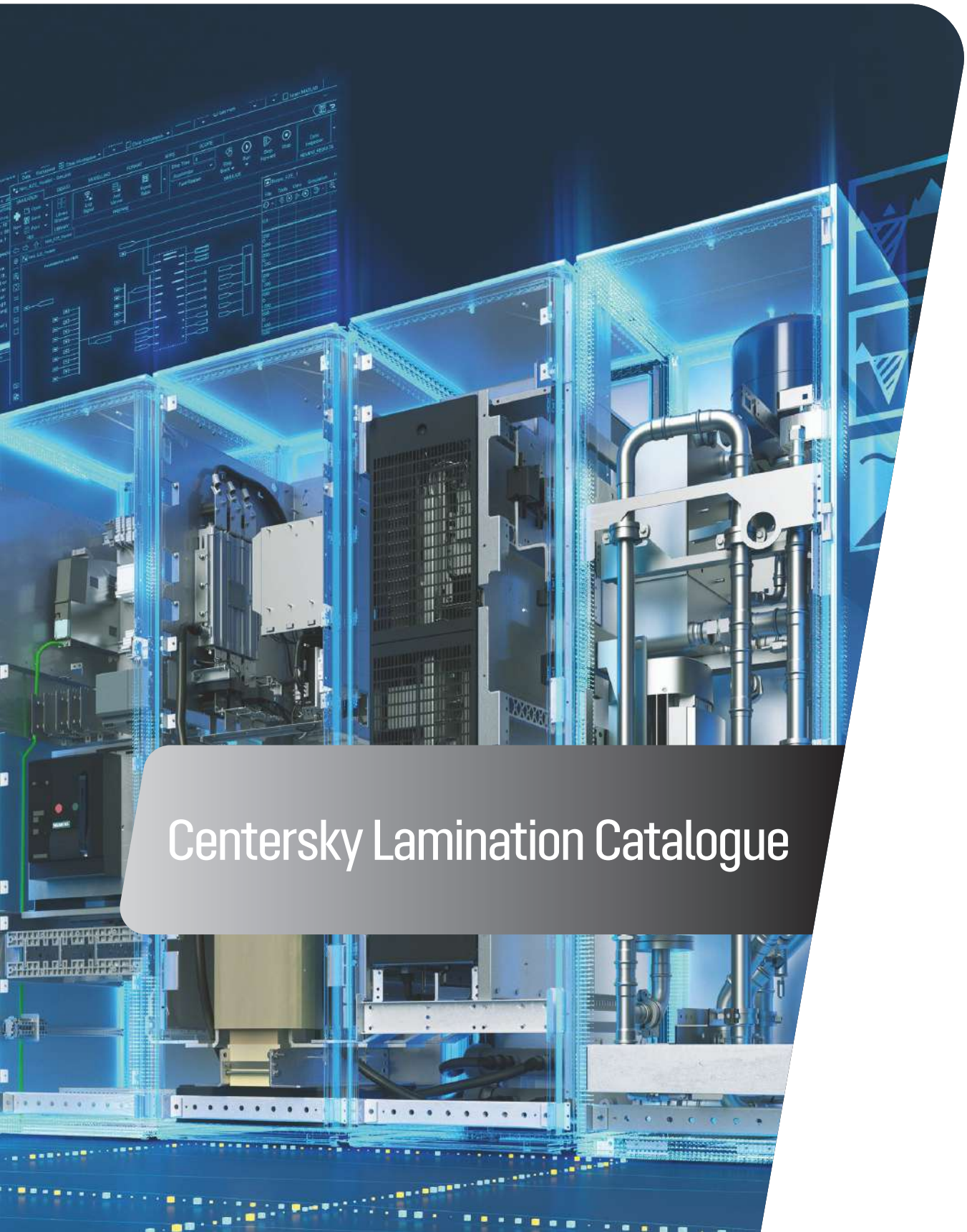
