

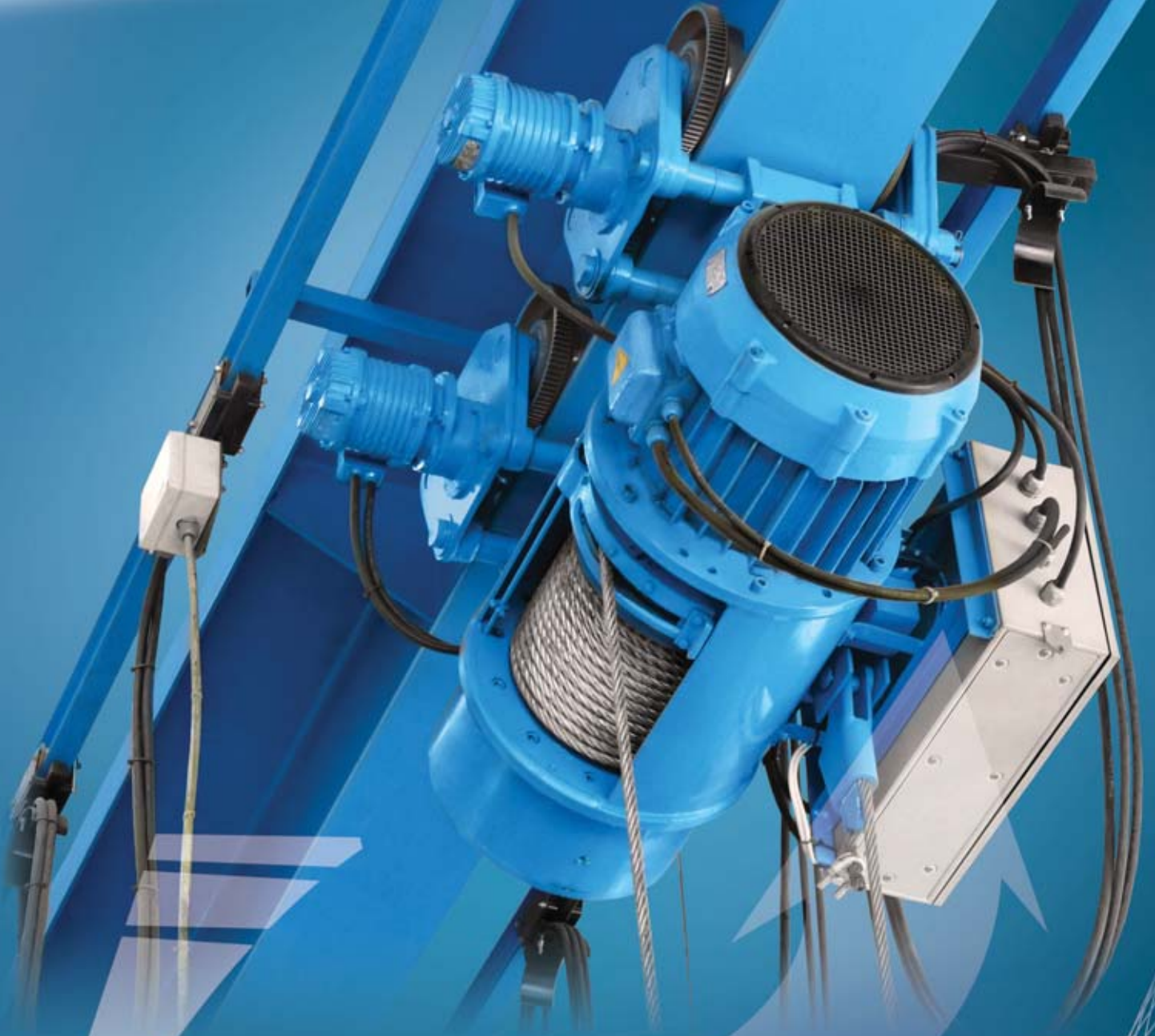


BALKANSKO ECHO

BULGARIA

PRODUCTION OF

ELECTRIC HOISTS, ELECTRIC MOTORS,
CRANES AND CRANE COMPONENTS



**CATALOGUE
CRANES**

www.balkanskoecho.com

CERTIFICATES



BALKANSKO
ECHO





**BALKANSKO
ECHO**

THE COMPANY

Dear customers, colleagues and friends,

In front of you is the catalogue which contains valuable and useful information about the manufacturing activity and high-quality production of one of the leading companies for travel and hoist systems worldwide.

