



HENG FENG YOU
• Make Life Better •

PRODUCT CATALOG version 2022-05

MINING TRANSFORMER

HENGFENGYOU ELECTRIC GROUP



www.hengfengyou.com

ABOUT HENGFENGYOU ELECTRIC

HENGFENGYOU ELECTRIC GROUP, is an electrical enterprise with transmission and distribution industry as its main business, integrating product research and development, manufacturing and trade. Designated suppliers for the world's top 500 enterprises. Its main products include power transformers, medium and low voltage switchgear, distribution panel, circuit breakers, transmission tower, Cable and other power distribution equipment. The group has five departments: Transformer department, Panel department, power transmission tower department, cable department and electrical engineering department. HENGFENGYOU ELECTRIC GROUP has been working hard to provide the best transmission, distribution solutions for users all over the world.

Key figures

- Since: 1990
- Revenue in 2018: 635 million yuan
- 550 employees and 30 Electrical Engineers
- 6 production sites in China
- 6% of revenue is invested in R&D

Mining Transformer solutions that drive the global energy transition

With energy demand expanding in both developed and emerging countries, the challenge for HENGFENGYOU ELECTRIC GROUP is to connect energy with people. The group's teams work as closely as possible with projects and decision makers and design and propose technical and process solutions based on global user needs.



HENGFENGYOU ELECTRIC

• Business area

HENGFENGYOU ELECTRIC GROUP designs, manufactures and sells global solutions and equipment for public utilities and private medium and low voltage distribution networks.

Hengfengyou Electric Group's business area is global power distribution equipment demand, fully meet the different power distribution equipment demand of more than 50 countries around the world.

• Grow business with Hengfengyou

Our goal is to become the world's leading manufacturer of electrical equipment. The business, experience and technology accumulated over the years have benefited customers in more than 50 countries around the world. Once our customers establish a cooperative relationship, they are long-term trusted customers, because HENGFENGYOU ELECTRIC GROUP always insists on providing you with our best electrical products and services.

Qingdao Hengfengyou Electrical Engineering Co., Ltd

Smart Electric Global Service provider, Make life better!

Address: NO.506 Huicheng Road, Chengyang District, Qingdao City, China

Tel: +86-532-87936206 Fax: +86-532-87936207

Website: <http://www.hengfengyou.com>

Sales: hfy@hengfengyou.com

Service: service@hengfengyou.com

• The team energy

The HENGFENGYOU ELECTRIC team achieves synergy within the team to develop and produce specific solutions that meet all customer needs.

Our equipment is designed and researched by R&D services according to each country's electrical standards and helps manage your distribution network for optimal efficiency.

HENGFENGYOU's state-of-the-art production workshop and production equipment will produce high quality products according to your specifications.

HENGFENGYOU ELECTRIC GROUP has a certified quality control laboratory where electrical products are tested out of factory to ensure the reliability and optimal life of our products.

• Innovative development

For more than 30 years, HENGFENGYOU ELECTRIC GROUP has been designing innovative power distribution solutions to improve network security, optimize facility efficiency and become more environmentally friendly.

Every year, HENGFENGYOU ELECTRIC GROUP spends 6% of its revenue on research and development and innovation of energy saving development of distribution transformers; Intellectualization of distribution boards and substations; Research, development and improvement of transmission tower and cable materials. The R&D division has more than 30 engineers and technicians dedicated to designing and deploying new electrical solutions. Continuously meet the global demand for energy saving and intelligent electrical.

Qingdao International academician port Qingdao MINGSI is introduced as the strategic partner of Technology Co., Ltd. to provide smart power consumption solutions for global users. Through the intelligent monitoring of the Internet of things system, it can realize the remote monitoring, early warning, control and management of enterprise power transmission and distribution equipment and power consumption equipment, and finally achieve the goal of reducing fire accidents, reducing operating costs, and improving enterprise management efficiency.