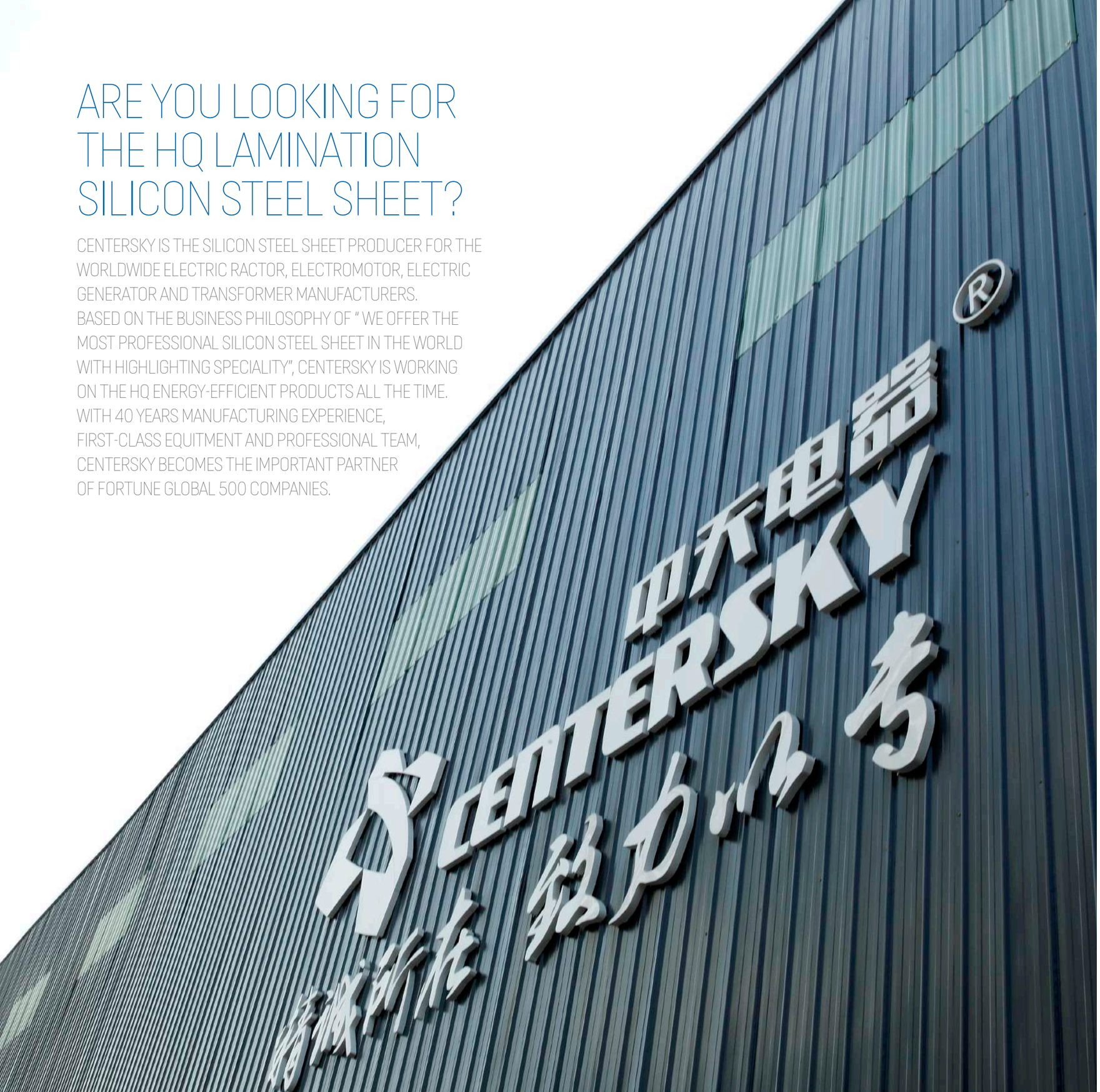
CENTERSKY