“Balkansko Echo” company is unique with its three separate factories situated on a total manufacturing area of over 20 000 m², more than 600 metal-working machines and more than 550 dedicated and highly qualified specialists, as all this makes the company independent from outer subcontractors and cooperative deliveries.

The company is designing, constructing, manufacturing, assembling and servicing the following:

- electric wire rope hoists of “T” and “MT” series with a lifting capacity of up to 50 t and a lifting height of up to 120 m, which are to be known for their exceptional reliability and durability;
- electric chain hoists, with a lifting capacity from 0,125 t to 2 t;
- single and double girder electric traveling cranes with a control from the cabin and from the ground with a lifting capacity of up to 100 t;
- bracket electric cranes with a lifting capacity from 1t to 10 t and outrigger length of 10 m;
- induction cone hoist motors, single and double- speeded, with a built-in brake and a thermo-protection from 0,12 kW to 30 kW;
- induction, mono-phase and three-phase cylindrical electric motors from 0,55 kW to 37 kW;
- geared motors for setting in motion the running gears of travel and hoist systems;
- lifting capacity limiting devices for all kinds of hoists and crane travel and hoist systems;
- complete spare parts range for all products.

All company’s products are manufactured in a general-industry, fire-safe and explosion-proof execution, and they can operate in different climate zones, including chemically aggressive environment.

The company’s system for quality management and control has been certified according to ISO 9001:2008 by TÜV Rheinland.

The company’s production has been certified according to the requirements of the countries where it is used.

By the end of 2010, “Balkansko Echo” had manufactured and sold more than 20 000 electric hoists, including 5000 explosion-proof ones, more than 600 cranes and over 50 000 general-industry and explosion-proof electric motors.

The production of “Balkansko Echo” company proves every day its high-tech qualities, security and reliability in different countries, like Russia, Kazakhstan, Belarus, Ukraine, Czech Republic, Slovakia, Turkey, Iran, etc. We are proud to announce that our goods are the only ones in the world with a 36-month warranty.

The aim of this catalogue is to provoke your interest to the goods we manufacture with great responsibility.

By this catalogue we would like to turn to you, our customers, and declare our willingness to make the most suitable product for your manufacturing, and also to assure you that you’ll make the best choice.

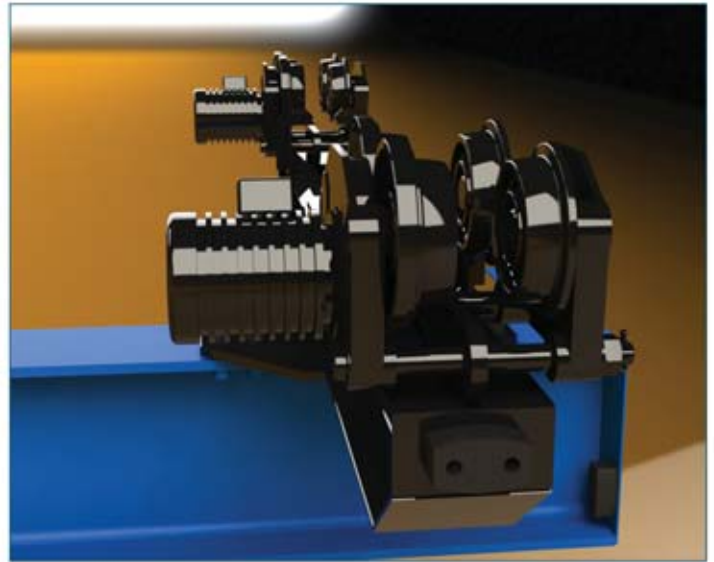
Please use the following telephone numbers for a twenty-four-hour contact with us: +35967302220; +359885000555; +359888223344 or you can write to us at balkanskoeho@abv.bg

CRANES

“Balkansko Echo” EOOD produces numerous modifications of underslung, traveling and bracket cranes with capacity from 1 to 50 t. The plant occupies a good position in Bulgaria, the European Union and Russia for its potential to produce 20 cranes a month.

“Balkansko Echo” EOOD is the only manufacturer in Bulgaria of explosion-proof cranes, certified for operation in the Russian Federation.

