



**HOTE<sup>®</sup>**  
- 宏特 -

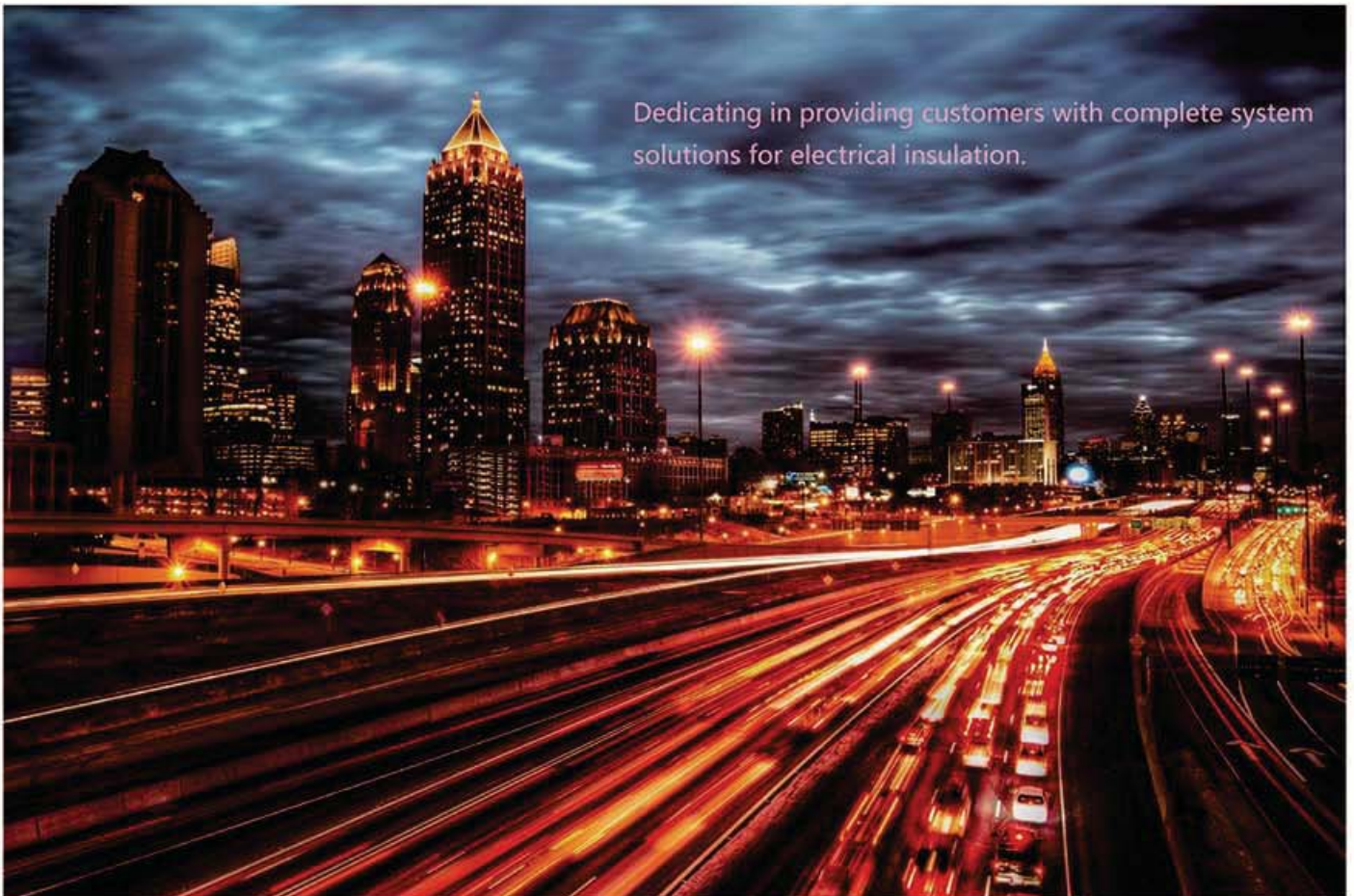
TENGDE & HONGTE

## 腾德实业 & 宏特绝缘材料

TENGDE INDUSTRIAL & HOTE INSULATION MATERIAL

电力电工环氧树脂绝缘系统整合专家

**EPOXY RESIN** INSULATION SYSTEMS  
FOR ELECTRICAL & ELECTRONICS



## About Tengde Group

Jiangxi Tengde Industrial Co., Ltd. is a high-tech private-owned enterprise who has engaged in Development, Production and Sales of Electrical Epoxy Resin over 14 years. We are one of the main manufacturers in this field in China, and the annual output of epoxy materials can reach 30, 000 tons. We use the most advanced facilities which are introduced from Hedrich Germany to make the cast resins, a full automatic production line to make sure the steady quality.

