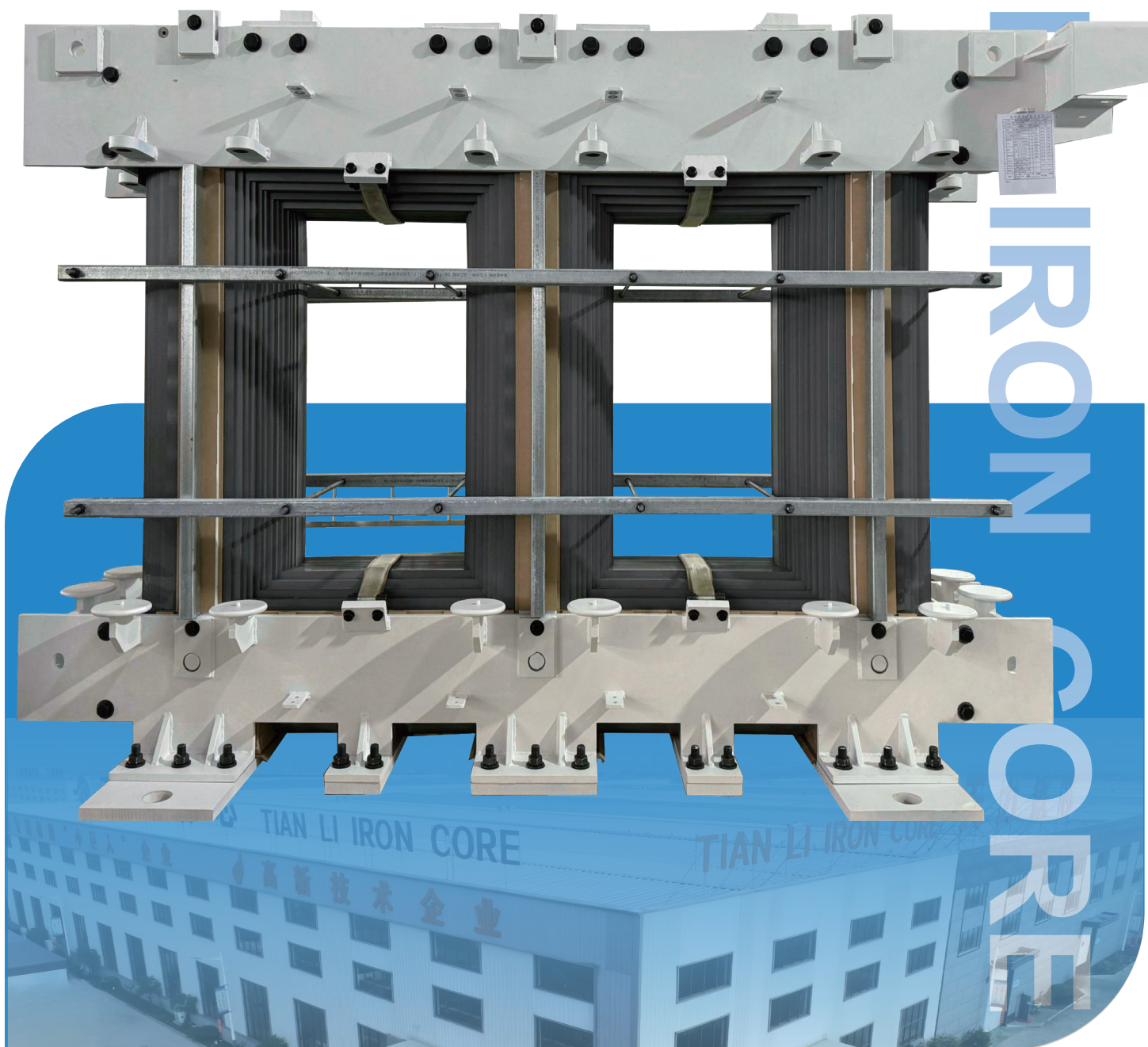




TIANLI IRON CORE

Customized Solution Provider



CONTENTS

天力铁芯

TIAN LI IRON CORE

TIAN LI IRON CORE



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ABOUT

TIANLI IRON CORE

Established in 2009, Tianli Iron Core is a leading full-solution provider of transformer core materials and assemblies. We specialize in slitted coils, core laminations, and precision-assembled magnetic cores for distribution and power transformers. With a strong technical foundation and materials sourced from top-tier mills like Shougang and Baosteel, we deliver reliable, high-performance solutions tailored to each client's needs. Our experienced team ensures quality, flexibility, and responsive service across global markets. From material selection to final core assembly, Tianli is committed to powering your success—efficiently and dependably.