Centersky Lamination Catalogue

ARE YOU LOOKING FOR THE HQ LAMINATION SILICON STEEL SHEET?

CENTERSKY IS THE SILICON STEEL SHEET PRODUCER FOR THE WORLDWIDE ELECTRIC RACTOR, ELECTROMOTOR, ELECTRIC GENERATOR AND TRANSFORMER MANUFACTURERS. BASED ON THE BUSINESS PHILOSOPHY OF " WE OFFER THE MOST PROFESSIONAL SILICON STEEL SHEET IN THE WORLD WITH HIGHLIGHTING SPECIALITY", CENTERSKY IS WORKING ON THE HQ ENERGY-EFFICIENT PRODUCTS ALL THE TIME. WITH 40 YEARS MANUFACTURING EXPERIENCE, FIRST-CLASS EQUITMENT AND PROFESSIONAL TEAM, CENTERSKY BECOMES THE IMPORTANT PARTNER OF FORTUNE GLOBAL 500 COMPANIES.



Menu

about us 04-05
Manufacturing Process 06
Environmental Initiatives 07
Technology Patent 08-09
Growth Situation 10-11
EI Core Lamination 12-13
3PH lamination 14-15
UI lamination 16
READY-CORE laminations 17
Certified / Global Customers 18-19

CENTERSKY PROVIDES WORLD-CLASS QUALITY SILICON STEEL SHEET THAT'S DESIGNED FOR VERY SPECIFIC APPLICATIONS, FROM TRANSFORMER AND BALLAST RESISTOR TO HIGH-END APPLIANCES AND MORE.

about us

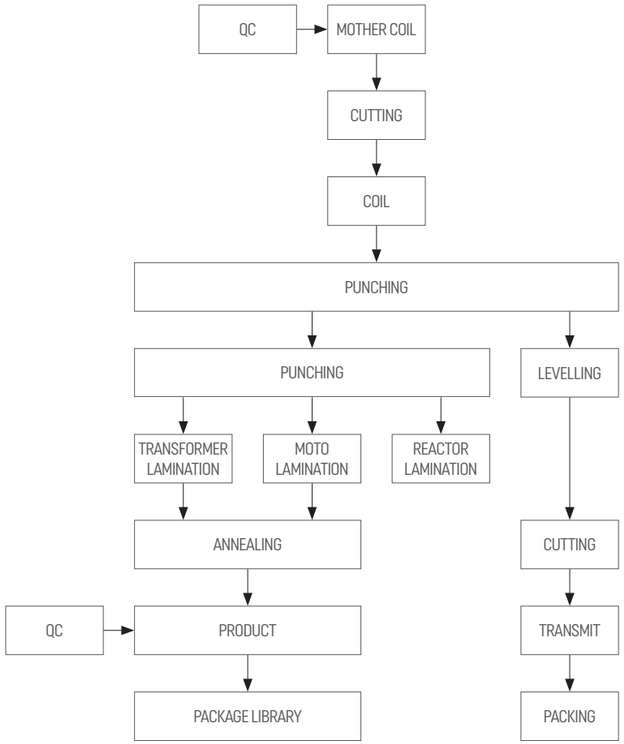
Centersky is a family company, owned by the same family since it was founded back in 1974. As the industy leader, Centersky treasures every customer, improves each innocation and devotes itself to satisfy the demand of energy-efficient.

Centersky is a global professional electromagnetic silicon steel manufacturing leader, specialized in the production of a variety of standard and non-standard series EI lamination, three-phase core, core ballasts, TL core series and a variety of reactor core products, widely for electronic transformers, power transformers, sensors, voltage regulator, computer power, leakage protection switch, welding machine, magnetic amplifiers, reactor, and instrumentation industries.

As the most professional manufacturer of magnetic laminations, Centersky has more than 40 years of professional experience. The floor area of the company is nearly 15,000 square meters. There are about 30 quality monitoring people among 200 employees. Centersky Provides high quality products to the customers worldwide (including Fortune 500). The excellent quality and sincere service we offered are recognized by our customers .

Manufacturing Process

Centersky offers the custmoized value-added services to enhance the efficiency and reduce the production process of customers.Centersky helps the customer develop products together and collaborate effictively.
Centersky is working on reduing the iron loss to improve the performance of the production. Double Annealing has been widely used in Centersky after numerous tests of R&D team.

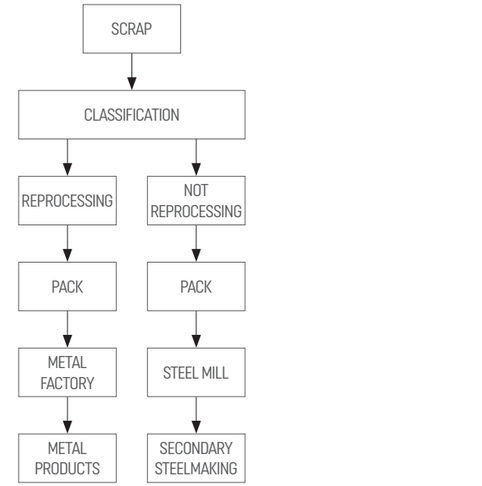


Environmental Initiatives

While the steel sector already produces a large portion of its product by recycling scrap metal, additional efficiency in the steel sector supported by its reuse, repair, recycling and downcycling can partially reduce greenhouse gas emissions and help slow the growth of emissions in the industry. To maximise the impact of these circularity measures, some key measures and policies are needed – and in addition to circularity measures, the primary production of steel still needs to be decarbonised.

