50						







Bridge crane 150/110-34-A7, Customer: "NLMK"


METALLURGICAL BRIDGE CRANES

METALLURGICAL BRIDGE CRANES ARE DESIGNED FOR WORKING WITH MOLTEN OR FULL-HOT METAL AT THE HIGH-TEMPERATURE PRODUCTION OF METALLURGICAL AND MACHINE-BUILDING ENTERPRISES.

- Pouring cranes** are suitable for transporting molten metals, pouring / casting. These cranes can be of double-girder with one trolley, with mounted main and auxiliary hoists, two / three / four girder, two or more trolleys.
- Turnaround charging cranes** are designed for lifting, moving and tilting of the molds. Characterized by an indication of the load capacity on charging capturing and carrying capacity of auxiliary hoist mechanism.
- Hardening cranes** are used in heat production to fast transferring of the heated billets from the heating furnace into the quenching bath.
- Pit cranes** are also used in thermal processes and serve to seat the billet in a furnace for heating and extraction, and transferring as well. The cranes have a lifting and pivoting column with stock material gripping mechanism installed at its base.
- Forge cranes** are intended for feeding and tilting the billet in the forging process on the press. Crane is usually double girder with main and auxiliary trolleys. The main hoist is provided with a protective shock-absorbing device on the suspension and under the frame of the mechanism and the tilting of the workpiece, usually a chain one.
- Charging cranes** are designed for the filling of the charge into the converter and arc furnace by tipping scoops. The cranes can be double- and three girder. In addition to the main trolleys, transporting / tipping scoops with the charge can be installed auxiliary trolley: grab or magnetic for scoop downloading.

Technical specifications of metallurgical bridge cranes					
Capacity, t	Gripping device type		Lifting height, m	Span, m	Type of working mode
63 / (5...15)	main	auxiliary	Up to 30	16 ... 42	A2 – A8
100 / (20...40)					
125 / (32...50)					
(63 + 63) / (5...15)	  				
(100 + 100) / (20...40)					
(125 + 125) / (32...50)					
(150 + 150) / (40...63)					
3,2 / (10...20)					
5 / (10...20)					

METALLURGICAL BRIDGE CRANES

Technical specifications	Capacity, t	Gripping device type		Lifting height, m		Span, m	Type of working mode
Metallurgical hardening bridge crane	40 / 10	 	Up to 30	16 ... 42	A6 – A8		
	50 / 12,5						
	75 / 15						
	200 / 75						
	320 / 80						
450 / 100							
Metallurgical forge bridge crane	50 / 12,5	 	Up to 30	16 ... 42	A6 – A8		
	100 / 20						
	150 / 32						
	250 / 50						
400 / 80							
Metallurgical bridge pit cranes	Capacity, t	Gripping device type		Lifting height, m		Span, m	Type of working mode
	16 / 20	main	auxiliary	main	auxiliary		
	20 / 50			6,5 ... 8	6,5 ... 8	16 ... 42	A7 – A8
	32 / 50						
40 / 50							
Bridge metallurgical pouring crane	Capacity, t	Gripping device type		Lifting height, m		Span, m	Type of working mode
	30 / 5	main	auxiliary				
	50 / 10			Up to 40	16 ... 42	A6 – A8	
	80 / 20						
	100 / 40						
140 ... 600 + 50 ... 120 / (20 ... 50)							



METALLURGICAL BRIDGE CRANES
120+32 / 10-24,5-A8, Y2
Customer: "Belarus metallurgical factory"



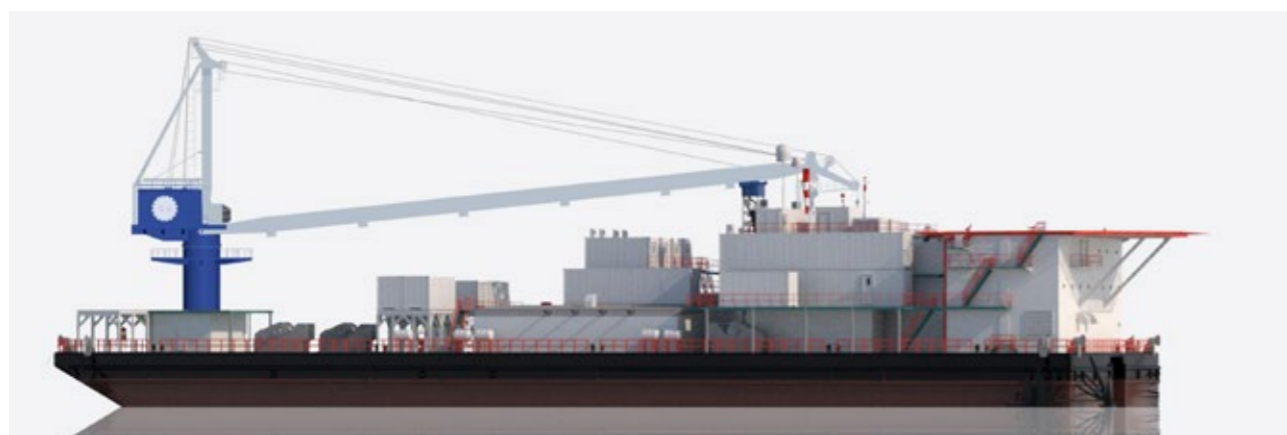
04

JIB CRANES

JIB CRANES

JIB CRANES ARE DESIGNED FOR HANDLING BULK, GENERAL CARGOES AND INSTALLED ON SHIPS, SHIPS AT RIVER PORTS AND COASTAL BASES (WAREHOUSES AND TERMINALS), AT PRODUCTION SITES FOR CARRYING OUT ASSEMBLY AND INSTALLATION WORKS AT SHIPYARDS AND OTHER INDUSTRIAL FACILITIES.