20+

Years of Focus

65,000+

Square Meter

150+

Global Clients

240+

Professional Team

65k+

Annual Capacity



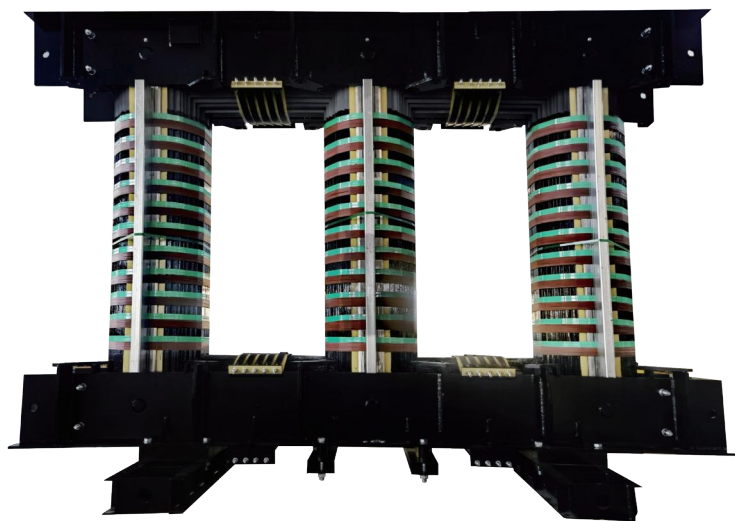
| Core Assembly

Fully Assembled Stacked Cores

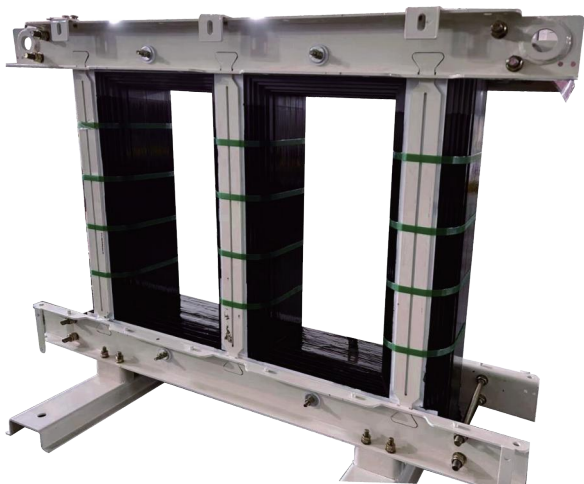
Tianli Iron Core delivers precision-engineered, fully assembled stacked cores for oil-immersed and dry-type transformers—customized to your exact design and technical requirements. We work with high-grade CRGO materials from trusted mills and offer step-lap, mitred, or straight-cut configurations based on your drawings. Using advanced stacking techniques, automated processes, and strict quality control, we ensure consistent performance, low loss, and minimal on-site labor. From material selection to packaging and delivery, every core is built to order—efficient, dependable, and ready for integration into your production line.