Recycling and downcycling

The key raw materials needed for steel recycling are waste steel (also referred to as scrap) and iron, the need for which depends on the availability and quality of the steel scrap. Electricity is usually used as a power source in the process and is often complemented with other sources of energy and carbon such as natural gas or coal.
In an Electric Arc Furnace (EAF), at very high temperatures between 1800°C – 3000°C the steel scrap is melted together with iron and some other materials to produce liquid steel. The liquid steel then goes into a metallurgy treatment process. The steel is then cast and formed into the desired shape before it is distributed.
The accumulation of impurities can be improved by better sorting, simpler product design and the development of new technologies for the purification of recycled steel.
According to some scenarios, the current scrap recovery and recycling patterns could lead to a 50% loss of usable steel stock by 2100; it is important to slow this loss of materials through better sorting and recycling practices.



centersky improve design for better sorting and recycling and to ensure longer-lasting products, in combination with improving waste-management practices. Compared with the United Nations Environmental Programme's recycling statistics, our results show the importance of taking a life-cycle perspective to estimate losses of metals to develop effective circular economy strategies.

Technology Patent

Growth Situation

2006 Established Centersky ZhiJie Trade Limited, which was in charge of the product promotion at home and abroad.

2005/5/19 Hu Jintao, President and General Secretary of CCP, visited Centersky and wrote an inscription: Harvesting Greater Achievements, Composing New Chapters

2005 Completed the third phase of factory building of 15000 square meters;

2003 Moved to a new factory—a green environmentally friendly garden factory

2000 All branches integrated into a corporation named Centersky Electric Appliance Co., Ltd

1988 It was the first high speed development period of Centersky. “Centersky” electromagnetic silicon steel took the lion’s share in East China.

1979 Established a chemical branch

1974/7/21 Established a submersible pump plant

Mr. Xu Xianliang, the Founder, established a school-run silicon steel factory affiliated to Nanzha Middle School, jiangyin, the parent of Centersky Electric Appliance Co., Ltd.

HARVESTING GREATER ACHIEVEMENTS COMPOSING NEW CHAPTERS

2012 Established Centersky Group (HK) Limited in Hongkong; Mr. Jag Xu, CEO of Centersky Electric Appliance, is the Chairman of the Board of Directors.

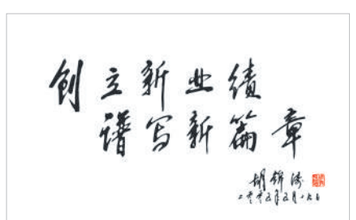
Provided technical assistance and cheered for Shanghai World Expo;

2010 It was the second high speed development period of Centersky Electric Appliance Co., Ltd. So far, the electromagnetic products made by Centersky took the share of 30% in China and 11% in the global market. As a world known silicon steel manufacturer, nearly half of the world’s top 500 enterprises purchased our products.

2009 Established Montessori (Jiangyin) Baby School

Introduced and established Shane English school-- the earliest English training institution, which trained a number of English talents for enterprises, institutions and schools.

2007 Established Centersky GuanYun Photoelectric Technology Limited, which became the designated display provider for American Apple computer and Korean LG and our shipments took 30% share of the two companies.



EI Core Lamination

EI laminations are one of the most popular design types for manufacturing single phase transformers. The simple, single coil layout (sometimes referred to as a "shell type" transformer) offers a cost effective method for producing a wide variety of transformers. These range from small PCB mounted units through to much larger types that may be found in control panels or stand alone enclosures.

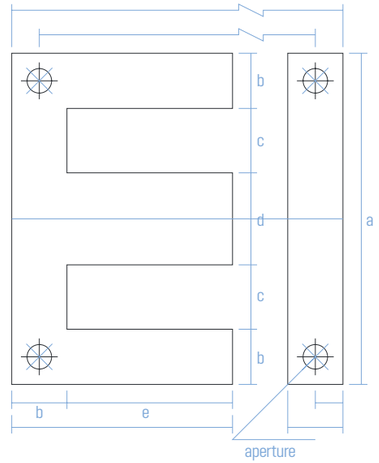
EI Core Lamination Features

- Low iron loss, high magnetic flux strength, comes up to the international advance standard.
- Slight thickness difference between the horizontal and the longitudinal direction, promising the high lamination factor.
- Processing Performance: Easily punched and cut, high dimensional accuracy.
- Insulating Coating: Uniform color, good insulation, strong adhesive, high heat resistance, high putrescibility.
- Smooth surface, no rust, no rolling marks, no cold lap, no crease, no bubble cell, no delamination defects.