“POSEIDON” CRANE SERIES



Marine cranes of «Poseidon» series are a product line of fully-revolving cranes with a straight-link boom and a rope luffing system which are mounted on a pedestal of offshore platforms & vessels and carry out cargo handling procedures in hook, grab & spreader modes.

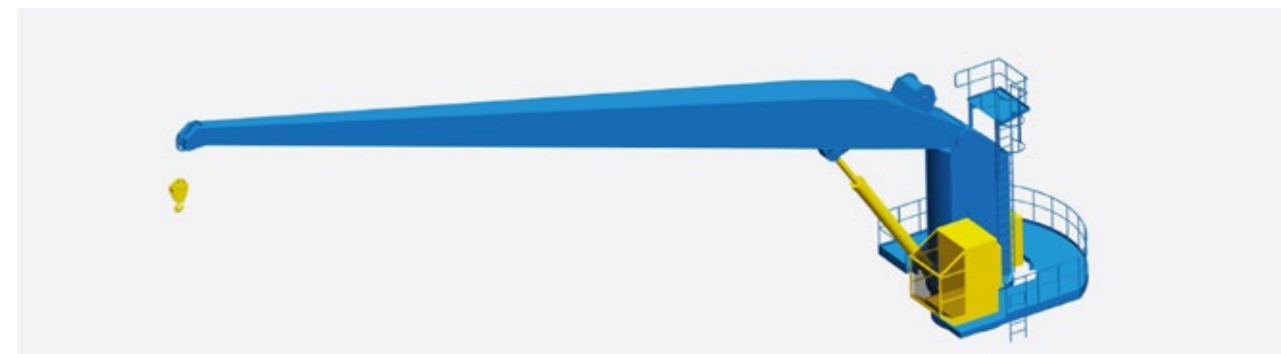
Main features:

- Drive type: electro-mechanic (Electro-hydraulic drive - upon the Customer's request). Working speeds of all mechanisms are smoothly adjusted by means of frequency inverters.
- Freedom of working motions or a possibility of their combinations of any kind as well as cargo handling which is close to horizontal during luffing procedures are provided.
- Longer life of main units - 20-25 000 machine hours.
- Rope winches are installed in an enclosed machine room. Electric equipment is installed in a separate heated room which ensures good quality service at any time of the year.
- Protection from boom tilting.
- Lowered gravity center for vessel stability improvement.
- Minimal necessity of imported components. It is also possible to equip the crane only with Russian mechanisms.
- Absence of the hydraulic drive makes it possible to minimize frequency of maintenance procedures and their costs. All the expendable materials used during operation are manufactured in Russia.
- It is possible to carry out handling of hazardous labeled cargoes.
- It is possible to use the cranes as topside facilities of a floating crane.

MARINE JIB CRANE

MARINE JIB CRANE IS A FULL-REVOLVING CRANE, WHICH IS INSTALLED ON SHIPS MAIN AND AUXILIARY FLEETS, DOCKS AND OTHER MARINE INFRASTRUCTURE.

“NEPTUN” CRANE SERIES



Marine stiff boom cranes of «Neptun» series are a product line of fully-revolving cranes with a straight-link box-section boom and electro-hydraulic drives of cargo lifting, luffing and slewing mechanisms which are mounted on vessel barbettes and are intended for operation with all kinds of cargoes including hazardous labeled ones.

“ODYSSEY” CRANE SERIES



Marine cranes of «Odyssey» series are a product line of fully-revolving knuckle boom cranes with electro-hydraulic drives of cargo lifting, luffing and slewing mechanisms which are mounted on vessel barbettes and are intended for operation with all kinds of cargoes including hazardous labeled ones.

OTHER PRODUCT LINES

IN ADDITION TO LIFTING EQUIPMENT, "TEHNOROS" DESIGNS AND MANUFACTURES EQUIPMENT FOR HANDLING OF BULK CARGO AND EQUIPMENT FOR SHIPBUILDING AND SHIP REPAIR.

SHIPBUILDING AND SHIP REPAIR EQUIPMENT:

Ship transfer equipment:

- Ship transfer systems
- Handling trolleys
- Turntables

Ship launchng / lifting equipment:

- Slipways
- Vertical shiplifts

Ship / dock equipment

Shipbuilding equipment

BULK MATERIALS HANDLING EQUIPMENT:

- Ship loaders
- Wagon tippers
- Reclaimers
- Stackers
- Stacker-reclaimers
- Scraper reclaimers
- Belt and sraper conveyors

DETAILED DESCRIPTIONS AND SPECIFICATIONS ON THE WEBSITE
WWW.TEHNOROS.RU OR IN BOOKLETS :



OUR PARTNERS



THANK YOU
FOR YOUR COOPERATION

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