The primary markets we serve include:

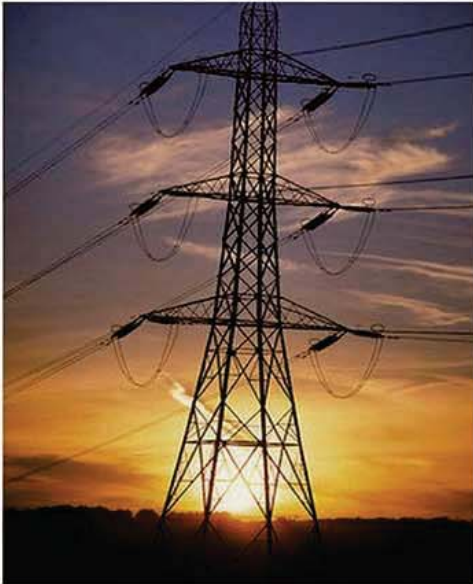
- Electrical & Electronics Systems
- Coatings & Construction
- Transportation & Industrial
- Wind Power

### Main Products

1. Epoxy Resin System for **Class F or H Dry-type Transformer**, Reactors and Special transformers **up to 11, 22, 33 KV**.
2. Epoxy Resin System for **Current Transformer & Potential Transformer** used in Outdoor or Indoor.
3. All sort of insulating composite materials, including DMD (0.1~1.1mm), DMDP (0.12~0.50mm), NMN (0.12~1.1mm), PET (0.05~1.1mm), NHN (0.13~0.60mm), NMNP, YMY, YMYP, DDP, PMP, GHG, GHG-P, SHS, NHN-P, YHY, YHY-P, DM, GMG, which are widely in electrical transformers/motors and electronic fields.
4. Production and sales of electromagnetic wire, copper bar, copper foil, copper strips products.
5. **Full set Procurement Integration** of Cast Resin Dry Transformers, CT&VT and Oil-immersed Transformers.



## The advantage of Tengde Company



- ◆ Jiangxi Tengde Group Co., Ltd. owned more than five industrial companies, the production workshops mainly located in Fuzhou, Jiangxi Province, China, the total area is about 200,000 square meters, which has been dedicating to the research, development, production, and sales of insulating materials, electrical materials and other products.
- ◆ Tengde has been committed to providing a full set of procurement solutions for most famous transformer manufacturers, including TBEA, Guangdong Siemens and Guangzhou Sunten, Chint, JST, Hainan Weite, Dalian Yihu, Zhejiang Tianji and Chaowei Battery etc..
- ◆ Our prices are more competitive than other suppliers no matter on services and prices.

### Comprehensive Infrastructure

We have sufficient operational installed capacity for Formulated systems. Adequate infrastructure is in place to augment capacity within a short period to meet the requirements of the growing markets.

### Certificates

Tengde & HOTE have passed the quality control system ISO9001:2015, the environment control system ISD14001 and UL certificate with more than 20 invention and utility model patents. In addition, based on the market demand, Tengde has been dedicated to providing an Integrated Procurement Solutions for customers of Cast Resin Dry Transformer, Instrument Transformer and Oil-immersed Transformer, including full set projects of Technologies, Equipments and Materials.



## Development History

Tengde & HOTE have certain market share and technology advantages, and therefore we have the potential to become the leader of this industry.



## Epoxy Resin for Dry-Type Distribution Transformers

### ◆ Main Properties

TD Epoxy Products have a long pot life, short gel time, low viscosity, high crack resistance, good electrical and mechanical performances, and high thermal resistance, which can meet the general requirements for Cast Resin Dry Transformers.

◆ **Applications:** Cast Resin Dry Transformer, Reactor, Instrument Transformers, etc.