HENGFENGYOU ELECTRIC



04

CATALOGUE

▪ Company profile	01
▪ KS Mining Oil-immersed Transformer	05
▪ KBSGZY Mining Explosion Isolation Transformer	07
▪ KSG Mining Explosion Isolation Transformer	10
▪ Technical Parameter	11
▪ Quantity Control	13
▪ TEST	14
▪ Installation	15
▪ Our factory	16
▪ CASE	17
▪ Certificate	19



KS MINING OIL-IMMERSED TRANSFORMER

PRODUCT OVERVIEW

- HENGFENGYOU KS13 series mining oil immersed transformer is used as the power distribution equipment of mine. The product has the characteristics of small volume, easy combination, reasonable structure, low loss and good thermal conductivity.
- It is suitable for mining oil immersed transformers with a voltage of 1250kv and below. This type of mine transformer is a general oil immersed transformer without explosion-proof requirements. It is mainly used as the power supply for mine lighting or electric drive during mine power distribution.
- The products are mainly sold to Iran, Kazakhstan, Uzbekistan, Kazakhstan, Pakistan, Indonesia, Chile and other countries and regions.
- Executive standard: IEC60076, GB1094 1~2-1996、GB1094. 3,5-2003 、GB/T6451-2008、GB12173-2008



KS MINING OIL-IMMERSED TRANSFORMER

PRODUCT FEATURE

-HENGFENGYOU KS series mining transformers are made of silicon steel sheets with high oriented magnetic conductivity. The iron core is a core type iron core and a fully inclined seam stacked iron core. The iron core column is a multi-level circular section to ensure low noise and low loss, and the oil tank structure is firm.

-The two sides of the box wall are welded with high and low voltage cable junction boxes, which are used as cable connection. The high voltage coil must have a rated voltage of 5%. The switching power supply must be cut off when the tap changer is used to convert the voltage to the voltage, and then the tap changer is adjusted to carry out the transformation voltage.

-The low-voltage side of the transformer allows "Y" type to be connected into 693v or "d" type to be connected into 400V power supply. The secondary end is directly installed in the cable junction box, and six porcelain sleeves are led out for the user to connect the transformer. The lifting lug welded on the box wall is used for the lifting of the transformer. The bottom of the transformer box is equipped with a drag sled. The drag sled is equipped with installation holes to supply ore and add ore car rollers when necessary.



>1000kva Mining Transformer



>500kva Mining Transformer

KBSGZY MINING EXPLOSION ISOLATION TRANSFORMER

PRODUCT OVERVIEW

KBSGZY mine flameproof mobile substation is mainly used in methane mixed gas and coal dust and has the danger of explosion in the mine, as a comprehensive mechanized mining equipment of coal mine power distribution device.



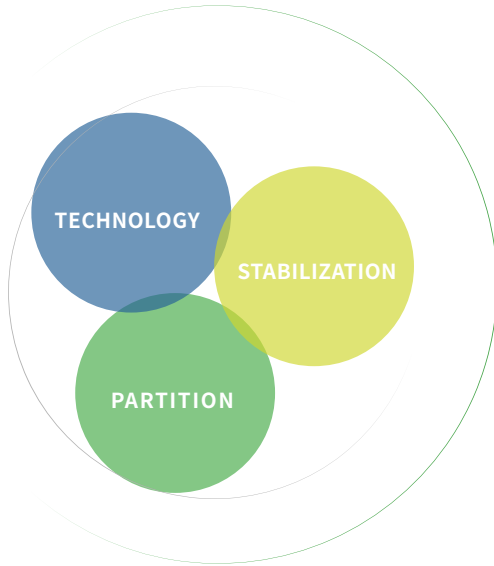
>1000kva KBSGZY Mining Explosion Isolation Transformer

PRODUCT FEATURE

DRY TYPE MINING EXPLOSION ISOLATION TRANSFORMER

>KBSGZY mining flameproof mobile substation KBSGZY is mainly composed of three parts: mine flameproof mobile substation special dry transformer, mine flameproof mobile substation special high voltage vacuum switch, mine flameproof mobile substation special low voltage protection box. High and low voltage switch with leakage, overload, short circuit, phase break, loss of voltage, PLC control and other functions.

>KBSGZY transformer shell for the top open cover flameproof structure, in the box cover is provided with four small hanging mix, used for lifting cover removal, box shell on both sides of the corrugated steel plate, box bottom thick steel plate, transformer high and low voltage side are provided with wiring flange, connecting high and low voltage switch. The box shell is provided with four large lifting lugs for the overall lifting of the transformer; Both ends of the box shell are welded with grounding bolts and grounding marks for connecting the external grounding wire.



