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/// V9.1

Power quality optimization expert

Goal

To be the best power quality product and solution service provider in China

Mission

Use new knowledge and technology to help users solve power problems

Value

Keep improving and innovate constantly .

路之生
ENTERPRISE CULTURE



With the changes of the times and the development of science and technology. Power quality and people's work and life are getting closer and closer. Specialized in new high-tech enterprises, one by one, the company is using science and technology to constantly solve the difficult problems in the process of power consumption, and has gradually become a trusted "power hospital" in the eyes of users.

Over the past ten years, Road Life has successfully developed a remote power quality diagnosis system combining Internet of Things and cloud technology, which makes data acquisition more convenient. The impact reactive power and harmonic voltage drop of complex site are comprehensively analyzed by using the "three elements" analysis method. In the process of power quality product manufacturing, the "full voltage and full current" is first proposed. The concept of full voltage and full current runs through the application. Through the detection and management of thousands of users' sites, we have rich experience in the field of power quality. At the same time, deep ploughing technology has obtained 14 national patented technologies, which can provide various customized solutions and products for different users' needs, and help users to add value in the business process, and enhance the company's long-term adherence.

Adhere to science and technology R&D and independent innovation have carried out in-depth academic discussions and project tackling with the Asian Power Quality Alliance, the Power Supply Division, the Power Supply Society and other major universities, and obtained the authorization of the Southwest District Detection Center of Shanghai Institute of Electrical Power Quality Detection Services, providing authoritative and accurate detection reports for more users. At present, Road Life Science and Technology provides testing, scheme design, product customization, professional maintenance and other services for national power supply, large-scale central enterprises and important power users. At the same time, it takes the road to revitalize the country. Products are sold to Southeast Asia, Central Asia, Africa and other life paths.

The road of life, the people in the road; through its unremitting efforts, it draws a beautiful life.



QUALIFICATION AND PATENT



QUALIFICATION AND PATENT





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THE CHARACTERISTICS OF ROAD LIFE TECHNICAL CORE



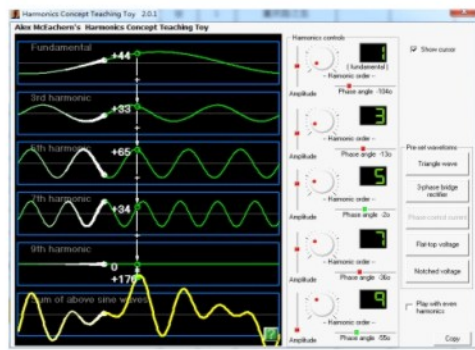
- ◎ Technical core
- ◎ Product display
- ◎ Technological innovation

Technical core

adopt a rigorous and scientific idea of closed-loop service to provide a systematic and targeted treatment program from problem finding to problem solving.



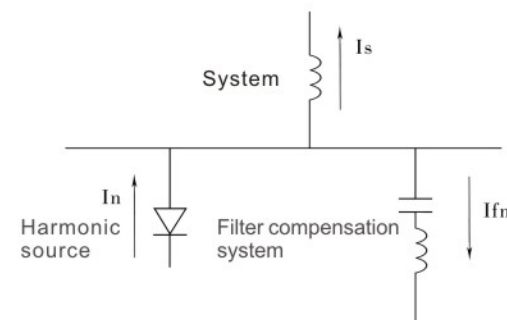
◆ The first technical theory of "full current and full voltage" is put forward.



How to ensure the long-term stable operation of the product ?

Power grid waveform is not an ideal fundamental operating state(50HZ). Because of the existence of the language quilt, the operation state of the equipment is the "all-electric and full-voltage" state of the base quilt + please. The key indicators are customized to ensure the safety and reliability of long-term operation.

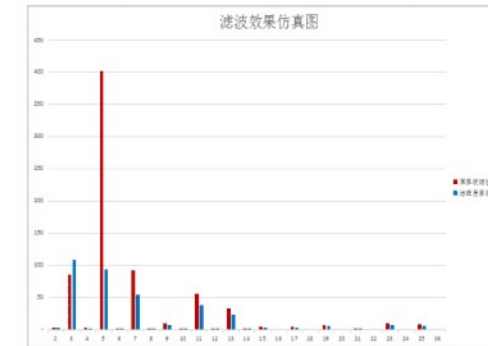
◆ Creative "Three Elements" Simulation Analysis Method



How to ensure that the product is suitable for each field?

(filter) device, its operation effect is written in class, system parameters and compensation device parameters are closely related. In different fields, the same set of mending (reading) device has different effects and service life. Through the "three-cable simulation analysis, according to the site parameters, the product can achieve high suitability for all kinds of sites.

◆ Calibration of Computer Operation Simulation by Scientific Application



How to ensure the effect after loading and putting into operation?

Fine sampling modeling of passage number and computer simulation. Use effect is predicted in advance. No excessive deviation occurs between the design scheme and the installation after commissioning, and reasonable safety qualification is guaranteed at the same time.

◆ Professional testing equipment



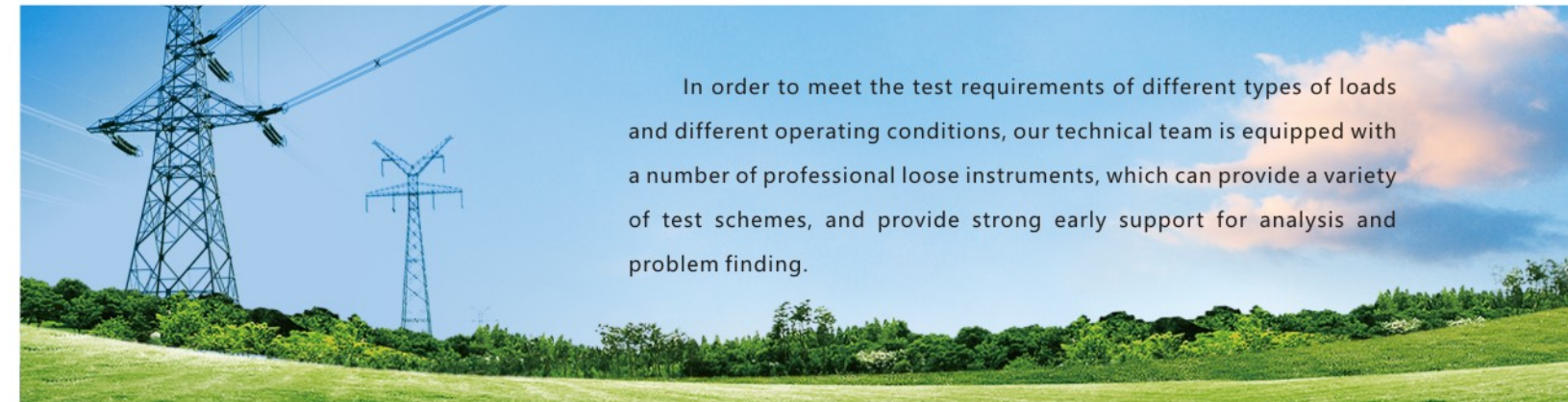
FLUKE435 II Power Quality Analyser



Qingzhi 8910C Power Quality Analyser



ZS-RTU Power Quality Management Terminal



In order to meet the test requirements of different types of loads and different operating conditions, our technical team is equipped with a number of professional loose instruments, which can provide a variety of test schemes, and provide strong early support for analysis and problem finding.

