



Gantry & semi-gantry cranes

Questionnaire

Technical specifications

1. Type of crane in structure	Gantry single-girder crane
	Gantry double-girder crane
	Gantry three-girder crane
	Gantry four-girder crane
	Semi-gantry crane
2. Crane group	General purpose gantry crane
	Assembly gantry crane
	Gantry crane with magnets
	Gantry crane with magnets and grab
	Gantry crane with grab
	Container gantry crane
	Special gantry crane for hydroelectric power plants and hydraulic structures
	Special gantry crane for nuclear facilities
Special gantry crane	

3. Using of crane and crane's mechanisms			
3.1	Type of drive	Electrical	
3.2 Estimated qualification groups of the crane and its mechanisms according to ISO 4301-1			
3.2.1	Crane in general (A3-A8)	A	
3.2.2	Main crane hoist (M1-M8)	M	
3.2.3	Auxiliary crane hoist (M1-M8)	M	
3.2.4	Trolley travel mechanism (M1-M8)	M	
3.2.5	Trolley rotate mechanism/load-handling device (jaws, hook etc.) (M1-M8)	M	
3.2.6	Crane travel mechanism (M1-M8)	M	
3.2.7	Other groups:	M	
3.3	Lifting capacity, t with removable load-handling device		
	with stationary load-handling device (hook, etc.)		
	of ropes		
	of trolley		
	other:		
	other:		
3.4	Crane span, m		
3.5	Lifting height, m		
3.6	Work radius on consoles (L\geq0), m	L1	L2
3.7	Crane size along its way (with uncompressed buffers), m	Offered by the manufacturer	
3.8	Quantity of freight trolleys and lift devices		
	with one trolley and one lifting mechanism		
	with one trolley and several lifting mechanisms		
	with two trolleys and any number of lifting mechanisms		
	with one or two trolleys and a hoist		
3.9	Load-handling device rotation: Not provided		
	Together with a load-handling device rotating mechanism		
	Together with rotating trolley		

3.10	Rotating angle limitations : hook/trolley/traverse/spreader/other:		
3.10.1	Full-turn/Non-full-turn ($\pm 90^\circ$ / $\pm 180^\circ$ / $\pm 270^\circ$ / $\pm 370^\circ$)		
3.11 Mechanisms speed			
3.11.1	Main crane hoist, m/sec (m/min)	V=	
3.11.2	Auxiliary crane hoist, m/sec (m/min)	V=	
3.11.3	Trolley travel mechanism, m/sec (m/min)	V=	
3.11.4	Trolley/load-handling device (hook, traverse, spreader, etc.) rotating mechanism, rpm	V=	
3.11.5	Crane travel, m/sec (m/min)	V=	
3.11.6	Other:	V=	
3.12 Height from the rail head level			
3.12.1	Lifting the load, m		
3.12.2	Lowering the load, m		
3.13	Distance from rail head level up to lower truss elements (for indoor cranes and cranes located under the roof), m		
3.14	Distance from rail head level axis up to pillars and other crane travelling way elements, m		
3.15	Crane rail type		
3.16	Permissible wheel load, kN (t)		
4 Operating conditions			
4.1	Operating temperature range, °C	from	up to
4.2	Placement category: (outdoor – «1», under the roof – «2», not heating zone – «3», heating zone – «4», high humidity zone – «5»)		
4.3 Wind load			
4.3.1	Maximum wind speed In crane operation mode, m/sec	V=	
	Out of use, m/sec	V=	

4.4	Seismic resistance, (Richter scale)	up to		
4.5	Dustiness level (in case of increased dustiness):			
4.5.1	Type of the dust (material)			
4.5.2	Density, mg/m ³			
4.6	Heatstroke possibilities			
4.6.1	Source (no source / load / furnace etc.)			
4.6.2	Main impact on (suspension/travers/bridge girder/ trolley/control cabin, etc.)			
4.6.3	Temperature, °C	from	up to	
4.6.4	Duration, min	from	up to	
4.7	Other special conditions			
5 Crane purpose				
5.1.	Load handling:			
		Bulk load, specify:		
		General cargoes, specify:		
5.2	Execution of technological operations:			
	Warehouse maintenance	Freight transport loading		
	Freight train loading	Furnace loading		
	Assembly operations	Other:		
6 Load characteristics				
6.1.1	General cargoes or load package of the 1st type			
6.1.1.1	Maximum weight on a load-handling device, t			
6.1.1.2	Maximum dimensions, mm	length	width (diameter)	height (depth)