>KBSGZY flameproof mobile substation dry transformer is composed of box shell, box cover, core assembly, insulation assembly, high voltage lead, low voltage lead and railway track trolley.

>KBSGZ transformer internal high and low voltage interlocking line and temperature control line are respectively connected with high and low voltage switch; Temperature control using PT100 platinum resistance or temperature relay, when the temperature inside the transformer is too high, send out overtemperature signal.

>Transformer core assembly consists of core, clip, insulation, etc. The core is made of high quality 30Q130 or 30Q120 cold-rolled oriented silicon steel sheet and multi-step fully inclined three-joint laminated structure to reduce no-load loss and no-load current. The cut of the core piece shall be coated with antirust liquid, and the surface of the core column and the yoke shall be coated with high temperature antirust and moisture-proof paint. The clamp is made of channel steel, and the pull screw structure is used for pulling up and down, and measures are taken to prevent the relative displacement of the core and the clamp, so as not to affect the quality of the product. The core insulation is made of grade C insulation material made in China.

KBSGZY MINING EXPLOSION ISOLATION TRANSFORMER

PRODUCT FEATURE

- > KBSGZY transformer insulation assembly includes the main vertical insulation, high and low voltage coil, coil compression and other structures. The main longitudinal insulation adopts high quality C grade insulation material; The high and low voltage coil is tightly wound, which improves the mechanical strength of the coil. The high and low voltage coils are made of C class insulated Nomex paper wrapped oxygen-free copper wire. The dielectric constant of Nomex paper and air is very close, and the electric field around the coils is uniform and the local release is small. The coil compaction adopts the structure of pressing nail and porcelain pressing block, and measures are taken to prevent loosening.
- > The high-voltage leads are led out by cable, and the low-voltage leads are led out by cable or copper busbar. The creepage distance and air gap are greater than the relevant provisions of China GB3836.3-2000. Under normal operating conditions, sparks, arcs and dangerous temperatures will not be generated, and the use of safe and reliable.
- > The trolley is fixed at the bottom of the box body with bolts, the wheels can be disassembled, and the trolley gauge is 900/600mm.



KSG MINING DRY-TYPE TRANSFORMER

PRODUCT FEATURE

· KSG mining dry-type transformer is produced by HENGFENGYOU TRANSFORMER. It is mainly used for power supply and distribution of various mines such as coal mine, iron mine, aluminum mine, copper mine, gold mine, silver mine, zinc mine, titanium mine, manganese and magnesium, as well as explosive dangerous gas places such as oil field, gas field and oil station. Rated capacity: 50 KVA-2000 KVA. It has the advantages of strong moisture-proof ability and good flame retardant performance.



TECHNICAL PARAMETERS

Rated Capacity (KVA)	Voltage group		Connection method	Loss(W)		No-load Current (%)	Impedance Voltage (%)
	HV	LV		No-load	Load		
KGS-100KVA	11KV	0.4 0.69KV	Dyn11 Dy11 Yd11	400	1570	1.8	4.0
KGS-200KVA				620	2530	1.1	
KGS-250KVA				720	2760	1.4	
KGS-315KVA				880	3470	1.2	
KGS-400KVA				980	3990	1.2	
KGS-500KVA				1160	4880	1.2	
KGS-630KVA				1300	5960	1.0	6.0
KGS-800KVA				1520	6960	1.0	
KGS-1000KVA				1770	8130	1.0	
KGS-1250KVA				2090	9690	1.0	