Product display

◆ High Voltage Automatic Reactive Power Compensation Device



For substation and user 10kV busbar, it is mainly used to compensate reactive power for busbar. On this basis, on-line monitoring technology of capacitance reduction of high-voltage capacitor is developed to prevent the invitation of post caused by capacitance reduction of high-voltage capacitor. Realize the high-pressure compensating device to measure the tube clown all the week, ensure the device to run safely and reliably, and stretch out the compensating device of high-pressure on-discharge suitable for single equipment.

Device characteristics

1. It is suitable for centralized compensation of 10kV and 35kV lines.
2. Fully automatic and stable lifting of power factor, avoiding power and electricity costs and reducing line losses.
3. The device has capacity on-line monitoring function and automatic alarm indication.
4. Full current, full voltage technology core. Ensure that the bag itself has a high degree of safety and reliability.

◆ Low Voltage Dynamic Reactive Power Compensation Device



For large passive load, fast change, large demand for instantaneous reactive power and other sites, all-dynamic switching mode, buy-and-put switching fast. Avoiding overcompensation and undercompensation caused by inadequate compensation can effectively fix Leitong power with low reactive power.

Device characteristics

1. Compensation response time is less than 20 ms, which is suitable for high impact and frequent fluctuation loads.
2. Zero-crossing switching has no inrush and arc control, and can be switched frequently for a long time. High safety and reliability.
3. Supporting co-compensation, sub-compensation and cross-compensation in special occasions can restrain the harmonic amplification of specific times.

◆ Active Power Quality Products



With modern power electronics technology and digital number processing technology based on high-speed DSP devices, APF (Active Power Filter) and sVG4 static power generator can quickly and dynamically adjust the number of times, reactive power regulation. Active products can be compared with non-active products. Under better operating conditions, it can be used to control power harmonics. It achieves a better period effect and has a smaller cross-loading empty space at the same time.

Device characteristics

1. Harmonic control is not affected by power factor, so it can be used to control heavy harmonics in high power factor field.
2. Stepless output can realize reactive power compensation in near ideal state.
3. The total response time is less than 10 ms, which is suitable for dynamic field.
4. Intelligent protection, adaptive system, easy to operate. Safety and reliability are high.

◆ Low Voltage Heavy Harmonic Filter Compensation Device



In the large-scale commercial, chemical, training, glass and other industries, which are widely used in frequency converters, power electronics and non-linear equipment. With the large number of harmonics produced by equipment work, it is seriously harmful to the power supply and distribution system, resulting in increased losses and high temperature abnormal noise of transformers. Equipment shutdown or misoperation, etc. Passing through the complement device is deeply understood and optimized. Considering both reactive power compensation and high-efficiency harmonic control, lzf introduced a low-voltage heavy harmonic compensation device.

Device characteristics

1. It is suitable for high natural power factor (above 0.85) and specific harmonic overweight field.
2. Compared with the traditional Reactance Compensation device, the filtering effect is more obvious, and the primary and secondary harmonics effect reaches 60-80%.
3. Reduce the loss of transformer caused by harmonic wave greatly, and the energy saving rate can reach 3%-5%.
4. Full current and full voltage technology core ensures high safety and reliability of the device itself.



◆ Fine Reactive Power Compensation Device

Characteristics:

1. Transformer light load, No-load adaptive
2. Accurate reactive power output;
3. It can be used in conjunction with original compensation.



◆ Fine power purifier

Characteristics:

1. Harmonic source side-by-side treatment, both treatment of symptoms and symptoms.
2. Effectively reduce the harm of zero-sequence harmonics and avoid zero-line overcurrent.
3. Solve reactive power and unbalance and stabilize terminal power grid.



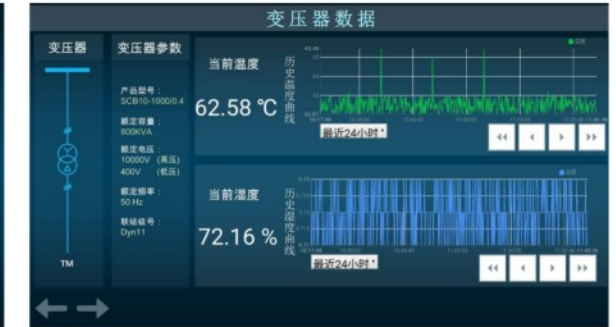
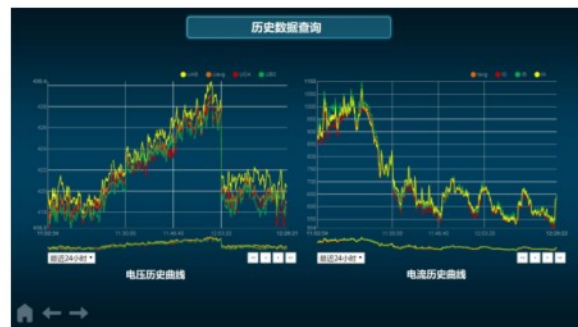
◆ Internet of Things Intelligent Switch

Characteristics:

1. Harmonic source side-by-side treatment, both treatment of symptoms and symptoms.
2. Effectively reduce the harm of zero-sequence harmonics and avoid zero-line overcurrent.
3. Solve reactive power and unbalance and stabilize terminal power grid.

Technological innovatio

◆ Smart Security Cloud Technology Life Cycle Management of Compensation System



It is often a difficult problem for equipment managers to have unobstructed information and not understand the running status of equipment. Lu Sheng technology is actively exploring the new form of "Internet +" power quality industry development. With the Internet, big data and cloud computing technology as the means, the power quality monitoring data will be transmitted to the cloud, and the application of information technology such as equipment geographic information system will form a comprehensive control mode of power quality and big data, and strive to crack down on the letter. Source and Base Magnetism in Power Quality Control under Information Conditions

It can provide real-time monitoring and analysis of power quality indicators and phenomena and comprehensive information management functions. Managers can quickly and accurately grasp the operation status of power quality of the whole system through computer and mobile APP, and provide scientific basis and decision support for comprehensive management of power quality through comprehensive evaluation and analysis of multi-level power quality from face to point.

Typical case analysis

- ◎ Industry Chapter
- ◎ Civil Chapter
- ◎ Product Operation Certificate
- ◎ Technical Exchange and Service
- ◎ Compensation industry performance statement

Industry Chapter

Automobile Industry

Chang An 、 BAIC Hainachuan Auto Co. Ltd
rapid impact、 heavy harmonic 、
Three-phase imbalance 、
voltage magnitudes dropping



Case 1

■ ChangAn Automobile

Product Structure Upgrading (V301S) Capacity Expansion Project Improvement of T2T3 Power Station in Huaijie No.2 Workshop

User Feedback:

The main switch often jumps, High rejection rate, Low Power Countries at Examination Points , High monthly power tariff , Long-term damage to components of reactive power compensation device.

Key Points of Problems:

Suspension welding, Reactive current of fixed spot welding is very strong, Three-phase unbalance of cross-phase load, Three (zero sequence) harmonic weights, The impact of stamping workshop load is great, The 5th and 7th harmonics of painting workshop are outstanding.