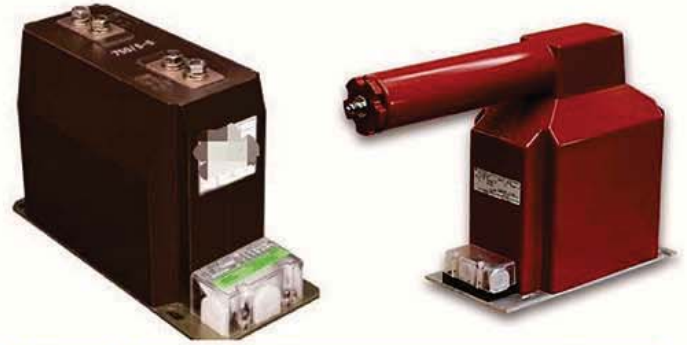
Product Designation	Mixing Ratio (PBW)	GTT-Tg(°C)	Viscosity Pa.s	Critical Stress Intensity Factor $K_{Ic}$ (MPa·m <sup>1/2</sup> )	Filled or Unfilled	Thermal Class	Properties
TD-6007AB / TD-6007AB-1	100:100/ 100:95:200:12	65 - 80 80 - 85	A: at 40°C 3-3.5 / 0.6-0.8 B: at 40°C 1-2 / 0.17-0.23	2.0 - 2.4	Prefilled	F	Long pot life, Short Gel time at higher temperature. Excellent Mechanical and Electrical properties. Good Crack Resistance.
TD-6008AB-1	100:100:15:1: 410	70 - 80	at 25°C 6 - 9 at 25°C 0.15 - 0.2	2.9 - 3.1	Prefilled	H	Good mechanical and electrical end properties. Very high thermal endurance properties. Class H according to IEC 60085.
TD-9005AB	100:100:200: 6:10:0.1	70 - 80	at 40°C 0.7 - 0.8 / 2.3-3 with filler at 40°C 0.25 - 0.35 / 1-1.8 with filler	2.0 - 2.4	Unfilled	F	Long pot life, Short Gel time at higher temperature. Excellent Mechanical and Electrical properties. Good Crack Resistance
TD-9006AB	100:80:200 or 100:100	75 - 90	at 25°C 2.5 - 3.0 at 25°C 0.28 - 0.38	2.7 - 2.9	Unfilled	H	Very low initial mix viscosity, can adopt the high filler content. Excellent mechanical and curing characters. Good crack resistance properties.
TD-9612AB	100:80:334	80 - 90	at 25°C 1.5 - 2.5 at 25°C 0.2 - 0.5	2.90 - 3.10	Prefilled Unfilled	H	High filler possible due to low initial mix viscosity. Long pot-life up to 80°C. Good mechanical and electrical properties. Good crack resistance and thermal endurance properties.
TD-9018AB	100:100:390	50 - 60	at 25°C 4.0 - 5.7 / 0.4 - 0.7	2.90 - 3.10	Prefilled	H	Good mechanical and electrical properties. High thermal shock resistance.
TD-9615AB	100:100:7:0.2	90 - 98	at 25°C 9 - 14 / 0.15 - 0.22	System 3: -	Unfilled	-	Good mechanical and electrical end properties. Very high thermal endurance properties. Considerable insensitivity to atmospheric and chemicals influences.
TD-9010AB	100:100	110 - 120	at 25°C 0.08-0.2 / at 25°C 0.025-0.075	2.8 - 3.0	Unfilled	Indoor	Outstanding mechanical and electrical properties combined with very high crack and thermal shock resistance due to the low coefficient of thermal expansion. Suitable for encapsulation of large metal parts.

## Epoxy Resin for Instrument Transformer

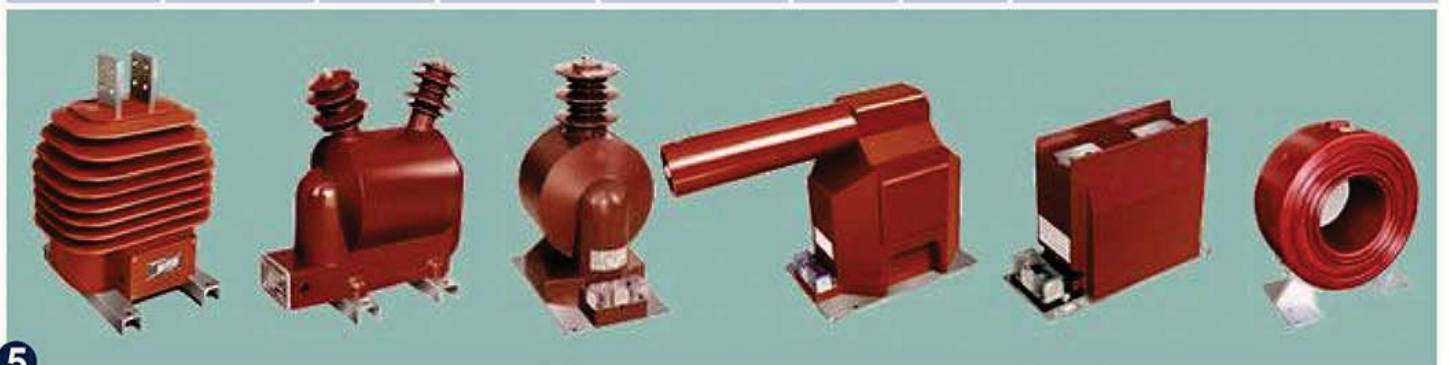
### ◆ Main Properties

TD Epoxy Products are dedicated to provide high crack resistance and high Tg. Outstanding weather resistance and UV resistance for outdoor applications.