SINGLE-GIRDER UNDERSLUNG CRANE



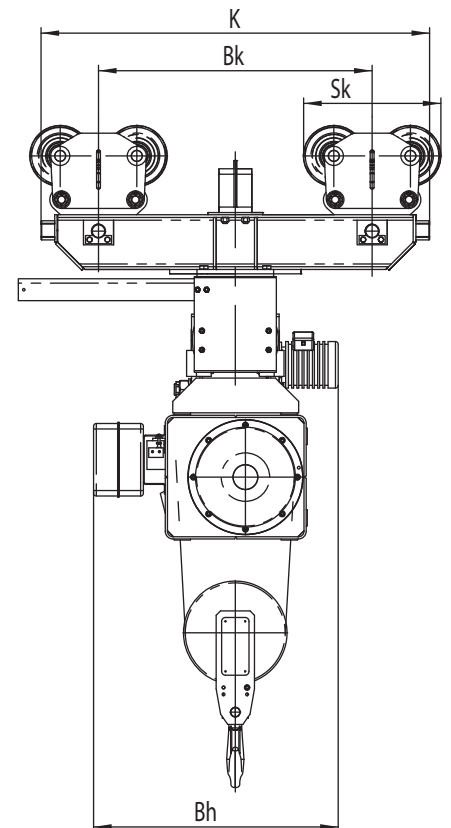
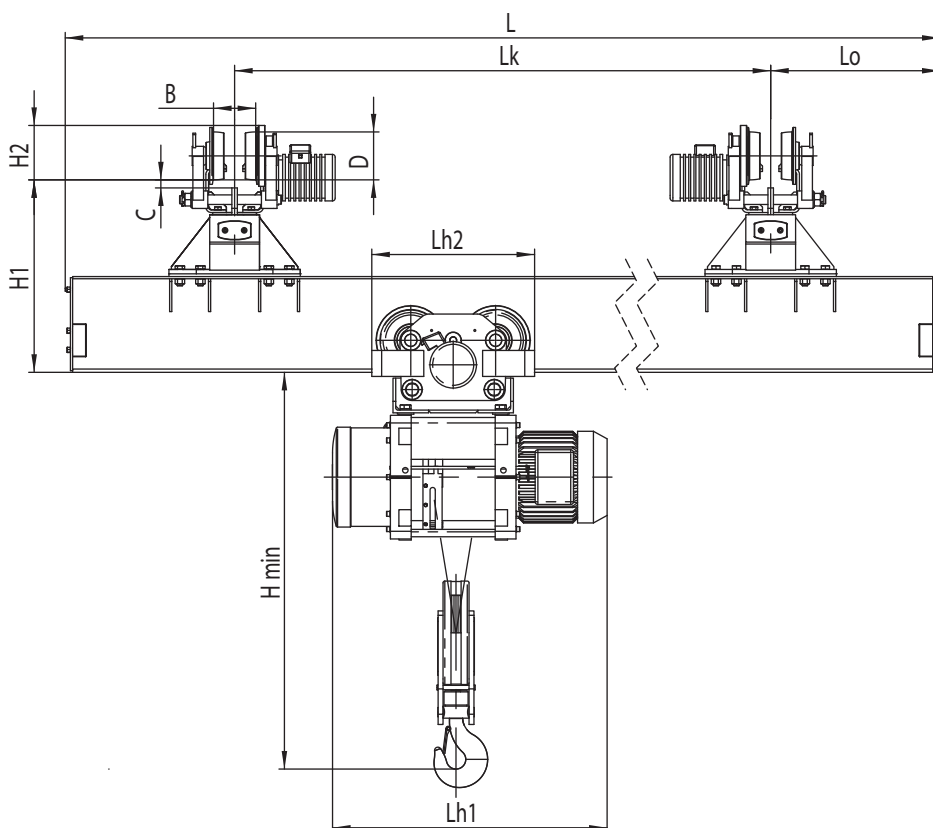
Single-girder underslung crane with an electric hoist is load lifting equipment for conveying loads in the space.

The crane is controlled from the floor by a suspended control panel or wireless control.

The crane is designed for normal operation of K3-K6 group under БДС 16570-86 at ambient temperature from -25°C to $+40^{\circ}\text{C}$ and relative air humidity less than 80% at $+20^{\circ}\text{C} \pm 5^{\circ}\text{C}$. The construction of the crane is consistent with DIN15018.