Solution:

One-step switching fast response, Cross-phase compensation, Setting up 3, 5 and 7 times of channel of Fubo, Component parameters are designed according to "full current and full voltage".

Fast response (overall time less than 20 ms) , Cross-phase compensation (three-phase unbalanced load characteristics), 3 times filter channel scheme.

A total of 8 sets of dynamic filter compensation devices to ensure the stable operation of welding production line distribution!



To sum up the above data:

After the transformed reactive power compensation device is put into operation, the operating current, reactive power of the system, the harmonic currents of 3, 5 and above are reduced and the system voltage is raised. Meanwhile, the average power factor is over 0.95, the line current is reduced by more than 400A, and the filtering effect of harmonic currents of 3 and 5 times is over 40%, which achieves the expected control goals.

Case 2

Beijing Automobile Hainachuan Parts Base

Project base:

Project Base: Tianjin Wuqing, Hebei Cangzhou, Quanlin Town, Chongqing Liangjiang New Area and Jiangsu Zhenjiang; five major automotive parts production bases have been built in China.

Lu Zhisheng has been equipped with dynamic reactive power image compensation and active filter device, which has been running steadily for more than three years.



Chemical Industry

Sino-Thai Chemistry and Sino-Wu Chenguang Chemical Industry

Key points of the problem:

Closed-loop production, corrosive gas, a large number of speed control devices, high-power variable-frequency motors, etc.

Solution:

"Full current, full voltage" design concept, electrical safety gap, harmonic control.

Achieved results:

On-line capacitance monitoring of high voltage compensation ensures safe operation and stable operation of low voltage dynamic compensation.



Aerospace

Chongqing Jinshili Aerospace Material Production Base



10KV motor load (Titanium plate mill): 1775kW + 4000kW; liquefaction pump, fast forging unit, electric arc furnace and other high-power equipment.

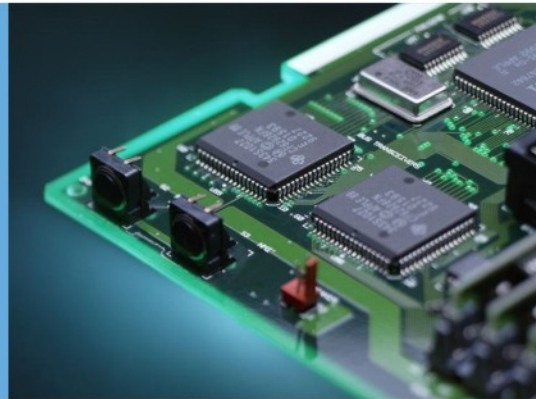


Construction:

Lu Zhisheng built a new 1800 kVar high voltage filter compensation device + 3600 kVar low voltage dynamic reactive power compensation to solve the reactive power and harmonic problems and ensure the stability of its power grid operation.

Electronics Industry

Kaige Electronics, Dayou Technology
Precision Processing,
Sensitive Equipment



Case 1

■ Kaige Electronics

User feedback:

Nearly 10,000 yuan per month for power regulation, 10 times a year for power shaking (100,000–200,000 loss each time), the integrated capacitor is easy to burn out, long-term in the state of removal.

Points of the problem:

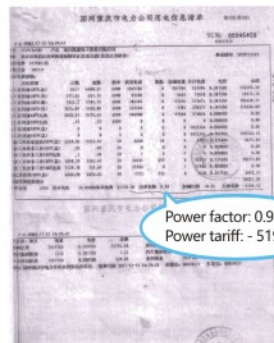
The original compensating system needs to compensate for fast response when the single capacitor amplifies harmonics and part of the fluctuating load in the field.

Solution:

Five times filter branch circuit is designed. Component parameters are designed according to "full current and full voltage". Dynamic and static combination meets part of fluctuating load and reactive power demand. At the same time, reactive power storage is increased to effectively reduce the shaking sound.

Achieved results:

Safe operation for more than two years, the average monthly power factor of the assessment point is more than 0.95, and it enjoys a reward of about 5,000 yuan per month, which greatly reduces the frequency of power shaking in two years.



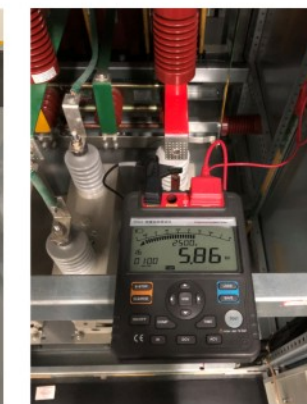
Power factor: 0.98
Power tariff: - 5194.13



Case two

■ Darwin Technology Diodes American IC giant, Nasdaq listed company

The two phases of the project consist of 2 sets (12 sets) of high-pressure compensating devices for 10 kV ice water units, and a 5-year maintenance agreement for the products has been signed.



Glass Industry

Zhengchuan Glass Heavy Harmonic and High Temperature Environment



User Feedback:

Reactor over 130C high temperature, long-term burnout of capacitors, a large number of switch damage, distribution cabinet screaming.

Points of the problem:

Voltage harmonic ripple rate is high, 5th and 7th harmonic current is large, reactor, capacitor and switch are not suitable for use in heavy harmonic environment.

Solution:

Customize the special 5 times filter channel for heavy harmonics, and check it through the "full current and full voltage" security design, taking into account the filtering effect and security.

The results are as follows:

The operating temperature of the reactor is reduced to below 90 C, the ability of harmonic filtering reaches 70%, the operation state of the capacitor is stable, and the copper whistle in the cabinet is greatly reduced.



Before transformation



After transformation

| LOGGER | Unit | 1:00:00 | 2:00:00 | 3:00:00 | 4:00:00 |
|--------------------|------|---------|---------|---------|---------|
| Uolt | 6.3 | 6.1 | 5.9 | 42.7 | |
| THD% _r | 14.6 | 15.7 | 15.1 | 58.7 | |
| I _{1rms} | 1778 | 1724 | 1779 | 39 | |
| I _{2rms} | 19 | 17 | 19 | 2 | |
| I _{3rms} | 21 | 14 | 21 | 25 | |
| I _{4rms} | 9 | 8 | 10 | 0 | |
| I _{5rms} | 240 | 249 | 242 | 11 | |
| I _{6rms} | 3 | 1 | 3 | 0 | |
| I _{7rms} | 79 | 89 | 101 | 5 | |
| I _{8rms} | 5 | 5 | 5 | 0 | |
| I _{9rms} | 14 | 7 | 18 | 2 | |
| I _{10rms} | 5 | 6 | 6 | 0 | |

The harmonic voltage drop to 5% (national standard)

| LOGGER | Unit | 1:00:00 | 2:00:00 | 3:00:00 | 4:00:00 |
|--------------------|------|---------|---------|---------|---------|
| Uolt | 4.1 | 4.2 | 4.0 | 33.4 | |
| THD% _r | 6.9 | 8.1 | 7.6 | 38.9 | |
| I _{1rms} | 1515 | 1482 | 1536 | 48 | |
| I _{2rms} | 19 | 13 | 17 | 1 | |
| I _{3rms} | 16 | 10 | 13 | 19 | |
| I _{4rms} | 24 | 22 | 21 | 1 | |
| I _{5rms} | 71 | 91 | 78 | 4 | |
| I _{6rms} | 2 | 1 | 2 | 0 | |
| I _{7rms} | 44 | 54 | 58 | 3 | |
| I _{8rms} | 5 | 4 | 4 | 0 | |
| I _{9rms} | 17 | 2 | 18 | 3 | |
| I _{10rms} | 4 | 4 | 4 | 0 | |