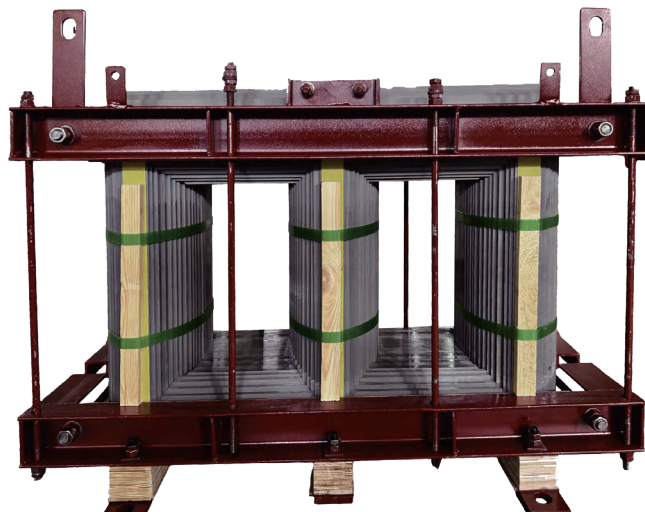
▲ Special Transformer Core



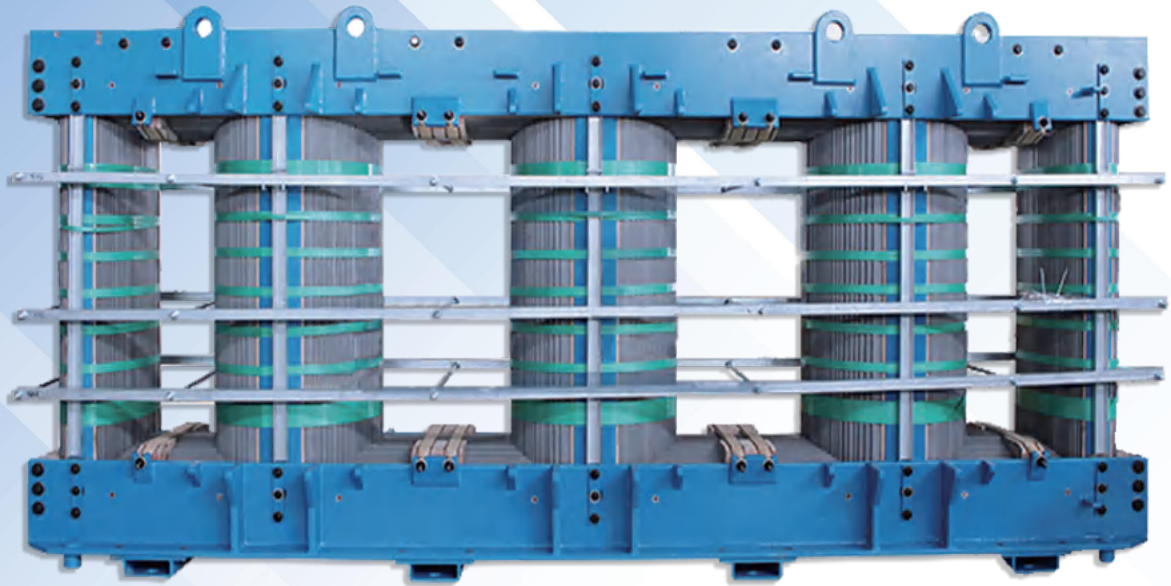
▲ Power Transformer Core



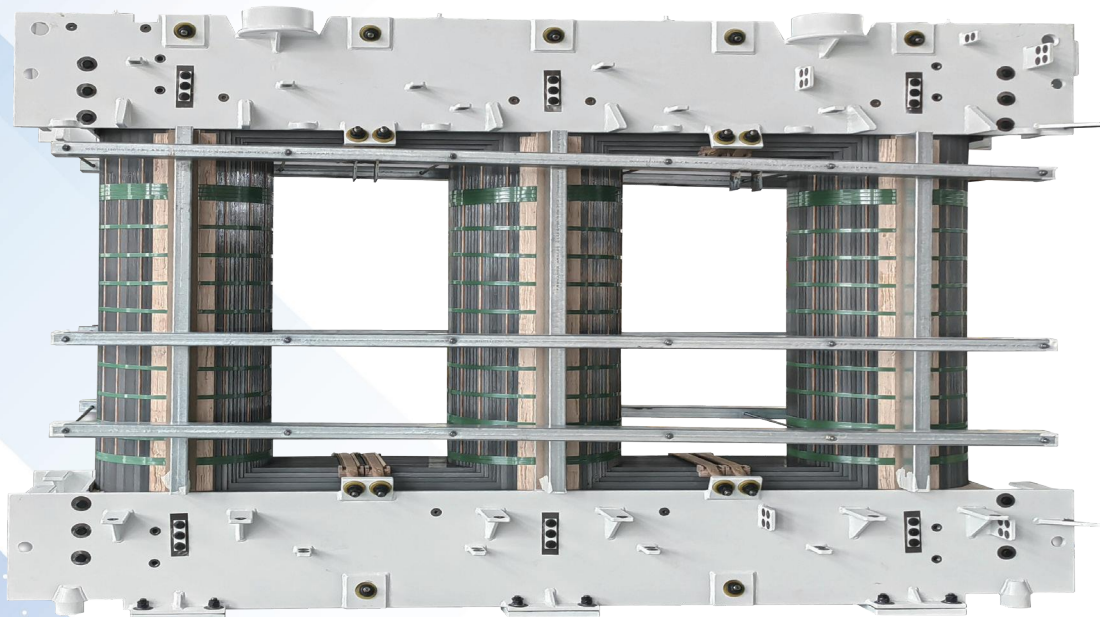
▲ Dry-type Transformer Core



▲ Distribution Transformer Core



▲ Three-Phase Five-Limb Transformer Core



▲ Oil-immersed Transformer Core

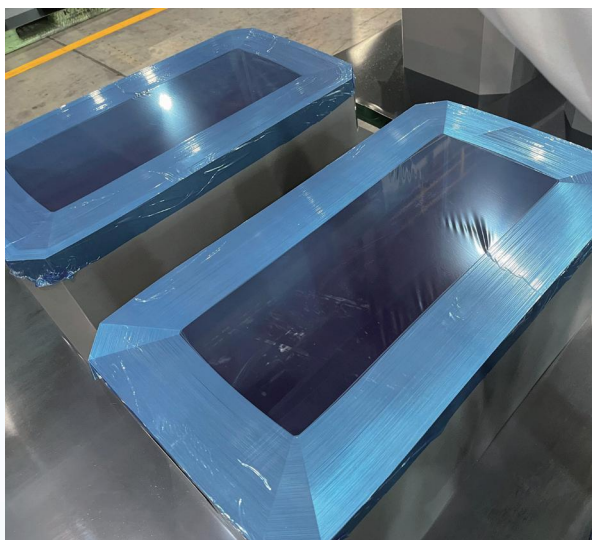
Parameters	Maximum Weight	Curvature Tolerance
CUSTOMIZED	≤40t	≤(1.5/1000)mm
Gap Tolerance at the Joint	Ground Insulation Resistance	Total Stack Thickness Tolerance
<0.5mm	≥200MΩ	±0.5mm
Verticality Tolerance	Window Height&Weight Tolerance	
≤(2.0/1000)mm	±0.2mm	

| Unicore



Unicore/Jencore Solutions

Tianli Iron Core also supplies Unicore—also known as Jencore—manufactured to meet diverse transformer design needs. We offer customized cores based on client specifications, using CRGO materials ranging from 0.18mm to 0.30mm thickness, with varied core loss levels depending on performance requirements. Every Unicore is precisely processed, shaped, and annealed to ensure consistent quality and magnetic stability. We're also able to provide design enhancement suggestions when requested, helping clients optimize both cost and performance. Whether for compact transformers or high-efficiency applications, our Unicore solutions are built for precision, flexibility, and value.

