

PORT EQUIPMENT BY JSC





A.A. Bashkankov
Chairman Of The
Board of JSC RIKON

The manufacture of equipment for ports has characterised the history of today's company **JSC RIKON**. The company was founded on the order of the Maritime Minister dated 17 November, 1954, No.51, on the creation of the Central workshop. The primary goals of this consisted in mastering new samples and manufacture of replaceable spare parts for port machinery, cargo handling accessories, metal constructions for port equipment and port structures. In 1974 the enterprise acquired new factory buildings and was renamed an experimental enterprise for manufacturing and installation of equipment under the Directorate for manufacture and installation of equipment of the Maritime Ministry of the USSR. After transformation into a joint-stock company at the beginning of 90s, the factory became A/S RIKON.

The basic business area of the factory today is the manufacture of port equipment and metal constructions:

- Metal working and manufacture of tailored metal constructions
- Repairs, modification, installation and dismantling of gantry cranes

The factory production is well-known in all ports of the former USSR, from the Baltic to the Far East. Clients also include companies in Finland, Sweden and Germany.

The company has its own know-how and wide experience in the field of manufacture of trans-shipping machinery for ports in the industry. All works, from planning, designing and manufacturing to installation and commissioning are carried out by the company itself. The works are supported by a reliable service.





During the years of privatisation, a serious modernisation of the factory was carried out with the installation of new Italian and Finnish equipment, which in turn, attracted world-renowned manufacturers to work with the factory.

The factory has a territory of 21,000 m², wharf wall of 130 l/m. Within the territory of the factory there are well equipped shops making total floor space of more than 4,200 m².

The basic type of equipment includes universal metal-cutting machine tools, forge-press equipment, the most advanced welding equipment, flame-cutting equipment with computer control. Unique bending equipment is available, which makes for manufacturing of scantlings with a thickness of up to 20 mm and length of up to 6 m.

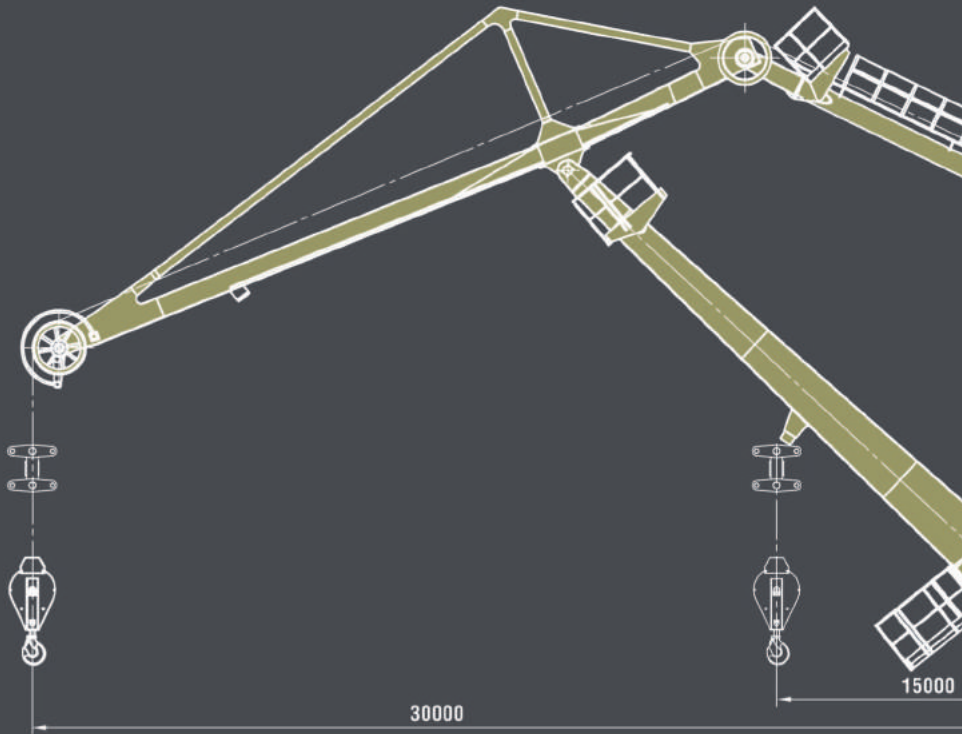
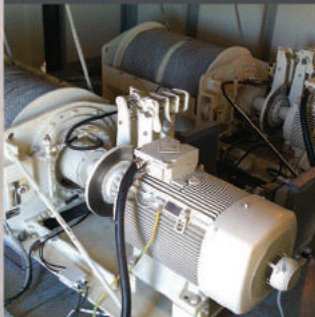
The application of almost half a century experience in manufacture of port machinery forms an important precondition for solving the problems of a customer. The production and service of the JSC RIKON company comply with the standards ISO 9001:2009.

Tvaika, 68b, Riga, LV-1034, Latvia
Phone: +371 7393156; fax: +371 7391647
rikon@rikon.lv
www.rikon.lv



«STRIZH»

Electric
Transshipment
Gantry Crane

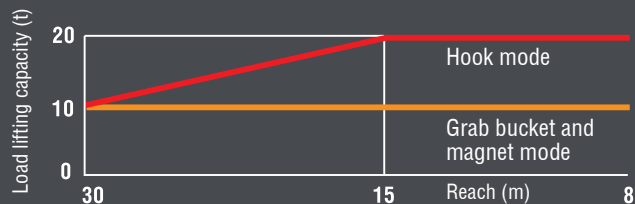


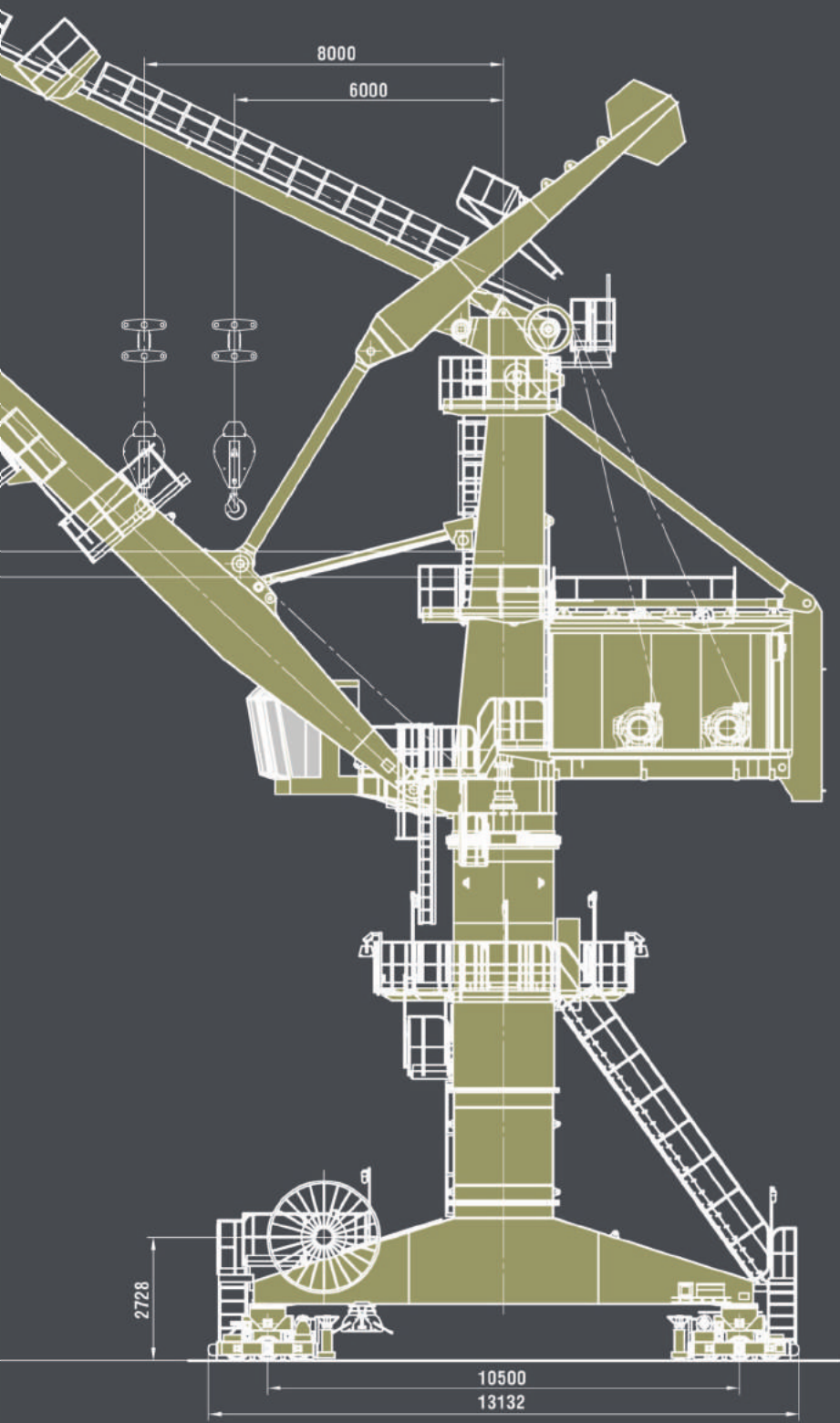
TECHNICAL SPECIFICATIONS:

Boom Reach*		Lifting Height (m)	
Minimum (m)	8	grab bucket	20
Maximum (m)	30	hook	22
Load Lifting Capacity		Lowering Depth (m)	
Grab bucket mode (t)		grab bucket	15
boom reach 30–8 m	10	hook	15
Hook mode (t)**		Superstructure tail radius (m)	7,0
boom reach 30–15 m	10-20	Operating Speeds:	
boom reach 16–8 m	20	Lifting/lowering (m/min)	64-90
Crane Gauge (m)***	10,5	Turning (rpm)	1,6-2,2
Maximum load per wheel (t)	22,5	Jibbing (m/min)	64
Crane Weight (t)	160	Traveling (m/min)	20
		Crane base (m)	10,5
		Crane operation mode according to ISO 4301/1	A8

*possibility of increase up to 36 m ** possibility of increase up to 30 t
*** possibility of increase up to 15.3 m

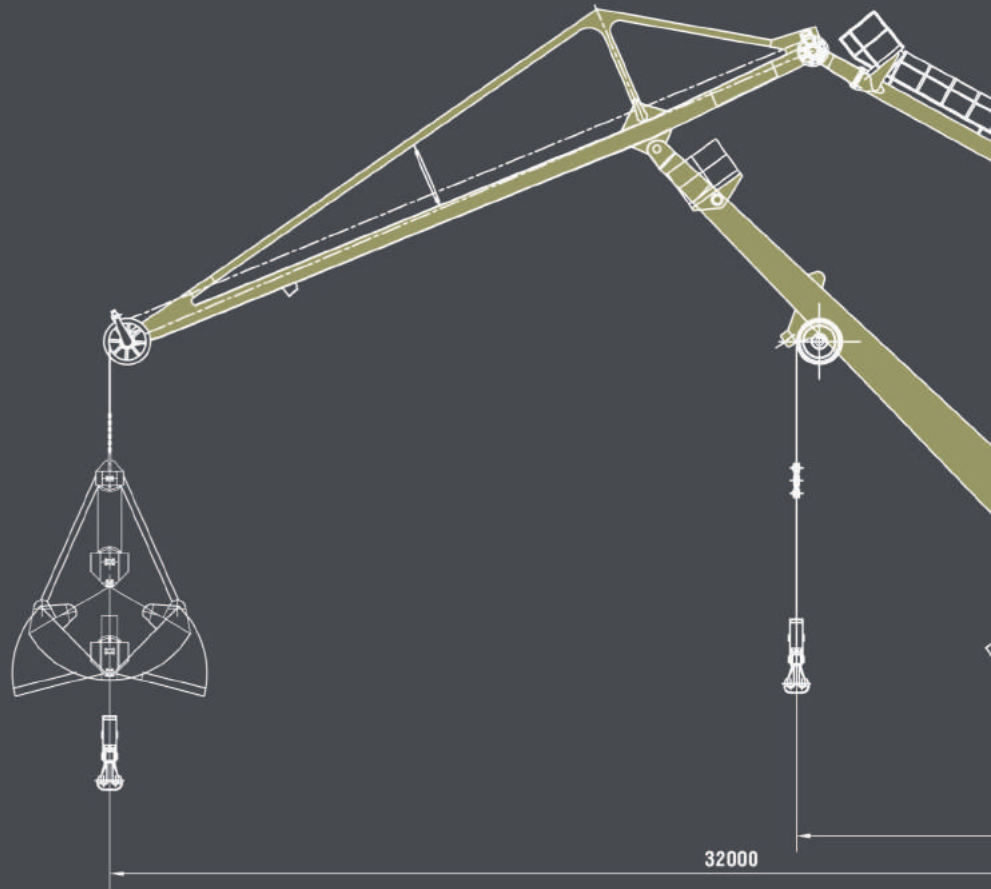
Lifting capacity vs. outreach of the boom





«AIST»