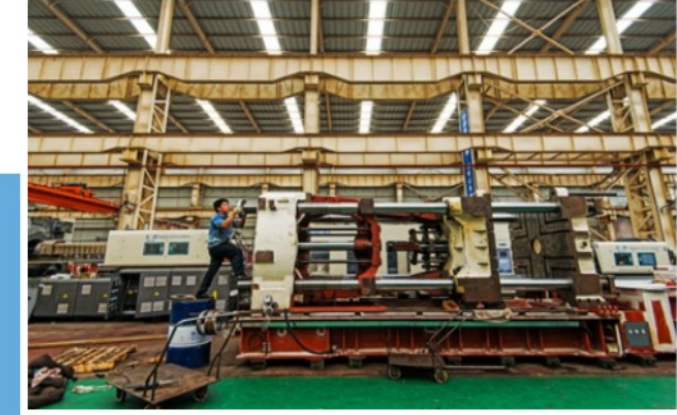
Five times lower 160 A

seven Five times lower 50A

Foundry industry

Gaojin Industry

Low Initial Power Factor and High Load Impact



User Feedback:

Transformer temperature is too high, ready to replace transformers and capacitors, capacitor leakage, contactor frequent replacement.

Points of the problem:

Single capacitor amplifies harmonics, has low power factor and insufficient capacitance. It needs large capacitance input. Harmonic amplification causes high temperature of transformer.

Solution:

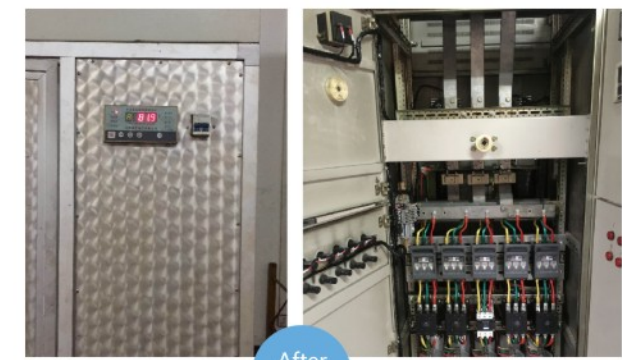
Redesign capacity to meet power factor requirements, set up 5 times filter branch, design component parameters according to "full current, full voltage"

Result:

The compensator has been running safely and steadily for nearly two years, and the transformer temperature has been reduced by 30 C at room temperature during the same period.



Before transformation



After transformation

Pharmaceutical Industry

Heimani Pharmaceutical



User Feedback: Capacitors often bulge and explode.

Solution: "Full current, full voltage" parameter customized capacitor, filter channel.

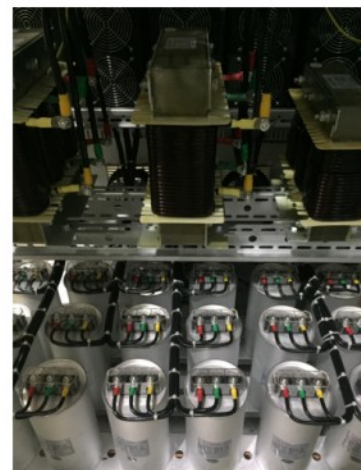
Points of the problem: a large number of variable frequency air conditioning (shady room).

Result: After stable operation of the first phase of transformation, the second phase of new supporting facilities.



Before and after the first phase of transformation

Current Situation of Phase II New Construction



CNC -- industry

Jiate CNC industry spare parts

User anti-expensive:

Mitsubishi PLC control machine tool can not be used with two other planers at the same time, alarm shutdown, seriously affecting the production of enterprises.

Key points of the problem:

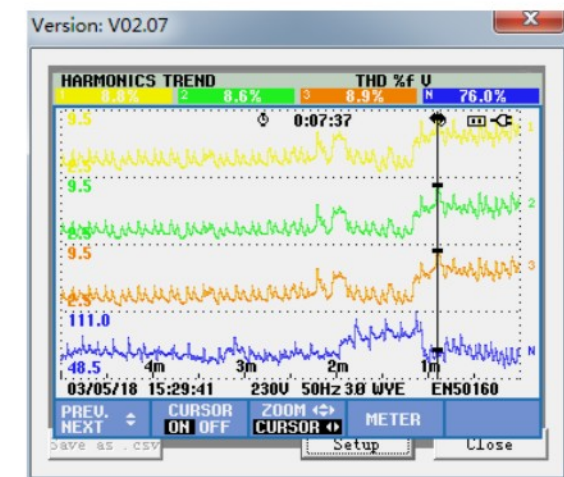
The harmonic voltage variation rate is too high, the compensation device amplifies the harmonic, and the compensation response speed can not meet the needs of the field.

Solution:

Dynamic filter group guarantees reactive power demand while greatly reducing harmonic content.

Achieved results:

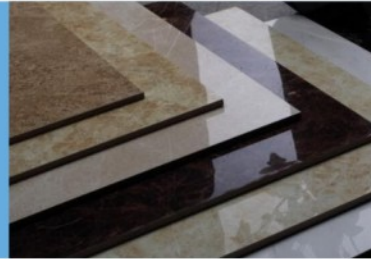
Voltage harmonic distortion rate is reduced, three devices can be used at the same time, avoiding the phenomenon of the user site shutdown again affecting production.



The field harmonic voltage distortion rate reaches 9%, causing machine tool alarm.

Ceramic Industry

Aesthetic Ceramics



User feedback:

Large area damage of compensation device, abnormal operation of control equipment, high temperature of transformer.

Key points of the problem:

Burning kiln has the characteristics of high power factor and multiple harmonics, which results in serious harmonic overload of unit capacitor. Over-high harmonic voltage leads to motor misoperation and equipment heavy harmonic automatic protection shutdown.

Solution:

Customize the special 5 times filter channel for heavy harmonics, and check it through the "full current, full voltage" security design, taking into account the filtering effect and security.

Achieved results:

Current harmonic ride rate is reduced by 60%, voltage distortion rate is reduced to within the national standard, transformer load rate is reduced by 20%, energy saving is about 3%.

| LOGGER | | | | |
|-------------------|-----------------|-----|---------|---|
| | P _{UN} | 0 | 0:07:24 | |
| Amp | A | B | C | N |
| H5 _{RMS} | 374 | 407 | 385 | 0 |
| Amp | A | B | C | N |
| H6 _{RMS} | 1 | 1 | 0 | 0 |
| Amp | A | B | C | N |
| H7 _{RMS} | 45 | 55 | 53 | 0 |
| Amp | A | B | C | N |
| H8 _{RMS} | 1 | 1 | 0 | 0 |

06/25/19 18:13:49 400V 50Hz 3Ø WYE LIM 1

UP DOWN TREND EVENTS 0 STOP START

Harmonic treatment before

| LOGGER | | | | |
|-------------------|-----------------|-----|---------|---|
| | P _{UN} | 0 | 0:21:16 | |
| Amp | A | B | C | N |
| H5 _{RMS} | 158 | 172 | 156 | 0 |
| Amp | A | B | C | N |
| H6 _{RMS} | 1 | 1 | 1 | 0 |
| Amp | A | B | C | N |
| H7 _{RMS} | 36 | 47 | 41 | 0 |
| Amp | A | B | C | N |
| H8 _{RMS} | 1 | 1 | 1 | 0 |

06/25/19 17:41:27 400V 50Hz 3Ø WYE LIM 1

UP DOWN TREND EVENTS 0 STOP START

After the harmonic governance



Civil Chapter

Financial Center

Ping An International Financial Center



User feedback:

Large-scale burning, reactor corrosion and copper arc-drawing in the capacitor cabinet of underground garage distribution room.