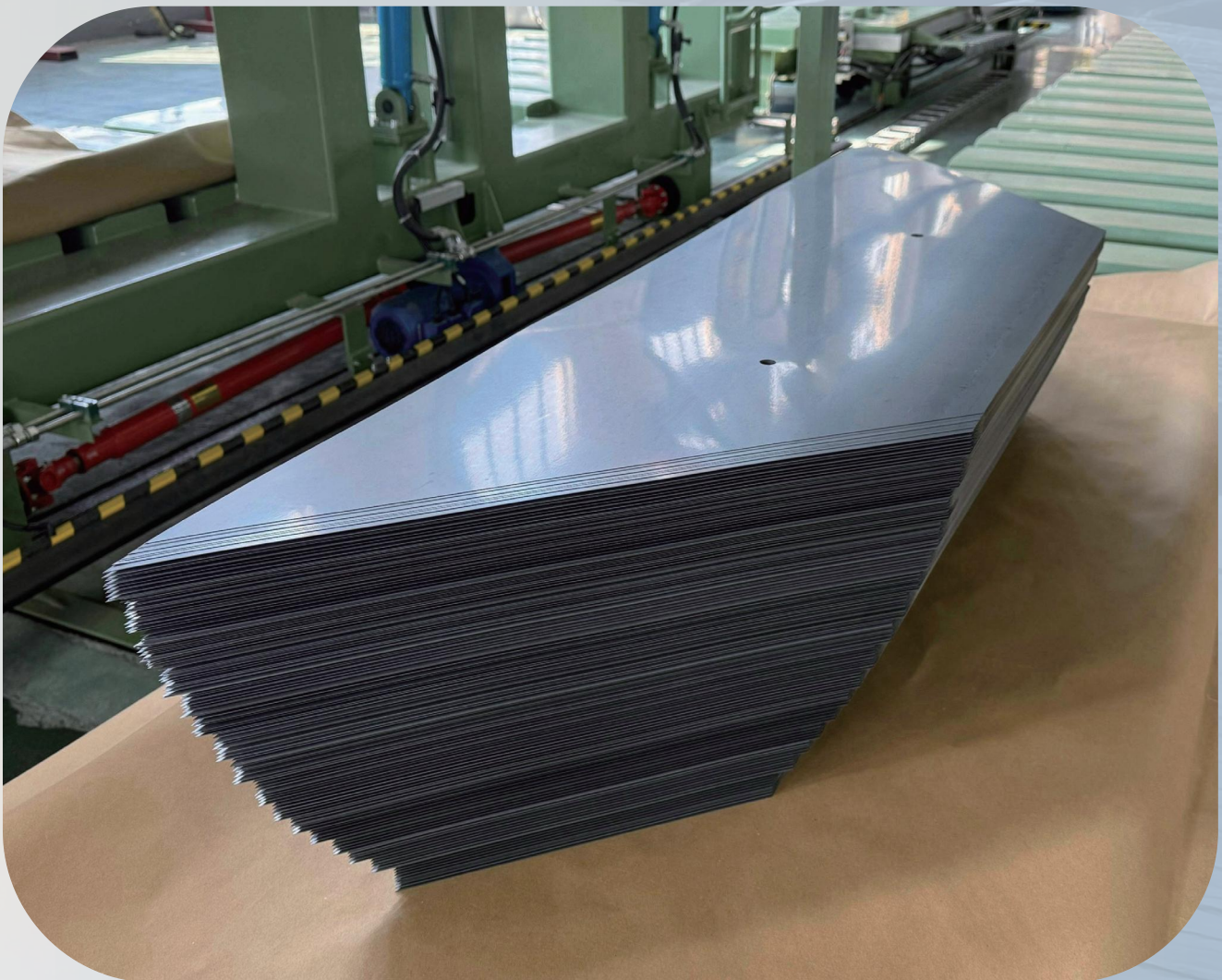


| Cut Lamination

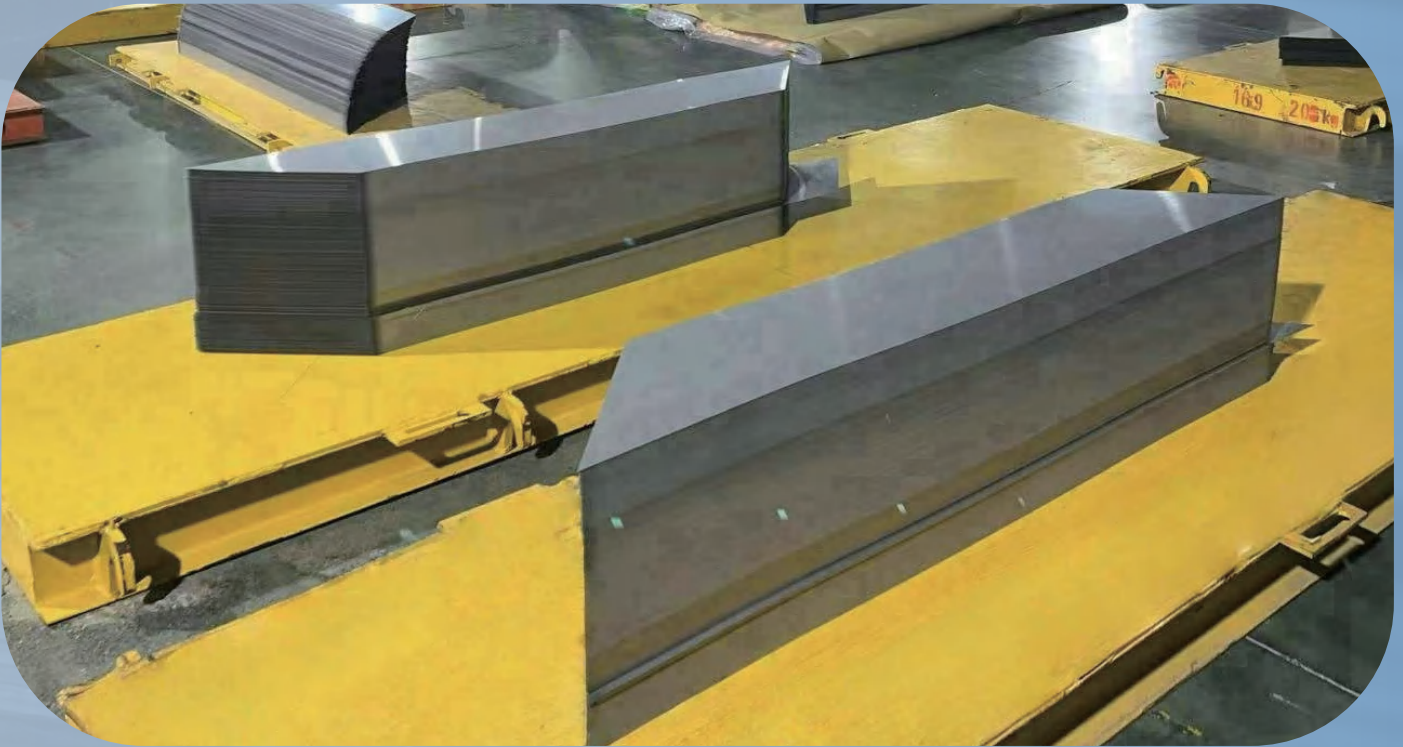
Cut Laminations

Tianli Iron Core provides high-precision cut laminations for transformer manufacturers seeking reliable, ready-to-stack solutions. Using advanced cutting lines and strict dimensional controls, we ensure clean edges, accurate angles, and minimal burrs for smooth assembly. Each batch is carefully sorted, labeled, and securely packaged to maintain quality during transport and storage. Whether for small batch prototypes or bulk orders, our laminations are crafted to meet your exact specifications with consistency and care.

Maximum Width	Maximum Length	Angle Accuracy	Burr Height
840mm	5000mm	<0.005°	<0.02mm



▼ Power Transformer Cut-Lamination



▼ Distribution Transformer Cut-Lamination



▼ Stacked Cut-Lamination



▼ Packaged cut-lamination



▼ Packaged cut-lamination



Mother&Slit CRGO Coil

Width Range	Edge Camber	Grade	Burr Height
0-1200mm	0.1/2000mm	18-60	<0.02mm



Silicon Steel Supply

The silicon steel Tianli process and offer is with high quality, as we directly source from major Chinese steel mills. With daily stock of over 6,000 tons, it largely shortens the lead time of the production and maintains a stable offer.

Slitting & Processing Services