Cranes are manufactured in a general-industry execution and also to operate in an explosive environment, for transportation of toxic, explosion and flammable substances as well as molten metal.

By negotiation between the manufacturer and the customer, it is possible to manufacture cranes with a span of L_k and lifting height of H , other than those specified in the data table.

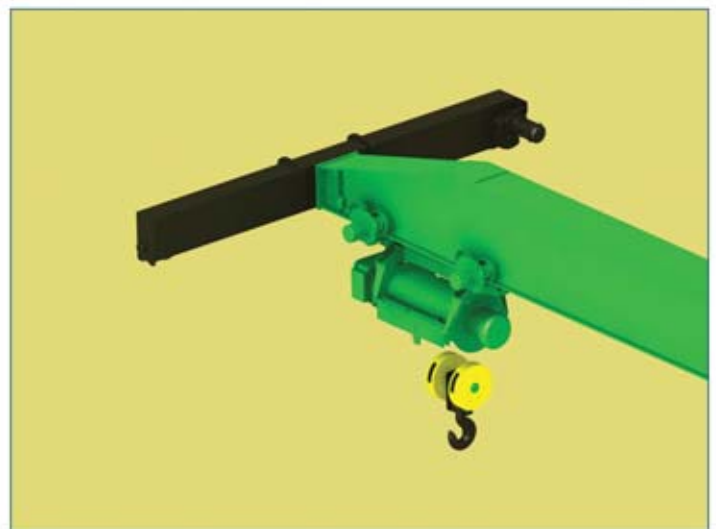
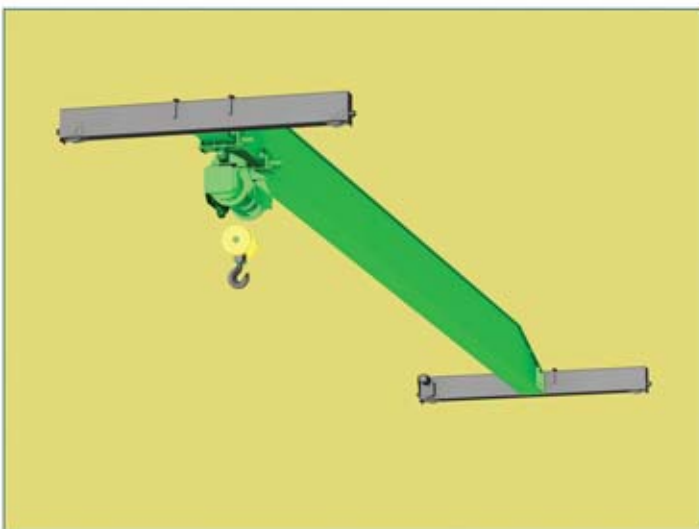




TECHNICAL DATA

Lifting capacity, t	Full length L, m	Base Bk, m	Lifting height H, m	Hmin, mm	B, mm	C, mm	D, mm	H1, mm	H2, mm	K, mm	Sk, mm
1	3 / 4.2 ... 25.5 / 27.9	1.0 ... 3.5	6 ... 42	890 ... 1000	110 ... 300	33; 42	Ø120; Ø175	550 ... 1150	140; 200	1400 ... 4000	387; 503
2	3 / 4.2 ... 25.5 / 27.9	1.0 ... 3.5	5.5 ... 39	1070 ... 1220	130 ... 300	42	Ø175	600 ... 1250	200	1400 ... 4000	503
3.2	3 / 4.2 ... 25.5 / 27.9	1.0 ... 3.5	5.5 ... 38	1140 ... 1290	130 ... 300	30; 42	Ø175; Ø210	600 ... 1450	200; 230	1400 ... 4000	503; 563
5	3 / 4.2 ... 25.5 / 27.9	1.0 ... 3.5	4.5 ... 35	1390 ... 1630	130 ... 300	30; 42	Ø175; Ø210	600 ... 1650	200; 230	1400 ... 4000	503; 563
6.3	3 / 4.2 ... 25.5 / 27.9	1.0 ... 3.5	6 ... 12.5	1095 ... 1170	130 ... 300	30; 42	Ø175; Ø210	650 ... 1700	200; 230	1400 ... 4000	503; 563
8	3 / 4.2 ... 24 / 26.4	1.0 ... 3.5	8 ... 35	1650	150 ... 300	30; 35	Ø210; Ø250	700 ... 2000	230; 275	1450 ... 4200	563; 680
10	3 / 4.2 ... 24 / 26.4	1.0 ... 3.5	5.5 ... 11.5	1500	150 ... 300	30; 35	Ø210; Ø250	750 ... 2100	230; 275	1450 ... 4200	563; 680
12.5	3 / 4.2 ... 22 / 24.4	1.0 ... 3.5	8.5 ... 17.5	1650	150 ... 300	35	Ø250	800 ... 2200	275	1600 ... 4200	680
16	3 / 4.2 ... 19.5 / 21.9	1.0 ... 3.0	8.5 ... 17.5	1650	150 ... 300	35	Ø250	900 ... 1850	275	1600 ... 3700	680