Key points of the problem:

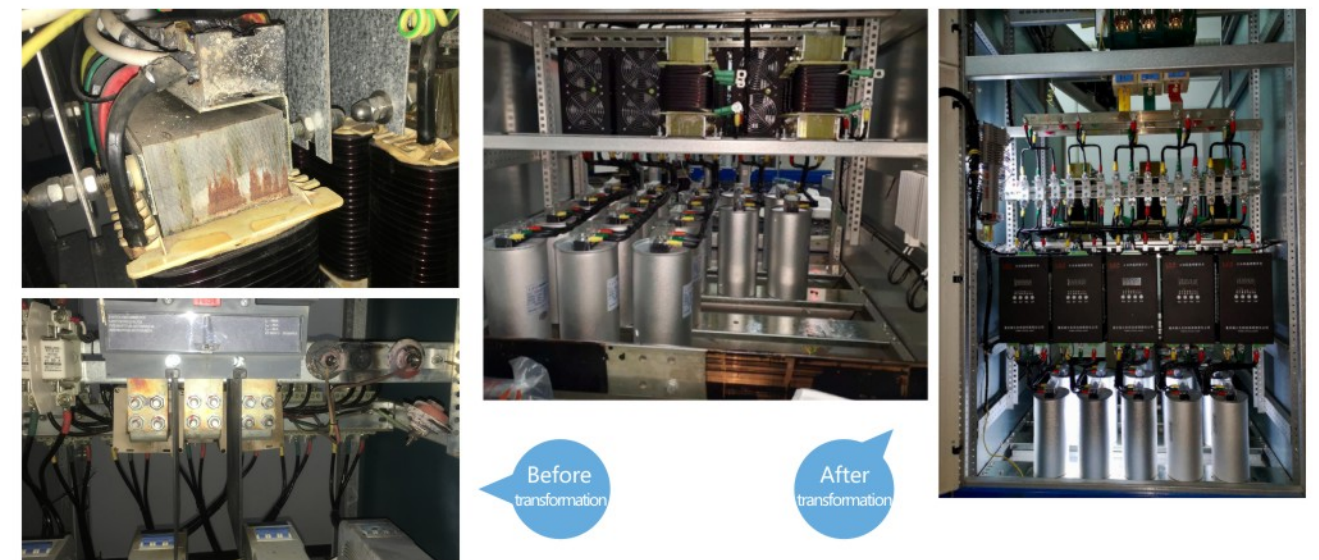
The air humidity of the distribution room near the basement chiller is high, the components are oxidized and corroded, and the zero-sequence harmonics are heavy. All aspects of the performance are affected.

Solution:

Increase the temperature control of dehumidification in cabinet, customize filter compensation elements, expand the internal insulation distance of electronic products to consider three anti-paint (special environment).

Achieved results:

The device operated steadily for more than one year.



Before transformation

After transformation

High-end business office

—Chongqing Enterprise World



User Feedback:

Air conditioning centrifuge starts, busbar and transformer are impacted and vibrated, capacitor is damaged and ignited.

Key Points of Problems:

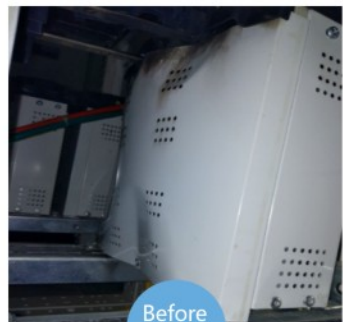
The dynamic reactive power response is not in place and the design parameters of "full current and full voltage" are not in accordance with the starting reactive power impact of the motor.

Solution:

Industrialization standard requirements, dynamic compensation scheme, one step in place, fast input compensation, "full current, full voltage" parameter products, strong impact resistance, good stability.

Achieving results:

Bus and transformer jitter is greatly reduced, stable operation for three years, energy saving of about 3%.



Before transformation



After transformation



High-end Resort Hotel

Hilton Hotel Jiuzhaigou

User feedback:

Atmospheric pressure decreases and insulation performance decreases.

Solution:

The capacitor reactor and main circuit components are all plateau customized, which enlarges the insulation gap and reduces the capacitance of some products.

Achieved results:

It has been running steadily for more than three years.





Medical Center

Dental Hospital Affiliated to Chongqing Medical University
Zigong Fourth People's Hospital

User feedback:

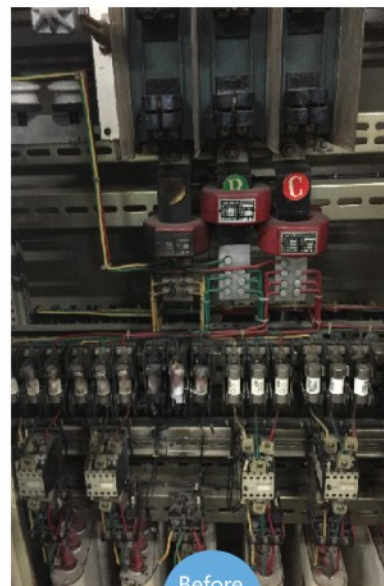
The capacitor is damaged frequently and the capacitor cabinet is burnt by arc drawing.

Solution:

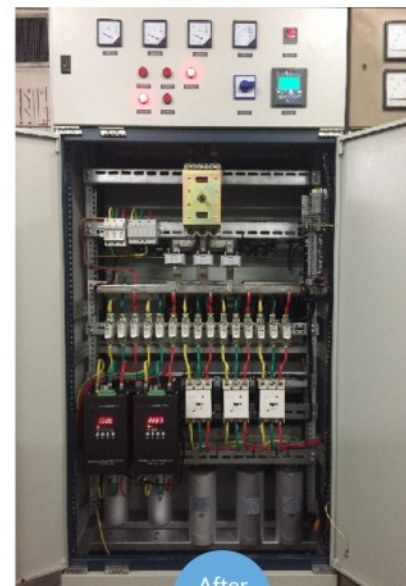
Combining static and dynamic compensation schemes, 3, 5 and 7 filtering channels are customized.

Achieved results:

Safe operation for more than 2 years.



Before transformation



After transformation

Public buildings

The Great Hall of the People



User feedback:

Elevator control system is prone to sudden crash before NPC meeting.

Key points of the problem:

When the light control cabinet adjusts the light, it produces a large number of third harmonics, and the zero line current is more than two times of the phase line, which interferes with the normal operation of the elevator control system.