Electric Transshipment Gantry Crane



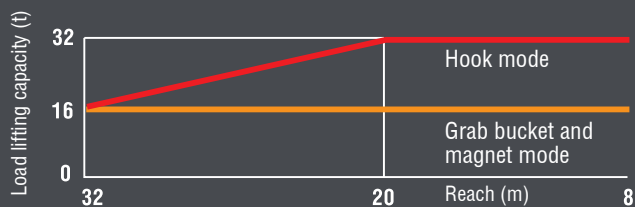
TECHNICAL SPECIFICATIONS:

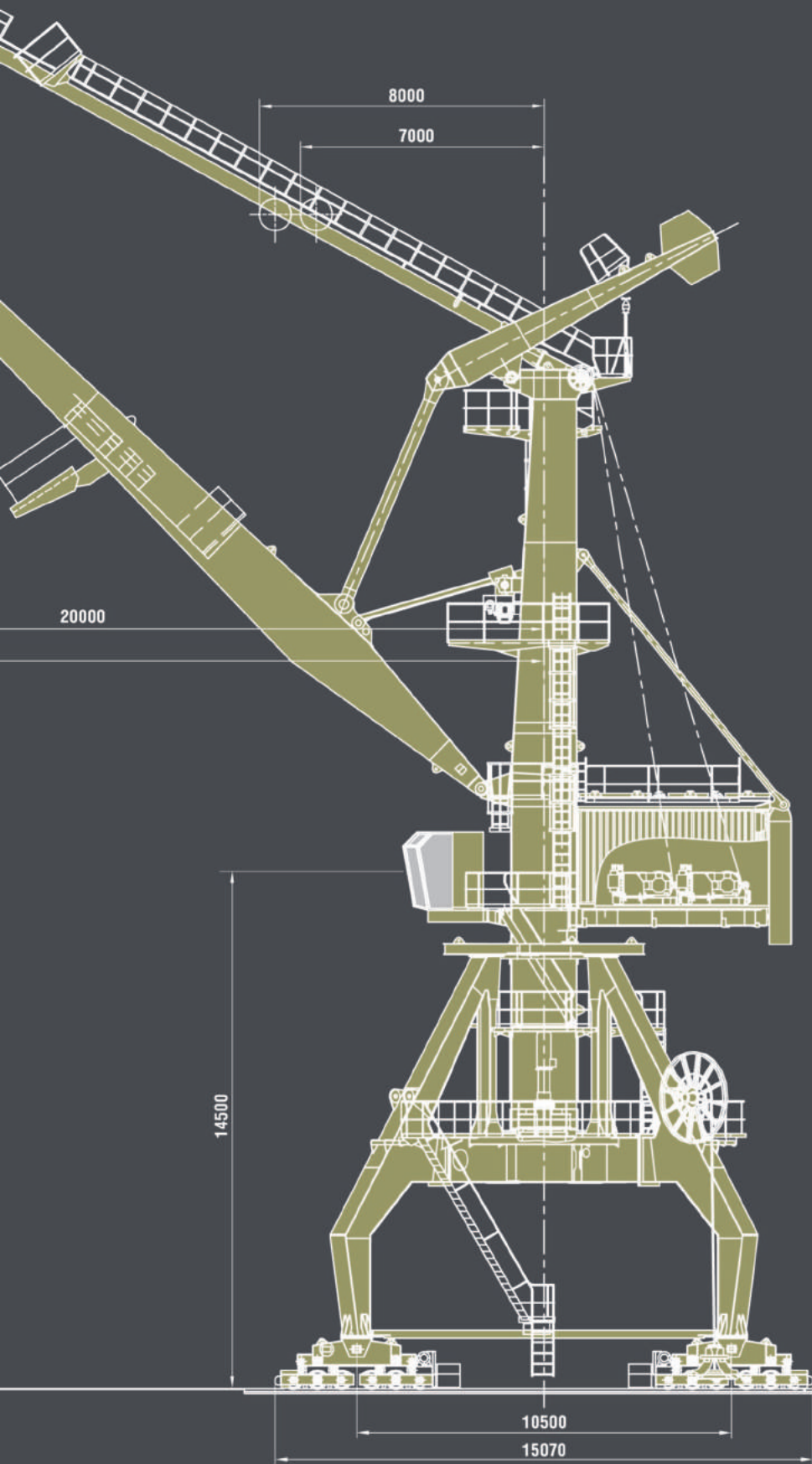
Boom Reach*		Lifting Height (m)	
Minimum (m)	8	grab bucket	22,9
Maximum (m)	32	hook	25,6
		Lowering Depth (m)	
		grab bucket	23
		hook	20
Load Lifting Capacity**		Superstructure tail radius (m)	7,0
Grab bucket mode (t)	18	Operating Speeds:	
boom reach 32-8 m		Lifting/lowering (m/min)	64-90
Hook mode (t)***	18-32	Turning (rpm)	1,6-2,2
boom reach 32-20 m	32	Jibbing (m/min)	63
boom reach 20-8 m		Traveling (m/min)	20
Crane Gauge (m)****	10,5	Crane base (m)	10,5
Maximum load per wheel (t)	22,5	Crane operation mode according to ISO 4301/1	A8
Crane Weight (t)	220		

* possibility of increase up to 40 m ** possibility of increase up to 20 t

*** possibility of increase up to 40 t **** possibility of increase up to 15.3 m

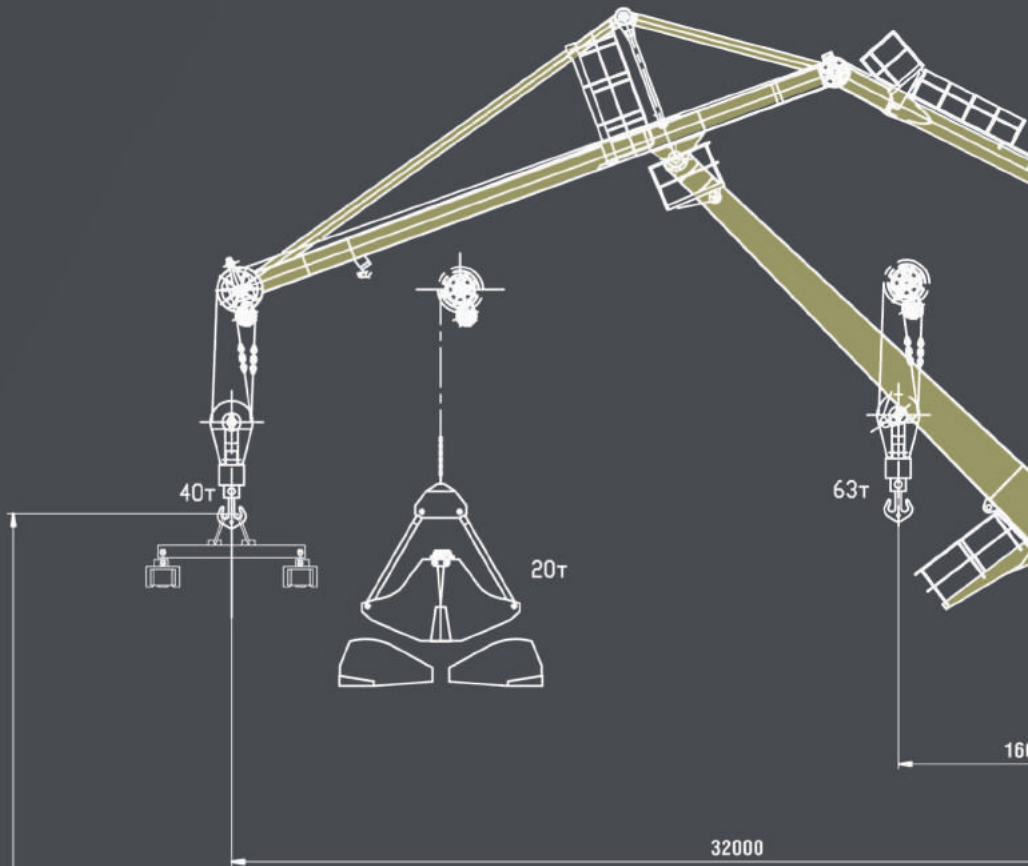
Lifting capacity vs. outreach of the boom





«VITJAZ»

Electric
Transshipment
Gantry Crane

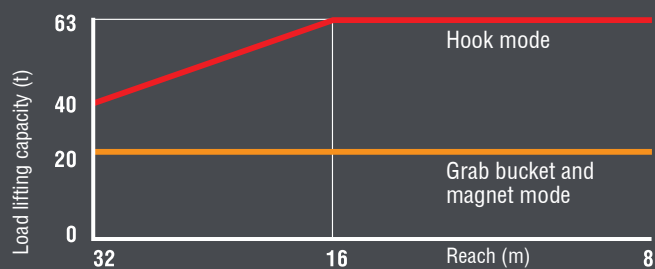


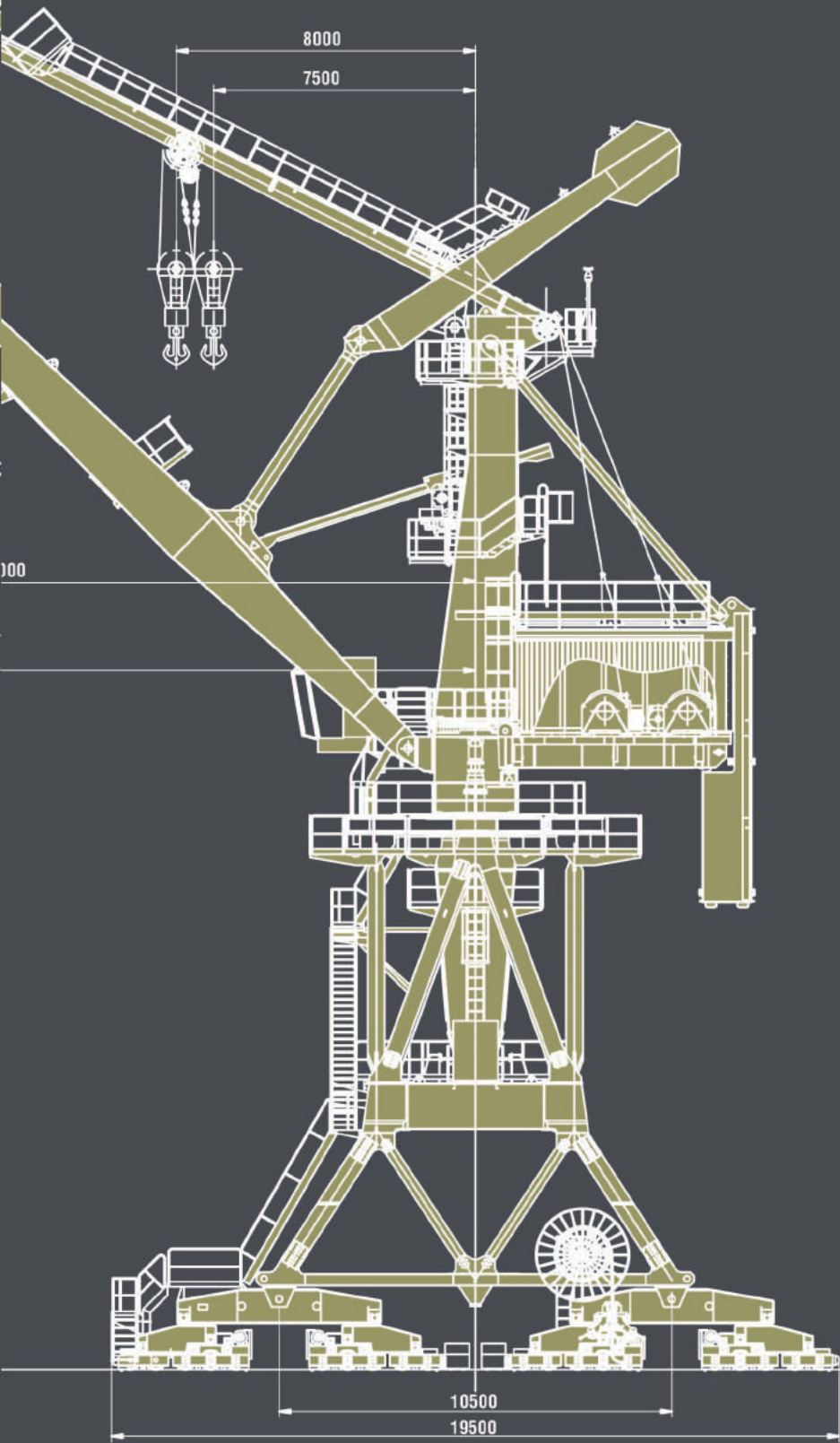
TECHNICAL SPECIFICATIONS:

27000	Boom Reach*		Lifting Height (m)	
	Minimum (m)	8	grab bucket	29
	Maximum (m)	32	hook	32
			Lowering Depth (m)	
	Load Lifting Capacity		grab bucket	23
	Grab bucket mode (t)**	20	hook	20
	boom reach 32-8 m	20	Superstructure tail radius (m)	7,5
	Hook mode (t)***	40-63	Operating Speeds:	
	boom reach 32-16 m	63	Lifting/lowering (m/min)	64
	boom reach 16-8 m	63	Turning (rpm)	1,4-1,7
		Jibbing (m/min)	60	
		Traveling (m/min)	20	
Crane Gauge (m)****	10,5	Crane base (m)	10,5	
Maximum load per wheel (t)	23	Crane operation mode according to ISO 4301/1	A8	
Crane Weight (t)	370			