### ◆ Applications: Instrument Transformer, CT, PT.



Product Designation	Mixing Ratio (PBW)	GTT-Tg(°C)	Viscosity Pa.s	Critical Stress Intensity Factor $K_{Ic}$ (MPa·m <sup>1/2</sup> )	Filled or Unfilled	Appli-cation	Properties
TD-6016AB /TD-6016AB-1	100:80:270/ 100:100: 300-350	80-90 /70-80	at 25°C 4.5 - 10.0 /1.6-3.5 at 25°C 4-6/1-1.5	2.5 -2.8	Prefilled or Unfilled	Indoor	Good mechanical and electrical properties. Good temperature shock resistance. Excellent long-term breakdown resistance.
TD-6026AB	100:80:270	105 - 125	at 25°C 8.6 -15.1 at 25°C 0.3 - 0.45	1.6 -2.0	Prefilled	Indoor	High mechanical and electrical properties at elevated temperature; Very high thermal shock resistance; Excellent toughness combined with elevated glass transition temperature.
TD-6036AB	100:100	65 - 75	at 25°C about 90 at 25°C about 50	-	Prefilled	Indoor	Very high mechanical strength. Very high resistance to thermal impact strength.
TD-6066AB	100:85:0-20: 0.5-1.5: 345-385	105 - 125	at 25°C 3.5 - 5.0 / 0.05 -0.085	2.65 - 2.85	Unfilled	Indoor	High mechanical and electrical properties. Good thermal shock resistance. High filler content.
TD-9010AB	100:100	110 - 120	at 25°C 0.08-0.2 at 25°C 0.025-0.075	2.8 - 3.0	Unfilled	Indoor	Outstanding mechanical and electrical properties combined with very high crack and thermal shock resistance due to the low coefficient of thermal Expansion. Suitable for encapsulation of large metal parts.
TD-3908AB	100:80:300	about 76	at 25°C 0.3 - 0.55 / 0.04 - 0.1	About 2.8	Prefilled	Outdoor	Good mechanical / electrical properties and good thermal shock resistance. UV Resistance. Suitable for insulators manufacturing with good weathering resistance under harsh conditions.
TD-9928AB	100:20	75 - 85	at 25°C 0.06- 0.1 / 0.06 - 0.12	2.6 - 2.9	Prefilled	Outdoor	Very good mechanical and electrical properties. Good temperature shock resistance. Excellent UV resistance



## Epoxy Resin for Insulators, Bushings and Other insulating parts



### ◆ Main Properties

TD Epoxy Products are dedicated to provide good crack resistance and high Tg. Outstanding weather resistance and UV resistance for outdoor applications.

◆ **Applications:** Pin and Post Insulators, Bushings, other insulating parts.

Product Designation	Mixing Ratio (PBW)	GTT-Tg(°C)	Viscosity Pa.s	Critical Stress Intensity Factor $K_{Ic}$ (MPa·m <sup>1/2</sup> )	Filled or Unfilled	Appli-cation	Properties
TD-6016AB /TD-6016AB-1	100:80:270/ 100:100: 300-350	80-90 /70-80	at 25°C 4.5 - 10.0 /1.6-3.5  at 25°C 4-6/1-1.5	2.5 -2.8	Prefilled or Unfilled	Indoor	Good mechanical and electrical properties. Good temperature shock resistance. Excellent long-term breakdown resistance.
TD-6026AB	100:80:270	105 - 125	at 25°C 8.6 -15.1  at 25°C 0.3 - 0.45	1.6 -2.0	Prefilled	Indoor	High mechanical and electrical properties at elevated temperature; Very high thermal shock resistance; Excellent toughness combined with elevated glass transition temperature.
TD-6066AB	100:85:0-20: 0.5-1.5: 345-385	105 - 125	at 25°C 3.5 - 5.0 / 0.05 -0.085	2.1-2.2/ 2.65 - 2.85	Unfilled	Indoor	High mechanical and electrical properties. Good thermal shock resistance. High filler content.
TD-9010AB	100:100	110 - 120	at 25°C 0.08-0.2  at 25°C 0.025-0.075	2.8 -3.0	Unfilled	Indoor	Outstanding mechanical and electrical properties combined with very high crack and thermal shock resistance due to the low coefficient of thermal Expansion. Suitable for encapsulation of large metal parts.
TD-3968AB	100:90:0-20: 0.6: 370-410	105 - 115 75 - 85	at 25°C 0.7- 0.9 / 0.07 - 0.09	2.4 - 2.8 2.8 - 3.2	Unfilled	Outdoor	Good mechanical and electrical properties. Good thermal shock resistance. High UV resistance. High tracking and arc. Resistance. Silanised filler ensures stable dielectrical properties under outdoor humid conditions.



## Epoxy Resin for Circuit Breaker & Solid Switchgear, Embedded Pole and High Voltage GIS Spacer

### ◆ Main Properties

TD Epoxy Products are dedicated to provide medium and high Tg and high resistance to mechanical creeping because of gas pressure in gas insulated GIS parts, as well as good crack resistance. Outstanding weather resistance, reduce current leakage and extend the pot life due to hydrophobic properties for outdoor applications.

### ◆ Applications:

Vacuum Circuit Breaker, Solid Switchgear, Embedded Pole, Medium and High Voltage GIS Spacer.