Solution:

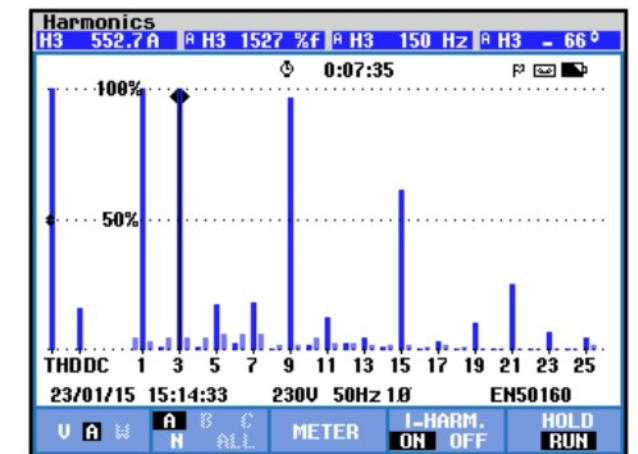
Isolate elevator control power supply and lighting control cabinet, install adjusting lamp cabinet and install zero sequence filter.

Achieved results:

Elevator normal operation, no downtime, zero cable no longer hot.

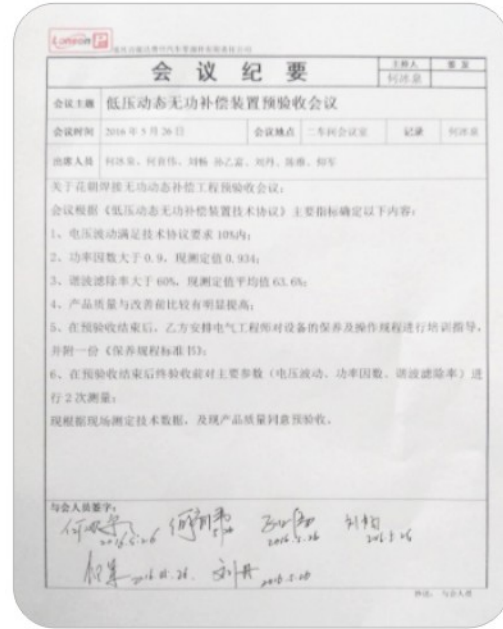


Lighting control cabinet



Third harmonics up to 552A

Product Operation Certificate



Summary of the acceptance meeting in Bernenda Push, Chongqing

The power factor of welding workshop is obviously increased, the harmonic wave is obviously reduced, and the product quality is obviously improved.

产品质量运行证明

我公司早期在某条生产线上多台数控机床不能正常工作，多方查找原因未果，严重影响公司正常生产，后经重庆路之生公司到现场细致查勘，进行电能质量检测分析，找到问题原因，并给我公司定制解决方案。后采用路之生动态谐波补偿装置后，恢复正常生产，成功解决了困扰我们多时的难题。路之生产品投运至今，性能可靠、质量稳定，服务及时。

特此提出表扬



Letter from users of Jiatae CNC in Zigong City

Solve the problem that users can't use the equipment at the same time because of the high harmonic voltage.

产品质量运行证明

我公司早期使用的电容补偿装置，平均3个多月电容器、接触器、熔断器就会损坏烧毁。变压器运行温度较高。于2017年采用路之生公司动态谐波补偿装置后，投运至今，电容补偿装置稳定运行，功率因数达到供电部门考核标准。同时变压器容量提升。路之生公司产品性能可靠、质量稳定，服务及时。

特此证明



Letter from Chongqing Shengli Industrial Group

Stable operation after transformation, reassuring users.

Technical Exchange and Service

Operation and Maintenance Training

After the equipment is installed in place, our company is responsible for training the technical, operational and maintenance personnel of the demander free of charge, so that the operators can operate skillfully and carry out daily maintenance, and free to the site to assist users in installation and debugging.

Regular return visits

Our company will regularly organize technical personnel to return visits to users' power supply and distribution systems and product operation, check the operation status of equipment, provide all necessary technical advice, technical services and technical training.

Return phase:

1. Regular telephone callback visits to users during the warranty period and on-site visits when necessary; 2. Mid-term callback visits to understand the operation status of equipment and to provide technical guidance for maintenance and maintenance of equipment; 3. Regular callback visits after the end of the warranty period, to understand the comprehensive evaluation of products by users and the quality defects in the later period, and to correct them in time.

Operation Guarantee

Because compensatory products have certain requirements on the use environment, in addition to routine inspection, users should maintain the device every six months or quarterly, and make good maintenance records to ensure that the device runs in a good environment.



Our company participates in Asia Power Quality Alliance Forum Summit



Engineers conduct on-site inspection



Regularly invite users to our company for technical training



Debugging and training

Compensation industry performance statement

Performance of Automobile Manufacturing Industry (Part)

| Serial number | Project name | Capacity/kVar | Remarks |
|---------------|---|---------------|---|
| 1 | Medium and Micro Automobile Industry Base | 6000 | Low Voltage Dynamic Compensation |
| 2 | Chang'an Commercial Vehicle Product Structure Upgrading (V301S Capacity Expansion) Project Improvement of T2T3 Power Station in Huilian No.2 Workshop | 2800 | Low Voltage Dynamic Compensation |
| 3 | China Zhongche Meishan Vehicle and Fastener Technology Co., Ltd. (Precision Parts Factory) 10kV Distribution and Installation Project | 3200 | Low Voltage Dynamic Retrofit |
| 4 | Beiqi Hainachuan Tianjin Wuqing Factory 10kV Substation | 2880+600A | Dynamic Supplementary Signal +Active Filtering |
| 5 | Distribution Installation of Automobile Parts in Beiqi Hainachuan Hebei Prefecture | 1200+900A | Dynamic Supplementary Signal +Active Filtering |
| 6 | Hainachuan Chongqing Modern Automobile Parts Park Phase I Project Specialized Allocation Project | 2680+400A | Dynamic Supplementary Signal +Active Filtering |
| 7 | Beijing Hainachuan Automobile Parts Co., Ltd. Zhenjiang Power Distribution Project in Jiangsu Province | 1480+300A | Low Voltage Dynamic Compensation+APF+Instrument |
| 8 | Jialing Honda Engine Factory | 2400 | Low Voltage Dynamic Compensation |
| 9 | Harmonic Control of Jiatong Lunyi Mixing Unit | 1600 | Low Voltage Dynamic Compensation |
| 10 | Renovation of Parts and Components of Bainengdapush Automobile | 2250 | Low Voltage Dynamic Compensation |
| 11 | Modification of Dynamic Reactive Power Compensation Device in Chongqing Chang'an Industrial Co., Ltd. | 1800 | Low Voltage Dynamic Compensation |
| 12 | Asia-Pacific Automotive Chassis System Engineering | 1250 | Instrument + Low Voltage Dynamic Compensation |
| 13 | Chongqing Pushi Reconstruction Project | 1600 | Low Voltage Dynamic Compensation |
| 14 | Dujiangyan Koshida Auto Parts Co., Ltd. 35 kV Automatic Filtering Compensation Upgrading Project | 2500 | 35kV High Voltage Compensation |
| 15 | Chongqing Lianhao Technology Automobile Parts | 4000 | Low Voltage Dynamic Compensation |
| 16 | Shanghai Echi Automobile Parts (Chongqing) Branch | 1280 | Low Voltage Dynamic Compensation |
| 17 | Chongqing Bojun Industrial Technology Co., Ltd. | 1050 | Low Voltage Dynamic Compensation |
| 18 | Shanghai Echi Automobile Parts (Chongqing) Branch | 1280 | Low Voltage Dynamic Compensation |
| 19 | Relocation Project of Chongqing Hongyan Automobile Spring Factory | 1600 | Low Voltage Dynamic Compensation |
| 20 | Chongqing Lilingchuanjiang Auto Parts Factory | 1800 | Low Voltage Dynamic Compensation |
| 21 | Electric Power Monitoring System of Chongqing Hengtong Automobile Electric House | — | Instrument + Electric Power Monitoring |