We offer precision slitting and customized processing services in-house, transforming raw coils into slit coils or sheets based on your exact needs. Clean edges, tight tolerances, and minimal burrs are guaranteed—making our materials ready for efficient transformer core production.

Domain refined (Laser Grooving)

Grade		Iron Loss P/1.7T(W/kg)		Magnetic T 50 or 60Hz
		50Hz	60Hz	J ₈₀₀
0.18	18SQGD060	0.59	0.77	1.91
	18SQGD065	0.64	0.83	1.91
0.20	20SQGD060	0.59	0.75	1.92
	20SQGD065	0.64	0.84	1.92
	20SQGD070	0.68	0.89	1.91
	20SQGD075	0.72	0.95	1.91
0.23	23SQGD070	0.70	0.93	1.92
	23SQGD075	0.73	0.97	1.92
	23SQGD080	0.75	1.01	1.92
	23SQGD085	0.80	1.04	1.91
0.27	27SQGD090	0.85	1.12	1.91
	27SQGD095	0.90	1.16	1.90
	27SQGD0100	0.96	1.24	1.91
0.30	30SQGD0100	0.95	1.23	1.90
	30SQGD0105	0.98	1.28	1.89

Non-domain refined (Non-laser Grooving)

Grade		Iron Loss P/1.7T(W/kg)		Magnetic T 50 or 60Hz
		50Hz	60Hz	J ₈₀₀
0.20	20SQG075	0.74	0.96	1.91
	20SQG080	0.79	1.03	1.90
	20SQG085	0.83	1.08	1.90
0.23	23SQG080	0.80	1.05	1.92
	23SQG085	0.83	1.09	1.92
	23SQG090	0.85	1.12	1.91
0.27	27SQG090	0.89	1.18	1.91
	27SQG095	0.92	1.22	1.91
	27SQG0100	0.95	1.23	1.91
0.30	30SQG0100	0.97	1.29	1.92
	30SQG0105	1.00	1.30	1.91



“首钢”牌产品质量证明书

首钢集团地址：中国北京市石景山区
ADD. OF SHOUGANG GROUP: SHIJINGSHAN DISTRICT, BEIJING,
CHINA

邮政编码 POST CODE:100041

电话 TEL. : (0315) 7706531

制造厂地址：中国河北省迁安市

ADD. OF MANUFACTURER: Qian'an City Hebei Prov., China

制 造 厂： 首钢集团： 首钢智新迁安电磁材料有限公司

MANUFACTURER: SHOUGANG GROUP: Shougang Zhixin Qian 'an Electromagnetic Material Co.,LTD.