Scope

Control Transformer | Power Transformer | Ballast Resistor | UPS | Charger

EI Core Lamination Table



Type	a	b	c	d	e	f	Holes	ø	Gap
EI-30	30	5	5	10	15				
EI-35	35	5	7.5	10	19.5				
EI-40	40	6.65	8	10.7	20.5	7	2		
EI-41	41	6	8	13	21				
EI-42	42	7	7	14	21		2	ø3.5	0.45
EI-48	48	8	8	16	24				
EI-50	50	8	9	16	25.5				
EI-57	57	9.5	9.5	19	28.5				
EI-57	57	9.5	9.5	19	28.5		4	ø4	
EI-60	60	10	10	20	30		4	ø5	
EI-66	66	11	11	22	33				
EI-66	66	11	11	22	33		4	ø4	
EI-66	66	11	11	22	33		4	ø4	0.7 0.8 0.9
EI-67	67	9.45	13.05	22			4		0.7
EI-75	75	12.5	12.5	25	37.5		4	ø5	Round
EI-76.2	76.2	12.7	12.7	25.4	38.1		4	ø5.5	
EI-76.2	76.2	12.7	12.7	25.4	38.1		4	ø5	T=1.0 T=1.4
EI-78	78	13	13	26	39		4	ø5	
EI-84	84	14	14	28	42		4	ø6	
EI-85.8	85.8	14.3	14.3	28.6	42.9		4	ø5	
EI-85.8	85.8	14.3	14.3	28.6	42.9		4	ø5	1.3 1.6 1.8 2.0 1.2 1.0 2.4 0.9 0.7
EI-95.25	95.25	15.875	15.875	31.75	47.625		4	ø5.5	
EI-96	96	16	16	32	48		4	ø6	
EI-96	96	16	16	32	48		4	ø6	1.0 1.4 2.5 2.7
EI-105	105	17.5	17.5	35	52.5		4	ø6	
EI-105	105	17.5	17.5	35	52.5		4	ø6	1.0 1.4 1.6 2.0 2.2 2.8
EI-108	108	18	18	36	54		4	ø6	
EI-114	114	19	19	38	57		4	ø6	
EI-114	114	19	19	38	57		4	ø6	2.7
EI-120	120	20	20	40	60		4	ø7	
EI-122	122	22	28	22	61	28	4	ø6	
EI-126	126	21	21	42	63		4	ø7	
EI-133.2	133.2	22.2	22.2	44.4	66.6		4	ø7	
EI-133.2	133.2	22.2	22.2	44.4	66.6		4	ø7	1.3
EI-150	150	25	25	50	75		4	ø8	
EI-152.4	152.4	25.4	25.4	50.8	76.2		4	ø8	
EI-162	162	27	27	54	81		4	ø8	
EI-162	162	27	27	54	81		4	ø10	
EI-168	168	28	28	56	84		4	ø10	
EI-171	171	28.5	28.5	57	85.5		4	ø10	
EI-180	180	30	30	60	90		4	ø8	
EI-180	180	30	30	60	90		4	ø10	
EI-190.5	190.5	31.75	31.75	63.5	95.25		4	ø8	
EI-192	192	32	32	64	96		4	ø10	
EI-210	210	35	35	70	105		4	ø10	
EI-228	228	38	38	76	114		4	ø10	
EI-240	240	40	40	80	120		4	ø10	
EI-254	254	48	55	48	164		4	ø12	
EI-300	300	50	50	100	150		4	ø12	
EI-174*	174	29	29	58	87		4	ø10.5	
EI-222*	222	37	37	74	111		4	ø10	
EI-270*	270	45	45	90	135		4	ø12	
EI-360*	360	60	60	120	180		4	ø12	
EI-228*	228	38	38	76	76		4	ø9.5	Partial hole
EI-28*	59	14	14	28	45		4	ø5	
EI-150*	150	25	25	50	95		4	ø8	
E70*	222	38	38	70	111		4	ø10	
EI-60*	210	37.5	37.5	60	210		4	ø10	
EI-60*	180	30	30	60	180		4	ø10	
EI-56*	200	28	44	56	69		4	ø12	
EI-162*	146.05	20.6	31.8	41.3	66.8		4	ø5.5	
EI-251*	228.6	31.75	50.8	63.5	139.7		6	ø9.5	

- Marked "*" model is manufactured by manually punch

- Calculate core area using transformer specifications.
- Choose core size to fit winding and bobbin.
- Minimize air gap for higher magnetic flux density.
- Optimize core size for low core loss and reduced heat generation.
- Consider manufacturing limitations and cost when selecting core size.