Medical and Pharmaceutical Achievements (Part)

| Serial number | Project name | Capacity/kVar | Remarks |
|---------------|---|---------------|----------------------------------|
| 1 | Yibin New Yao Wan | 1900 | Low Voltage Dynamic Compensation |
| 2 | Zigong Fourth People's Hospital | 800 | |
| 3 | Chongqing Zhengchuan Pharmaceutical Glass Longfeng Reform + New Water and Soil Construction | 8870 | |
| 4 | Chongqing Huacheng Pharmaceutical Co. | 800 | |
| 5 | Chongqing Heimeni Biotechnology Co., Ltd. | 1590 | |
| 6 | Customized Purchasing of Low Voltage Capacitor Cabinet in Distribution Room of Shangqing Temple District of Stomatological Hospital | 900 | |
| 7 | Jiang'an People's Hospital | 1200 | |
| 8 | Nanxi Hospital of Traditional Chinese Medicine | 1280 | |
| 9 | Chongqing Maternal and Child Health Hospital | 400 | |

Performance of Water System Industry (Part)

| Serial number | Project name | Capacity/kVar | Remarks |
|---------------|--|---------------|---|
| 1 | Sewage Treatment Reform of Shiping Bridge | 1600 | Instrument + Low Voltage Component |
| 2 | Yuhua Sewage Treatment Plant | 1840 | Low Voltage Dynamic Compensation |
| 3 | Green motion control | 1200 | Low Voltage Dynamic Compensation |
| 4 | Dare to create a ridge | 3750 | Low Voltage Dynamic Compensation |
| 5 | High Pressure in Huangxing Pumping Station of Daring to Create Dike Sewage Project | 2600 | 10 kV High Voltage Compensation |
| 6 | Changsha Sixth Aquatic Products | 1125 | 10 kV High Voltage Compensation |
| 7 | Dazu Waterworks | 1400 | Low Voltage Dynamic Compensation |
| 8 | Reconstruction Project of Youting Waterworks | 600 | Instrument + Low Voltage Dynamic Compensation |
| 9 | Reconstruction of Compensation Cabinet in the Second Water Purification Plant of Kunming City | 1800 | Low Voltage Dynamic Compensation |
| 10 | Experimental and experimental experimental Project of extra-limit phosphorus removal and Standard extraction in water quality purification plants of kunming main city | 2600 | Low Voltage Dynamic Compensation |
| 11 | Treatment of High Chlorine Wastewater in West Sichuan of Sinopec | 2210 | Low Voltage Dynamic Compensation |
| 12 | Rongchang Jinpo Waterworks | 1200 | Low Voltage Dynamic Compensation |

Achievements of Aerospace Chemical Metallurgical Industry (Part)

| Serial number | Project name | Capacity/kVar | Remarks |
|---------------|---|---------------|---|
| 1 | Xinjiang Jinmaoxin Energy Co., Ltd. 1 million tons per year Asphalt and Comprehensive Utilization Project | 5000 | 10 kV High Voltage Compensation |
| 2 | Xinjiang Zhongtai Xinxin Chemical Technology Company | 7500 | 10 kV High Voltage Compensation |
| 3 | Renovation Project of Xinjiang Fulida Fiber Co., Ltd. | 4260 | Voltage Dynamic Compensation+Instrument |
| 4 | Parallel Capacitor Device Project of Xinjiang Mahatma Chlor-Alkali Co., Ltd. | 10275 | 10 kV High Voltage Compensation |
| 5 | Chongqing Jinshili Titanium Industry Co., Ltd. Titanium Alloy Project Electrical Equipment Purchase High Voltage | 1800 | 10 kV High Voltage Compensation |
| 6 | Dynamic Compensation of Low Voltage and Low Voltage for Special Distribution Engineering of Aeronautical Titanium Alloy Project of Chongqing Jinshili Titanium Industry Co., Ltd. | 3200 | Low Voltage Dynamic Compensation |
| 7 | Low Voltage Compensation Reform of 5000t/a Special Fluorine Resin Distribution Room in No.3 Fluoride Plant of Zhonghao Chengguang Chemical Research Institute Co.Ltd. | 1200 | Low Voltage Compensation |
| 8 | Hongshaquan Open-pit Coal Mine, West Heishan Mining Area, Jundong Coal Mine, Xinjiang | 6750 | 10 kV High Voltage Compensation |
| 9 | Zigong Shangfu Science and Technology | 900 | Low Voltage Compensation |

Performance of Machinery and Electronic Processing Industry (Part)

| Serial number | Project name | Capacity/kVar | Remarks |
|---------------|---|---------------|----------------------------------|
| 1 | Dahl Technology, USA | 7200 | 10 kV High Voltage Compensation |
| 2 | Kaige Electronic Reconstruction Project | 1080 | Low Voltage Retrofit |
| 3 | Reform of 2# Transformer Compensation Device in Chongqing Gaojin Industrial Co., Ltd. | 1280 | Low Voltage Retrofit |
| 4 | Chongqing Gaojin Industrial Co., Ltd. Adding 1600 kVA | 900 | Low Voltage New Building |
| 5 | Chongqing Jiekelong Metal Technology Co., Ltd. | 720 | Low Voltage New Building |
| 6 | Meishan Ruitong Machinery | 1720 | Low Voltage New Building |
| 7 | Allied Information Electronics Phase II Project | 1250 | Low Voltage New Building |
| 8 | Electricity for New Opening and Closing of Chongqing Shun'an Blasting Material Co., Ltd. | 1450 | 10 kV High Voltage Compensation |
| 9 | Chongqing Huayu Electric Group Co., Ltd. Compensation System Maintenance and Replacement of Thyristor Project | 120 | Low Voltage Dynamic Compensation |
| 10 | Shengli Industrial Group | 800 | Low Voltage Dynamic Compensation |

| Serial number | Project name | Capacity/kVar | Remarks |
|---------------|--|---------------|---|
| 11 | Neijiang Ruixin Electric Power | 1440 | Low Voltage Dynamic Compensation |
| 12 | Fushun Mele Food Company | 1120 | Low Voltage Dynamic Compensation |
| 13 | Meishan Ruitong Machinery | 1720 | Low Voltage Dynamic Compensation |
| 14 | Tianfu Vegetable Garden Food Co., Ltd. | 1100 | Instrument + Low Voltage Dynamic Compensation |
| 15 | New Project of Zigong Jiata CNC Machinery Manufacturing Co., Ltd. | 1450 | Low Voltage Dynamic Compensation |
| 16 | Mingwei Energy | 1950 | Low Voltage Compensation |
| 17 | Taiwan Zhishen Technology Co., Ltd. | 1080 | Low Voltage Dynamic Compensation |
| 18 | Jiangsu Nantong Langshan Steel Wire Rope Haimen Branch Project | 1960 | Low Voltage Dynamic Compensation |
| 19 | Reconstruction Project of Compensation Device of Yuanding Concrete Co., Ltd. in Dazu District, Chongqing | 1360 | Low Voltage Dynamic Compensation |
| 20 | Distribution Project of Chongqing Ruiyu Material Company | 1500 | 10 kV high voltage compensation |
| 21 | Rongchang Dayou Surface Technology Co., Ltd. Reform Project | 300 | Low Voltage Dynamic Compensation |
| 22 | Chongqing Yurong Glass Co., Ltd. Compensation Cabinet Renovation Project | 720 | Low Voltage Dynamic Compensation |
| 23 | Yongping Sugar Factory | 960 | Low Voltage Dynamic Compensation |