SINGLE-GIRDER TRAVELING CRANE



SINGLE-GIRDER TRAVELING CRANE

Cranes are designed for normal operation of K3-K6 group under БДС 16570-86 at ambient temperature from -25°C to +40°C and relative air humidity less than 80% at +20°C ± 5°C. The construction of the crane is consistent with DIN15018.

Cranes are manufactured in a general-industry execution and also to operate in an explosive environment, for transportation of toxic, explosion and flammable substances as well as molten metal.

The module construction of a single-girder traveling crane with a lifting capacity of 1 to 16 tons, with a span of 4.5 to 25.5 m includes the following components:

Electric wire rope hoist, T or MT series

These hoists feature a high quality, reliable in operation, minimal weight and increased maintainability, they are known and sought in more than 50 countries worldwide.

Crane beam

The construction of a crane beam with double T-shaped or box-shaped section depends on the lifting capacity of the crane and its span. Dismantled flange joint with the end carriage facilitates transportation of the crane and its installation on the site.

End carriage

The end carriages have box-shaped section and a block of the traveling wheels built in them. They are distinguished by an original construction allowing a high degree of unification.

Traveling wheels

The steel, flanged traveling wheels ensure minimal resistance to movement and longevity of the crane rails. The traveling wheels are suitable for rails with width of the head from 40 to 70 mm. The rubber-metal shock dampers mounted to the block of the traveling wheels have high energy absorption.

Mechanism for traveling of the crane

Traveling of the crane is carried out by the driving traveling wheels combined in geared motor groups. The electric motors are induction ones, cone-rotor ones, and ones with a built-in brake. The conveying speed of the crane is 10 to 50 m/min. At the request of our customers, the movements can be frequency-controlled.

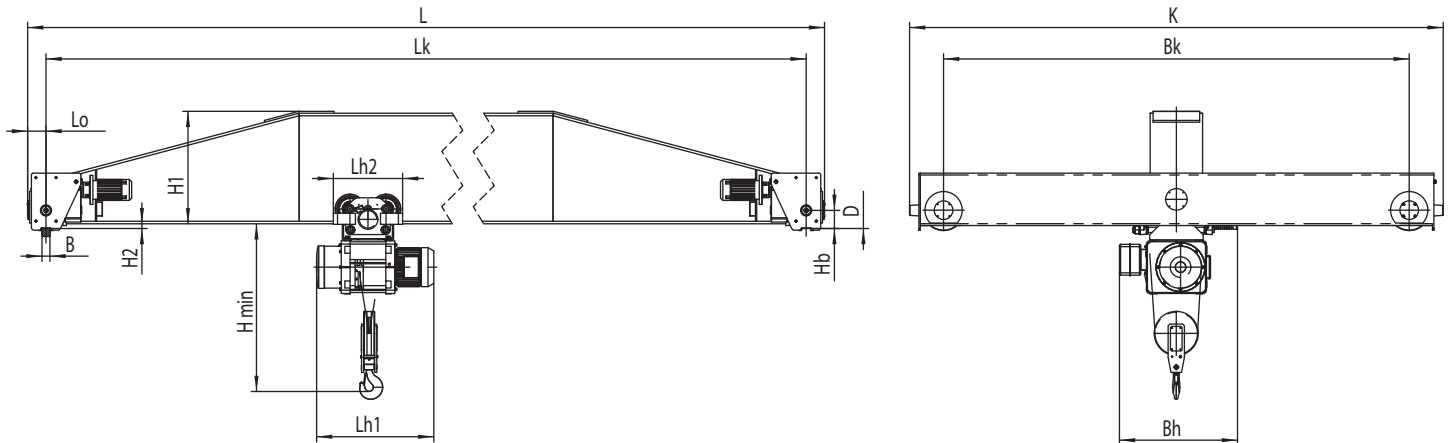
Electric equipment

The electric control panel is fixed to the metal construction of the crane and provides convenient services. Contactor-type control of the mechanisms of the crane ensures high reliability. The crane is powered by three-phase voltage of 380 W and frequency of 50 Hz. At the request of our customers, it is possible to supply cranes for other frequencies and voltage of the power supply network.