Product Designation	Mixing Ratio (PBW)	GTT-Tg(°C)	Viscosity Pa.s	Critical Stress Intensity Factor K <sub>1c</sub> (MPa·m <sup>1/2</sup> )	Filled or Unfilled	Appli-cation	Properties
TD-6016AB	100:100:350	70 - 90	at 25°C 8.5 - 10.0 at 25°C 5.0 - 7.0	2.5 - 2.8	Prefilled / Unfilled	Indoor	Good mechanical and electrical properties. Good temperature shock resistance. Excellent long-term breakdown resistance.
TD-6026AB	100:80:270	105 - 125	at 25°C 8.6 - 15.1 at 25°C 0.3 - 0.45	1.6 - 2.0	Filled	Indoor	Good mechanical and electrical properties at elevated temperature. Very high thermal shock resistance; High glass transition temperature.
TD-6066AB	100:85:0-20: 0.5-1.5: 345-385	105 - 125	at 25°C 3.5 - 5.0 / 0.05 - 0.085	2.65 - 2.85	Unfilled	Indoor	High mechanical and electrical properties. Good thermal shock resistance. High filler content.
TD-9010AB	100:100	110 - 120	at 25°C 0.08-0.2 at 25°C 0.025-0.075	2.8 - 3.0	Unfilled	Indoor	Outstanding mechanical and electrical properties combined with very high crack and thermal shock resistance due to the low coefficient of thermal Expansion. Suitable for encapsulation of large metal parts.
TD-9020AB	100:30-40: 210-330	105 - 115	resin at 40°C about 0.45	-	Unfilled	-	Solid thermal-cured epoxy casting resin with high mechanical strength, alumina or silica powder as the filler, excellent thermal shock resistance. Applied in GIS insulation parts, switchgear and bushing.
TD-3968AB	100:90: 0-20:0.6 :370-410	105 - 115 75 - 85	at 25°C 0.7 - 0.9 / 0.07 - 0.09	2.4 - 2.8 2.8 - 3.2	Unfilled	Outdoor	Good mechanical and electrical properties. Good thermal shock resistance. High UV resistance. High tracking and arc. Resistance. Silanised filler ensures stable dielectrical properties under outdoor humid conditions.



## Epoxy Resin for Electronic Encapsulation

### ◆ Main Properties

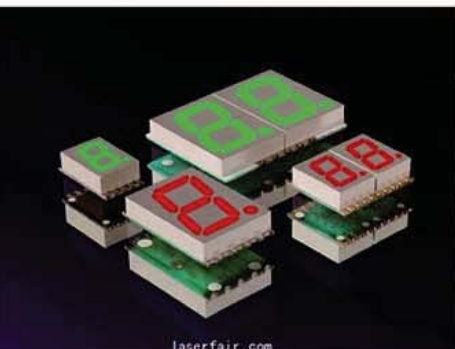
TD Epoxy Products are dedicated to provide long pot life with low viscosity, smooth surface after curing, good insulation properties.

### ◆ Applications:

Power Transformer, LED, Capacitor, Ignition Coil, Regulator, etc.



Product Designation	Mixing Ratio (PBW)	Viscosity Pa.s	Properties
TD-7018AB	100:25	at 40°C 0.11-0.13	Room temperature curing epoxy resin with excellent process properties, long shelf life, easy to operate. Good electrical and mechanical properties, bright surface.
		at 40°C 0.03	
TY-2058AB	100:50	at 25°C 2.6 - 3.0	Storage Battery: Low viscosity, good flowability, easy to penetrate into gaps of the products. Curing at room temp. or at 60°C, fast curing speed. Good adhesion, thermal resistance, low acid absorption, resistance to wet heat and atmospheric aging, good insulation, etc.
		at 25°C 0.08- 0.1	
TY-2059AB	100:50	at 25°C 3.5 - 4.5 / 0.03 - 0.05	Storage Battery Pole Resin: Low viscosity, good flowability, easy to penetrate into gaps of the products. Curing at room temp. or at 60°C, fast curing speed. Good adhesion, thermal resistance, low acid absorption, resistance to wet heat and atmospheric aging, good insulation, etc.
TY-601AB (Including Mould Releasing Agent)	100:100	at 25°C 7 - 9	Low mixing viscosity, good fluidity, good defoaming ability; Long use period, medium temperature curing speed; Excellent mechanical and electrical performance after curing; Small shrinkage; The solidified material has good light transmittance.
		at 25°C 0.2 - 0.25	



## Epoxy Resin for Wind Power Blade

### ◆ Main Properties

TD Epoxy Products are dedicated to provide low viscosity and high-elasticity laminated system, to extend the pot life.

