



株洲南车时代电气股份有限公司

ZHUZHOU CSR TIMES ELECTRIC CO., LTD.

2012

Corporate Social Responsibility Report



For better expression and reading, the Zhuzhou CSR TIMES ELECTRIC Co., Ltd. is represented as 'CSR Times Electric', 'the company' or 'we' in this report.

The report is prepared with references of the 2006 Sustainable Development Report of the Global Reporting Initiative (GRI), Guidance on Social Responsibilities of Industries (GSRI-China) and the Ten Principles of the UN Global Compact, and based on the actual situation of the CSR TIMES ELECTRIC.

Unless otherwise specified, the report covers the time from January 1st to December 31st of 2012, the currency used is RMB. The report covers the company HQ and share-holding subsidiaries but not including joint stock companies, using the same scope, boundary and calculation methods as the previous report.

This report is a faithful reflection of the company's actively fulfilling of its economic, environmental and social responsibilities and its implementation of the sustainable development strategy. It is a full disclosure of the company's management performance related to stakeholder concerns and expectations. All the information and data are collected from the company's official documents, statistical reports and sustainable development practices of functional departments and subordinate units.

This report is published in Chinese and English. If there are differences between the two versions, the Chinese version shall prevail.

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Electronic Version Available at: www.timeselectric.cn



This is our Communication on Progress
in implementing the principles of the
United Nations Global Compact.

We welcome feedback on its contents.



Company Profile and Governance 02

I. Company Profile 02

1. Introduction
2. The Main Economic Performance in 2012

II Company Management 05

1. Corporate Governance Mechanism
 - 1.1 Company Structure
 - 1.2 Company's Governance System
2. Risk Management and Internal Control
 - 2.1 Risk Management Organization
 - 2.2. Risk Management System
 - 2.3 Monitoring and Evaluation
3. Combat corruption and uphold integrity

III Important honors of the company 09

IV. Enterprise value and interested party 10

1. Company's values
2. Concerns of interested party

V. Opportunities and Challenges 11

Technological Innovation and Product Responsibility 12

I. Technological Innovation 12

- 1 Introduction to technical research and development
- 2 Technology R & D results
3. Impact of technological innovation

II. Product Liability 15

- 1 Product Quality Management
- 2 After-sale Service
3. Customer satisfaction survey and customer complaints
4. Product safety

Environmental protection 27

I. Environmental Protection policy 27

II. Environmental protection performance management data 27

III. Environmental management 29

1. Environmental Management System and Certification
2. Environmental protection products

IV. Environmental compliance description 29

V. Energy saving, consumption- decreasing and comprehensive treatment 30

Care staff 33

I. Our staff 33

1. Diversified Labor
2. Staff salary and benefits

II Skill upgrading and career development 35

1. Training and management
2. Staff's career development

III. Health and safety 37

1. Safety objective and index control
2. Occupational Health Safety Management System
3. Consolidate grass-roots safety management and fully develop standardized safety production construction in teams and groups
4. Strengthen safety education training and raise overall safety awareness and skills
5. Focus on safety investment and forcefully develop overhauling and rectification of potential safety hazard
6. Concern about staff health and develop occupational disease prevention

IV. Interests of staff 39

1. Worker's Congress
2. Staff's rationalization and feedback mechanism
3. Recreational and sports activities

Social harmony 41

I. Supplier management 41

1. Procurement policy and commercial specifications
2. Financial support from supplier
3. Local procurement

II Public charity 43

Looking Forward to the Future 45

Speech by the General Manager



Grateful for Favors Received and People Oriented Committed to Sustainable Development

In 2012, international economic situation was complex and changeable, especially Chinese economic development sought progress in stability and railway investment kept an increasing steady pace, which brought about a great impact on the development of Times Electric.

In the past one year, Times Electric has fully implemented strategies of "organizational efficiency" and "operational globalization" so that returns to scale rose against the trend and realized stable economic growth with operation revenue of RMB 7.22 billion for one year. Due to thorough promotion of global strategic measures, urban subway, track construction machinery, communication signals and other diversified industries had developed rapidly, which strengthened the Company's capability in risk resistance and sustainable development.

In the past one year, the Company has obtained the gold award of National Patented Technology for the first time, and has autonomously developed a series of advanced scientific projects such as permanent magnet traction system, silicon carbide IGBT device, simulation platform of electric system for high-speed trains, energy-regenerative power supply system for metro, harmonic suppression equipment etc. The Company has successfully applied for over 100 patents, formally awarded the qualification of key laboratory of Hunan Province on power electronic devices.

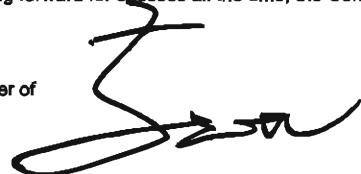
Grateful for favors received and people oriented, the Company conscientiously undertakes the responsibility of corporate social citizenship and shares corporate development results with the state, society, shareholders, clients and employees.

The Company has standardized organizational governance and established excellent energy management system to thoroughly implement cost decreasing and benefit increasing and expenditure saving activities. Such work has been done on a regular institutionalization basis. Responding to national policy's requirement on energy saving and emission reduction, low-carbon development, environmentally-friendly track transit products are actively developed to provide optimized system solutions for clients and improve operating efficiency of track transit products.

The Company invests plenty of resources in scientific innovation and talent training every year. We have trained and gathered a host of excellent talents through continuously improving business performance and constructing urban culture. From the source of product design, inculcate cultural concept of entire life-circle management into each staff's brain, and regard product quality and safety as the life of the enterprise.

Times Electric is still faced with great challenge at present. We believe that it is more likely for an enterprise to better display its economic value, social value and brand value through continuous self-value creation and enhancement. Furthermore, the enterprise will better perform its social responsibility to create reasonable profits for shareholders and provide superior quality product service for clients and bring more happiness for employees. Faithfully performing corporate mission and responsibility and striving forward for success all the time, the Company will certainly have a better tomorrow.

Executive Director and General Manager of
Zhuzhou CSR Times Electric Co., Ltd.:



Company Profile and Governance

Company Profile >>



Introduction

Zhuzhou CSR Times Electric Co., Ltd. was established jointly by five units in 2005, including CSR Zhuzhou Electric Locomotive Research Institute Co., Ltd., etc. On December 20, 2006, CSR Times Electric was listed in Hong Kong H stock (stock code 03898.HK), and became the first overseas listed company in Chinese rail transit industry and was also the enterprise which raised the most funds in overseas IPO capital markets in Hunan Province.

The company engages in the research and development, manufacturing, sales and technical service of railway transportation equipments including electric drive system, network control, converters, train control system, signal system, electric control system of rail engineering machinery, overall units, electronic products for passenger cars, large power semiconductors, general inverters, PV inverters, sensors, printed boards, composite busbars, urban intelligent traffic system, etc. Its products are widely used in various industries and fields such as MU, electric locomotives, diesel locomotives, passenger cars, subway and light rail vehicles, large-scale road maintenance machinery, electric power and metallurgy etc.

Through years of development, the Company has already with strong self-independent research and development and technological innovation ability. It has not only mastered the traction electric drive and network control key core technology which is honored as the "heart" and "brain" of trains, but also built mature self-independent innovation and research and development platform based on traction electric drive system field. In addition, it has also built domestic first-class comprehensive detection test system, achieved organic combination with six specialized manufacturing bases of the Company, and become the Company's most representative image "business card".

The Company is in a leading position in the industry by virtue of its powerful overall strength. The Company is the designated enterprise for AC drive and control system localization of urban track traction equipment, and the domestic responsible unit for IEC/TC9 industrial standards.

Innovate, develop and take advantages to progress. The Company always adheres to the development strategy of "concentric diversification", takes the development road from core technology to extend to related industries, continuously consolidates the leading position in rail transit industry, makes efforts to enhance the professional new image in electrical drive and control system fields, and strives to become an internationalization company with modern management concept, advanced corporate culture, strong core competitiveness, high performance, great fulfillment of social responsibility.

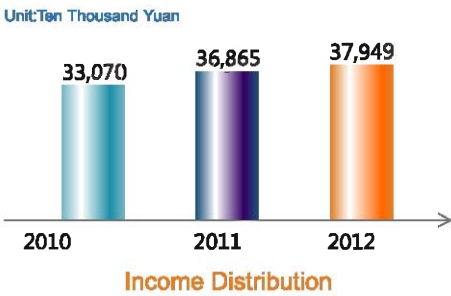
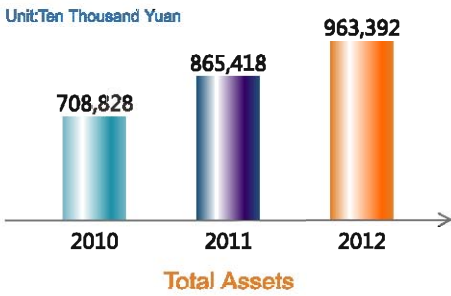
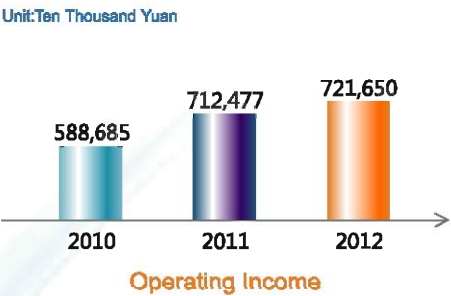
The Main Economic Performance in 2012