* possibility of increase up to 55 m ** possibility of increase up to 50 t
*** possibility of increase up to 200 t **** possibility of increase up to 15.3 m

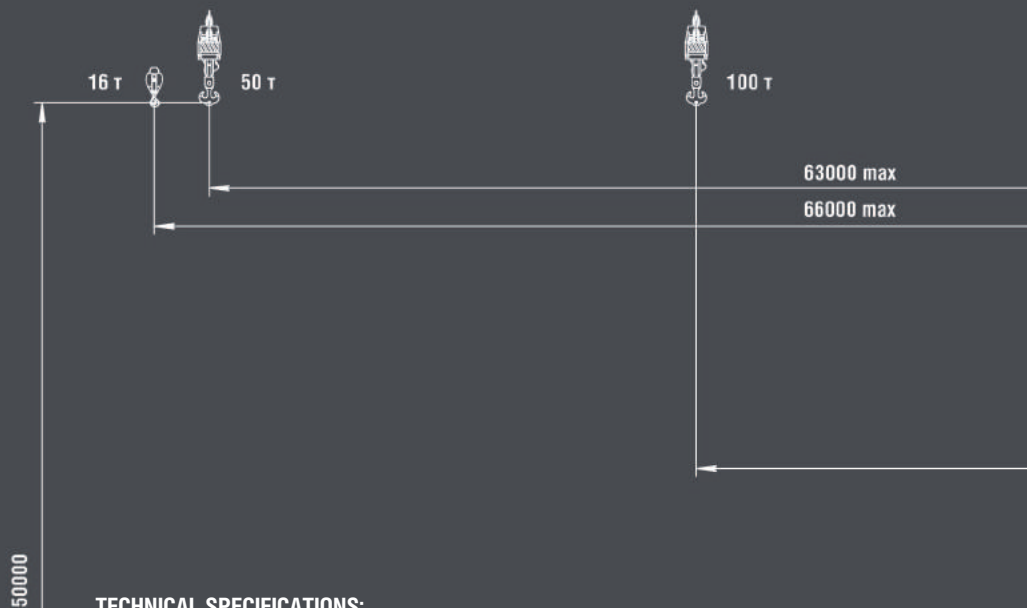
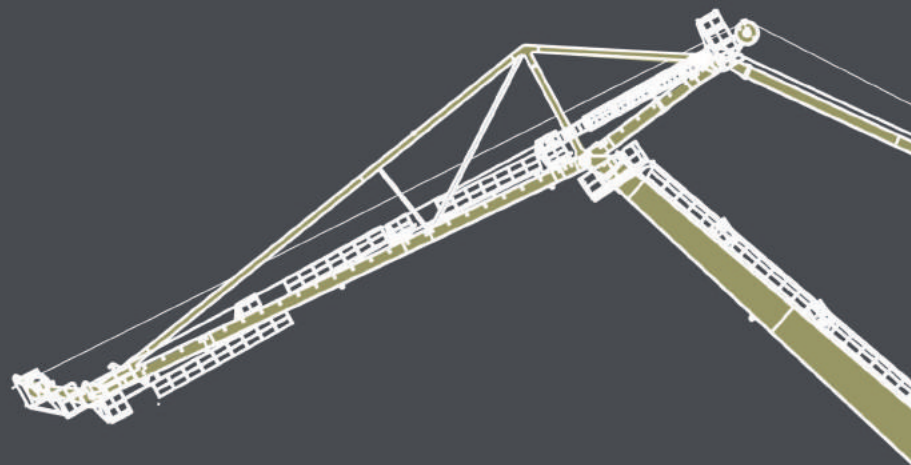
Lifting capacity vs. outreach of the boom





«VITYAZ-M»

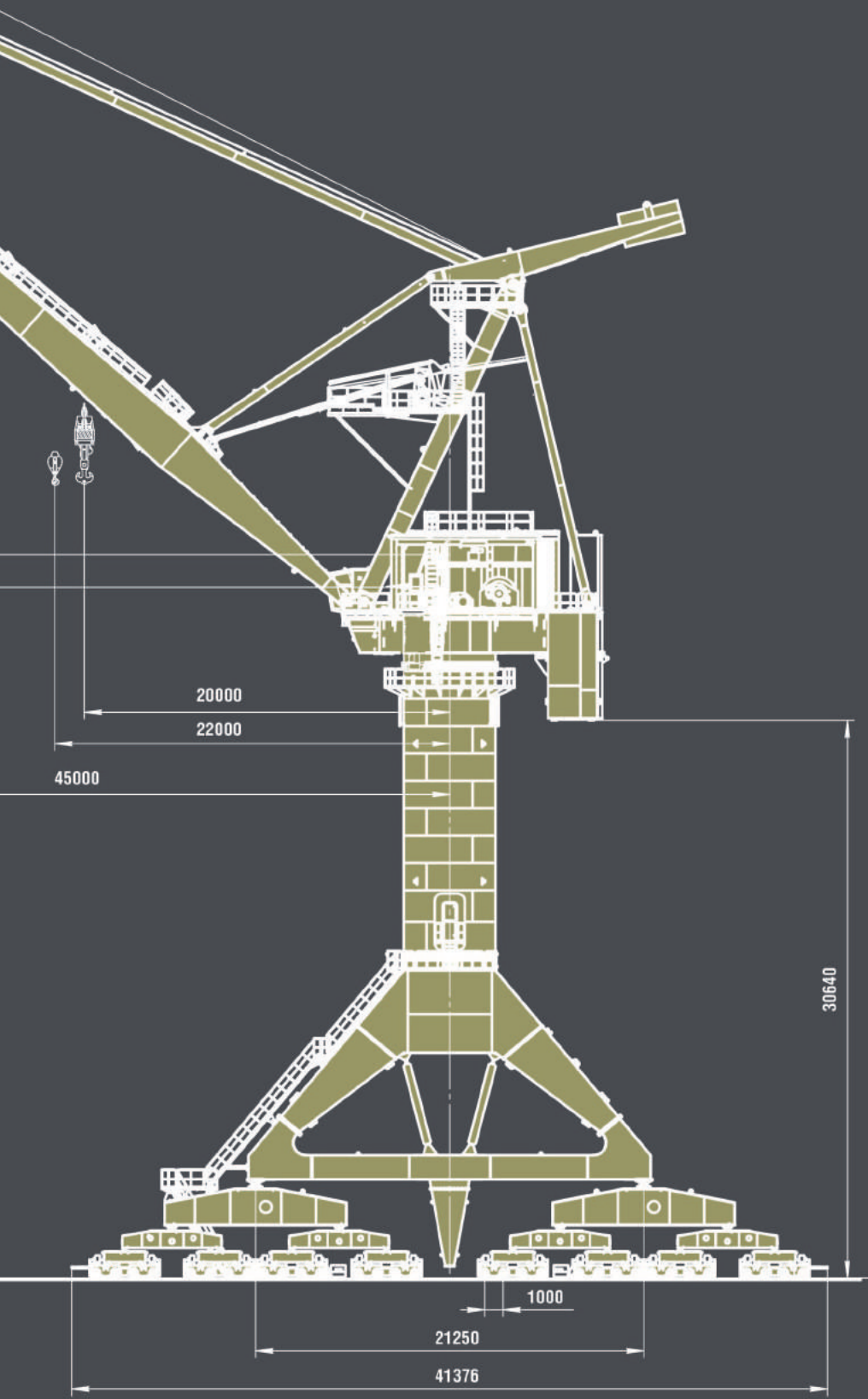
Electric
Transshipment
Gantry Crane



TECHNICAL SPECIFICATIONS:

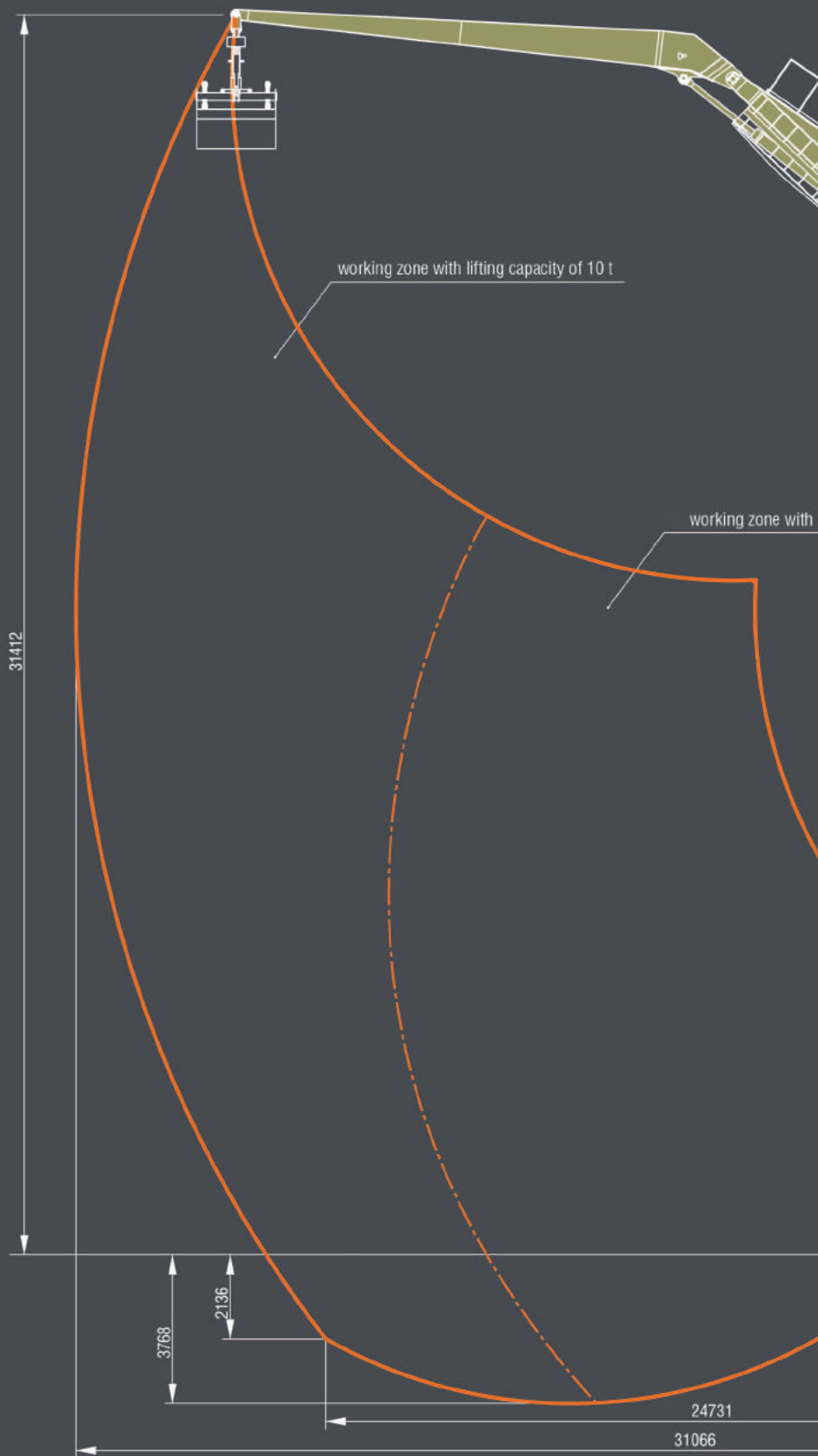
Boom Reach*		Crane Weight (t)	1250
Main hoist		Lifting Height (m)	
minimum (m)	20	Main hoist (m)	50
maximum (m)	63	Auxiliary hoist (m)	50
Auxiliary hoist***		Lowering Depth (m)	
minimum (m)	21	Main hoist (m)	10
maximum (m)	66	Auxiliary hoist (m)	10
Load Lifting Capacity		Crane Operating Speeds:	
Main hoist (t)**	50-100	Main hoist (m/min)	6-10
63 – 45 m	100	Auxiliary hoist (m/min)	24
45 – 20 m		Turning (rpm)	0,3-0,45
Auxiliary hoist (t)	16	Jibbing (m/min)	16
66 – 21 m		Traveling (m/min)	32
Crane Gauge (m)****	10-16	Crane operation mode as per	
Crane Wheelbase (m)	10,5	ISO 4301/1	A6
Maximum load per wheel (t)	320		

* possibility of increase up to 100 m ** possibility of increase up to 250 t
*** possibility of increase up to 40 t **** possibility of increase up to 25 m



«KMB-240»

Hydraulic Articulated Balance Crane



TECHNICAL SPECIFICATIONS:

Crane type: electric hydraulic or diesel hydraulic

Load lifting capacity (t) in the crane operation zone

8.5 to 31 m **10**

12 to 22 m **16**

Boom Reach*

Maximum (m) **31**

Minimum (m) **8,5**

Operation speeds

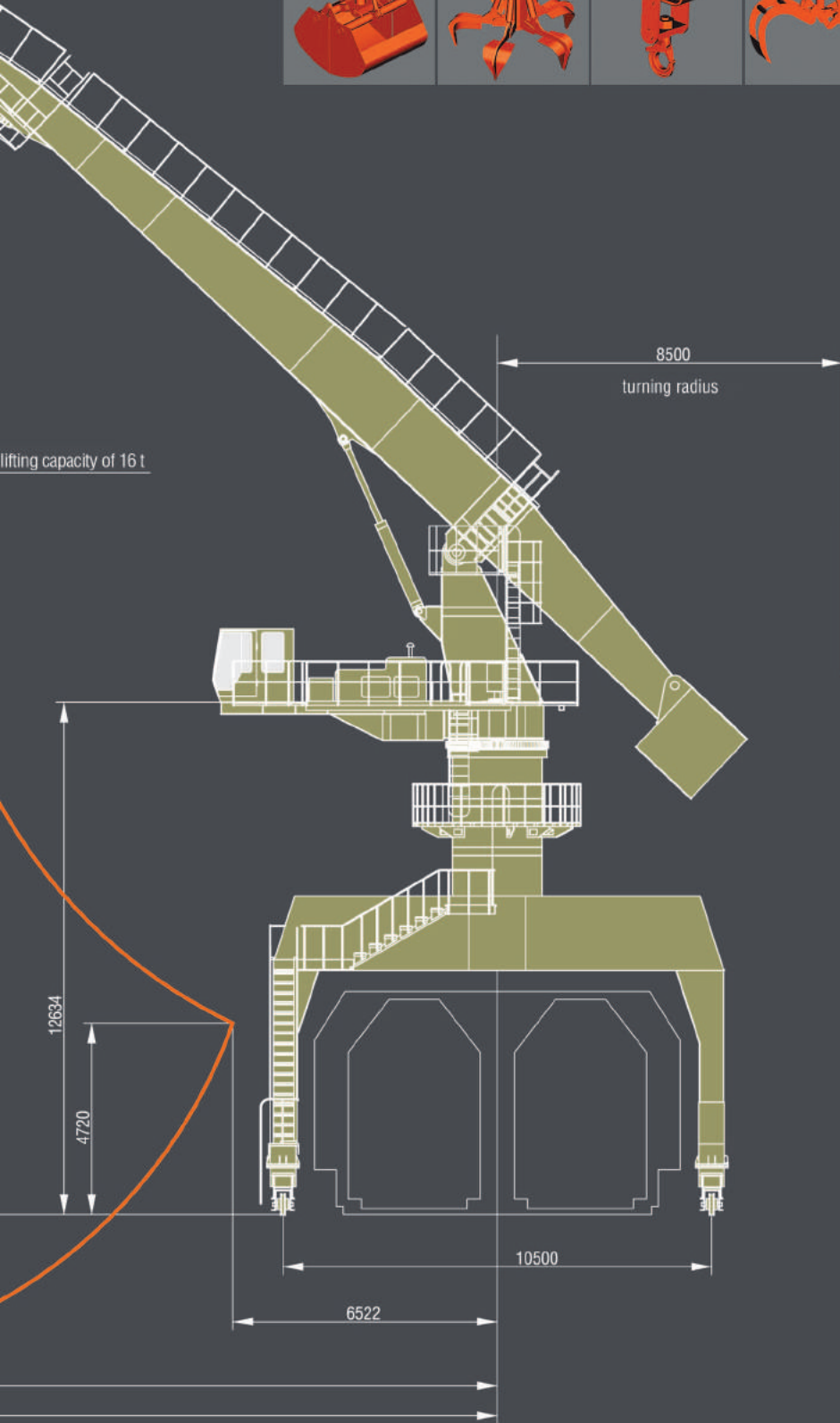
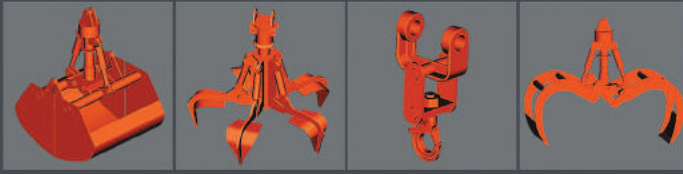
Boom raising/lowering (m/min) **0-100**

Turning (rpm) **0-2.7**

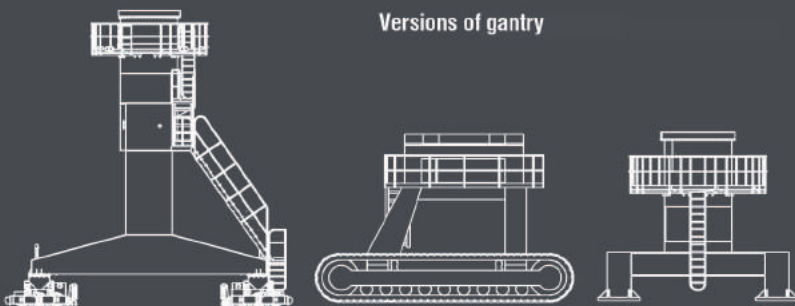
Traveling (m/min) **0-30**

Operation temperature range (°C)

-30 +40

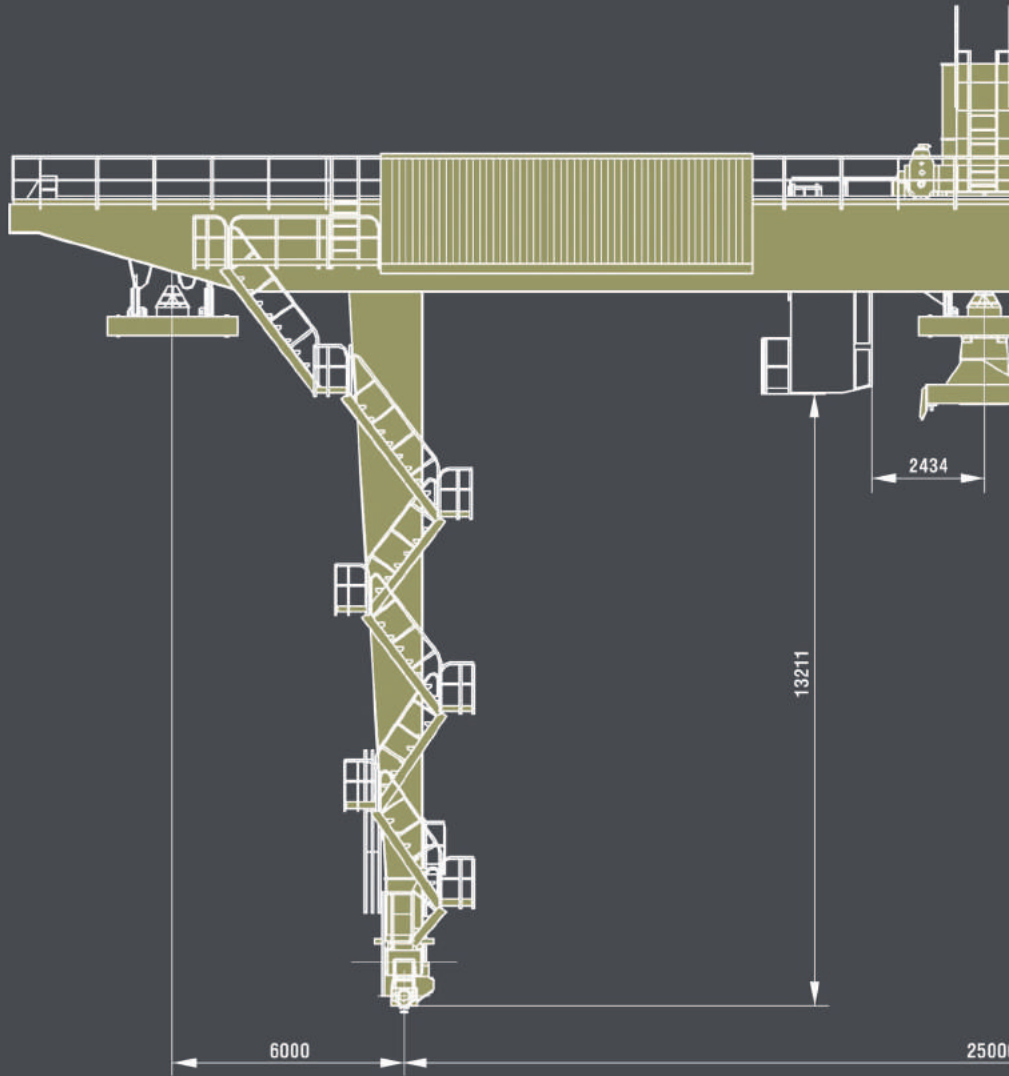
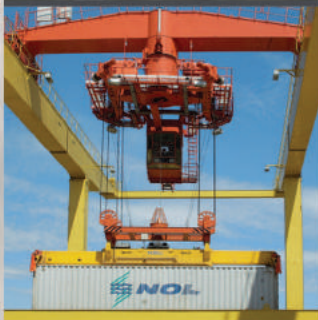


Versions of gantry



«BARS-K»

Traveling Bridge
Container Handling
Crane

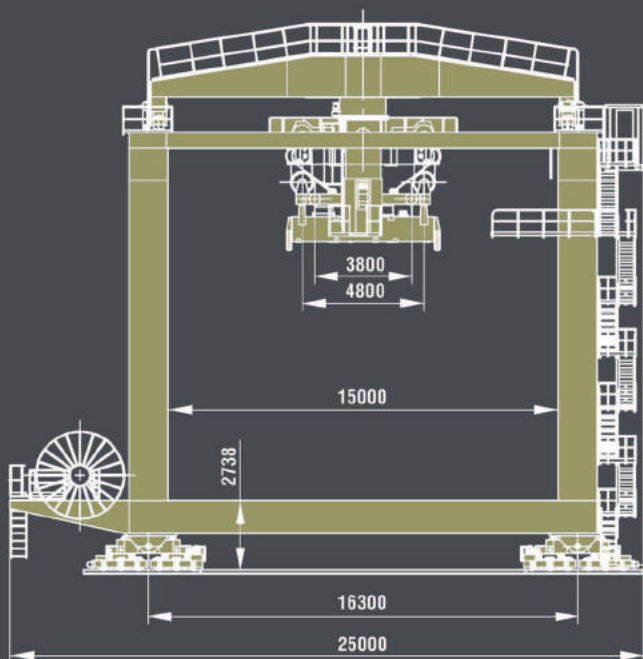
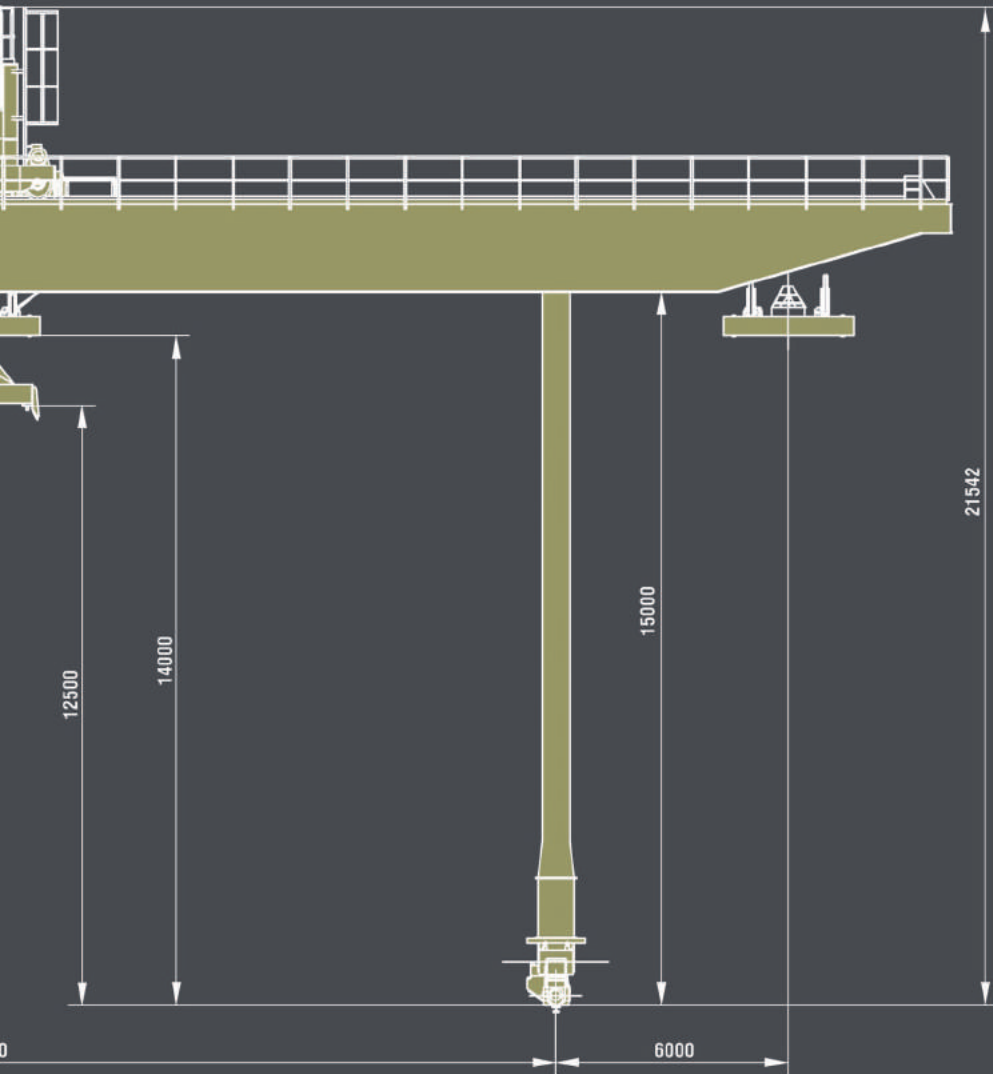