### ◆ Applications:

Industrial Composite Materials including wind power blade



Product Designation	Mixing Ratio (PBW)	Viscosity Pa.s	Properties
TD-3356AB	100:34	at 25°C 1.2 -1.6  at 25°C 0.012- 0.02	Transparent liquid. Low-viscosity and high-elasticity laminated system. The pot life is extended. It is particularly suitable for production of large industrial components.
TD-3358AB	100:34	at 25°C 1.3 -1.5  at 25°C 0.035- 0.068	Transparent liquid. Low-viscosity and high-elasticity laminated system. The pot life is extended. It is particularly suitable for production of large industrial components.

## Epoxy Color Paste

### ◆ Main Properties

High gloss, high temperature resistance, different bright color as per the request, acid and alkali resistance.

◆ **Applications:** Cast Resin Dry Transformer, Instrument Transformer, Insulator, Bushing, Switchgear, Reactor etc.

Product Designation	Color		Product Designation	Color	
TD-01	Bright Red		TD-07	Sapphire Blue	
TD-02	Red Brown		TD-08	Wine Red	
TD-03	Blackish Green		TD-09	Oxide Red	
TD-04	Coffee		TD-10	Light Gray	
TD-05	Iron Oxide Red		TD-11	Dark Gray	
TD-06	Mahogany brown		TD-12	Black	

## Other products

Product Designation	Mixing Ratio (PBW)	Applications	Properties
TD-8028AB	100:25	Coil Repair and LV End Sealing	Fast curing at Room Temperature. Good insulation and thermal resistance.
TD-7025AB(-1)	100:25	Iron-Core Coating	Room Temperature curing epoxy resin can be used for the iron core of dry transformers. Good insulation and excellent process performance and excellent surface gloss.
TD-6810	-	Mould Releasing Agent	Solvent-free liquid, fast-drying release agent with good thermal stability.
Flexibilizer Y-8-2	-	Epoxy resin	Transparent Liquid, Solvent-free polyglycol, can increase toughness and improve bearing strength in anhydride-cured epoxy resin.
Accelerator H-30-1	-	Hardener	Solvent-free tertiary amine suitable for epoxy-based used in electrical composite applications

**TD Group** has been committed to R&D, Production and Sales of Insulating Materials, including DMD (0.1~1.1mm), DMDP (0.12~0.50mm), NMN (0.12~1.1mm), PET (0.05~1.1mm), NHN (0.13~0.60mm), NMNP, YMY, YMYP, DDP, PMP, GHG, GHG-P, SHS, NHN-P, YHY, YHY-P, DM, GMG, all sorts of Crepe Paper and other Insulating Paper.

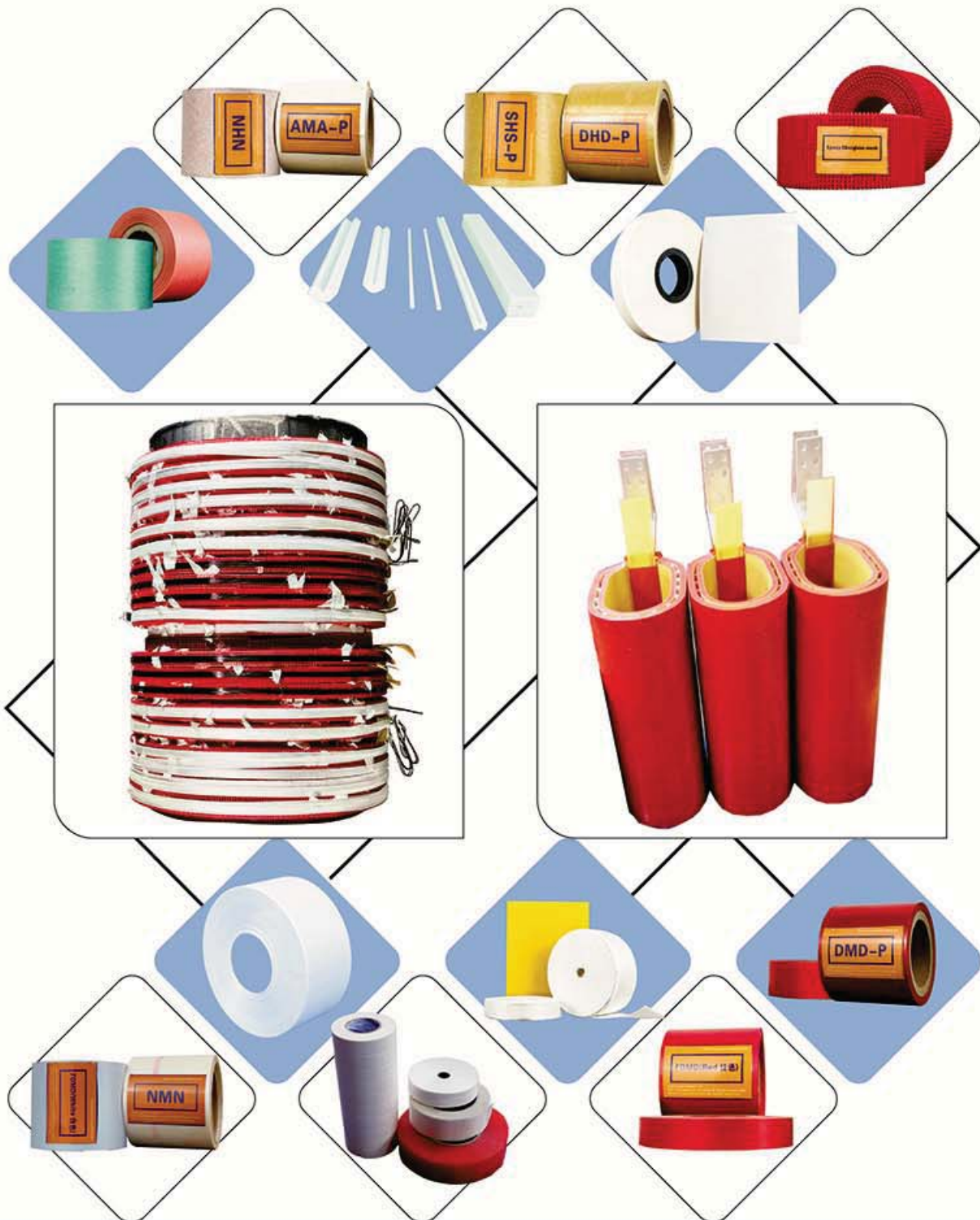


# Epoxy Resin and Hardener



Epoxy Resin System For Dry Type Transformer, CT/PT And Other Insulation Parts.

**DMD, DMDP , NMN, PET, NHN, NMNP, YMY, YMYP, GHG, SHS, NHN-P, YHY, YHY-P, DM, Red Coaming**



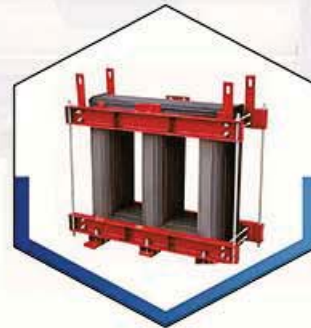
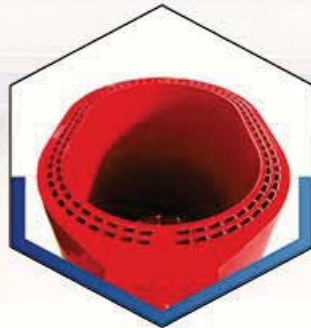
**Class H SHS use in Special Transformer or Reactor**



**EPOXY INSULATION SYSTEMS FOR ELECTRICAL & ELECTRONICS**

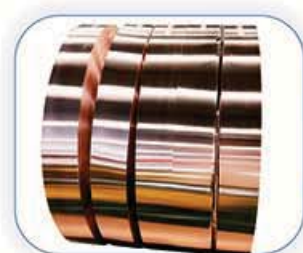
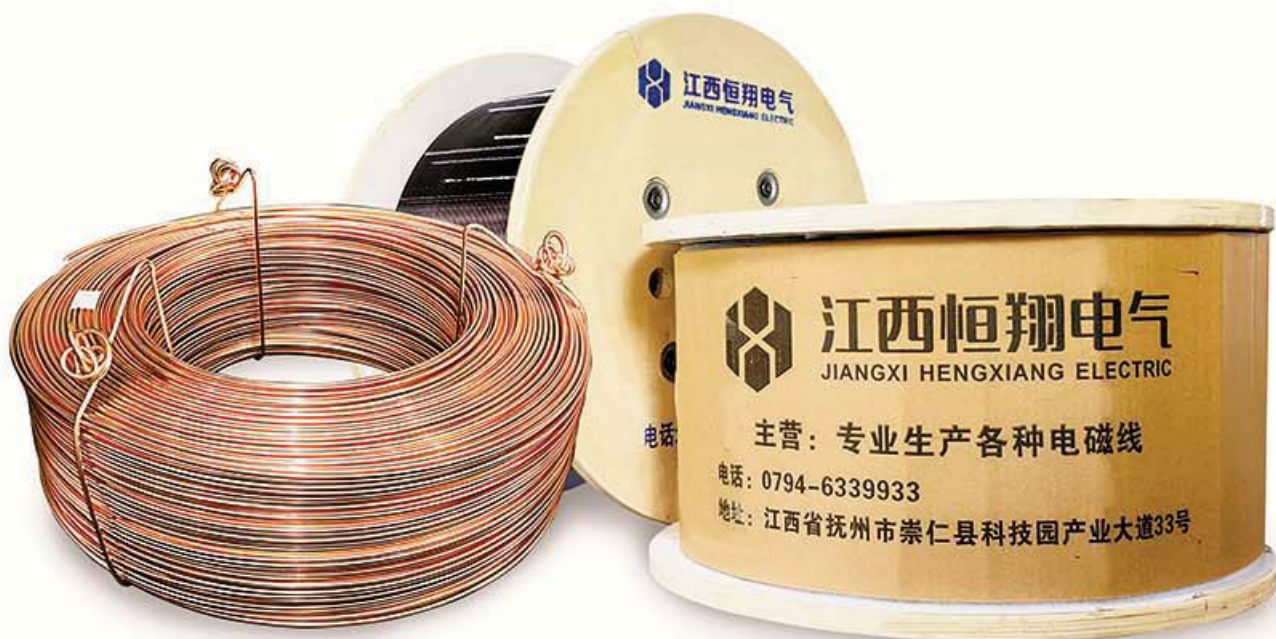
# OEM

factory for Transformer Coil and CRT



Advanced 6S Dust-free Workshop

# Copper Rod, Copper Wire and Electromagnetic Wire



Copper Strip



Copper Strip



Copper Rod



Copper Plate & Rod



Jingyan focuses on various automation equipments for transformers, CT/VT, power insulation parts, special motors, automotive electronics, new energy batteries, wind blades, etc.. The main products are: vacuum casting equipment, vacuum drying equipment, gas phase drying equipment, vacuum oiling equipment, vacuum impregnation equipment, automatic pressure gel equipment (APG), vacuum heat treatment equipment, integrated coating/gluing machine, intelligent production line and other types of automation equipments.

## Advanced Automation Equipments Manufacturer



**真空浇注设备**  
Vacuum Casting Equipment



**自动压力凝胶设备**  
Automatic Pressure Gel Equipment



**气相干燥设备**  
Vapor Phase Drying Equipment



**硅胶注射机**  
Silicone Injection Machine



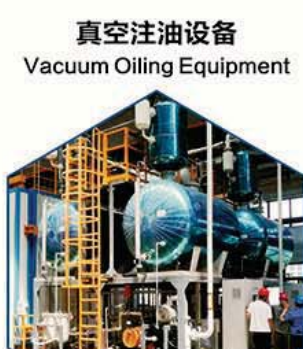
**压力成型机** Clamping Machine



**真空干燥设备** Vacuum Drying Equipment



**真空灌封设备**  
Vacuum Potting Equipment



**真空注油设备**  
Vacuum Oiling Equipment



**真空备料设备**  
Vacuum Material Preparation Equipment



**真空浸渍设备**  
Vacuum Impregnation Equipment



# Components Assembly for Dry-type Transformer



**Post Insulator**



**Air Flue Batten**



**TD Epoxy Resins**



**DMD Materials**



**Red Grid**



**PET Composite Film**



**Copper Bar, Strips, Rod**



**Dry Fan**



**Epoxy Laminates**



**Silicon Plate**



**Auto Temp. Controller**



**Resin Pad**



**Silicon Steel Core**



**RP Outer Shell**



**Conductive Aluminium Strips**

# Materials Assembly for Current and Voltage Transformers



**Different Sorts Of Insulation Tape-papers**



**Fiberglass And Silicon Rubber**

**Double glass flat copper wire**

**Silicon Steel Core**



**Fiberglass Insulating Fitting Tube**



**Lubricating Silicone Grease**



**Plastic Cover For CT&PT**



**Pure-Prefilled Epoxy System For Outdoor And Indoor**

# Materials Assembly for Oil Immersed Transformer



**Insulation**



**Tap-changers**



**Electromagnetic Wire**



**Winding for Oil Transformer**



**Electrical Porcelain Insulator/Bushing**



**Gas Relay**



**Pressure Relief Valve**



**Oil Conservator**



**Iron Core**



**Radiator**



**Corrugated tank shell**



**Electric Insulating Oil**



**HOTE<sup>®</sup>**  
**- 宏特 -**



**电力电工环氧绝缘系统**

**EPOXY INSULATION SYSTEMS FOR ELECTRICAL & ELECTRONICS**

Jiangxi Tengde Industrial Co., Ltd. & Jiangxi Tengyue Trading Co., Ltd.

江西腾德实业有限公司 & 江西腾跃贸易有限公司

Add: No. 222, Wang'anshi Avenue, Fuzhou High & New- tech Industrial Park,

Jiangxi Province, P.R. China

中国江西省抚州高新技术产业园王安石大道 222 号

Jiangxi HOTE Insulation material Co., Ltd.

江西宏特绝缘材料有限公司

Add: Chongren Industrial Park of Fuzhou City, Jiangxi Province, P.R. China

江西省抚州市崇仁县崇仁工业园

Mr. Carl Wu 吴益平

Overseas Sales Representative/ 海外销售代表

Email: [carl.wu@jxhongte.com](mailto:carl.wu@jxhongte.com)

Website: <http://en.jxtengde.com/main.html>

<http://en.jxhongte.com/index.html>

Mob. / Whatsapp / Wechat No.: +86 13735252010

Phone: + 86 794-788 1029

Fax: + 86 794-788 1095