订单编号 Customer						合同编号 Contract No.		Y2402080/GGX240330045				车船号 Train/Ship No.		外库						
收货单位 Purchaser						交货状态 Condition of Supply		切边 trimming				证明书编号 Certificate No.		GQ240330637658						
产品名称 Product		取向电工钢卷 oriented electrical steel				发货日期 Date of Delivery						表 号 Record No.		SG-01-dc-01. A						
标 准 Specification		Q/SGZGS 0342-2020/ Q3				牌 号 Steel Grade		23SQGD075				商 标 trademark		50G055						
序号 N O.	检验号 Inspection No.	炉号 Heat No.	钢卷号/捆 包号 Coil/Pack No.	尺寸 Size(mm) 厚度 宽度 长度 Thick- ness Widt h Lengt h	件 数 Pcs .	重 量 Wt. ton	* 6 单片铁损 P1.7/50 W/kg	* 8 单片磁感 B800 T	* 9 单片铁损 P1.5/50 W/kg	* 11 叠装系数 f %										
1	Q240307054	242501530	2421122202	0.23 1140	1	3.010	0.72	1.91	0.53	合格 (OK)										
2	Q240306854	242401689	2421144603	0.23 1160	1	4.772	0.73	1.92	0.53	合格 (OK)										
3	Q240306854	242401689	2421144602	0.23 1160	1	4.804	0.72	1.92	0.53	合格 (OK)										
	以下空白Null																			
合计 Total					3	12.586														
订单号 Order No: 80002402260023 密度 Density kg/dm³: 7.65 备注 Remarks:																	审核 Check		质量检验负责人 Person in Charge of Quality Inspection	
1. 本产品经检验满足订货标准要求。 We hereby certify that material described here in has been tested with satisfactory results in accordance with the requirements of the above material specification. 2. 本质量证明书中空白项目均不作为交货条件。 Blanks project the quality certificate are not as delivery conditions 3. 盖章后生效。 Copied after the entry into force 4. 联系方式: TEL: 0315-7706098 E_mail: ggxs@sgqs.com																	NA			
日期 Date: 2024-03-30 13:40:07																				

防伪码: 106084138826



“首钢”牌产品质量证明书

首钢集团地址：中国北京市石景山区
ADD. OF SHOUGANG GROUP: SHIJINGSHAN DISTRICT, BEIJING,
CHINA

邮政编码 POST CODE: 100041

电话 TEL: (0315) 7706531

制造厂地址：中国河北省迁安市

ADD. OF MANUFACTURER: Qian'an City Hebei Prov. China

制 造 厂： 首钢集团；首钢智新电磁材料（迁安）股份有限公司

MANUFACTURER: SHOUGANG GROUP: Shougang Zhixin Electromagnetic Materials (Qian'an) Co., Ltd.

订货单位 Customer						合同编号 Contract No.		Y2402084/GGX240509072				车船号 Train/Ship No.		外库			
收货单位 Purchaser						交货状态 Condition of Supply		切边 trimming				证明书编号 Certificate No.		GQ240509656674			
产品名称 Product		取向电工钢卷 oriented electrical steel				发货日期 Date of Delivery						表 号 Record No.		SG-01-dc-01.A			
标 准 Specification		Q/SGZGS 0342-2020/ Q3				牌 号 Steel Grade		20SQGD065				商 标 trademark		S06055			
序号 N o.	检验号 Inspection No.	炉号 Heat No.	钢卷号/捆包号 Coil/Pack No.	尺寸 Size(mm) 厚度 宽度 长度 Thick- ness h Length		件数 Pcs.	重量 Wt. ton	* 6 单片铁损 P1.7/50 W/kg	* 8 单片磁感 B800 T	* 9 单片铁损 P1.5/50 W/kg	* 11 叠装系数 f %						
1	Q240501967	242502760	2422049903	0.2	1160	1	3.954	0.65	1.92	0.47	合格 (OK)						
2	Q240501569	242502753	2422050505	0.2	1160	1	3.588	0.63	1.92	0.46	合格 (OK)						
3	Q240501938	242502676	2422099605	0.2	1180	1	3.092	0.65	1.91	0.47	合格 (OK)						
4	Q240501938	242502676	2422099606	0.2	1180	1	3.216	0.65	1.91	0.47	合格 (OK)						
5	Q240501584	242502680	2422099904	0.2	1170	1	3.862	0.65	1.91	0.46	合格 (OK)						
6	Q240501896	242502685	2422118304	0.2	1160	1	3.390	0.65	1.91	0.46	合格 (OK)						
7	Q240501896	242502685	2422118303	0.2	1160	1	3.390	0.65	1.91	0.46	合格 (OK)						
8	Q240501835	242502680	2422100002	0.2	1130	1	2.578	0.65	1.91	0.46	合格 (OK)						
合计 Total						8	27.070										
订单号 Order No: 80002402260027 密度 Density kg/dm³: 7.65 备注 Remarks:														审核 Check		质量检验负责人 Person in Charge of Quality Inspection	
1. 本产品经检验满足订货标准要求。 We hereby certify that material described here in has been tested with satisfactory results in accordance with the requirements of the above material specification. 2. 空白项目不作为交货条件。 Blank project the quality certificate are not as delivery conditions 3. 盖章后生效。 Sealed after the entry into force 联系电话: TEL: 0315-7706098 E_mail: gxzs@sgqg.com																	
日期 Date: 2024-05-09 17:01:11														NA		张永成	