TECHNICAL PARAMETERS

DRY TYPE MINING EXPLOSION ISOLATION TRANSFORMER

Type	Rated capacity (KVA)	Voltage combination(KV)			Connection group grade	Loss(W)		No-load current (%)	Short-circuit resistance (%)	Weight (kg)	Dimensions L*W*H (mm)	Gauge (mm)
		High voltage (KV)	Tapping range (%)	Low voltage (KV)		No-load loss	Load loss					
KBSGZY-50/6	50	6	±5	0.693/0.4	Yy0(d11)	350	550	2.5	4	1950	2990*700*900	600
KBSGZY-100/6	100					520	920	2.5	4	2050	3040*720*1000	
KBSGZY-200/6	200					820	1550	2	4	2550	3150*760*1050	
KBSGZY-315/6	315			1.2/0.693	Yy0(d11)	1100	2150	1.8	4	3500	3560*875*1340	600
KBSGZY-400/6	400					1300	2600	1.8	4	3750	3565*900*1400	
KBSGZY-500/6	500					1500	3100	1.5	4	4040	3580*950*1545	
KBSGZY-630/6	630					1800	3680	1.5	4	4345	3580*950*1545	
KBSGZY-800/6	800			1.2/0.693	Yy0(d11) Yyno	2050	4500	1.0	4	5675	3760*990*1560	600 900
KBSGZY-1000/6	1000			3.45		2350	5400	1.0	4	6600	4000*1060*1615	
KBSGZY-1250/6	1250			1.2 3.45	Yyo Yyno	2750	6500	1.0	4	7610	4040*1175*1590	600 900
KBSGZY-1600/6	1600					3350	8000	0.8	4	9400	4250*1190*1865	
KBSGZY-2000/6	2000			3.45	Yyno Dyn11	3800	9500	0.6	4.5	9900	4250*1190*1865	
KBSGZY-2500/6	2500					4500	10600	0.6	5	13750	4550*1200*1900	
KBSGZY-3150/6	3150					5300	12500	0.6	5.5	16750	4800*1250*1800	
KBSGZY-50/10	50	10	±5	0.693/0.4	Yy0(d11)	390	680	2.5	4	2050	3090*720*1000	600
KBSGZY-100/10	100					560	1050	2.5	4	2400	3240*800*1050	
KBSGZY-200/10	200					950	1800	2.0	4	2950	3390*850*1300	
KBSGZY-315/10	315			1.2/0.693	Yy0(d11)	1300	2500	1.8	4	3600	3620*895*1450	600 900
KBSGZY-400/10	400					1500	3000	1.8	4	3860	3710*910*1500	
KBSGZY-500/10	500					1750	3500	1.5	4	4135	3880*950*1535	
KBSGZY-630/10	630					2000	4100	1.5	4	5480	3990*990*1585	
KBSGZY-800/10	800			1.2/0.693	Yy0(d11) Yyno	2300	5100	1.2	4	6270	4160*1060*1615	600 900
KBSGZY-1000/10	1000			3.45		2600	6100	1.2	4.5	6800	4250*1050*1680	
KBSGZY-1250/10	1250			1.2 3.45	Yyo Yyno	3100	7400	1.0	4.5	7750	4330*1175*1790	600 900
KBSGZY-1600/10	1600					3800	8500	1.0	5	9450	4380*1100*1850	
KBSGZY-2000/10	2000			3.45	Yy0(d11)	4500	9700	0.7	5	11850	4590*1200*1900	
KBSGZY-2500/10	2500					5200	10800	0.7	5.5	14850	5255*1360*1735	
KBSGZY-3150/10	3150					6100	12800	0.7	5.5	18850	5210*1300*1880	
KBSGZY-5000/10	5000					8000	18500	0.7	6.5	24800	5700*1480*1900	
KBSGZY-6300/10	6300					9500	21000	0.7	7	26800	5800*1560*1900	
KBSGZY-8000/10	8000					11500	25000	0.7	7.5	28700	6000*1650*1960	