Municipal Engineering Performance (Part)

| Serial number | Project name | Capacity/kVar | Remarks |
|---------------|---|---------------|---|
| 1 | Chongqing Chaotianmen International Trade City | 9600 | High Voltage Compensation |
| 2 | Transformer and Distribution Room Relocation Project of 57.4-57.6 | 2280 | Low Voltage Dynamic Compensation |
| 3 | CNG Standard Station of Yingbin Avenue, Tengchong County, Yunnan Province | 1170 | Low Voltage Dynamic Compensation |
| 4 | Yunnan Highway Information Center | 1620 | Low Voltage Dynamic Compensation |
| 5 | Meishan Street Lamp Management Office | 1780 | Instrument + Low Voltage Dynamic Compensation |
| 6 | Renovation of Xufu Road | 3600 | Low Voltage Dynamic Compensation |
| 7 | Renovation Project of 10kV Weiqi Line and Taiyuan District of Meng Dian | 1420 | Low Voltage Dynamic Compensation |

Performance of Financial Office and Commercial Real Estate Industry (Part)

| Serial number | Project name | Capacity/kVar | Remarks |
|---------------|--|---------------|---|
| 1 | Jiuzhaigou Luneng Chagou-Hilton Hotel Power Distribution Project | 2800 | Instrument + Low Voltage Dynamic Compensation |
| 2 | Ping An International Financial Center | 3200 | Low Voltage Dynamic Compensation |
| 3 | Chongqing Xintiandi No. 345 building | 2800 | Low Voltage Dynamic Compensation |
| 4 | Helenburg, Kunming | 3830 | Low Voltage Dynamic Compensation |
| 5 | Paulie everybody | 2400 | Low Voltage Dynamic Compensation |
| 6 | Kunming Gaoxin Taoji Real Estate Development Co., Ltd. 10kV Distribution Project | 4840 | Low Voltage Dynamic Compensation |
| 7 | Block 4-7, Phase I, Haipo Lanting Square, Greenbelt | 860 | Low Voltage Dynamic Compensation |
| 8 | Yinlong Square | 4250 | Instrument + Low Voltage Dynamic Compensation |
| 9 | Kunming Tomorrow City Property Management Development Co., Ltd. | 600 | Low Voltage Dynamic Compensation |
| 10 | 10kV Power Distribution Project in D/E Block of Xiangshuhuhuacheng, Wuhua Green Space Group | 330 | Low Voltage Dynamic Compensation |
| 11 | Triple Purchase | 1800 | Low Voltage Dynamic Compensation |
| 12 | Block 12 of Kunming Lake | 1760 | Low Voltage Dynamic Compensation |
| 13 | Block C of Xiangshuhuhuacheng | 900 | Low Voltage Dynamic Compensation |
| 14 | Yunnan Peking University Resources Kunming Fangyuan Botai Real Estate Co., Ltd. Boyuecheng Project Phase I | 700 | Low Voltage Dynamic Compensation |
| 15 | 35 kV Power Supply and Distribution Project of Relocation Project of Kunming Liangting Grain Transfer Station | 960 | Low Voltage Dynamic Compensation |
| 16 | Distribution Project of 3#5#6 | 3480 | Low Voltage Dynamic Compensation |
| 17 | Greenbelt Haipo Lanting Phase II | 1640 | Low Voltage Dynamic Compensation |
| 18 | Evergreen Kingdom | 1680 | Low Voltage Dynamic Compensation |
| 19 | Strength Real Estate Development and Management Group Co., Ltd. Strength Shanyujian District 2260 kVA Power Distribution Project | 680 | Low Voltage Dynamic Compensation |
| 20 | Sunshine Peninsula | 300 | Low Voltage Dynamic Compensation |
| 21 | Zigong Fushun Ruixiang Commercial City | 2250 | Low Voltage Dynamic Compensation |
| 22 | Zigong Yuanda Fushun | 2120 | Low Voltage Dynamic Compensation |
| 23 | Yibin Liya Longcheng | 3980 | Low Voltage Dynamic Compensation |
| 24 | Public rental housing in Zigong | 3420 | Low Voltage Dynamic Compensation |
| 25 | Zigong Yuanda Real Estate "Xicheng One" Residential Area Project | 2760 | Low Voltage Dynamic Compensation |
| 26 | Fushun Eastern Eastern | 830 | Low Voltage Dynamic Compensation |

| Serial number | Project name | Capacity/kVar | Remarks |
|---------------|--|---------------|----------------------------------|
| 27 | Riya goes to town | 2400 | Low Voltage Dynamic Compensation |
| 28 | Yibin Western Food Trade City | 3070 | |
| 29 | Yuanda Xicheng County Huating 10kV Distribution Project | 1730 | |
| 30 | Project of Zhongwei Real Estate Development Co., Ltd. | 3630 | |
| 31 | Yibin Splendid Dragon City | 3180 | |
| 32 | Renshou Jingshengjing Real Estate Development Co., Ltd. / Landscape 33 Phase I | 2100 | |
| 33 | Meishan Jingkai New District Construction Investment Co., Ltd. (Shangyi Market Town Commerce) 10kV Distribution Installation Project | 1040 | |
| 34 | Provincial Sanjian Meteorological Road Passes Housing | 1180 | |
| 35 | Yibin Tianli University | 1320 | |
| 36 | Distribution and Distribution Installation Project of Chongqing Rising Investment Co., Ltd. (Environmental College) | 1160 | |
| 37 | Light Industry Expo City | 2040 | |
| 38 | Yibin Government Center | 1120 | |
| 39 | Oriental Times Square | 4380 | |
| 40 | Fushun Ruixiang Business City Phase 1 | 1400 | |
| 41 | Yinlong Square | 4250 | |
| 42 | Sichuan Xinxiang Real Estate | 1660 | |
| 43 | Tonghui Street Office, Dongpo District, Meishan City 10 kV Distribution Installation Project | 2200 | |
| 44 | Meishan Lake Hotel | 1100 | |
| 45 | 10 kV Distribution Project of Yibin Department Store | 2730 | |
| 46 | 10/0.4 kV Distribution Installation Project of Sichuan Haihua Real Estate Co., Ltd. | 1640 | |