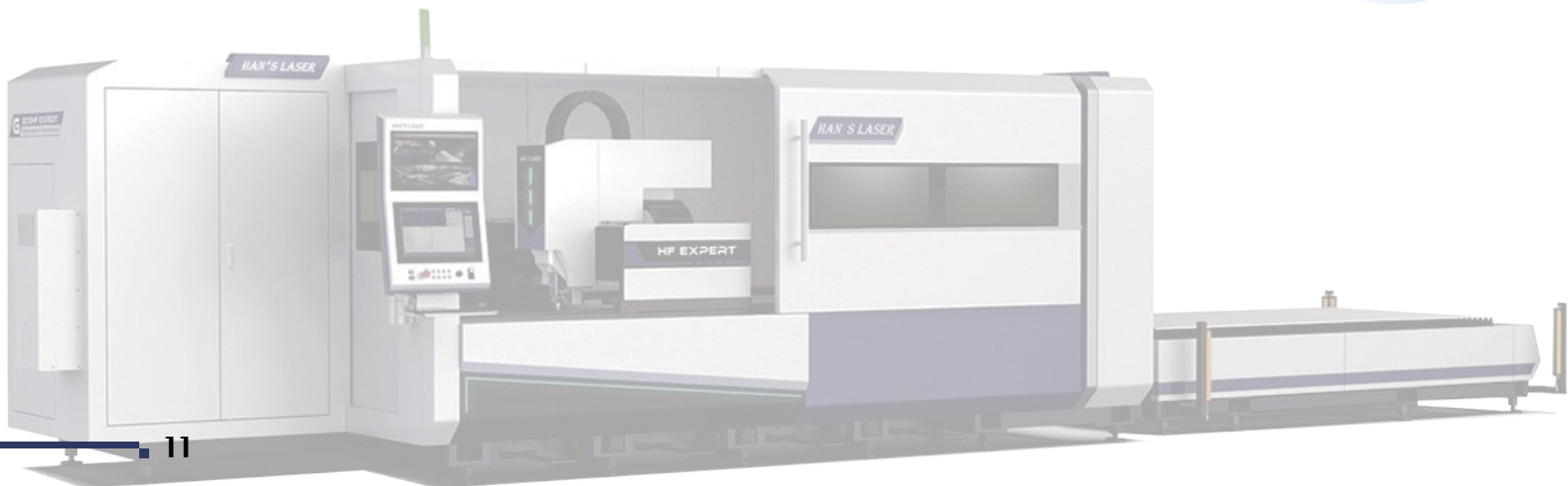
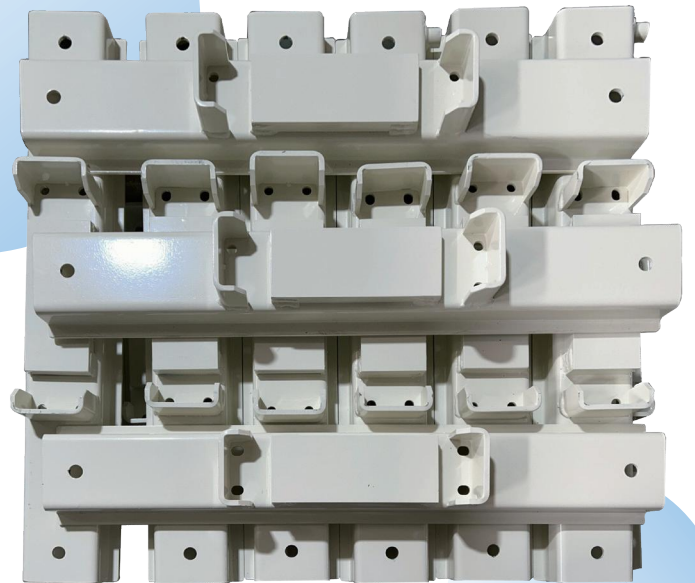
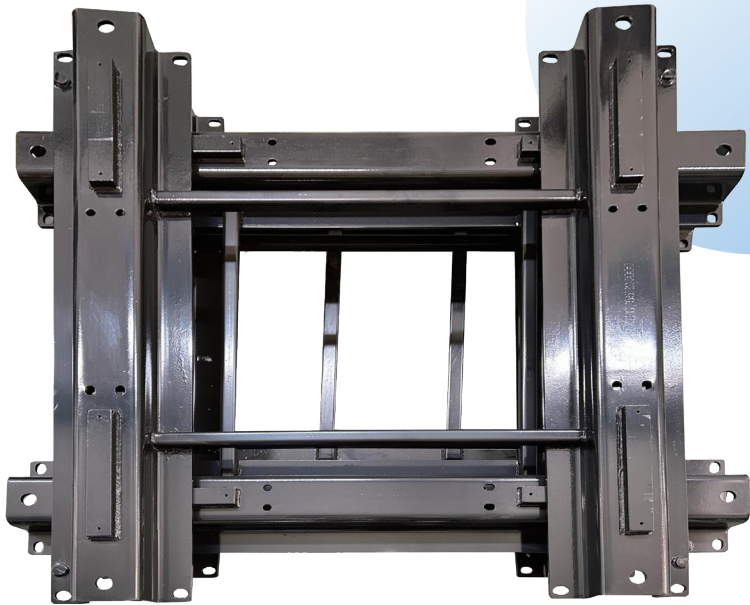
防伪码: 772176772261

| Transformer Core Clamps

Core Clamps & Structural Parts

Tianli Iron Core manufactures and supplies core clamps and structural parts according to each customer's detailed specifications. We offer a full range of options including flat channels, bent channels, and custom-bending styles to suit various transformer designs. Finishing choices include galvanizing, powder coating, or paint in your preferred RAL colors. Whether you require welded assemblies, slotted holes, or insulated contact surfaces, we tailor every detail for a perfect fit. Our clamps are built for mechanical strength, corrosion resistance, and easy assembly—ensuring long-term stability for both oil-immersed and dry-type transformer cores.