Control

The crane is controlled from the floor by a suspended control panel or wireless control.

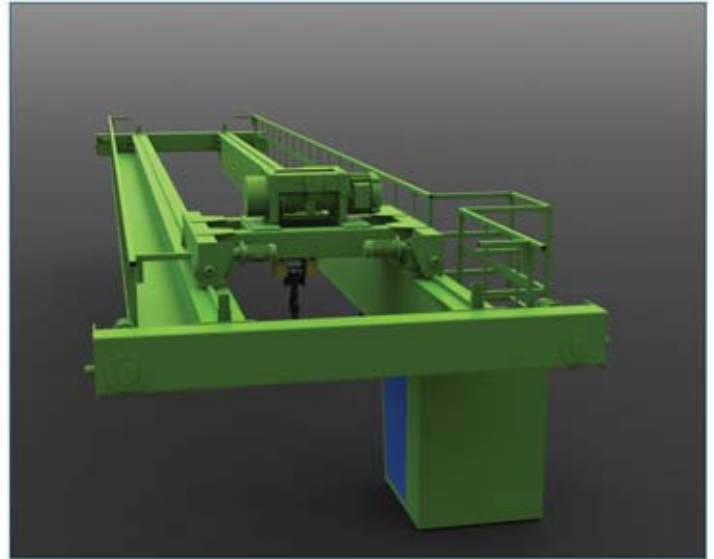
By negotiation between the manufacturer and the customer, it is possible to manufacture cranes with a span of Lk, other than that specified in the data table.



TECHNICAL DATA

Lifting capacity, t	Full length L, m	Base Bk, m	Lifting height H, m	Hmin, mm	B, mm	D, mm	H1, mm	H2, mm	K, mm	Sk, mm
1	4.5 / 4.73 ... 25.5 / 25.73	1.65 ... 4.5	6 ... 42	890 ... 1000	40	Ø160	370 ... 850	50	2080 ... 4930	145
2	4.5 / 4.73 ... 25.5 / 25.73	1.65 ... 4.5	5.5 ... 39	1070 ... 1220	40	Ø160	370 ... 850	50	2080 ... 4930	145
3.2	4.5 / 4.73 ... 25.5 / 25.77	1.65 ... 4.5	5.5 ... 38	1140 ... 1290	40; 50	Ø160; Ø200	370 ... 950	50	2080 ... 4970	145; 180
5	4.5 / 4.73 ... 25.5 / 25.77	1.65 ... 4.5	4.5 ... 35	1390 ... 1630	40; 50	Ø160; Ø200	370 ... 1050	50	2080 ... 4970	145; 180
6.3	4.5 / 4.73 ... 25.5 / 25.77	1.65 ... 4.5	6 ... 12.5	1095 ... 1170	40; 50	Ø160; Ø200	370 ... 1050	50	2080 ... 4970	145; 180
8	4.5 / 4.77 ... 24.0 / 24.27	2.15 ... 4.0	8 ... 35	1650	50	Ø200; Ø250	370 ... 1050	50	2620 ... 4520	180 ... 155
10	4.5 / 4.77 ... 24.0 / 24.27	2.15 ... 4.0	5.5 ... 11.5	1500	50	Ø200; Ø250	370 ... 1050	50	2620 ... 4520	180 ... 155
12.5	4.5 / 4.77 ... 22.5 / 22.82	2.6 ... 4.0	8.5 ... 17.5	1653	50; 60	Ø250; Ø315	390 ... 1050	50; 70	3120 ... 4580	155
16	4.5 / 4.82 ... 19.5 / 19.82	2.6 ... 4.0	8.5 ... 17.5	1653	60	Ø315	500 ... 1050	70	3180 ... 4580	155

DOUBLE-GIRDER TRAVELING CRANE



Cranes are designed for normal operation of K3 group under БДС 16570-86 at ambient temperature from -25°C to $+40^{\circ}\text{C}$ and relative air humidity less than 80% at $+20^{\circ}\text{C} \pm 15^{\circ}\text{C}$. The construction of the crane is consistent with DIN15018.

Cranes are manufactured in a general-industry execution and also to operate in an explosive environment, for transportation of toxic, explosion and flammable substances as well as molten metal.

They are used in indoor and outdoor storages, rail loading-unloading stations, on production sites.

The module construction of a double-girder traveling crane with a lifting capacity of 5 to 25 tons, with a span of 10.5 to 24 m includes the following components:

Crane trolley with an electric wire rope hoist, T or MT series

Pipe or welded construction driven by one or two geared motor groups.

Crane beam

The construction of a crane beam with double T-shaped or box-shaped section depends on the lifting capacity of the crane and its span. Dismantled flange joint with the end carriages facilitates transportation of the crane and its installation on the site.

End carriages

The end carriages have box-shaped section and a block of the traveling wheels built in them. They are distinguished by an original construction allowing a high degree of unification.

Traveling wheels

The steel, flanged traveling wheels ensure minimal resistance to movement and longevity of the crane rails. The traveling wheels are suitable for rails with width of the head from 40 to 70 mm. The rubber-metal shock dampers mounted to the block of the traveling wheels have high energy absorption.



Mechanism for traveling of the crane

Traveling of the crane is carried out by the driving traveling wheels combined in geared motor groups. The electric motors are induction ones, cone-rotor ones, and ones with a built-in brake. The conveying speed of the crane is 10 to 50 m/min. At the request of our customers, the movements can be frequency-controlled.

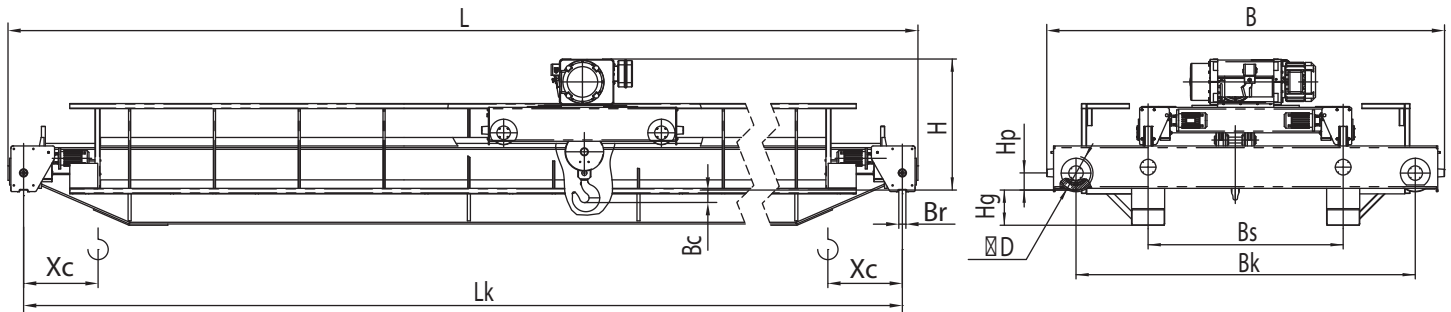
Electric equipment

The electric control panel is fixed to the metal construction of the crane and provides convenient services. Contactor-type control of the mechanisms of the crane ensures high reliability. The crane is powered by three-phase voltage of 380 V and frequency of 50 Hz. At the request of our customers, it is possible to supply cranes for other frequencies and voltage of the power supply network.

Control

The crane is controlled from the floor by a suspended control panel or wireless control.

By negotiation between the manufacturer and the customer, it is possible to manufacture cranes with a span of L_k and lifting capacity of Q , other than those specified in the data table.



TECHNICAL DATA

Lifting capacity, t	Full length L, m	Base Bk, m	Lifting height H, m	B, mm	D, mm	H, mm	Hp, mm	Hg, mm	Br, mm	Bc, mm	Xc, mm
5	10.5 / 10.77... 24.0 / 24.27	2.6 ... 4.0	4.5 ... 35	3070 ... 4520	Ø200; Ø250	1085 ... 1450	180; 155	170 ... 630	50	210 ... 100	1000 ... 1200
8	10.5 / 10.77... 24.0 / 24.32	2.6 ... 4.0	8.0 ... 35	3120 ... 4580	Ø250; Ø315	1350 ... 1450	155	130 ... 750	50; 60	300 ... 200	1000 ... 1200
10	10.5 / 10.77... 24.0 / 24.32	2.6 ... 4.0	5.5 ... 11.5	3120 ... 4580	Ø250; Ø315	1350 ... 1450	155	130 ... 750	50; 60	300 ... 200	1000 ... 1200
12.5	10.5 / 10.82... 24.0 / 24.38	2.6 ... 4.0	8.5 ... 17.5	3180 ... 4690	Ø315; Ø400	1450 ... 1560	155; 200	130 ... 1000	60; 70	230 ... 170	1300
16	10.5 / 10.82... 24.0 / 24.38	2.6 ... 4.0	8.5 ... 17.5	3180 ... 4690	Ø315; Ø400	1450 ... 1560	155; 200	200 ... 850	60; 70	230 ... 170	1300
20	10.5 / 10.88... 24.0 / 24.38	2.6 ... 4.0	8.5 ... 17.5	3290 ... 4690	Ø400	1560	200	200 ... 850	70	170	1300
25	10.5 / 10.88... 22.5 / 22.88	2.6 ... 4.0	8.5 ... 17.5	3290 ... 4690	Ø400	1560	200	330 ... 730	70	170	1300

WE ALSO MANUFACTURE

T- electric wire rope hoists

The electric wire rope hoists of T Series are the most famous and well-sold hoists worldwide. More than 1 800 000 pieces have already been produced, which have been marketed in more than 40 countries. Their main advantages are: high reliability, durability, simple maintenance. These advantages in combination with the broad range of lifting capacities, lift and move speeds, construction executions, and ability to be used in different conditions, make the electric hoists of this series preferred to the other executions, despite their 30-year-old history.

MT- electric wire rope hoists

The wire rope hoists of MT Series are the inheritors of the world's most popular series of electric wire rope hoists T. By keeping the basic technical features and thanks to the use of a new body construction, contemporary steel ropes, hooks, etc., we offer our customers a series of electric hoists with much extended opportunities like lifting capacity, lift speed and conveying speed. All this expands new opportunities for a more efficient operation of our products.

BT- electric explosion-proof wire rope hoists

Based on the basic construction decisions of electric wire rope hoists series T and keeping its technical features, series BT electric explosion-proof wire rope hoists is intended to operate in an explosion hazardous environment.

The electrical equipment included in these goods, such as: electric motors, electric appliances panel, control panel, overtravel limit switches, etc., is manufactured in the so called "explosion-proof" execution, and it is marked by: (Ex) d IIB T5 and (Ex) d IIC T5.

BMT- electric explosion-proof wire rope hoists

The electric wire rope hoists BMT series are based on the basic technical solutions being used in BT and MT series. Based on the higher technical parameters of MT series and the already proven technical decisions of BT series regarding explosion proof, we have created an electric explosion-proof wire rope hoist having much better operational features, such as lifting capacity, lift speed and conveying speed. The electrical equipment is identical to BT series, which presupposes the identical explosion-proof execution and marking: (Ex) d IIB T5 and (Ex) d IIC T5.

Induction electric motors

1. With built-in brakes, for the main lift of electric chain and wire rope hoists and other running gears - from 0.75 kW up to 30 kW. Explosion-proof execution as an option.
2. With built-in brakes, for running gears of electric chain hoists and wire rope hoists and other lifting parts - from 0.12 kW to 3 kW. Explosion-proof execution as an option.
3. Electric motors for general purposes, executions of IM B3, IM B5, IM b35, IM B14, etc., with or without a built-in brake - from 0.55 kW to 37 kW.

Crane components

- 1.Reduction gears and geared motor groups - intended for driving the running gears of girder cranes and other lifting equipment. These are available in a great variety of output revolutions and torques. They are driven by electric motors with built-in cone brakes. Explosion-proof execution as an option.
- 2.End carriages for stationary traveling cranes - diameters of traveling wheels from 160 to 400 mm, load of the traveling wheel from 4000 to 19 500 kg, conveying speeds from 8 to 32 m/min. Explosion-proof execution as an option.
- 3.Cable trolleys - intended for carrying supply and operation cables of traveling cranes. Available in executions for traveling onto profile or straight steel rope.



**BALKANSKO
ECHO**

“BALKANSKO ECHO” EOOD

Bulgaria

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