TECHNICAL SPECIFICATIONS:

Load lifting capacity*		Spreader turning angle	270°
Under the spreader (t)	43	Crane operation speeds	
Under the pulley frame	50	Maximum spreader rotation frequency (rpm)	1
Crane gauge (m)**	25	Maximum load lifting/lowering speed (m/min)	25
Crane wheelbase (m)	16,3	Trolley traveling speed (m/min)	80
Trolley gauge (m)	15,6	Crane traveling speed (m/min)	70
Trolley wheelbase (m)	2,52	Crane operation mode category as per ISO 4301/1 during transshipment of:	
Distance between gantry legs in the load passage zone (m)	15,5	Containers, gross weight 30.5 t	A8
Right and left consoles reach (m)***	6	Containers, gross weight 43 t	A5
Maximum load per wheel (t)	22,5	Breakbulk cargo, gross weight up to 50 t	A5

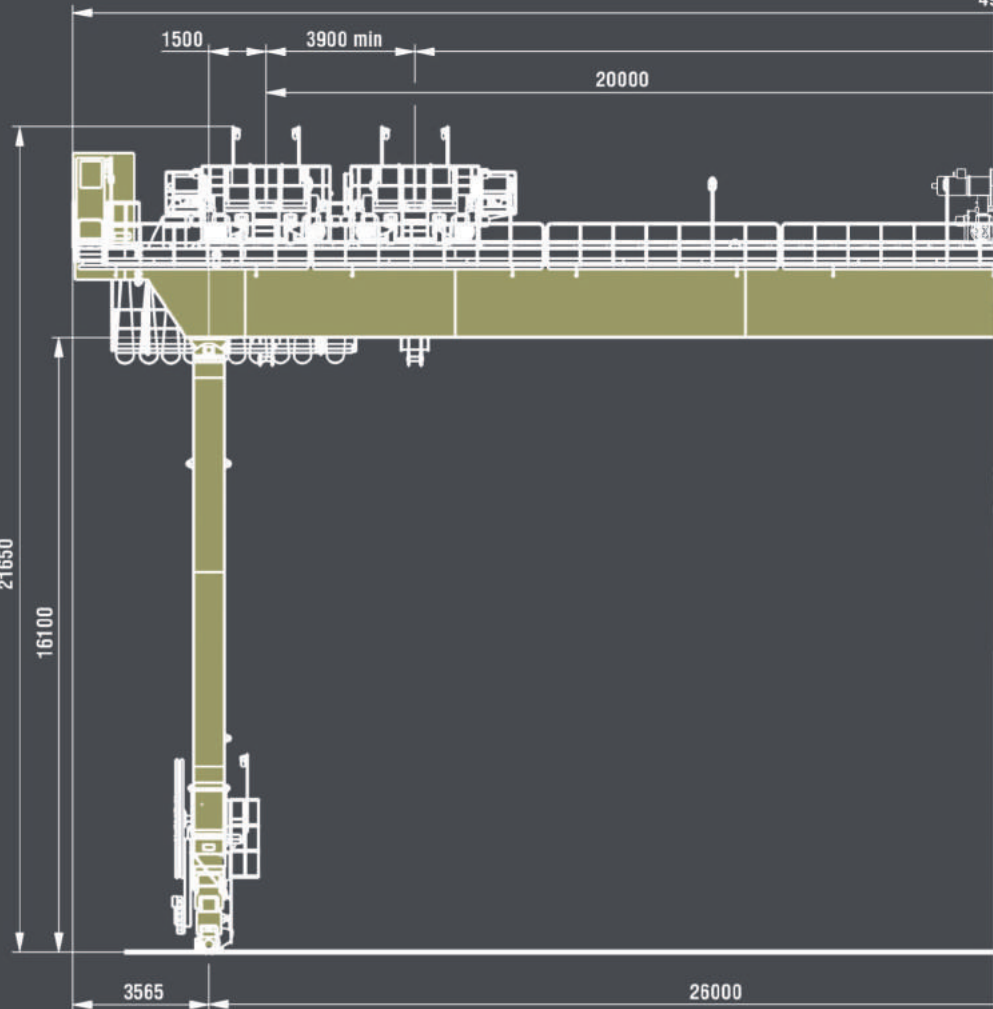
* possibility of increase up to 50 t ** possibility of increase up to 52 m

*** possibility of increase up to 16 m



«BARS-M»

Traveling bridge
Erecting Crane

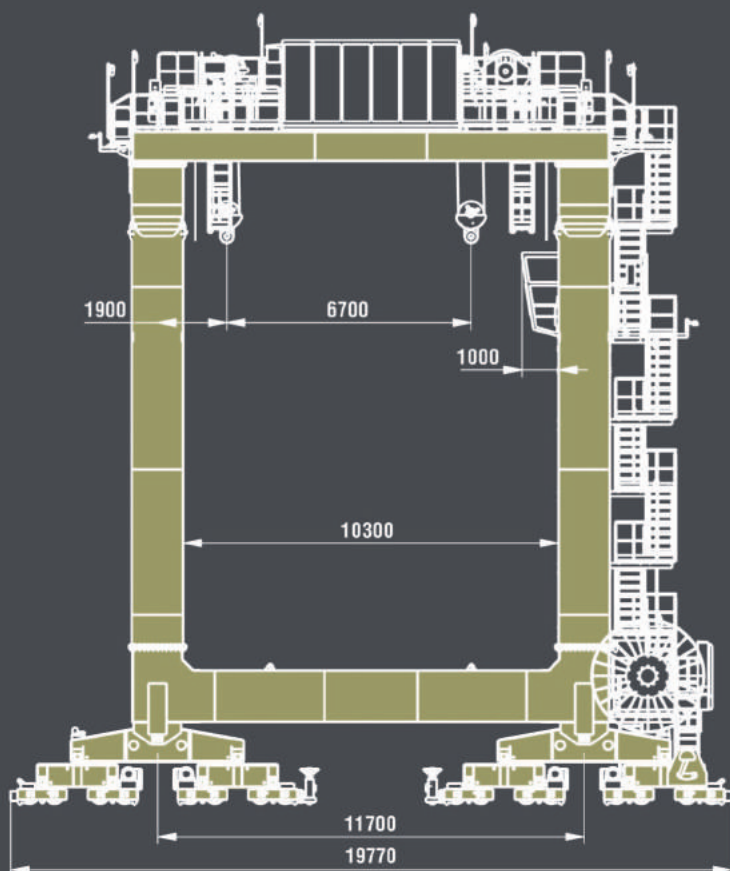
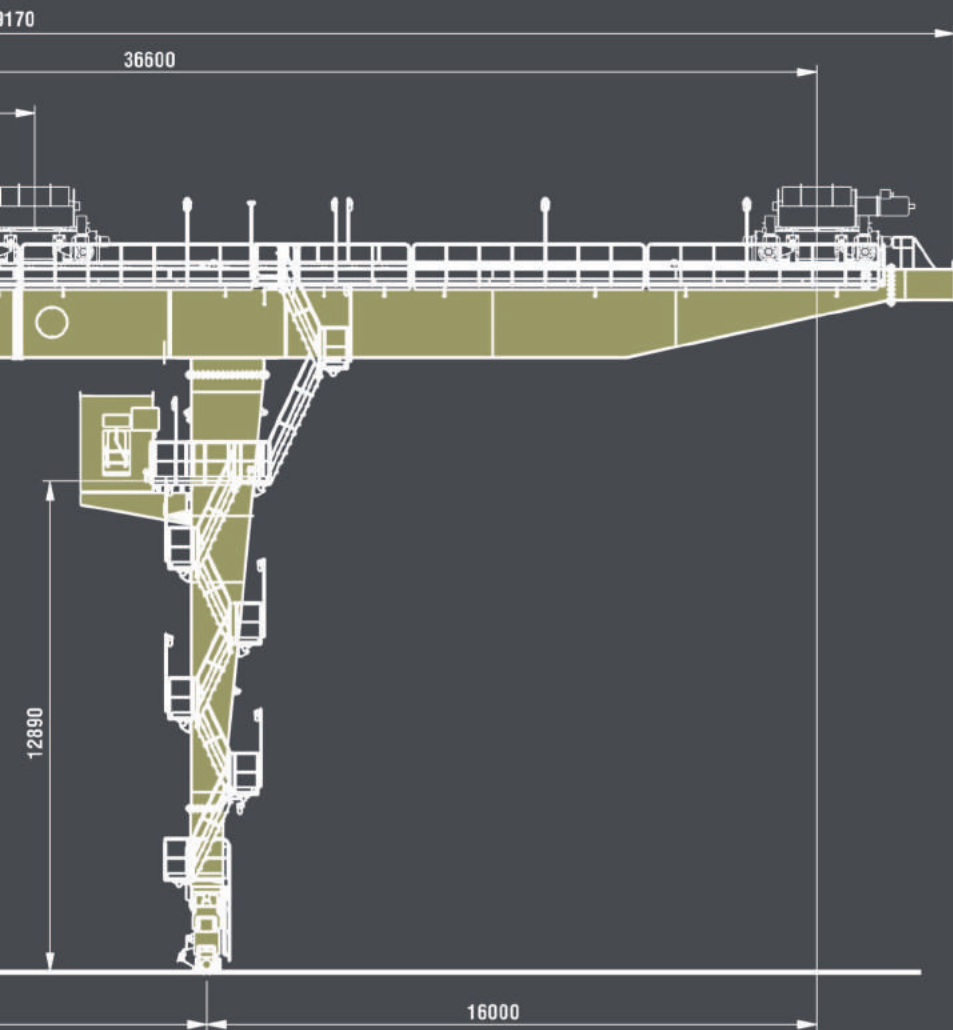


TECHNICAL SPECIFICATIONS:

Load lifting capacity* (t)		Lifting height (m)**	15
During axial spreaders operation inside the gantry	150	Maximum load lifting/lowering speed (m/min)	4
During small spreaders operation on a console	45	Idle lifting/lowering speed (m/min)	6
Crane gauge (m)**	26	Trolley traveling speed (m/min)	15
Crane wheelbase (m)	11,7	Crane traveling speed (m/min)	20
Trolley gauge (m)	10,9	Crane operation mode according ISO 4301/1:	A5 (U4, Q3)
Trolley wheelbase (m)	2,52	Climatic category as per GOST 15150-69	U1
Distance between gantry legs in the load passage zone	10,3		
Right console reach (m)	16		

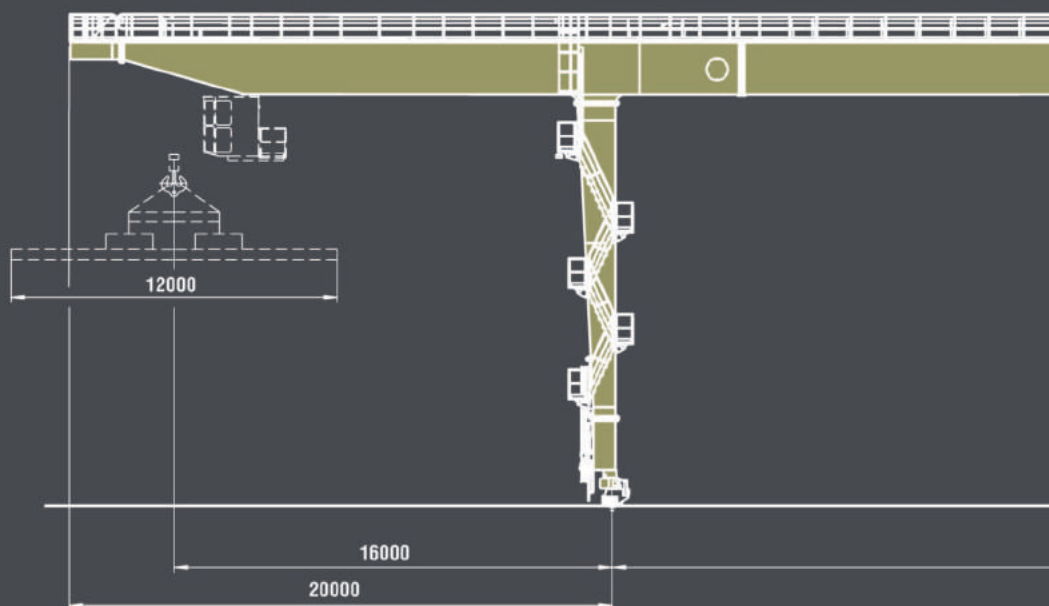
* possibility of increase up to 1200 t
*** possibility of increase up to 60 m