3PH lamination

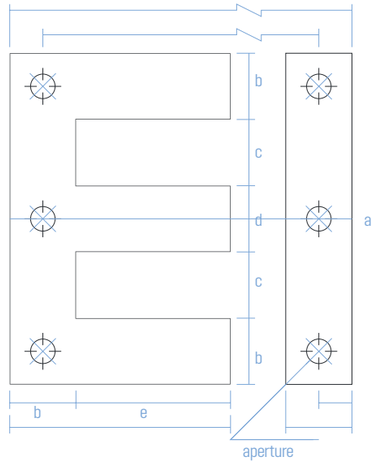
3UI lamination cores are used in the manufacturing of three-phase transformers. In transformers with 3 UI lamination cores, each of the three lamination core arms bears a coil body. In contrast to the EI sheets, the 3UI sheets cannot be welded since the joints of the E and I sheets are within the coil body. The E and I sheets therefore have to be nested reciprocally during transformer manufacturing. As a result, either one or multiple identical sheets are slid in from one side of the coil body. Nesting machines are available for the nesting of 3UI sheets, which can significantly reduce manufacturing times.

3PH lamination Features

- Low core loss: Low core loss reduces heat generation, resulting in improved efficiency and longer lifespan.
- High permeability: High permeability enables stronger magnetic fields and better performance in AC motors and generators.
- Stacking factor: High stacking factor provides more space for winding and increases the overall efficiency of the motor or generator.
- Magnetic flux density: High magnetic flux density ensures efficient energy transfer in AC motors and generators.
- Insulation coating: Insulation coatings protect against short circuits, reducing the risk of damage and increasing safety.

Scope

Control Transformer | Power Transformer | Ballast Resistor | UPS | Charger



3PH lamination Table

Type	a	b	c	d	e	f	Holes	ø	Gap
3PEI-10									
3PEI-13									
3PEI-17.5	87.5	17.5	17.5	17.5	52.5	17.5	4	6	
3PEI-20	100	20	20	20	50	20	4,6	6	
3PEI-20	100	20	20	20	60	20	4,6	6	
3PEI-22	110	22	22	22	66	22	4,6	8	
3PEI-25	125	25	25	25	75	25	4,6	8	
3PEI-30	150	30	30	30	75	30	4	8	
3PEI-30	150	30	30	30	90	30	6	8	
3PEI-32	160	32	32	32	80	32	4	8	
3PEI-32	160	32	32	32	96	32	4	8	
3PEI-34*	170	34	34	34	102	34	4	8	
3PEI-35	175	35	35	35	105	35	4	10	
3PEI-38	190	38	38	38	95	38	6	10.5	
3PEI-38	190	38	38	38	114	38	6	8	
3PEI-40	200	40	40	40	100	40	4	10	
3PEI-40	200	40	40	40	120	40	4,6	10	
3PEI-44	220	44	44	44	132	44	6	8	
3PEI-45	225	45	45	45	135	45	4,6	10	
3PEI-45.6*	228	45.6	45.6	45.6	114	45.6	6	8	
3PEI-50	250	50	50	50	125	50	4	10	
3PEI-50	250	50	50	50	150	50	6	11	
3PEI-55	275	55	55	55	165	55	6	12	
3PEI-56	280	56	56	56	168	56	4	12	
3PEI-60	300	60	60	60	150	60	6	10	
3PEI-60	300	60	60	60	180	60	6	12	
3PEI-61	305	61	61	61	152.5	61	6	10.5	
3PEI-65	325	65	65	65	162.5	65	6	12	
3PEI-70	350	70	70	70	210	70	6	13	
3PEI-80	400	80	80	80	240	80	6	14	
3PEI-90*	450	90	90	90	270	90	6	14	
3PEI-100*	500	100	100	100	300	100	6	16	
3PEI-120*	600	120	120	120	360	120	6	16	
2PEI-122	122	22	28	22	61	28	4	6	
3PEI-61*	288	61.5	52	61	144		4	12	NS
3PEI-34*	170	34	34	34	102		4	8	
3PEI-45.6*	228	45.6	45.6	45.6	114		6	8	
3PEI-90*	450	90	90	90	270		6	14	
3PEI-100*	500	100	100	100	300		6	16	
3PEI-120*	600	120	120	120	360		6	16	
3PEI-27*	141	27	30	27	80		4	8	

- Marked "*" model is manufactured by manually punch

- Determine the required core dimensions from transformer specifications.
- Choose laminations that fit the winding and bobbin size.
- Optimize core size for low core loss and reduced heat generation.
- Consider the stacking factor to maximize winding space and improve efficiency.
- Balance size and weight to achieve desired performance while maintaining manufacturability.