- CNC electro-hydraulic servo bending machine
- Han'slaser cutting machine
- Electric Fiber laser cutting machine
- Large sanding machine



| Transformer Core Insulation

Insulation Components

Tianli Iron Core provides a comprehensive range of custom-made insulation components for transformer cores and windings, tailored to meet each client's specific requirements. We collaborate with leading suppliers, including Weidmann Electrical Technology AG, to source premium materials such as electrical-grade press-board, crepe paper, epoxy glass fiber laminates, and polyester films. Our product offerings encompass spacers, end blocks, tie rods, clamping rings, and barriers, all designed to ensure optimal electrical insulation and mechanical support. Each component is meticulously fabricated to guarantee precise fit and long-term reliability in both oil-immersed and dry-type transformer applications. By partnering with top-tier material providers, we ensure that our insulation solutions contribute to the enhanced performance and longevity of your transformers.



Epoxy Resin Board



Oil Duct Strips



Insulation Cylinders



Insulation Pressboard



Collars with Spacers



Wood Spacers



Pressure Ring



Laminated Wood Pressboard



Laminated Wood Pressboard



Wood Spacers

Production Equipment

Slitting Lines: ZJX(2005)-1250/80



Slitting line	Slitting speed(m/min)	Strip burr(mm)	Straightness deviation of each edge	Material thickness(mm)	Coilweight(kg)
ZJX(2005)-1250/80	0-80	≤ 0.02 mm	≤ 0.02 mm/2m	0.18-0.35	Max.500

Epstein Frame



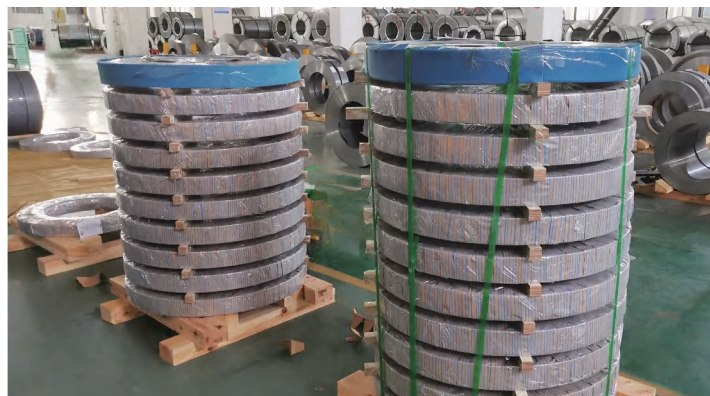
Turns	Maximum magnetization field
700T	10 kA/m
Working temperature	Frequency
0℃~45℃	≤ 400 Hz

Magnetic Properties Measuring System for Electrical Steel



Magnetic Field Strength	Measurement Method
1 A/m ~ 10 kA/m	M.C
Specimens Thickness	Working Temperature
0.1 mm ~ 0.5 mm	0℃~45℃

Packaging Machine



Ring speed	Width	ID	OD	Control Type
60r/min	60-100 mm	55mm	200mm	Fully Automatic

Production Equipment

Cut-to-length Lines: HJX(D262)-800



Cut-to-length line	Width of sheet(mm)	Length of sheet(mm)
HJX(D222)-600	60-440	400-3500
Feeding speed(m/min)	Cutting burr(mm)	Accuracy of cutting angle
0-214	≤0.02	±0.01

WT5000 Precision Power Analyzer



basic power accuracy	AC power accuracy
±0.03%	0.01% of reading + 0.02% of range
DC power accuracy	
0.02% of reading + 0.05% of range	

Iron Loss Measuring System for Electrical Steel



Capacity	Minimum Power Resolution
3150 kVA	0.1 W × PT Ratio × CT Ratio
Operating Ambient Temperature	
-10°C to +45°C	



| Global Clients

AUX **IG**  **TBEA**



HYOSUNG

| Domestic Clients

CHINT **正泰**



上海电气
SHANGHAI ELECTRIC

XD **中国西电集团**
CHINA XD GROUP



鲁能集团
LUNENG GROUP



中国电气装备
China Electrical Equipment

NARI
南京南瑞集团

20+
years

150+
clients



Taizhou



Shanghai

Why Choose Tianli

With years of hands-on experience in the transformer core industry, Tianli Iron Core has become a reliable partner for clients across Asia, Europe, the Middle East, Africa, and beyond. Our reputation is built on consistent quality, fast delivery times, and a deep understanding of each customer's unique needs.

Backed by strong supply chains, in-house stock, and a flexible production system, we respond quickly and deliver on schedule—even for urgent or highly customized orders. Trusted by a global clientele, we are committed to long-term partnerships and powering progress through dependable core solutions.

Get in touch with us today to learn how Tianli Iron Core can support your next transformer project.



Date _____

Details



Main Ideas	Details



TIANLI IRON CORE

TAIZHOU TIANLI IRON CORE MANUFACTURING CO.,LTD.

LOCATION: NO.1,THIRD INDUSTRIAL PARK, LIANGXU STREET,TAIZHOU, JIANGSU, CHINA

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FAX: +86 523 8891 8266

E-MAIL: INFO@TL-CORE.COM

WEBSITE: WWW.TL-CORE.COM

LINKEDLN ACCOUNT:

