



金盘电气
JINPAN ELECTRIC



环氧树脂浇注干式变压器

Cast Resin Dry-type Transformer

科技创新 低碳环保 绿色发展

Technology Innovation Low-carbon Environment Green Development



金盘电气(中国)有限公司
JINPAN ELECTRIC (CHINA) CO., LTD.

海南金盘电气有限公司
HAINAN JINPAN ELECTRIC CO., LTD.



创新... ..

我们永恒的主题
Innovation is our enduring topic

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关于金盘电气

金盘电气成立于1993年，1998年在美国成功上市，是国家级高新技术企业，已发展为拥有海口、武汉、上海、桂林四个生产基地、一个电气研究院，并在美国设有公司的集团企业。

企业秉承“绿色发展”的理念，致力于绿色清洁能源专用输配电设备及智能电网产品的研发与生产。金盘电气取得了全球主要国家和地区的产品认证，产品已出口到48个国家，参与了世界各国太阳能发电、风力发电、核能发电、燃气发电及水力发电等绿色能源和清洁能源项目的建设。

金盘电气的产品已深入绿色能源、智能电网产业链，并打造了强有力的竞争优势，成为多家知名大型跨国公司值得信赖的长期合作伙伴。

面向世界，开创未来。金盘电气将继续主要向太阳能发电、风电、核电、智能电网以及地铁、高铁、造船等中国和世界未来的高速发展领域进行新产品的研发与拓展，创世界品牌，造百年基业。



美国公司 Jinpan U.S.A.



研究院 Research Institute





桂林基地 Guilin Facility



海口基地 Haikou Facility



武汉基地 Wuhan Facility



上海基地 Shanghai Facility

About JST

Founded in 1993 and successfully listed in the U.S. as a publicly traded company in 1998, Jinpan Electric is a high technology enterprise with four manufacturing bases- in the cities of Haikou, Wuhan, Shanghai and Guilin respectively - and one electric equipment research institute. Jinpan Electric also has a subsidiary in the United States.

Jinpan Electric adheres to "Sustainable Development" principles. The Company is dedicated to the development and manufacture of power transmission and distribution equipment for green and clean energy applications and smart grid products. Jinpan Electric has secured the requisite product certifications in major countries and regions worldwide, has exported its products to 48 countries, and has participated in the development of solar, wind, nuclear, gas, hydro power and other green and clean energy projects worldwide.

Jinpan Electric's products are deeply integrated into green energy and smart grid supply chains. The Company has built a strong competitive edge and has become a reliable, long term partner to well-known international OEMs.

Looking forward, Jinpan Electric will continue to focus on the research and development of new products for solar, wind, nuclear, smart grid, subway, high-speed rail, marine, and future high growth sectors in China and abroad, to build a global brand, and to lay a solid foundation for long term growth.



科技创新 低碳环保 绿色发展 <<

Technology Innovation Low-carbon Environment Green Development

系列产品 Type Meaning

树脂浇注干式电力变压器 Cast resin dry-type power transformer

绝缘性能好，局部放电量小，耐雷电冲击能力强。随着城市用电负荷不断增加，城网区域性变电所越来越深入城市中心区、居民小区、大中型厂矿等负荷中心，大容量的区域供电干式电力变压器得到广泛应用。

Features: Outstanding insulation performance, small amount of partial discharge, and strong lightning impulse resistance. With the continuous increase of urban power consumption, more and more big volume's regional power supply dry type transformers have been applied in various load centers (e.g. urban center, residential area and medium/large-sized factories or mines), and large-capacity dry-type transformers have been widely used for regional power supply.



树脂浇注干式配电变压器 Cast resin dry-type distributing transformer

体积小，重量轻，无污染，免维护，安装经济，可安装于负荷中心，无需特殊基础。广泛用于工业及民用建筑、机场、电厂、地铁等场合的动力、照明。

Features of products: Small size, light weight, eco-friendly, maintenance free, and low decommissioning costs installation, it can be installed at load center without necessity of special foundation. Scope of application: Power supply and lighting in various places (e.g. industry/civil building, airports, power plant and subways).

树脂浇注干式多晶硅生产用变压器 Cast resin dry-type transformer for polycrystal silicon production

副边为三个独立的多抽头单相线圈，每个单相线圈有多个不同容量的电压抽头及大电流输出，能承受长期的过载、过压及较大的谐波电流，专用于多晶硅生产系统的氢化炉及还原炉的供电。

Features: At the secondary side are three independent multi-tapped single-phase coils, each of which is provided with multiple voltage taps of different capacities and heavy current output and can withstand long-term over-load, over-voltage and heavier harmonic current. Scope of application: Power supply for hydrogenation and reducing furnaces in polycrystal silicon production system.

树脂浇注干式轨道交通牵引整流变压器 Cast resin dry-type traction rectifier transformer

等效24相整流回路对电网的谐波污染比12脉波整流回路降低50%。用于地铁牵引变电站中，可降低交流网侧的谐波含量及改善直流电压波形，在VI级重型牵引负载条件下可靠运行。

Features: The harmonic pollution to power grids is 50% lower in equivalent 24-phase rectifying circuit than 12-pulse rectifying circuit. Scope of application: Traction transformer substation to reduce the harmonic content of AC grid and improve the wave form of DC voltage; and reliable running under Class VI heavy traction load.

树脂浇注干式整流励磁变压器

Cast resin dry-type rectifying excitation transformer

采用单相/三相结构、高压带离相或共相母线进线、高低压线圈之间带屏蔽结构，能够承受较高的谐波电流，温升低。适用于水力发电厂、火力发电厂、燃机电厂的静态励磁系统。

Features: Single/three-phase structure, high-voltage incoming wire with isolated or coupling phase bus, shielding equipped between high-voltage and low-voltage coils, resistance to relatively high harmonic current, and small temperature rise. Scope of application: Static excitation systems in hydraulic, thermal and gas power plants.



光伏并网逆变用干式变压器

Dry-type transformer for photovoltaic power grid-connecting inversion

轴向/辐向双绕组双分裂成两个相同容量、相同联接组别和电压等级的低压绕组。同时当一段母线发生短路时，除能有效地限制短路电流外，还能使另一段母线上电压保持一定水平，不影响系统运行，广泛用于光伏发电并网系

Features: Axial/Radial dual-winding is double-split into two low-voltage windings of same capacity, same connection group and same voltage class; and at a short circuit in a bus segment, the short-circuit current can be effectively limited and the voltage is kept at certain level in another bus segment, so as not to affect system operation. Scope of application: Photovoltaic power grid-connecting system.

风力发电用变压器

Wind power generating transformer

风力发电配套变压器安装于塔内，为适应塔内狭小的安装环境，变压器采用特殊的绝缘结构，使变压器体积非常小，目前此配套变压器已在欧美各风电场安全稳定运行。

Features: Special insulation structure to make small transformer volume a small and thus adapt to the narrow installation space in tower. At present, this kind of transformer is under safe and reliable running in wind power plants in Europe and the USA.

树脂浇注干式铁芯电抗器

Cast resin dry-type iron-core reactor

产品用于电力系统中，包括串联电抗器、并联电抗器、相控电抗器、滤波电抗器、启动电抗器及接地变和消弧线圈等。

Our products such as series reactor, shunt reactor, phase-control reactor, filter reactor, starting reactor, earthing transformer, and arc-suppression coil are used in power system.

*可根据用户不同需求设计相应变压器。

*The transformer is customizable according to different customer demands.

产品特性 Features Of Products



- 通过CEF (气候、环境、燃烧) 试验
- 防火性能好, 具有难燃自熄的特性
- 损耗低, 噪声小
- 无污染, 免维护
- 绝缘性能好, 局部放电量小, 耐电冲击能力强
- 机械强度高, 抗温度变化、抗短路能力强
- 耐潮湿, 可在高温度下运行
- 安装经济, 可安装于负荷中心, 无需特殊基础
- 体积小、重量轻
- CEF TEST Passed (climatic, environmental and fire behaviour)
- Non-flammable-The insulating materials will not self-ignite and are self-extinguishing
- Efficient&Quiet-transformers have low losses and low sound level
- Environmental Friendly-Units are eco-friendly and free of maintenance
- Outstanding insulation performance, low partial discharge, and strong lightning impulse resistance
- High mechanical strength strong resistance to temperature change and short-circuit
- Damp-proof, and operable at high temperature
- low Installation Cost-Transformers can be installed close to the load center without costly vaults, dikes, and special ventilation
- Conserve Valuable Space-Designs are compact and light weight

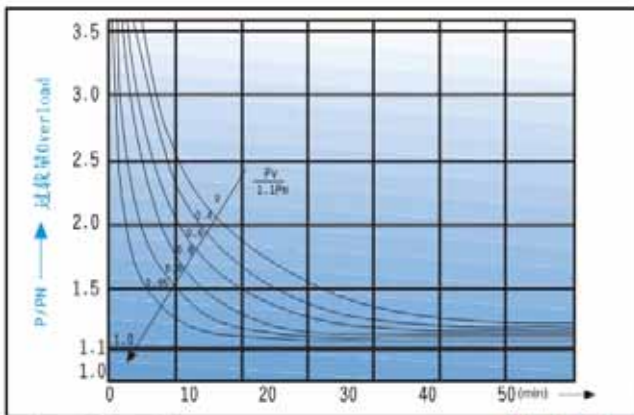
技术规范 Technical Specifications

- ◆ 电压等级: 35KV及以下 (含双电压)
 - ◆ 容量: 50~35000KVA (空气自冷)
 - ◆ 分接范围: $\pm 2 \times 2.5\%$ (或根据用户要求)
 - ◆ 频率: 50Hz或60Hz
 - ◆ 相数: 三相或单相
 - ◆ 联结组别: Dyn11; Yyn0或其他
 - ◆ 冷却方式: AN或AF
 - ◆ 绝缘等级: F或H
 - ◆ 绝缘水平:

电压等级	6,10KV	20KV	35KV
工频耐压	35KV	50KV	70KV
雷电冲击电压	75KV	125KV	170KV
 - ◆ 防护等级: IP00, IP20, IP23 或其它
 - ◆ 使用条件: 海拔小于1000米, 环境温度低于40°C。超过上述使用条件时, 需按照标准做相应的调整。
 - ◆ 适用标准:
 - GB1094 《电力变压器》
 - IEC60076 《电力变压器》
 - ◆ 有特殊要求的订货, 可以进行专门设计, 以满足用户需要。
- ◆ Voltage class: Up to 35KV (including dual voltages)
 - ◆ Capacity: 50~35000KVA (natural air ventilation)
 - ◆ Taps: $\pm 2 \times 2.5\%$ are standard (other options available)
 - ◆ Frequency: 50Hz or 60Hz
 - ◆ Phases: Single or Three-phase
 - ◆ Connection Symbol: Dyn11; Yyn0 or others
 - ◆ Cooling : AN or AF
 - ◆ Insulation class: F or H
 - ◆ Insulation level:

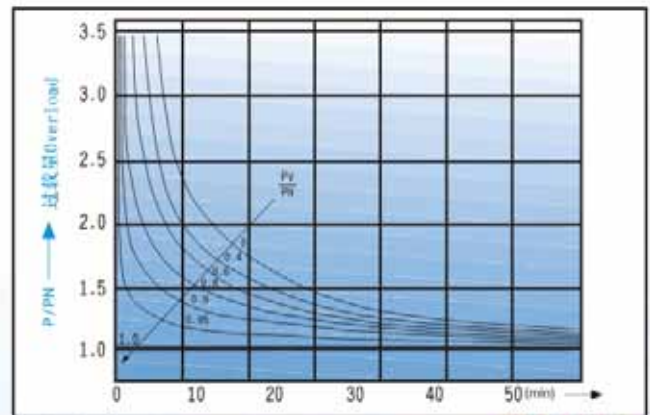
Voltage	6,10KV	20KV	35KV
Power frequency withstand voltage	35KV	50KV	70KV
Lighting impulse withstand voltage	75KV	125KV	170KV
 - ◆ Protection level: IP00, IP20, IP23 or as required
 - ◆ Service Condition: Altitude, not exceeding 1000m. Ambient temperature ,not exceeding 40°C. or adjustable according to relevant standard beyond the said conditions.
 - ◆ Applicable standard:
 - Power Transformers (GB1094)
 - Power Transformers (IEC60076)
 - ◆ Customizable according to special customer demands.

过载曲线 Over-load Curve



环境温度: $\theta_a = 20^\circ\text{C}$
Ambient Temperature: 20°C

允许过载时间
Max. time of over load



环境温度: $\theta_a = 40^\circ\text{C}$
Ambient Temperature: 40°C

允许过载时间
Max. time of over load

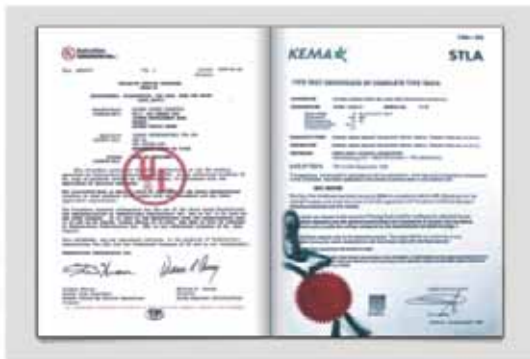
P_N -额定容量 P_v -起始负载 P -过载容量
Rated Power Initial Load Overload

技术研发 Technological Research

拥有200名研发及工程技术人员的金盘电气研究院是省级工程技术研究中心。面向国际高端电力设备市场需求，金盘电气研究院吸收、引进了世界各地电力设备先进技术。经过18年的自主研发和持续创新，开发了17大系列300多个品种的产品，并取得多项自主知识产权，形成了金盘电气强有竞争力的核心技术。目前金盘电气产品已经应用于风电、核电、太阳能发电、燃气发电、水电等绿色能源和清洁能源，以及地铁、高铁、石化等高端领域的专用输配电设备，智能开关成套设备、中压充气环网柜、C-GIS、SVG动态无功补偿系统等多种智能电网节能减排产品。具备了为用户提供整体方案的技术服务及参与世界各种大项目电力系统设计的能力。



技术研发
R&D Team



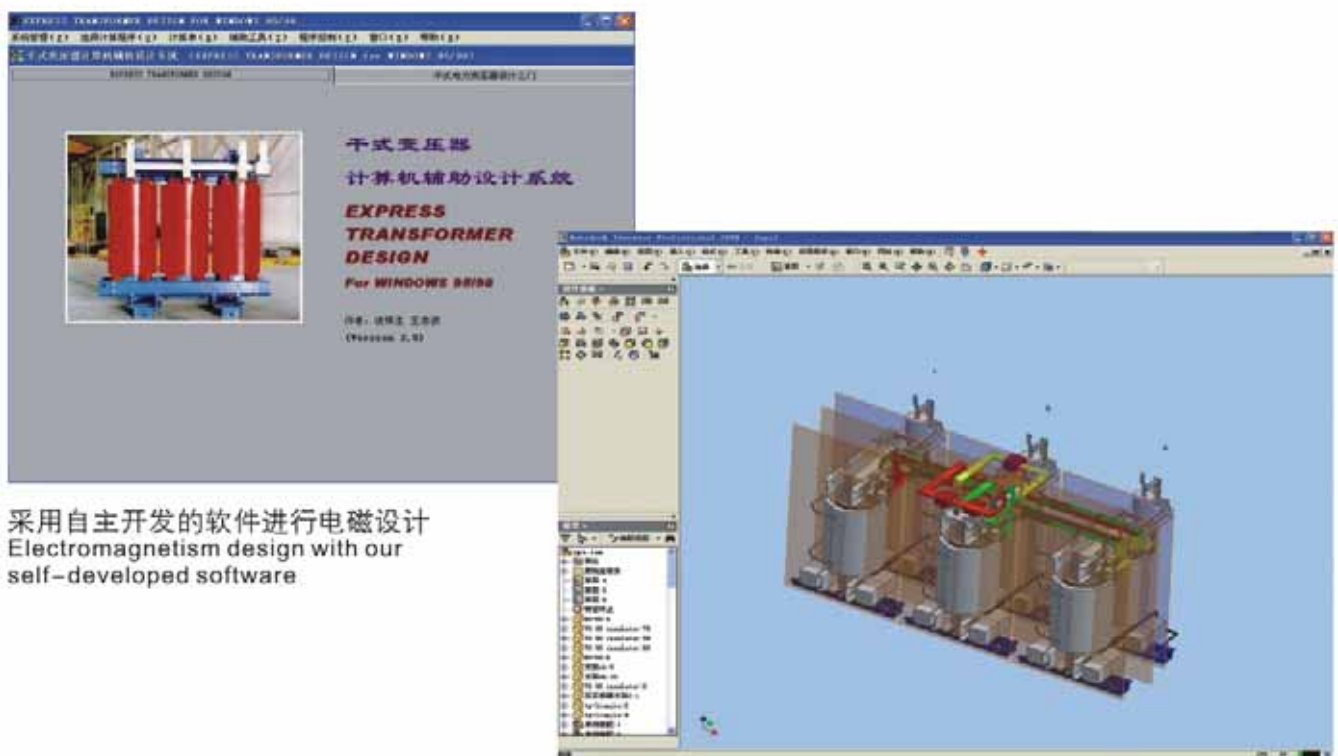
UL&KEMA认证
UL&KEMA Certificates

Jinpan Electrical Research Institute with more than 200 engineering technicians is a provincial engineering technology research center. In order to meet the international market demand of high-end electrical equipment, Jinpan Electrical Research Institute introduced and absorbed advanced technologies of electrical equipment from all over the world, and has, after 18 years of independent research and development and continuous innovation, developed 17 series of products (more than 300 types) and obtained a number of proprietary intellectual property rights, which compose the competitive core technology of Jinpan Electric. At present, the products of Jinpan Electric have been widely used for wind power, nuclear power, solar power, fuel gas power, hydropower and other green energy and clean energy based power generation and for dedicated power transmission and distribution for subway, high-speed rail, petrochemical industry and other high-end industries, including a number of intelligent power grid energy conservation and emission reduction products such as intelligent complete switching equipment, inflatable MV looped network cabinet, C-GIS, SVG dynamic reactive compensation system etc. Hence, Jinpan is capable of providing users with technical service of overall solution and participating in the design of power system of large projects all over the world.

产品的电磁设计应用了具有自主知识产权的干式变压器电磁设计系统，产品的结构设计则引进了美国三维设计软件，具有三维零件实体造型、各级装配约束检验、网上联合设计、自动输出施工图等功能。

金盘电气的实验检测中心被认定为海口市电气设备重点实验室，包括原材料理化实验室，符合美国标准的UL专业实验室，机械强度、焊接无损探伤实验室，模拟海洋盐雾、淋雨、高污秽、高湿度、极限温度等环境条件的耐腐蚀实验室，能进行所有要求试验项目的电气性能实验室。

美国引进PTC、PLM软件，建立在信息化基础之上的先进设计手段和功能齐全的实验检测装备，为研发工作提供了有利条件，大大缩短了产品的开发周期，保证了设计质量。



采用自主开发的软件进行电磁设计
 Electromagnetism design with our
 self-developed software

采用Inventor三维设计软件进行产品开发
 3D design software (Inventor™) for product development

Jinpan Electric uses its own proprietary software to design dry type transformer's electromagnetic system. Mechanical design is accomplished using imported 3-D design software, which renders 3-D part models, verifies assembly constraints, enables online collaboration in design, and outputs engineering drawings automatically.

Jinpan Electric's Quality Control and Testing Center has been designated as "Haikou Key Laboratory of Electric Equipment". The Quality Control and Testing Center includes a material testing lab, a UL testing lab of US standard, mechanical strength/non-destructive flaw lab, and an erosion testing lab that can simulate oceanic fog, rain, high dirt, high humidity, high pollutant and extreme temperature conditions. The Quality Control and Testing Center enables the Company to conduct the full range of tests on electric equipment.

Launched PTC&PLM management systems bought from U.S, Advanced design tools and full range of testing experimental equipment based on information are conducive to the research and development, greatly shorten the product development cycle and ensure the design quality.

生产制造 Manufacturing

铁芯 CORE



GEORG横剪线
GEORG lamination cut-to-length line

德国GEORG公司的全自动硅钢片剪切线，采用计算机程序控制，剪切精度高，毛刺小，具有多头放料、自动叠码收料和步进叠功能。由于减少了切片振动次数，保证了硅钢片的晶粒结构。

铁芯的截面设计近似圆形，硅钢片采用45度全斜剪切，芯柱和轭铁接缝处为步进叠结构。通过这些措施，改善了铁芯的磁场分布，降低了材料和能源的消耗。

选用德国GEORG公司的铁芯翻转叠装台，将芯柱和轭铁装配成“山”字形铁芯，显著提高了铁芯的加工质量和生产效率。

铁芯是变压器的核心部件之一，金盘电气采用一流的设备、先进的工艺和优质的材料保证了铁芯质量，大大降低了变压器的空载损耗和噪音。

The core is the heart of transformer. Through the first-class equipment, advanced process and high-quality material, our core is of high quality to greatly reduce the no-load losses and noise of transformers.



GEORG横剪线的自动柱状收料
GEORG line can stack a core

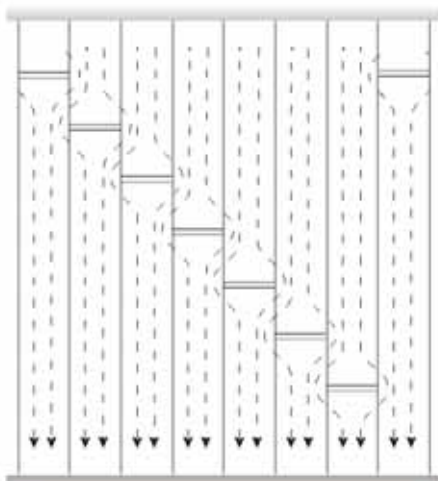
We adopt the full-automatic silicon steel sheet cutter of German GEORG Co. By controlling through computer program, it has a high cutting precision and no burr, and has the function of multi-end feeding, automatic stacking collection and step lap. It can reduce the number of vibration at cutting, so that the crystal grain structure is maintained with less variation of finished silicon steel sheet.



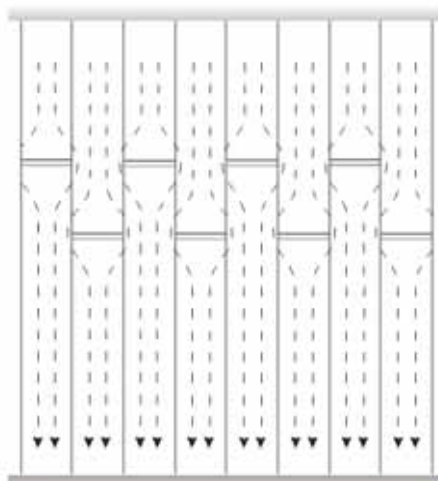
GEORG公司制造的铁芯自动翻转叠装台
GEORG stacking table

Our core has an approximate circular section. Silicon steel sheet is cut fully-oblique at 45°. The joint between core column and yoke iron is of step lap structure. These measures improve the magnetic field distribution of core, and reduce the consumption of materials and energy.

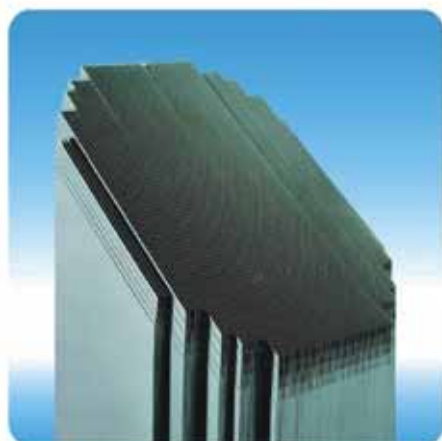
We also adopt the core inverting/lap/assembling table of German GEORG Co. It assembles the core column and yoke iron into epsilon-shaped core, and significantly improves the processing quality and production efficiency of core.



接缝处步进叠方式的磁通密度分布
Magnetic flux distribution on the connections with step-lap



接缝处两片叠方式的磁通密度分布
Magnetic flux distribution on the connections with traditional lap



采用步进叠的铁芯
Step-lap core



叠码完毕的“山”字形铁芯
“E”core finished without upper yoke

生产制造 Manufacturing

绕线 WINDINGS

高压自动绕线机从德国STOLLBERG公司引进，采用计算机程序控制，具有恒定张力和自动排线功能。高压线圈采用铜电磁线和玻璃纤维等绝缘材料一起绕制，采用分段圆筒式结构，层间电压低，抗过电压能力强。较大容量的线圈设有散热气道，具有良好的散热性能。

低压线圈除可采用铜电磁线制外，金盘电气还生产低压箔式线圈的变压器，该变压器具有电场分布均匀，抗短路能力强等优点。低压箔式线圈采用高纯度圆边箔带与预浸环氧树脂的绝缘材料紧密绕制。低压箔式绕线机是德国STOLLBERG公司的最新产品，具有恒张力、去毛刺和自动纠偏功能。

Computer-controlled HV automatic winding machines constant tension and automatic wire laying function were imported from STOLLBERG, a German company. The HV windings are made of copper electromagnetic wire and insulated with fiberglass mats through segmented cylindrical structure, and thus with a low voltage between layers and strong over-voltage resistance. The winding of larger capacity has a heat-radiating air passage to make a good heat radiation.

JST also produces LV copper-foil windings. The advantage of foil winding is that the current density can distribute itself freely along the width of the conductor and have strong short-circuit resistance. LV foil is closely through highly-purified round-edge foil strip and insulating material pre-saturated in epoxy resin. LV foil winding machine is the newest product of STOLLBERG. Controlled by a computer module, the machine can maintain constant tension, wipe off any debur and rectify deviations automatically.



STOLLBERG高压自动绕线机
HV winding machine from Stollberg



STOLLBERG低压箔式绕线机
LV foil winding from Stollberg



生产制造
Manufacturing

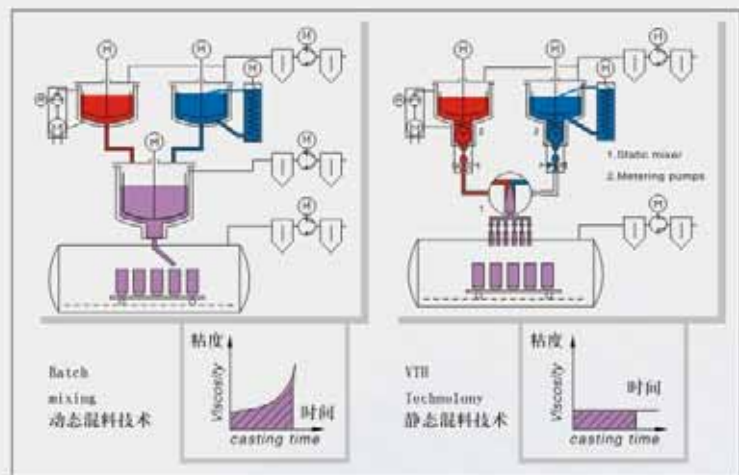
浇注
CASTING

绕制完毕的线圈经过预热干燥后，转入环氧树脂真空浇注设备的浇注舱中进行真空干燥，除去绝缘中的水分和气体。同时，进口的环氧树脂和固化剂等材料在独立的各料罐中进行连续脱泡处理。处理过程结束后，计算机通过精密计量系统按照设定的比例将各种化工材料注入模具。浇注结束后，在烘炉中高温固化，最终制成固态线圈。

浇注设备从德国HUBERS公司引进，该设备采用了薄膜脱泡和静态混料等专利技术。静态混料技术的应用保证了混合材料具有一致的粘度和化学反应程度等理化性质，这点明显优于动态混料技术。

The winding is moved into the vacuum casting chamber of epoxy resin vacuum casting equipment to dry after preheating, the moisture/gas in the insulation are removed in the vacuum casting procedure. Meanwhile, the imported chemical materials (e.g. epoxy resin and hardener) are continuously prepared in the separate vessels. After the preparation process is finished, all of the materials are pumped into a static mixer at the ratio preset by the precise computer measuring system, and then cast into the molds. After the completion of casting, the coils are cured in an oven to form strong solid coils under high temperature.

We adopt the casting equipment introduced from HUBERS, a German company. It applies the patented technologies (e.g. thin-film deaeration and static mixing). The static mixing technology is significantly superior to dynamic one in the consistent physical/chemical property of material mixture (e.g. viscosity and chemical reaction degree).



静态混料技术和动态混料技术对比
Difference between static mixing technology & batch mixing technology



低压箔式线圈
LV foil Windings



高压线圈
HV Windings

附件 Optional Accessories

风冷系统 Air-cooling system



采用空气自冷(AN)和强迫风冷(AF)两种冷却方式。辐流式风冷装置的使用可使变压器增容40%。风冷装置仅作为短时过载的保护，不推荐变压器长期在强迫风冷方式下工作。

The transformers can be cooled by two modes: air natural cooling (AN) and air forced cooling (AF). Forced-air AF output of the transformer is up to 140% of the self-cooled rating, should be used only for emergency non-recurring loads, and but is not recommended for long-term running.

钢板外壳保护装置 Steel-plate protective enclosure



钢板外壳，采用优质的冷轧钢板，经数控剪床，数控冲床，数控弯板机等三大数控设备加工而成，外壳面板表面经磷化、喷塑处理，具有很高的防腐性能。钢板外壳具有外形美观精致、通风性能好、安装简单快捷、运输方便等优点，其结构采用拼装式，机械强度高，可方便地在现场组装，前后均设检修门、通风孔。钢板外壳颜色为RAL7032计算机灰或根据用户要求定制。

The steel-plate enclosure is processed from high-quality cold-rolled steel plate through three numerical control equipment (i.e. numerical control cutter, numerical control puncher and numerical control plate bender). The surface of enclosure panel is treated through phosphorization and plastic spraying, and thus possesses a very high corrosion resistance. The steel-plate enclosure has various advantages (e.g. beautiful exquisite appearance, good ventilation, simple fast installation, and convenient transportation). Its assembled structure has a high mechanical strength. It can be easily assembled on the scene, and there are access door and ventilating hole in its front and at its back. The color of steel-plate enclosure is computer gray (RAL7032) or customizable according to customer demand.

温度显示控制设备 Temperature controller

温度显示控制设备采用智能信号温度计，通过预埋在低压绕组端部的测温元件（Pt100铂电阻）实现对变压器的检测与控制，温控设备自动监测并巡回显示变压器运行中三相绕组的温度值、超温报警(130℃)、启动风机(100℃)、停止风机(80℃)、跳闸报警(150℃)及传感器故障报警等功能。

The temperature is controlled by means of sensor provided on each transformer. The sensor (Pt100) are installed in the LV winding. The digital controller shows the operating temperature of each LV winding, sequentially. The temperature controller performs the following functions of three-phase winding during transformer running: automatically switch the cooling fans on at 100℃ and off at 80℃, it will send an over-temperature alarm at 130℃, and will send emergency shutdown trip signal at 150℃, and sensor fault alarm.



铝合金外壳保护装置 Aluminum-alloy protective enclosure

铝合金外壳，其主要材质为铝合金磨花板，美观，防腐蚀，可方便地在现场组装，前后均设检修门。

The aluminum-alloy enclosure is processed mainly from aluminum-alloy polished plate. It has a beautiful appearance and good corrosion resistance. It can be easily assembled on the scene, and there are access door in its front and at its back.

外壳保护装置为带电部分提供安全屏障，防护等级达到IP20、IP23及以上。IP20外壳可防止直径大于12mm的固体异物进入；IP23外壳更兼具防止与垂直线60°角以内的水滴流入，可适用于户外运行。

The protective enclosure provides safety shielding for charged position at a protective class of IP20, IP23 and above. IP20 enclosure can prevent the entry of solid impurities of >12mm diameter; and IP23 enclosure can additionally prevent the inflow of water droplet within the range at a 60° angle to of perpendicular line, and is applicable for outdoor use.