UI lamination

UI lamination cores are used as an alternative to EI lamination cores for single-phase transformers. They allow for the construction of slimmer transformers. In transformers with UI sheets, both arms of the U sheet bear a coil body each. UI sheets cannot be welded since the cut edges of the U and I sheets lie within the coil body. They therefore have to be reciprocally nested. This can be done manually or with a nesting machine.

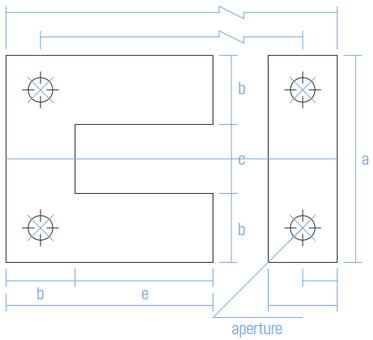
UI lamination Features

- High magnetic flux density for efficient energy transfer.
- Low core loss for reduced heat generation.
- High stacking factor for maximum winding space.
- High permeability for stronger magnetic fields.
- Optimal thickness for high magnetic saturation and reduced core loss.

UI lamination Table

TYPE	a	b	c	d	e	f	holes	ø	Gap
UI-16	48	16	16		48	16	4	4.5	
UI-35	105	35	35		105	35	4	10	
UI-50	150	50	50		150	50	4	8,11	
UI-60	180	60	60		60	60	4	12	
UI-98	98	30	38		47.5	30	4	8	0.45
UU-13	50	13	24		21	13			
UI-38*	114	38	38		114		4	8	
UI-40*	120	40	40		120		4	10	
UI-44*	132	44	44		132		4	8	
UI-70*	210	70	70		210		4	13	
UI-80*	240	80	80		240		4	14	
UI-55*	170	55	60		180			12	

- Marked "*" model is manufactured by manually punch



- Determine core dimensions from transformer specs and winding/bobbin size.
- Choose high stacking factor for maximum winding space and efficiency.
- Opt for low core loss for reduced heat generation and better energy efficiency.
- Optimize core size for desired performance characteristics.
- Consider manufacturing limitations and cost when selecting core size.

READY-CORE laminations

The separate, latchable sheets of the EI range are characterised, as a special range, by their integrated latching mechanism which in turn allows for particularly quick and economical processing. Separate, latchable sheets do not have to be nested reciprocally but can rather be slid into the coil body from either side in packages and snapped together. We offer processing machines (tamping machine type 300) for this. The usual DIN standardised EI coil bodies can be used.

READY-CORE laminations Features

- Reduced assembly time, improving production efficiency and lowering costs.
- High accuracy, ensuring precision and consistency in performance.
- Versatility in various shapes and sizes for different applications and designs.
- Customization to specific requirements for tailored solutions.
- Quality materials for durability, reliability, and long-lasting performance.

