



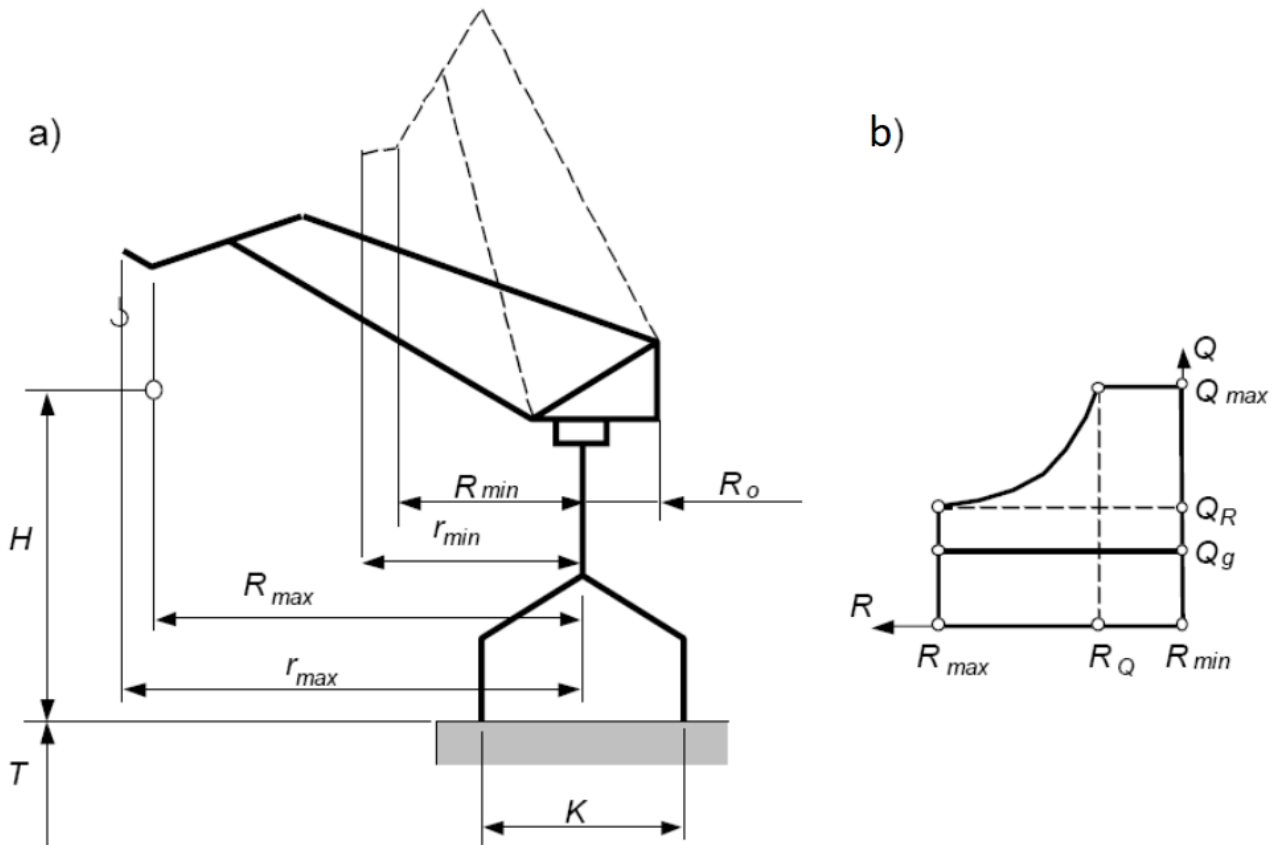
Portal crane

Questionnaire

Technical specifications

1.	Type of crane in structure	Portal crane
		Portal assembly crane
2. Using of crane and crane's mechanisms		
2.1	Type of drive	Electrical
2.2 Estimated qualification groups of the crane and its mechanisms according to ISO 4301-1		
2.2.1	Crane in general (A3-A8)	A
2.2.2	Main crane hoist (M3-M8)	M
2.2.3	Auxiliary crane hoist (M3-M6)	M
2.2.4	Crane outreach control mechanism (M3-M8)	M
2.2.5	Crane slewing mechanism (M3-M8)	M

2.2.6	Trolley rotating mechanism/load-handling device (jaws, hook etc.) (M1-M8)	M
2.2.7	Crane travelling mechanism (M1-M8)	M
2.2.8	Other groups:	M



2.3 Crane main hoist (illustration a)		
2.3.1	Lifting capacity, t : maximum Q_{max}	
	on maximum outreach Q_r	
	on grab mode Q_g	
2.3.2	Crane boom outreach, m: maximum R_{max}	
	minimal R_{min} (only for cramped conditions)	
	maximal lifting capacity section end R_q	
2.3.3	Lifting height, m	H
2.3.4	Lowering depth, m	T

2.4 Crane auxiliary hoist (illustration b)		
2.4.1	Lifting capacity, t	Q
2.4.2	Outreach, m maximal, r_{max}	
	minimal, (only for cramped conditions) r_{min}	
2.4.3	Lifting height, m	H
2.4.4	Lowering depth, m	T
2.5	Portal track, m	K
2.6	Portal basement, m	B
2.7	Crane size along its way (with uncompressed buffers)	Offered by the manufacturer
2.8	Crane slewing device type	
	Slewing ring	
	Swivel column	
	Circular/tapered rail	
2.9	Boom system type	
	Single boom crane	
	Double boom crane	
2.10 Crane swing		
2.10.1	In general	
	Full turn	
	Non-full-turn ($\pm 90^\circ/\pm 180^\circ/\pm 270^\circ/\pm 370^\circ$)	
	Other	
2.10.2	Load-handling device	
	Full-turn	

	Non-full-turn ($\pm 90^\circ/\pm 180^\circ/\pm 270^\circ/\pm 370^\circ$)	
	Other	
2.11 Mechanisms speed		
2.11.1	Main crane hoist, m/sec (m/min)	V
2.11.2	Auxiliary crane hoist, m/sec (m/min)	V
2.11.3	Crane outreach control mechanism, m/sec (m/min)	V
2.11.4	Crane slewing mechanism, m/sec (m/min)	V
2.11.5	Trolley/load-handling device (hook, traverse, spreader etc.), rpm	V
2.11.6	Crane travel, m/sec (m/min)	V
2.11.7	Other	
2.12 Height from the rail head level		
2.12.1	Lifting of the suspension, m	
2.12.2	Lowering of the suspension, m	
2.13	Swing radius (rear size)	R₀
2.14	Crane rail type	
2.15	Permissible wheel load, kN (t)	
3. Operating conditions		
3.1	Operating temperature range, °C	from up to
3.2	Placement category	outdoor
3.3 Wind load		
3.3.1	Maximum wind speed	
	in crane operation mode, m/sec	V

	out of use, m/sec	V		
3.4	Seismic resistance, (Richter scale)	from	up to	
3.5 Dustiness level				
3.5.1	Type of the dust (material)			
3.5.2	Density, mg/m ³			
3.6	Other special conditions			
4. Crane purpose				
4.1.	Load handling:			
		Bulk load, specify:		
		General cargoes, specify:		
4.2	Execution of technological operations:			
	Warehouse maintenance	Freight train loading		
	Ship loading	Freight transport loading		
	Assembly operations	Other:		
5. Load characteristics				
5.1.1 General cargo or load package of the 1st type				
5.1.1.1	Maximum weight on a load-handling device, t			
5.1.1.2	Maximum dimensions, mm	length	width (diameter)	height (depth)
5.1.1.3	Availability of special slinging points	yes	no	
5.1.1.4	Load temperature, °C	from	up to	
5.1.1.5	Other:			
5.1.2 General cargo or load package of the 2nd type				
5.1.2.1	Maximum weight on a load-handling device, t			

5.1.2.2	Maximum dimensions, mm	length	width (diameter)	height (depth)
5.1.2.3	Availability of special slinging points	yes	no	
5.1.2.4	Load temperature, °C	from	up to	
5.1.2.5	Other:			

5.2.1 Bulk load of the 1st type

5.2.1.1	Name of material	
5.2.1.2	Load conditions (normal, frozen, caked, in pieces etc.)	
5.2.1.3	Density, t/m ³	Maximum temperature, °C
5.2.1.4	Other:	

5.2.2 Bulk load of the 2nd type

5.2.2.1	Name of material	
5.2.2.2	Load conditions (normal, frozen, caked, in pieces etc.)	
5.2.2.3	Density, t/m ³	Maximum temperature, °C
5.2.2.4	Other:	

6. Load handling device type and characteristics

6.1	Hooks	Main hook	One-horn hook	Double-hornhook
		Auxiliary hook	One-horn hook	Double-hornhook
6.2	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		Calculated by the manufacturer according to items 6.2.1 & 6.2.2			
		Other:					
6.3	Magnet	Characteristics are offered by the manufacturer					
		Rectangular profile shape	Round profile shape	Special profile shape			
		Load capacity					
		Quantity, pcs					
		Foreign drive		Russian drive			
		Drive trade mark					
		Type					
		Load temperature, °C		from	up to		
		Other:					
6.4	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 crane runway		Located across crane runway			
		Other:					

6.5	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
		Complete set of traverse		
		<u>6.5.1 With hooks</u>	Quantity, pcs.	Lifting capacity, t
		<u>6.5.2 With magnets</u>		
		<u>6.5.3 With claws</u>	Separate crane mechanism	
			Electric drive	
			Hydraulic drive	
		<u>6.5.4 With slings</u>	Lifting capacity, t	
			Sling's length, mm	
			Sling type	
Quantity, pcs.				
<u>6.5.5 Other</u>				
6.6	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:		
6.7	Other (load-handling device)			
7. Constructional requirements				
7.1	Alignment restrictions for working movements of mechanisms:			

7.2	Crane's current supply type	trolley	cable		
7.3	Load-handling device current supply necessity	yes	no		
7.4	Type of the control system	frequency			
7.5	Complete set of the control cabin				
8. Additional requirements					
8.1	Lifting capacity limiter availability	for each winch	other requirements		
8.2	The parameter recorder setting is necessary (Obligatory for cranes with 10t or more lifting capacity (A6-A8))	yes	no		
8.3	Complete set of the crane				
No.	Name	Unit	Qty.	TM	Manufacturer
1					
2					
3					
4					
5					
8.4	Technical documentation, provided by the Customer				
Dimensional drawing			Other:		
8.5	Painting				
8.5.1	Enamel + primer				
8.5.2	Enamel color: yellow /				

8.6	Additional requirements of the Customer	
9. Customer information		
9.1	Company name	
9.2	Address	
9.3	Contact person	
9.4	Phone	
9.5	E-mail	

Thank you for the provided information!

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