6.1.1.3	Availability of special slinging points :		yes	no
6.1.1.4	Load temperature, °C		from	up to
6.1.1.5	Other:			
6.1.2	General cargo or load package of the 2nd type			
6.1.2.1	Maximum weight on a load-handling device, t			
6.1.2.2	Maximum dimensions, mm	length	width (diameter)	height (depth)
6.1.2.3	Availability of special slinging points		yes	no
6.1.2.4	Load temperature, °C		from	up to
6.1.2.5	Other:			
6.2.1	Bulk load of the 1st type			
6.2.1.1	Name of material			
6.2.1.2	Load conditions (normal, frozen, caked, in pieces etc.)			
6.2.1.3	Density, t/m ³	Maximum temperature, °C		
6.1.2.4	Other:			
6.2.2	Bulk load of the 2nd type			
6.2.1.1	Name of material			
6.2.1.2	Load conditions (normal, frozen, caked, in pieces etc.)			
6.2.1.3	Density, t/m ³	Maximum temperature, °C		
6.2.1.4	Other:			
7 Load handling device type and characteristics				
7.1	Hooks	Main hook I	One-horn hook	Double-horn hook
		Main hook II	One-horn hook	Double-horn hook
		Auxiliary hook I	One-horn hook	Double-horn hook
		Auxiliary hook II	One-horn hook	Double-horn hook

7.2	Grab	Characteristics are offered by the manufacturer			
		Double-rope		Four-rope	
		Permanent		Mounted on a hook	
		Manual drive	Electric drive	Hydraulic drive	
		Foreign drive		Russian drive	
		Drive trade mark			
		Intended for unloading wagons		Not intended for unloading wagons	
		Double jaw		Multi jaw	
		Orientation regarding crane ropes (for double-jaw four-rope grab)		Longitudinal opening	Lateral opening
		Volume capacity, m ³			
		Other:			
7.3	Magnet	Characteristics are offered by the manufacturer			
		Rectangular profile shape	Round profile shape	Special profile shape	
		Load capacity, t			
		Quantity, pcs.			
		Foreign drive		Russian drive	
		Drive trade mark			
		Type			
		Load temperature, °C		from	up to
		Other:			
7.4	Spreader	Characteristics are offered by the manufacturer			
		Permanent		Mounted on a hook	
		Foreign made		Russian made	
		Spreader trade mark			
Manual drive		Electric drive	Hydraulic drive		

		Container standard size			
		Replaceable by standard size		Sliding	
		Located along the crane runway		Located across the crane runway	
		Other:			
7.5	Traverse	Characteristics are offered by the manufacturer			
		Permanent		Mounted on hook	
		Vacuum traverse	Hook traverse	Magnet traverse	
		Located along bridge girder	Located across bridge girder	Need for rotation	
		<u>Complete set of traverse</u>			
		7.5.1 With hooks	Quantity, pcs.	Lifting capacity, t	
		7.5.2 With magnets	(fill in item 7.6)		
		7.5.3 With claws	Separate crane mechanism		
			Electric drive		
			Hydraulic drive		
		7.5.4 With slings	Lifting capacity, t		
			Sling's length, mm		
Sling type					
Quantity, pcs.					
7.5.5 Other					
7.6	Pliers	Characteristics are offered by the manufacturer			
		Permanent		Mounted on hook	
		Foreign made		Russian made	
		Trade mark			
		Manual drive	Electric drive	Hydraulic drive	
		Located along the crane runway		Located across the crane runway	
		Other			

7.7	Mold	Characteristics are offered by the manufacturer			
		Double Hook suspension		Four Hook suspension	
7.8	Automatic capture				
7.9	Other (load-handling device)				
8 Constructional requirements					
8.1	Alignment restrictions for working movements of mechanisms:				
8.2	Necessity for synchronization speeds when working together		yes	no	
8.3	Crane's current supply type		Trolley		
			Cable	Reel	Tracking
8.4	Control cabin		Mobile		Stationary
8.5	Control cabin location				
8.6	Type of the control system		Frequency		
8.7	Complete set of the control cabin				
9 Additional requirements					
9.1	Lifting capacity limiter availability		For each winch		Other requirements
9.2	The parameter recorder setting is necessary (Obligatory for cranes with 10t or more lifting capacity (A6-A8))		yes		no
9.3	Complete set of the crane				
No.	Name	Unit	Qty.	TM	Manufacturer
1					
2					
3					
4					
5					

9.4	Technical documentation, provided by Customer	
	Dimensional drawing	Other:
9.5	Painting	
9.5.1	Enamel + primer	
9.5.2	Enamel color: yellow	/
9.6	Additional requirements of a Customer	
10 Customer information		
10.1	Company name	
10.2	Address	
10.3	Contact person	
10.4	Phone	
10.5	E-mail	

Thank you for the provided information!

Please, send us this form to our e-mail address: info@tehnoros.com