质量控制 Quality Control



变压器检测中心
Transformer Inspection and Test Center

金盘电气依据ISO9001质量管理标准和产品标准进行质量控制，在进料、生产、成品测试、发货等环节，都配置了专职质量工程师进行质量控制。所有生产工序都严格执行“三检”（自检、互检、专检）制度及产品标准，确保给下道工序提供的均是合格产品。严格的管理制度，认真的工作态度，先进的检测设备，产品检测中心通过CNAS认可，保证了产品的高品质及可靠性。



雷电冲击试验系统
Impulse Test System



变压器性能测试系统
Transformer Load Loss Test System



进口微欧计WR50-12
Micro-ohm Meter WR50-12

试验项目 Test Item	试验类型 Test Type	试验项目 Test Item	试验类型 Test Type
绕组电阻测量 Winding resistance measurements	例行试验 Routine test	感应耐压试验 Induced-voltage test	例行试验 Routine test
电压比测量和联结组号检定 Ratio and phase-relation tests	例行试验 Routine test	局部放电测量 Partial discharge measurements	例行试验 Routine test
空载损耗和空载电流测量 No-load loss and excitation current measurements	例行试验 Routine test	声级测定 Sound level measurements	型式试验 Type test
负载损耗和阻抗电压测量 Load loss and impedance measurements	例行试验 Routine test	雷电冲击试验 Lightning impulse test	型式试验 Type test
绝缘电阻测量 Insulation resistance measurements	例行试验 Routine test	温升试验 Temperature rise test	型式试验 Type test
外施耐压试验 Applied-voltage test	例行试验 Routine test	短路承受能力试验 Short-circuit withstand test	特殊试验 Special test

Jinpan Electric quality control was carried out according to ISO9001 quality management standard and production standard, there are many quality engineers working for IQC, PQC, FQC and OQC. All product should be inspected and tested by operator, auditor and inspector according to the production standards

and requirements before it been transported to the next production process, the failed product will be rejected. The product's quality and reliability are ensured by our strict management produce, serious working attitude and advanced testing equipments.

营销服务

Sales Service

良好的品牌形象是企业赢得市场的关键。金盘电气采取差异化的营销战略，注重品牌营销，不断提高产品的性价比，力求实现客户价值的最大化。

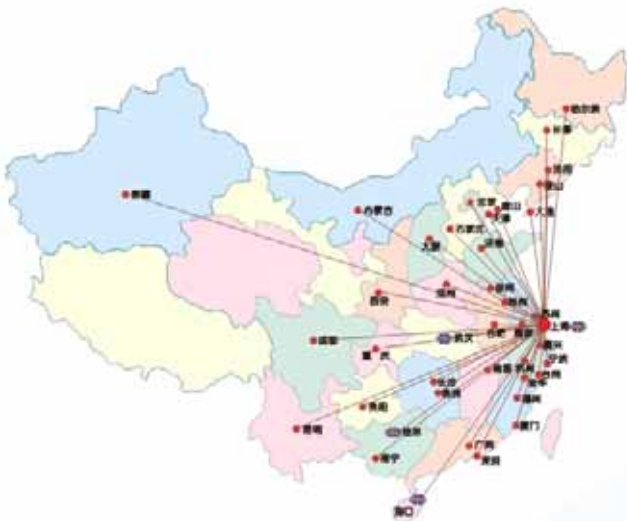
金盘电气高度重视销售队伍的建设，41个销售网点遍布中国的大中城市。1997年美国公司的成立，开辟了国际营销渠道。倡导“全员为客户服务”的理念，金盘电气与客户建立了良好的关系。

凭着卓越的品质和优质的服务，金盘电气已经与通用电气、西门子、施耐德等国际知名电气公司建立了长期合作关系，成功打入欧美等发达国家的高端电气产品市场，在国内外客户中留下了良好的口碑。

Good brand image is key to our success in the market. Jinpan Electric's sales strategy focuses on promoting our brand name, continually improving product quality, and realizing the greatest value for our customers.

Jinpan Electric places great emphasis on the development of its sales team. The Company has 42 sales locations in large and medium sized cities all over China. The Company established a US sales company in 1997 to open international sales channels. Focused on customer service, Jinpan Electric has established good relations with its customers.

Based on our superior product quality and service, Jinpan Electric has established long term cooperative relationships with GE, Siemens, Scheiner and other internationally well known electric equipment OEM, successfully penetrated the market for high end electric equipment in developed countries, such as Europe, United States and etc, and established a good reputation among its domestic and international customers.



国内销售网络
Sales Network in China



全球市场分布
Distribution of Global Market



国外用户

- 美国新世贸中心 New World Trade Center, New York, USA
- 芝加哥地铁 Red Line & Brown Line, Chicago Transit Authority, Chicago, USA
- 纽约拉瓜地机场 La Guardia Airport, New York, USA
- 纽约联合爱迪生电厂 East River Power Plant, Con Edison, New York, USA
- 阿拉巴马蒂森克鲁伯钢铁厂 TK Steel Plant in Mount Vernon, Alabama
- 加拿大国威电厂 Goreway (Station) Power Plant, Ontario, Canada
- 俄罗斯沙图拉电厂 Shatura Power Plant, Siberia, Russia
- 意大利卡撒诺电厂 Cassano d'Adda Plant, Milan, Italy
- 希腊拉沃灵电厂 Lavrion CCPP Power Plant, Lavrion, Greece
- 西班牙艾思卡电厂 CCC Aceca Power Plant, Villaseca de la Sagra, Spain
- 葡萄牙拉瑞电厂 Lares Power Plant, Lares, Portugal
- 沙特阿拉伯日雅德电厂 Riyadh_PP8 Power Plant, Saudi Arabia
- 印度贾苏古达电厂 Jharsuguda Power Plant, India
- 日本东京核电电力公司 K-site Nuclear Power Plant, Japan
- 阿联酋福佳拉电厂 Fujairah Plant Extension, United Arab Emirates
- 马来西亚蒂克森港口电厂 Port Dickson Power Plant, Malaysia