TECHNICAL PARAMETERS

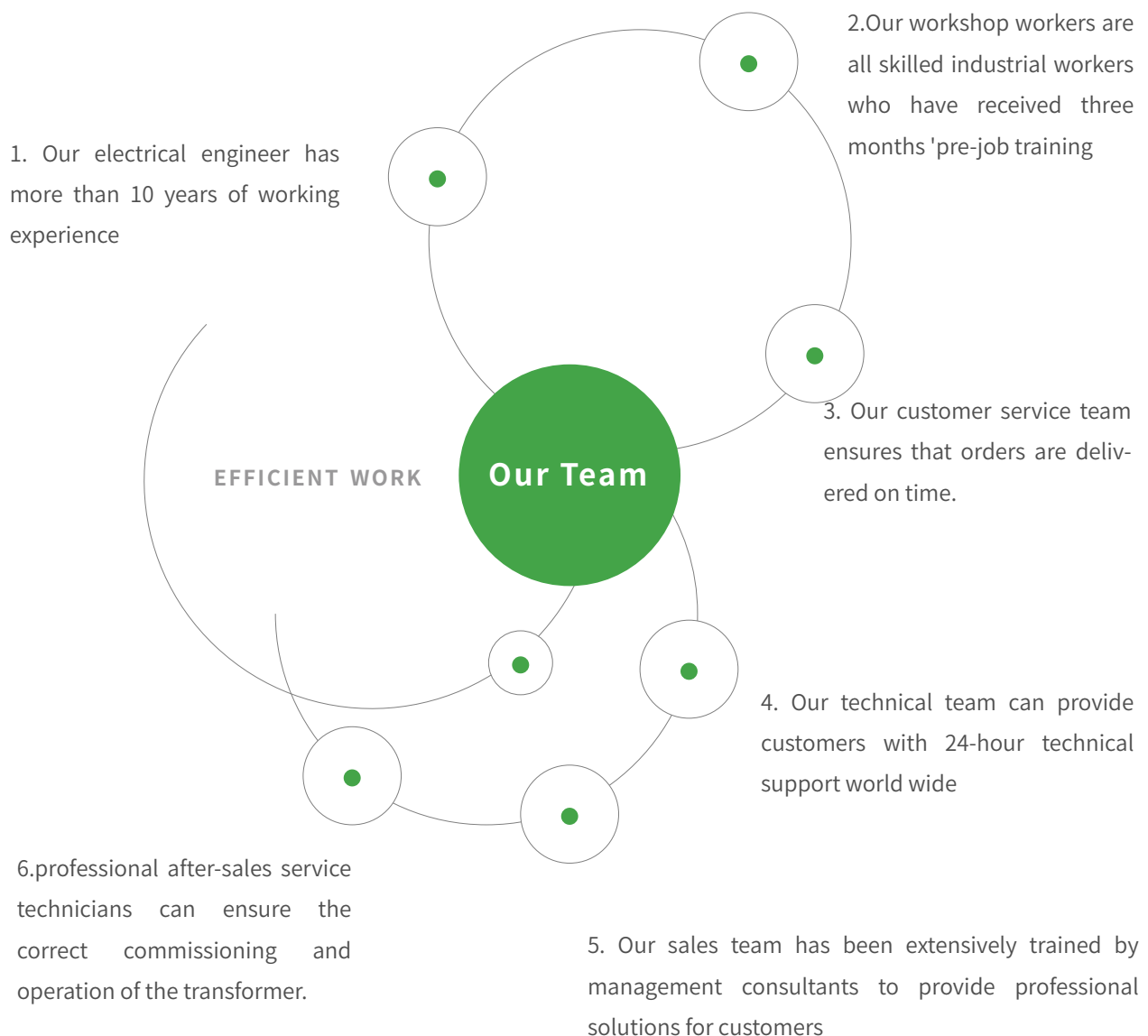
MINING OIL-IMMERSED TRANSFORMER

RatedPower(KVA)	H.V(KV)	L.V(KV)	Loss(KW)		Non-load Current (%)	Short Circuit Impedance (%)	Weight(KG)	
			No-load	Load			Oil Weight	Total Weight
KS-30KVA	20	0.4	0.1	0.63/0.6	1.5	4.0	75	295
KS-50KVA			0.13	0.91/0.87	1.3		88	395
KS-63KVA			0.15	1.09/1.04	1.2		95	420
KS-80KVA			0.18	1.31/1.25	1.2		103	480
KS-100KVA			0.2	1.58/1.50	1.1		115	540
KS-125KVA			0.24	1.89/1.80	1.1		130	645
KS-160KVA			0.28	2.31/2.20	1		145	740
KS-200KVA			0.34	2.73/2.60	1		175	885
KS-250KVA			0.4	3.20/3.05	0.9		195	1010
KS-315KVA			0.48	3.83/3.65	0.9		230	1205
KS-400KVA			0.57	4.52/4.30	0.8		255	1375
KS-500KVA			0.68	5.41/5.15	0.8		285	1620
KS-630KVA			0.81	6.2	0.6	4.5	350	1960
KS-800KVA			0.98	7.5	0.6		405	2310
KS-1000KVA			1.15	10.3	0.6		490	1690
KS-1250KVA			1.36	12	0.4		550	3315
KS-1600KVA			1.64	14.5	0.4		625	3795