** possibility of increase up to 100 m



«BARS»

Traveling Gantry Transshipment Crane



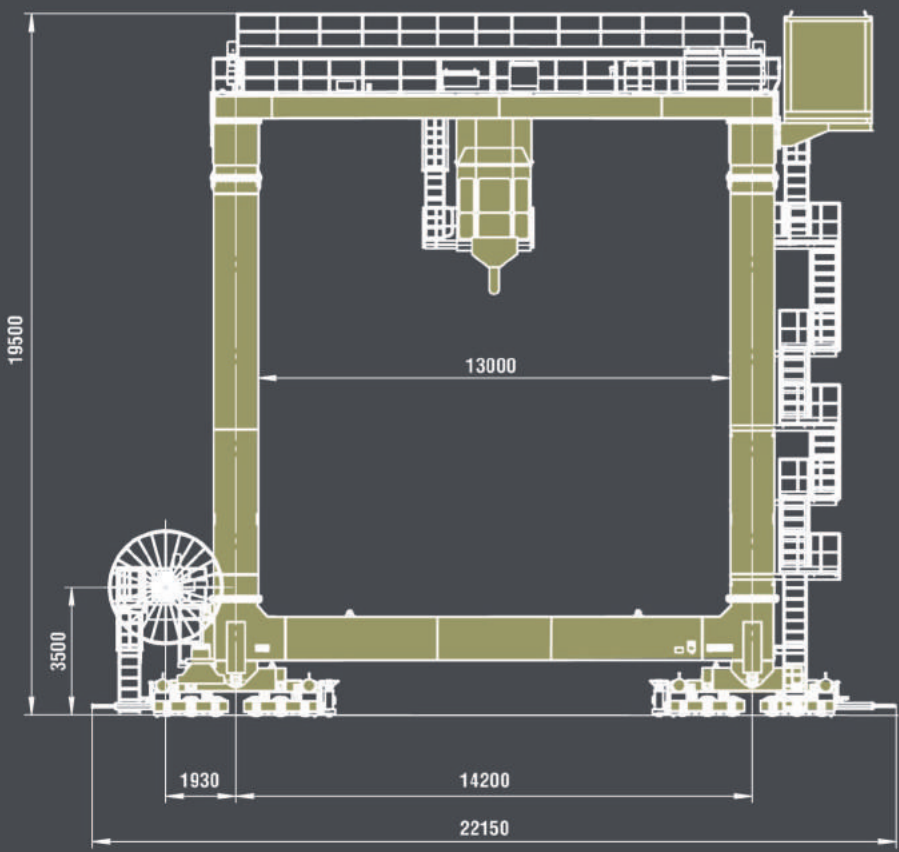
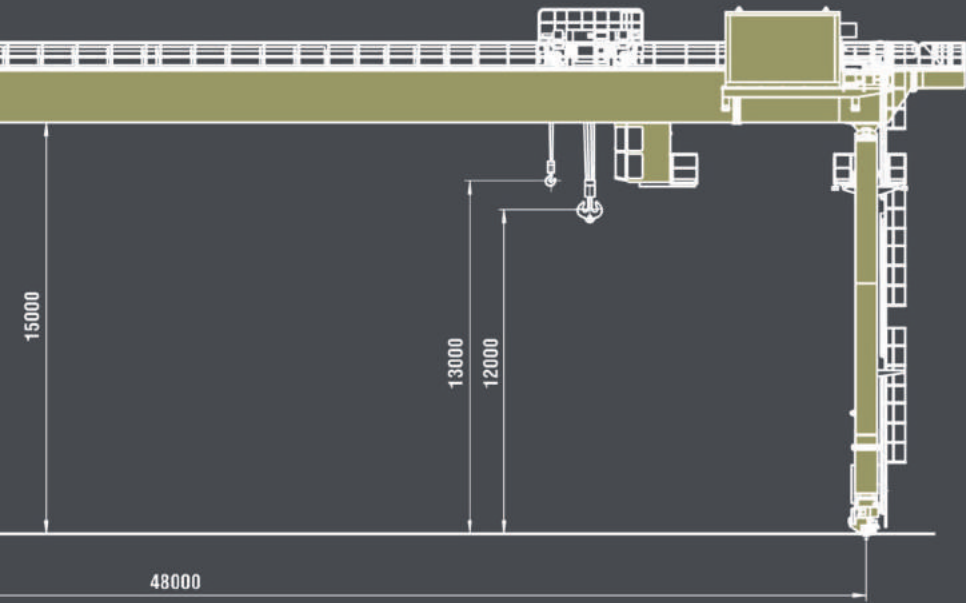
TECHNICAL SPECIFICATIONS:

Load lifting capacity (t)*		Maximum load per wheel, (t)	26
Main hoist	50		
Auxiliary hoist	12,5		
Crane gauge, (m)**	48	Crane operation speeds:	
Crane wheelbase, (m)	14,2	Main hoist, (m/min)	20
Trolley gauge, (m)	14,2	Auxiliary hoist, (m/min)	20
Trolley wheelbase (m)	4,5	Trolley traveling speed, (m/min)	40
Distance between gantry legs in the load passage zone	13	Crane traveling speed, (m/min)	40
Right console reach, (m)***	16	Hook rotation frequency, (rpm)	1
		Crane operation mode according ISO 4301/1:	A7

* possibility of increase up to 200 t

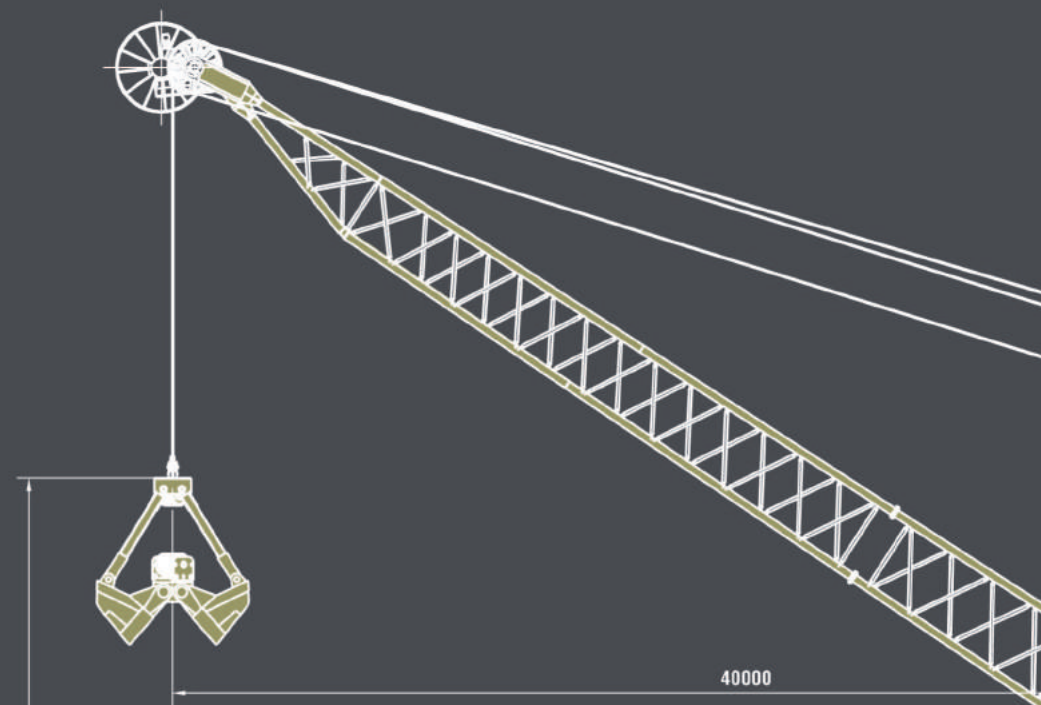
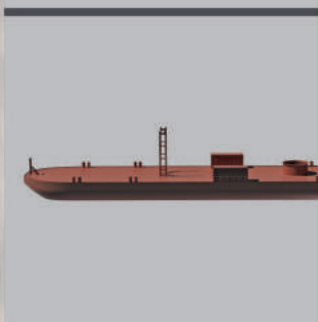
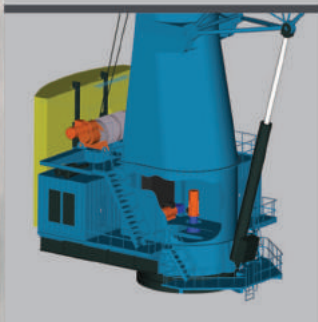
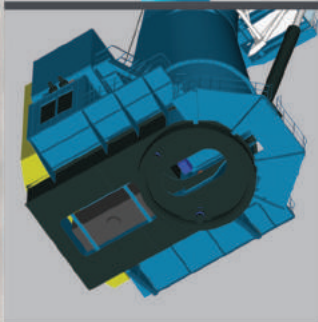
** possibility of increase up to 80 m

*** possibility of increase up to 32 m



«PERESVET 40-100»

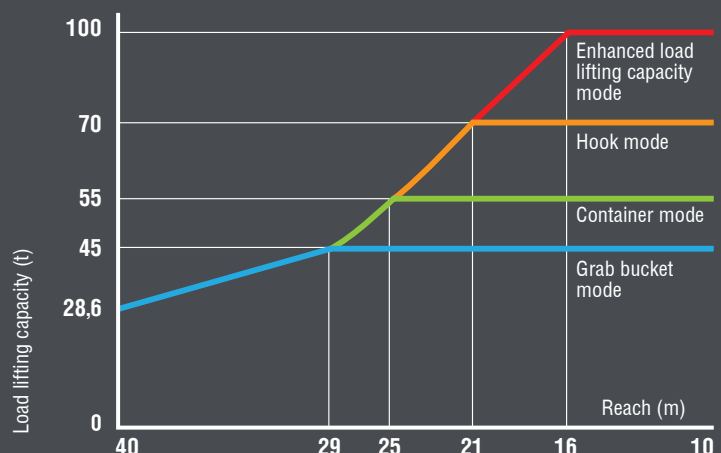
Mobile Harbor Crane

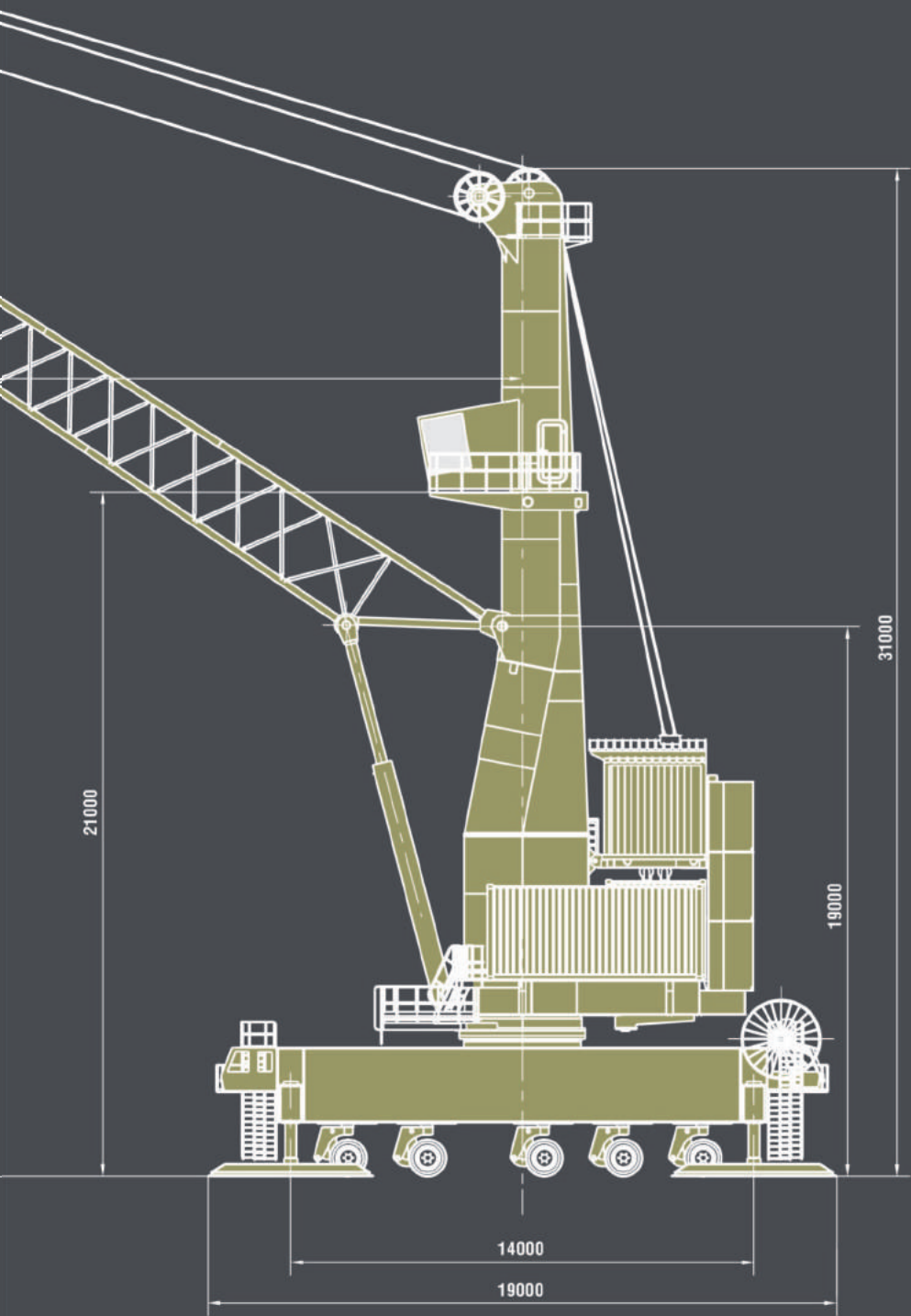


TECHNICAL SPECIFICATIONS:

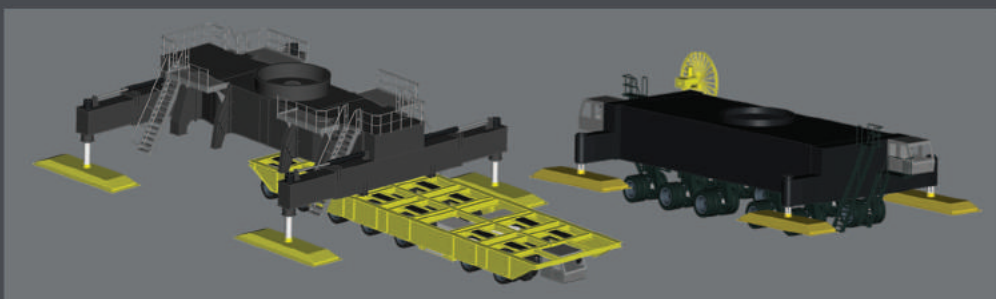
Boom Reach			Lifting Height (m)	
Minimum (m)	10		grab bucket	max. 37
Maximum (m)	40		hook	max. 42
Load Lifting Capacity			Lowering Depth (m)	
Grab bucket mode (t)			grab bucket	15
boom reach 10 – 29 m	45		hook	15
boom reach 29 – 40 m	45 - 28,6			
Container mode, (t)			Superstructure tail radius (m)	7,0
boom reach 10 – 25 m	55			
boom reach 25 – 40 m	55 - 28,6		Operating Speeds:	
Hook mode (t)			Lifting/lowering (m/min)	10 - 80
boom reach 10 – 21 m	70		Turning (rpm)	max. 1.6
boom reach 16 – 8 m	70 - 28,6		Jibbing (m/min)	60
Enhanced weight lifting capacity hook mode (t)			Traveling (m/min)	max. 90
boom reach 10 – 16 m	100		Crane operation mode according ISO 4301/1	A7
boom reach 16 – 40 m	100 - 28,6		Maximum soil load (kgf/cm)	8,7
Crane wheelbase (m)			Crane weight (t)	3330
longitudinal (m)	14			
transverse (m)	13			

Lifting capacity vs. outreach of the boom



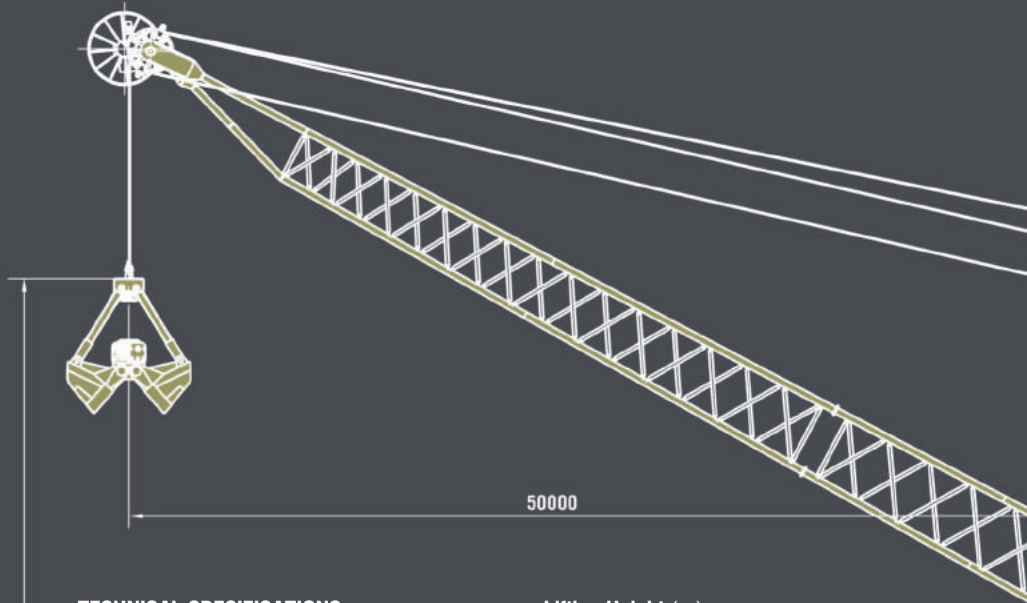
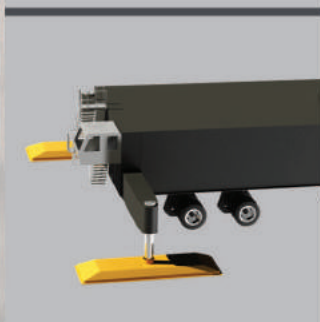
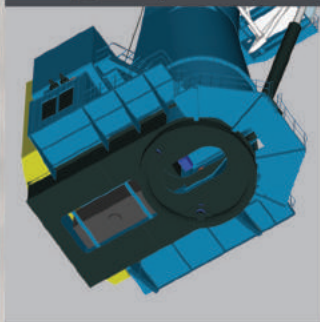
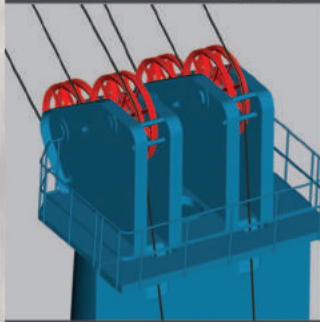


Chassis Versions



«PERESVET 50-130»

Mobile Harbor Crane



TECHNICAL SPECIFICATIONS:

Boom Reach

Minimum (m)	12
Maximum (m)	50

Load Lifting Capacity

Grab bucket mode (t)	
boom reach 12 – 50 m	47,5
Container mode, (t)	
boom reach 10 – 25 m	55
Hook mode (t)	
boom reach 12 – 28.5 m	105
boom reach 28.5 – 50 m	105 - 55
Enhanced weight lifting capacity	
hook mode (t)	
boom reach 12 – 23 m	130
boom reach 16 – 40 m	130 - 55

Crane wheelbase (m)

longitudinal (m)	22,55
transverse (m)	13,5

Lifting Height (m)

grab bucket	30
hook	35

Lowering Depth (m)

grab bucket	20
hook	15

Superstructure tail radius (m)

8,0

Operating Speeds:

Lifting/lowering (m/min)	10 - 80
Turning (rpm)	max. 1.5
Jibbing (m/min)	60
Traveling (m/min)	max. 80

Crane operation mode according

ISO 4301/1 A7

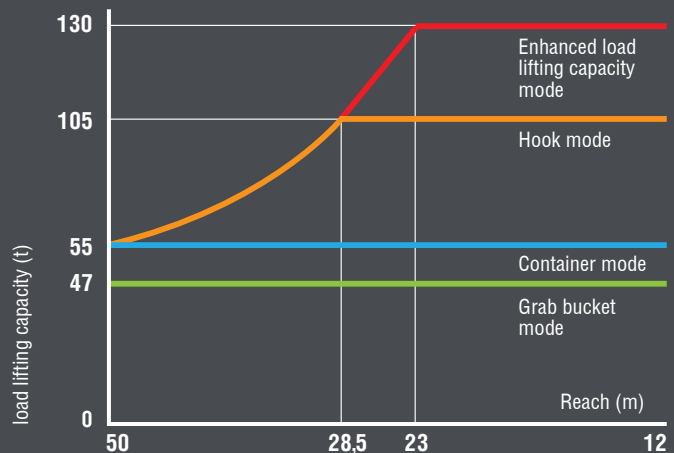
Maximum soil load (kgf/cm)

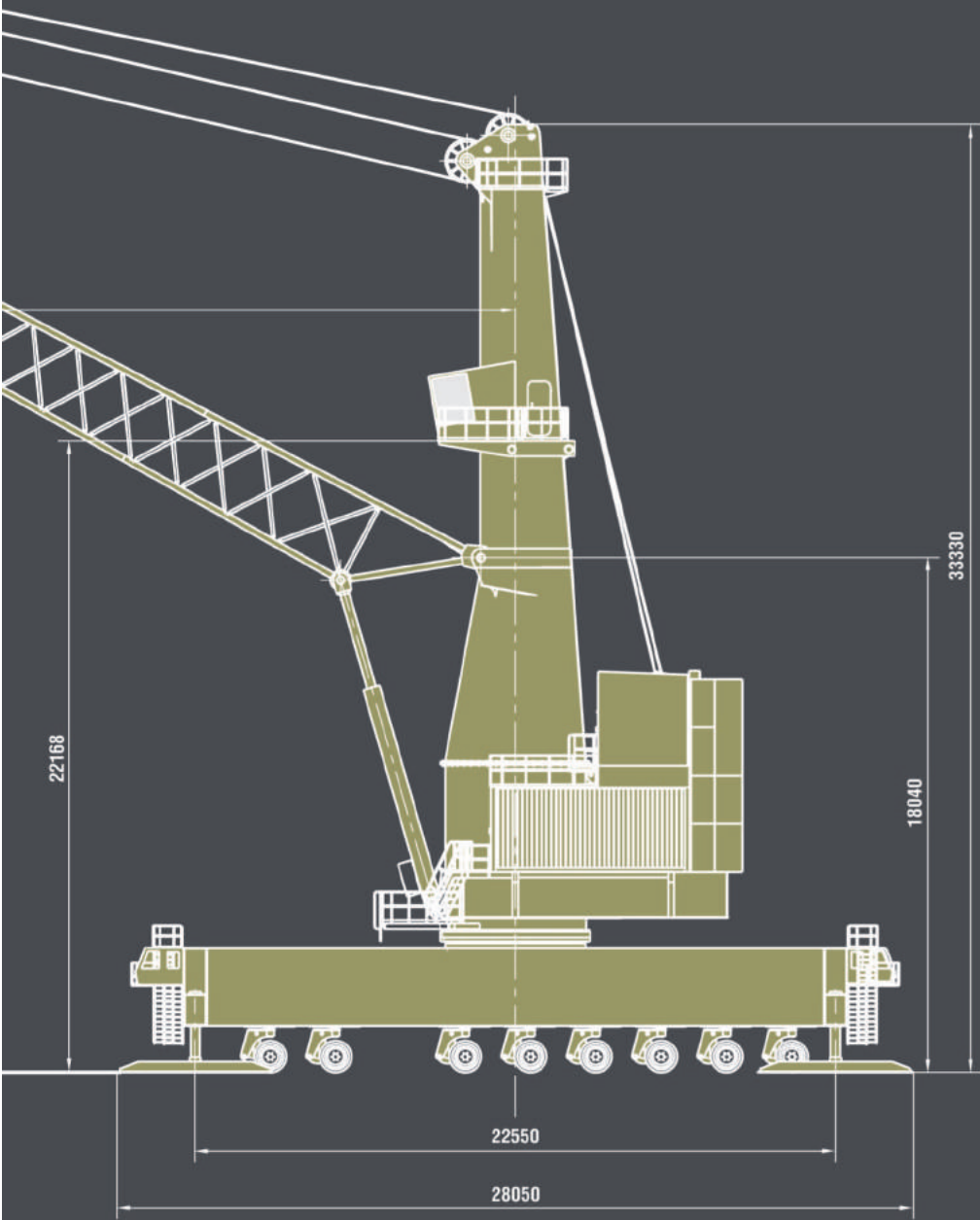
8,7

Crane weight (t)

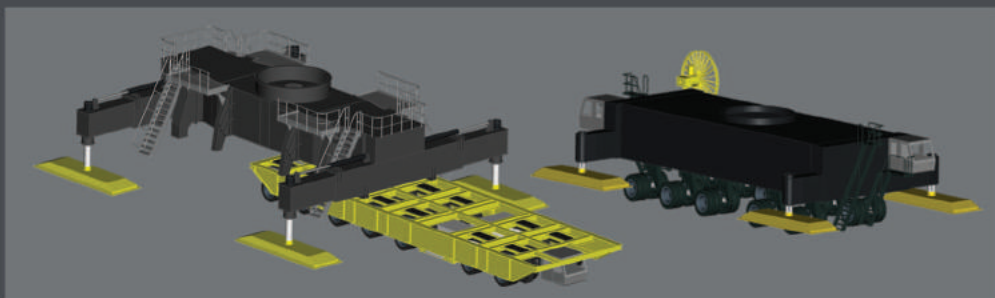
500

Lifting capacity vs. outreach of the boom

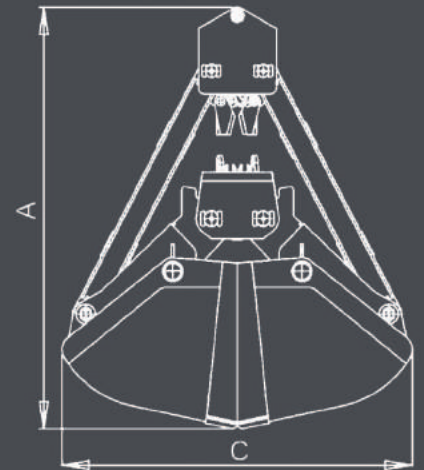
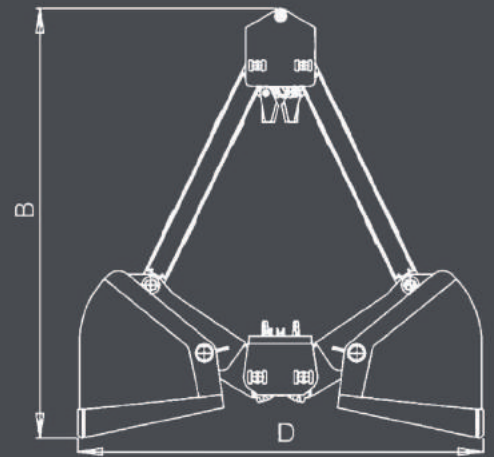
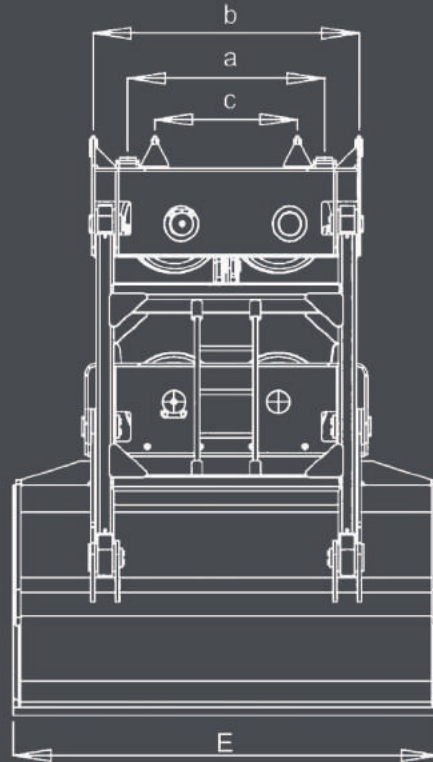




Chassis Versions



Gripping devices

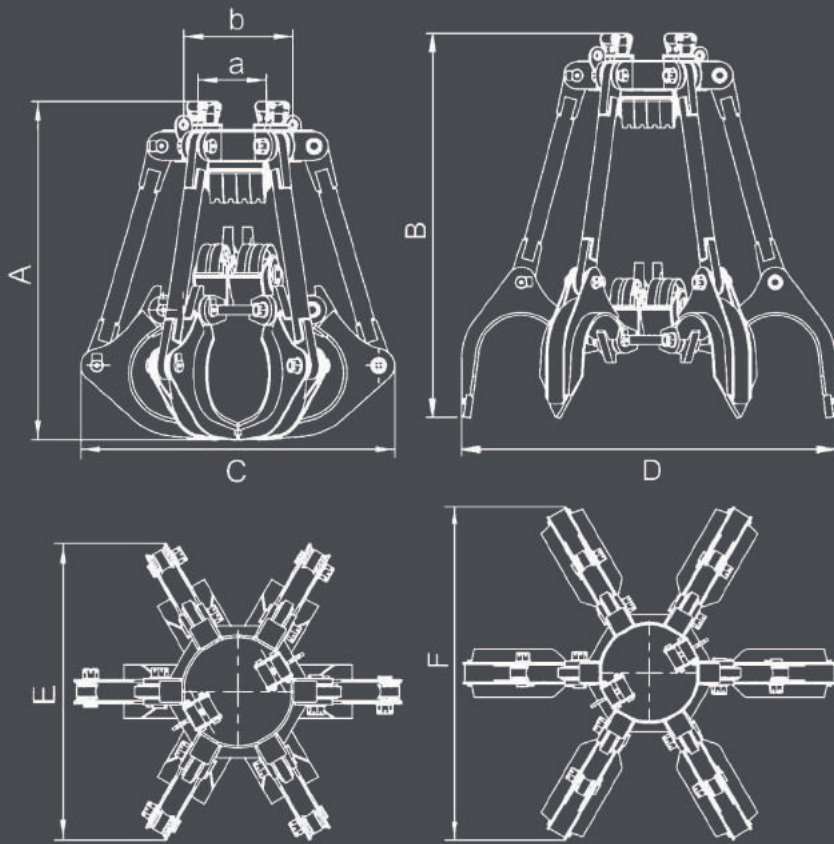


FOUR ROPE TWO CLAMSHELL GRAB

Crane lifting capacity	t	16	16	16	16	16	16	16	16	18
Grab volume	m ³	15,0	9,0	5,8	4,7	3,5	3+5,25	14,0	9,0	10,0
Apparent density of material	t/m ³	0,55	1	1,6	2,1	3,0	1,75+3	0,61	0,9	1
Dimension [A]	mm	3875	3640	3255	3215	2990	3298	3875	3650	3802
Dimension [B]	mm	4405	4540	3715	3615	3410	3768	4406	4600	4760
Dimension [C]	mm	3205	3550	2705	2415	2250	2568, 2608	3205	3550	3718
Dimension [D]	mm	4680	4250	3505	3380	2825	3248	4680	4250	4453
Dimension [E]	mm	3580	2350	2390	2370	2390	2330	3340	2350	2350
Dimension [a]	mm	1106	1106	1106	1106	1106	1106	1106	1106	1106
Dimension [b]	mm	1492	1492	1492	1492	1492	1492	1492	1492	1492
Dimension [c]	mm	800	800	800	800	800	800	800	800	800
Diameter of polyspast rope	mm	27,0	27,0	27,0	27,0	27,0	27,0	27,0	27,0	28
Diameter of polyspast sheaves	mm	480	480	480	480	480	480	480	480	480

FOUR ROPE TWO CLAMSHELL GRAB

Crane lifting capacity	t	10	10	10	10	20	25	32	32
Grab volume	m ³	5,8	4,5	3,0	2,3	12,0	5,5	20,0	10,0
Apparent density of material	t/m ³	1,0	1,25	2,0	2,6	1	3	0,99	2,2
Dimension [A]	mm	3135	3125	2655	2660	3985	4019	4523	4581
Dimension [B]	mm	3680	3520	3120	3120	4961	4465	5874	5092
Dimension [C]	mm	2700	2410	2190	2190	3940	2734	4620	3299
Dimension [D]	mm	3510	3165	2590	2590	4718	3504	4572	4384
Dimension [E]	mm	2330	2382	2350	1900	2350	2350	3700	2500
Dimension [a]	mm	940	940	940	940	1106	680	760	760
Dimension [b]	mm	1324	1324	1324	1324	1496	1460	1460	1460
Dimension [c]	mm	654	654	654	654	800	-	-	-
Diameter of polyspast rope	mm	23,5	23,5	23,5	23,5	28	33,5	33,5	33,5
Diameter of polyspast sheaves	mm	410	410	410	410	480	630	710	710



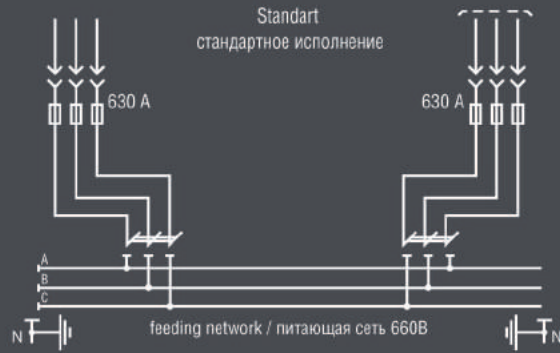
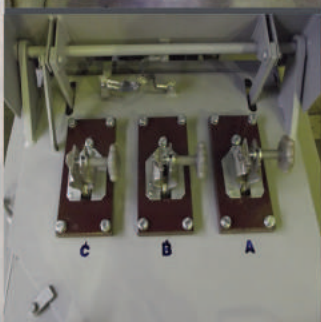
FOUR ROPE SIX CLAMSHELL GRAB

Crane lifting capacity	t	10	10	16	16	16
Grab volume	m ³	1,5	1,5	2,5	3,5	3,7
Apparent density of material	t/m ³	2,0	3,2	3,2	1,5	2,0
Variant	open / close	open	close	close	close	open
Dead weight	t	4,7	4,95	6,5	8,1	6,8
Dimension [A]	mm	2465	2465	2855	3260	3030
Dimension [B]	mm	3025	3025	3195	3920	3540
Dimension [C]	mm	2430	2430	2825	3100	3160
Dimension [D]	mm	3085	3085	4230	4425	4515
Dimension [E]	mm	2195	2195	2535	2775	2830
Dimension [F]	mm	2765	2765	3670	4020	3910
Dimension [a]	mm	610	610	674	674	674
Dimension [b]	mm	975	975	975	975	975
Multiplicity of polypast	n	5	5	5	5	5
Diameter of polypast rope	mm	23,5	23,5	27,0	27,0	27,0
Diameter of polypast sheaves	mm	410	410	480	480	480



FOUR ROPE THREE CLAMSHELL TIMBER GRAB

Nomination, drawing		
Crane lifting capacity	t	10
Clearance area of normally closed grab	m ²	2,0
Clearance area of fully closed grab	m ²	0,3
Dead weight	t	3,3
Cargo weight (max.)	t	6,7
Length of cargo (max.)	m	6,0
Multiplicity of polypast	pcs	4
Number of polypasts	pcs	2
Diameter of polypast rope	mm	23,5



COLU MN ELECTRICAL FOR CRANE

Columns electrical standard for crane are assigned to connect electrical mobile lifting-transport machines to the underground three-phase electrical current with a frequency of 50 Hz with a linear voltage 660V and 500V in temperate climate

EPP-2-660/630

Linear voltage to	V	660,0
Rated current	A	630,0
Length	mm	1800,0
Width	mm	780,0
Height	mm	590,0
Weight	kg	250,0

EPP-2-500/1000

Linear voltage to	V	500,0
Rated current	A	1000,0
Length	mm	1800,0
Width	mm	780,0
Height	mm	590,0
Weight	kg	270,0

COLUMN ELECTRICAL FOR VESSEL

Column electrical for vessel is to connect the ship`s electrical equipment to mains on shore

EPS-400

Dimensions

Length	mm	780,0
Width	mm	780,0
Height	mm	570,0
Weight	kg	140,0
Height above silk	mm	205,0

Heating center

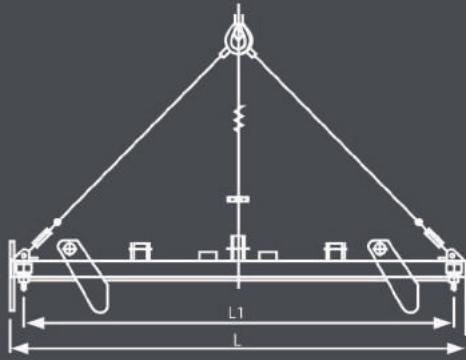
Frequency	Hz	50,0
Rated voltage	V	12,0
Power	W	60,0

Local Coverage

Frequency	Hz	50,0
Nominal lamp vol.	V	12,0
Power	W	250,0

The power of

Frequency	Hz	50
Rated voltage between phases	V	400
Rated current findings, no more than	A	400
Rater current of transformers, no more than	A	400/5
Simultaneously ensuring energy supply vessels, no more than	pcs.	1
Simultaneously connected cables (coastal)	pcs.	1-2
Simultaneously connected cables (ship)	pcs.	1-2
Nominal cross-section of each of the main core (shore cable)	mm ²	240
Nominal cross-section of each of the main core (cable vessel)	mm ²	35-120
The diametr of vessel cables on the outside cover	mm	32-56



SPREADER FOR CONTAINERS

Spreader is designed for handling of containers of type 1C and 1A with the help of a crane without support workers. Spreader works in the range of temperatures of 30-400C. Spreader can be used on transshipment sites at sea and river ports and wharves, railway stations etc.

ZKL - 1A

Lifting capacity	t	35
The distance between the axles of bayonet locks (longitudinal) L1	mm	11985
The distance between the axles of bayonet locks (transverse)	mm	2259
Working height	mm	7120
Weight	kg	3880
L	mm	12198

ZKL - 1C

Lifting capacity	t	30
The distance between the axles of bayonet locks (longitudinal) L1	mm	5853
The distance between the axles of bayonet locks (transverse)	mm	2259
Working height	mm	4100
Weight	kg	2375
L	mm	6052





JSC <RIKON>
68 b Tvaika Str.
Riga, LV-1034, Latvia
Tel. +371 67393156
Fax +371 67391647
E-mail: rikon@rikon.lv
www.rikon.lv