基础设施

- 南京地铁
- 深圳地铁
- 北京地铁
- 上海浦东国际机场
- 武汉天河国际机场
- 深圳宝安国际机场
- 三亚凤凰国际机场
- 首都图书馆
- 北京新中国国际展览中心
- 深圳世界金融中心
- 河南省艺术中心
- 福建省广播电视中心
- 中国移动通信集团公司
- 中国电信集团公司
- 中国网络通信有限公司



重大工程项目

- 西昌卫星发射中心
- 北京2009奥运场馆
- 上海世博会场馆
- 中国石化独山子1000万吨/年炼油及120万吨/年乙烯项目
- 青海盐湖100万吨钾肥工程
- 浙江宁海电厂
- 上海漕泾电厂
- 广东大唐潮州三百门电厂
- 广东岭澳核电站
- 海南昌江核电站
- 金沙江溪洛渡水电站
- 中船上海长兴造船基地建设工程
- 中船南沙龙穴造船基地建设工程
- 中国海运江苏造船基地建设工程
- 上海浦东国际机场
- 南京地铁一、二、三号线
- 深圳地铁三号线
- 鞍钢鲅鱼圈新厂项目
- 首钢曹妃甸工程
- 乐山乐电天威3000吨/年多晶硅项目
- 天威四川硅业有限责任公司3000t/a多晶硅项目
- 四川东方电气1500吨/年多晶硅项目

科学院校

- 中国工程物流研究院
- 中国电子科技集团公司
- 中国航空工业第一集团公司沈阳发动机设计研究所
- 中国运载火箭技术研究院
- 中国建筑科学研究院
- 中国社科院
- 中国计量科学研究院
- 中国农业科学院
- 中国石化研究院
- 国际贸易经济合作研究院
- 中国科学院软件研究所
- 中国医学科学院
- 中国人民解放军空军第四研究所
- 山东电力研究院
- 西安高压电器研究所
- 清华大学
- 北京大学
- 浙江大学
- 南京大学
- 四川大学



电厂电站

浙江国华宁海电厂
上海漕泾电厂
郑州新密电厂
金沙江溪洛渡水电站
金沙江向家坝水电站
浙江嘉兴电厂
江苏大唐吕四港电厂
河北国华定州电厂
江苏华电望亭电厂
内蒙古白音华金山坑口电厂
甘肃平凉电厂
安徽凤台电厂
北京郑常庄热电厂
四川大渡河龙头石水电站
贵州乌江构皮滩水电站
广东大唐潮州三百门电厂
内蒙古霍林河电厂
重庆彭水电厂
福建莆田燃机电厂
海南东方电厂
广西平班水电站
国投钦州燃煤电厂
云南小湾水电站
海南昌江核电站
广东岭澳核电站

石油化工

中国石油天然气股份有限公司独山子石化分公司
中国石油天然气股份有限公司兰州石化分公司
中国石油天然气股份有限公司辽阳石化分公司
中国石油化工股份有限公司金陵分公司
中油管道物质装备总公司
中海石油（中国）有限公司
中国石油呼和浩特石化公司
青海盐湖工业集团股份有限公司
新疆蓝德精细石油化工股份有限公司
上海石油天然气有限公司
山西焦化股份有限公司
海南金海浆纸业有限公司

政府机关

中共中央党校
中共中央直属机关
中国科学技术部
中国人民解放军总政治部
中国气象局
外交部新闻领事中心
北京市国家安全局



钢铁冶金

鞍钢股份有限公司
鞍钢集团新钢铁有限责任公司
鞍钢集团鞍山矿业公司
本溪钢铁（集团）有限责任公司
本钢板材股份有限公司
武汉钢铁（集团）公司
攀枝花新钢钒股份有限公司
首钢京唐钢铁联合有限责任公司
天津钢铁有限公司
中国铝业贵州分公司
福建省南平铝业公司
广西百色银海铝业有限责任公司
江西铜业股份有限公司
昆明钢铁集团有限公司
山西海鑫国际钢铁有限公司

新能源

河北省张家口博德万全玉龙风电项目
华能阜新风电场
福建莆田石城-石井风电场
深圳岭澳核电站
辽宁红沿河核电站
海南昌江核电站
江苏中能硅业科技发展有限公司
内蒙古锋威硅业有限公司
江西赛维LDK光伏硅科技有限公司
大唐国际青海格
20MWp太阳能光伏并网发电工程
宁夏红寺堡10MW光伏电站工程

制造行业

沪东中华造船（集团）有限公司
江南造船（集团）有限责任公司
上海中船长兴建设发展公司
中海工业有限公司
江南重工股份有限公司
中国北车集团
上海大众汽车有限公司
天津汽车夏利股份有限公司
天津丰田汽车发动机有限公司
太原重工股份有限公司
三一重工股份有限公司
贵州中烟工业公司
中国东方电气集团
四川虹欧显示器有限公司(PDP)
哈药集团制药总厂



金盘电气上海集团

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海南金盘电气研究院有限公司
HAINAN JINPAN ELECTRIC RESEARCH INSTITUTE CO., LTD.
金盘电气集团(上海)有限公司
JINPAN ELECTRIC GROUP (SHANGHAI) CO., LTD.