RatedPower(KVA)	H.V(KV)	L.V(KV)	Loss(KW)		Non-load Current (%)	Gauge vertical /horizontal (mm)	Weight(KG)		
			No-load	Load			Machine Weight	Oil Weight	Overall Weight
KS-50KVA	106	0.4	0.17	0.87	2.0	660/630	0.248	0.110	0.410
KS-80KVA			0.25	1.25	1.8		0.335	0.130	0.570
KS-100KVA			0.29	1.50	1.6		0.360	0.140	0.610
KS-160KVA			0.40	2.20	1.4		0.505	0.190	0.790
KS-200KVA			0.48	2.60	1.3		0.585	0.210	1.050
KS-250KVA			0.56	3.05	1.2		0.715	0.235	1.150
KS-315KVA			0.67	3.65	1.1		0.820	0.255	1.270
KS-400KVA			0.80	4.30	1.0		0.980	0.290	1.580
KS-500KVA			0.96	5.10	1.0	600/790	1.155	0.335	1.790
KS-630KVA			1.20	6.20	0.9		1.430	0.440	2.200
KS-800KVA			1.40	7.50	0.9		1.860	0.530	2.850
KS-1000KVA			1.70	10.30	0.7		2.035	0.610	3.430

QUALITY CONTROL

- HENGFENGYOU has formulated strict workflow and ISO standards to ensure to provide customers with first-class mining Transformer and the best service.
- The HENGFENGYOU team works collaboratively within the team to develop and produce, Mining Transformer solutions that meet all customer needs.
- Our products are designed and studied by R & D services according to the electrical standards of each country and help manage your distribution network for optimal efficiency.



TEST

DRY TYPE MINING EXPLOSION ISOLATION TRANSFORMER

1.1 Preparation and inspection before use

1.1.1 Carefully read this instruction manual and the instruction manual of high and low voltage switches before use;

1.1.2 Check the product nameplate to check whether the electrical parameters such as capacity, voltage and connection group are consistent with the actual electrical equipment;

1.1.3 Adjust the high-voltage tap voltage to suit the input voltage. The power supply must be cut off first, and then the tap flange cover can be opened to adjust the high-voltage tap voltage. The flange cover has a sign of "No open cover with power on". The tap voltage and the corresponding connection piece position are shown in Sheet 1.

Sheet 1 High-voltage connection piece position and corresponding voltage

Y Connect the connector position	X1-Y1-Z1	X2-Y2-Z2	X3-Y3-Z3
D Connect the connector position	2-3	3-4	4-5
Tapping voltage	+5%	Rated Voltage	-5%

1.1.4 adjust the low voltage to make it compatible with electrical equipment. The power supply must be cut off first, and then the connecting flange cover must be opened to adjust the low voltage to realize voltage conversion. The flange cover is provided with a sign board of "do not open the cover with electricity". See Table2for the location of low voltage and corresponding connecting piece.

Sheet 2 Low-voltage connection piece position and corresponding voltage

Position of connection strap	x-y-z	a-y,b-z,c-x
Line Joins	y	d
Corresponding at low voltage 1200 / 693v	1200V	693V
Corresponding at low voltage 693 / 400v	693V	400V

1.1.5 Check that the shell, parts, etc. should be free of damage;

1.1.6 The explosion-proof surface should be free from damage and corrosion;

1.1.7 The button operation is flexible and the switch works normally;

1.1.8 Check whether each fastener is loose, and re-tighten it once;

1.1.9 The electrical connections are in good contact, reliable, and pressed tightly;

1.1.10 The incoming and outgoing cables should be compressed and sealed;

1.1.11 The electrical insulation performance of each component is good, and the short-term power frequency withstand voltage is qualified

INSTALLATION

Installation clearance size

Installation clearance size: the distance between the protruding part of the shell and the roadway support, railings and moving harvesters shall not be less than 0.5m; The width of sidewalk and inspection channel is not less than 0.8m; The distance between the highest point and the lowest point of the roof or support is not less than 0.25m, leaving a certain operating space.

Preparation, start-up and commissioning before trial operation

After the items are qualified, high voltage can be sent for no-load trial operation, check the noise and temperature rise of the transformer, etc., until no abnormal phenomenon of no-load operation, load can be connected.

CARRY&PACKAGE



THE CORNER OF OUR FACTORY

CUSTOMER-ORIENTED CREATE VALUE FOR CUSTOMERS



▲ FACTORY DISPLAY



▲ FACTORY DISPLAY

Hengfengyou Electric has 22000 square meters of modern plant, with a monthly delivery capacity of up to 200 Mining Transformer, and has fully passed the ISO9001, ISO14001, SA8000, BSCI and other market access standards reviewed and issued by international certification bodies. At present, the company has 10 senior engineers, 30 senior technicians and more than 300 employees, with an annual output value of US \$100 million

MAKE FRIENDS ALL OVER THE WORLD



▲ KBSGZY DRY TYPE MINING EXPLOSION ISOLATION MOVEABLE TRANSFORMER SUBSTATION

CASE

Hengfengyou Electric has always been committed to providing the best quality Mining Transformer products for global customers



Case show

make life better

Mainly used for power supply and distribution of coal mine, iron ore, aluminum ore, copper ore, gold ore, silver ore, zinc ore, titanium ore, manganese, magnesium and other mines, as well as oil field, gas field, oil station and other explosive dangerous gas sites.



SMART ELECTRIC GLOBALSERVICE PROVIDER

— — —

MAKE LIFE BETTER

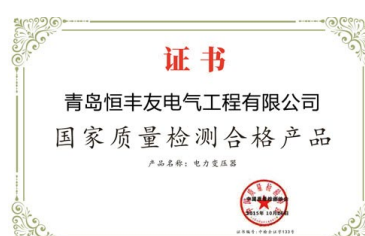
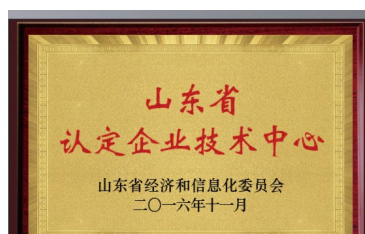


CERTIFICATE

QUALIFICATION CERTIFICATION



OUR HONOR



PRE-SALE SERVICE:

1. ISO certified excellent Manufacturer
2. Third-party authoritative certifications: CE, CB, SASO, CCC, KEMA etc
3. Flexible payment: T/T, LC, O/A
4. Sufficient inventory, fast delivery time and long validity of the price
5. The whole process of picture tracking can be realized in production and transportation
6. Experienced professional sales team and a strong technical team
7. Sincerely invite customers to visit the company for guidance

AFTER-SALES SERVICE:

1. If there is any quality problem after receiving the goods, you can return the goods free of charge or ship new products
2. We provide our customers with a 1-year product warranty
3. Provide 24-hour, 365-day technical guidance worldwide
4. The VIP customers enjoy our promotional activity
- trained by management consultants, is able to provide professional solutions for customers.
4. Our technical team is ready for 24-hour technical support worldwide.
5. Our customer service team ensures on time delivery.



Call Us For Details

+86 158 5325 2696 (JACK)

+86 158 5326 5269 (ALISA)



HENG FENG YOU

· Make Life Better ·

青岛恒丰友电气工程有限公司

QINGDAO HENGFENGYOU ELECTRICAL ENGINEERING CO., LTD

Hengfengyou Electric Group

Hengfengyou (Qingdao) Transformer Co., Ltd

Address: Fengju Road, Chengyang District, Qingdao City, Shandong Province, China

Hengfengyou (Qingdao) Transmission tower Co., Ltd

Address: Shuangyuan Road, Chengyang District, Qingdao City, Shandong Province, China

Hengfengyou (Qingdao) Cable Co., Ltd

Address: Jifa Longshan Road, Jimo District, Qingdao, Shandong Province, China

Hengfengyou (Qingdao) Panel Builder Co., Ltd

Address: Jifa Longshan Road, Jimo District, Qingdao, Shandong Province, China

Hengfengyou (Yancheng) special transformer Co., Ltd

Address: Longteng Road, Longgang Town, Yandu District, Yancheng City, Jiangsu Province, China

Hengfengyou (Liaocheng) transformer Co., Ltd

Address: Fenghuang Industrial Park, Liaocheng City, Shandong Province, China

QINGDAO HENGFENGYOU ELECTRICAL ENGINEERING CO., LTD

Tel: +86-532--8793 6206

Fax: +86-532-8793 6207

WhatsApp: +86 158 5325 2696 (Jack)

+86 158 5326 5269 (Alisa)

Website: www.hengfengyou.com

Email: hfy@hengfengyou.com

Address: 506 Huicheng Road, Chengyang District, Qingdao City, China