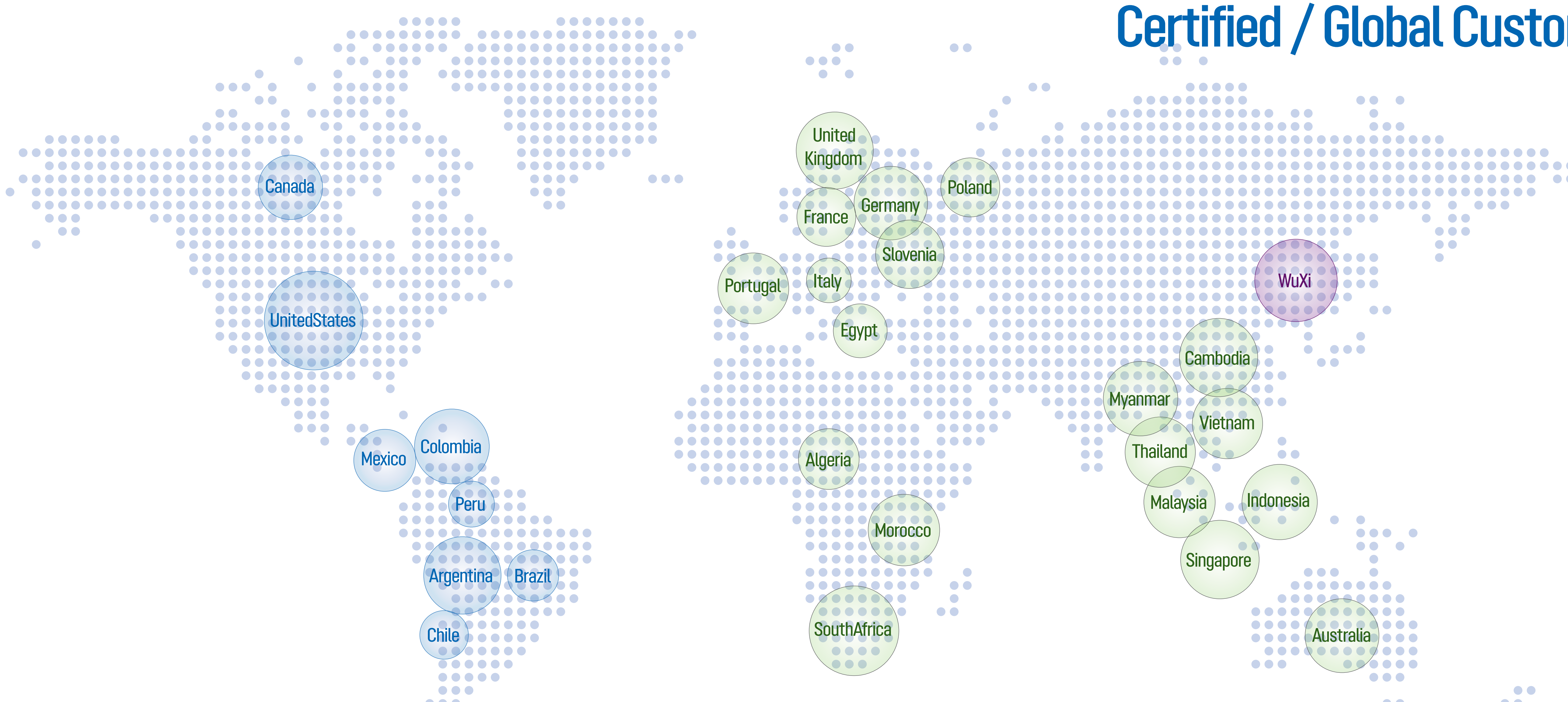
READY-CORE laminations Table

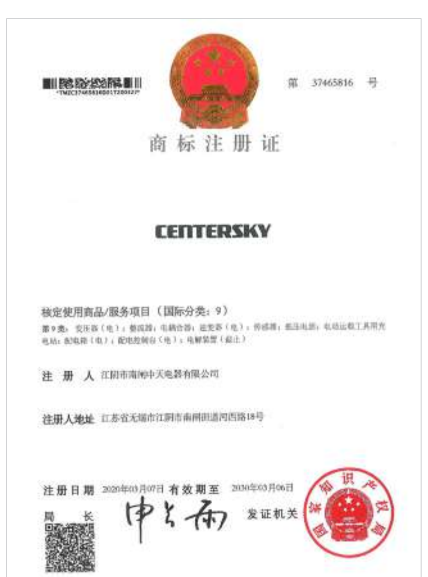
TYPE	length	width	high	ø	other
38×190	190	38	3	10	
38×190	190	38	3	12	
45×225	225	45	3	10	
45×225	225	45	3	12	
38×95	95	38	2	4	
40×40	40	40			
38×40	40	38			
40×200	200	40	3	10	
40×200	200	40	3	11	
30×90	90	30			
30×150	150	20	3	8	
35×170	170	35	3	10	
35×197	197	35	3	10	
30×170	170	30	3	10	
30×175	175	30	3	10	
EIB114 T=2.0	114	19	4	7	Need mold cost
EIB114 T=2.6	114	19	4	7	Need mold cost
EIB114 T=3.0	114	19	4	7	Need mold cost
35×107	107	35			
35×143	143	35			

- Determine core dimensions from transformer specs and winding/bobbin size.
- Choose high stacking factor for maximum winding space and efficiency.
- Opt for low core loss for reduced heat generation and better energy efficiency.
- Optimize core size for desired performance characteristics.
- Consider manufacturing limitations and cost when selecting core size.

CENTERSKY

Certified / Global Customers




商标注册证

CENTERSKY


商标注册证


Certificate of Registration

nqa

CENTERSKY CONQUERS THE MARKET WITH QUALITY AND LETS KNOW OF THE WORLD

Jiangyin Centersky Electrical Appliance Co., Ltd

18# Hexi RD. Nanzha Subdistrict,
Jiangyin 214400, Jiangsu, China
Tel:+86 510 8617 8333
Fax:+86 510 8618 6167
info@centersky.com.cn
www.centersky.cn