In 2012, the Company's mainly business performance indicators have been improved significantly. The business performance indicators are shown as below:

Main business performance indicators			Unit: ten thousand Yuan
Indicators \ Year	2010 (restatement)	2011	2012
Operating income	588,685	712,477	721,650
Total assets	708,828	865,418	963,392
Total profits	98,716	138,092	140,063
Total tax payment	46,801	52,616	71,054
Operating costs	370,836	459,869	478,101
Market value of share capital	3,312,402	1,498,441	2,523,059
Revenue distribution	33,070	36,865	37,949

Note 1: Considering that the Hong Kong Exchanges and Clearing Limited have approved the periodic financial report which is calculated from the annual accounting period ended on or after December 15, 2010 and prepared by the enterprises listed in Hong Kong but registered in mainland by adopting China Accounting Standards for Business Enterprises, upon the approval of the Board of Directors, the Company has used China Accounting Standards for Business Enterprises to prepare annual financial report (since 2011). The financial data of 2010 was restated according to China Accounting Standards for Business Enterprises.

Note 2: The income distribution in 2012 shall still be approved by the general meeting of stockholders.



The earnings per share of the Company in recent three years showed stable growth. During 2010-2012, it achieved earnings per share of RMB 0.79, RMB 1.09 and RMB 1.13, respectively.



Sub-product Business Performance

In 2011, the Company has completed the operating income of RMB 7,217 million, of which: the turnovers of train traction converter, auxiliary power supply equipment and control systems were RMB 4,741 million; the turnovers of track maintenance machinery and related products were RMB 976 million; the turnovers of power semiconductor components products were RMB 490 million. The turnovers of main products in recent three years are shown as below:

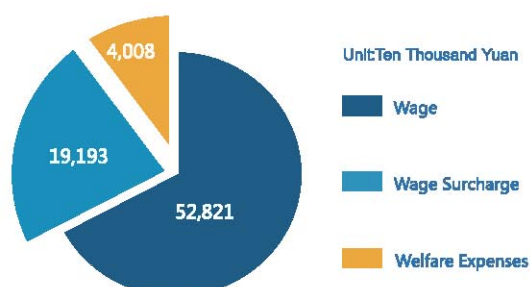
The operating income of main products over the years		Unit: Million Yuan		
	2010	2011	2012	
Train traction converter, auxiliary power supply equipment and control systems	4,134	5,427	4,741	
Train traffic safety equipment	411	439	613	
Maintenance machinery-related products	567	597	976	
Power semiconductor components	462	499	490	
Sensors and related products	101	108	91	
Other products	212	235	306	
Total turnover	5,887	7,125	7,217	

Significant financial support given by the government

During 2010-2012, the Company has assumed many major scientific and technological projects of many countries, the Ministry of Railways and Hunan Province. It accumulatively obtained funds of RMB 46.71 million allocated by government science and technology projects in 2010; it accumulatively obtained funds of RMB 71.42 million allocated by government science and technology projects in 2011; it accumulatively obtained funds of RMB 25.65 million allocated by government science and technology projects in 2012.

Employees' total remuneration and classification

In 2012, the total remuneration of employees in the Company was RMB 760.22 million, including wages of RMB 528.21 million, wage surcharge of RMB 191.93 million and welfare expenses of RMB 40.08 million.

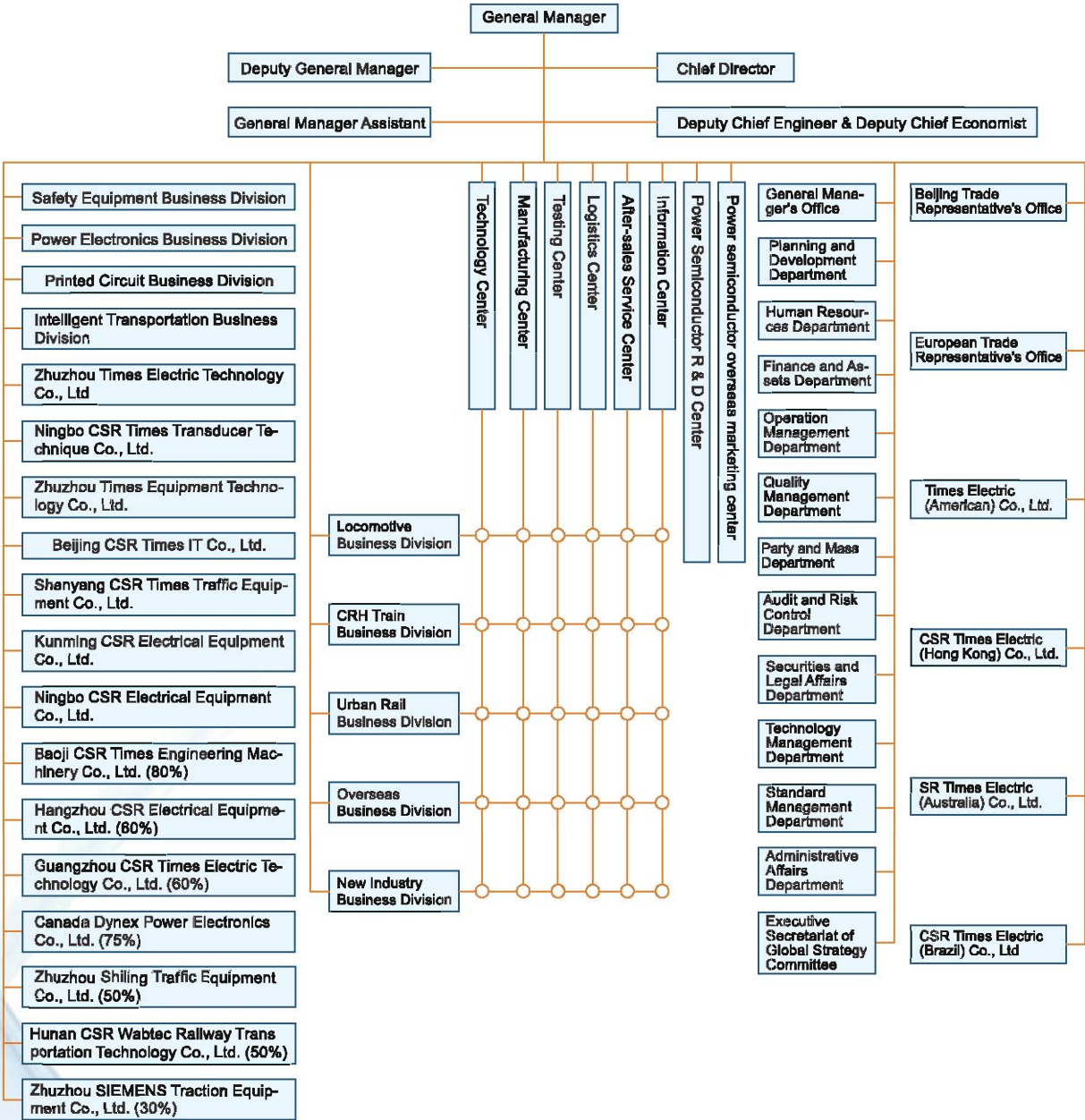


Company Management >>

Corporate Governance Mechanism

Company Structure

Organizational chart of Zhuzhou CSR Times Electric Co., Ltd.



Company's Governance System

Board of Directors

By the date of this report, the board of directors is made up of 9 directors, each with different skills, industry background and expertise. The board fully represents the interests of shareholders and is accountable to shareholders' meeting. It formulates the company strategy and monitors the implementation of management and financial status within duties defined in the Article of Association and in accordance with the procedures defined by the Board Rules of Procedure for long-term returns. Five special committees, i.e. strategy, audit, risk control, nomination and remuneration committee are set under the Board of directors.

The four independent non-executive directors of the company account for more than one-third of the directors. They have carried out works on improving corporate governance and making major decisions, proposed fair and objective advices on major issues of the company and related transactions, facilitated a scientific decision-making process of the board of directors and effectively protected the interests of the company and minority shareholders.

The company held seven board meetings in 2012.

Board of Supervisors

By the date of this report, the board of supervisors is composed of four members including one independent supervisor, one shareholder representative supervisor and two staff representative supervisors. Staff representative supervisors are nominated by the Workers Congress and elected by the general meeting of shareholders. The board of supervisors exercises independent supervision rights according to the law to protect the rights and interests of shareholders, the company and employees.

The company held four board of supervisors meetings in 2012.

The Management

The company's senior managers are responsible for implementing strategic decisions of the board of directors and management of daily operations. Daily supervision and annual assessment of the management are carried out by the board of directors. The president and General Manager are held by different members of the company, who are assigned to clearly defined responsibilities to ensure the independence of decision-making of the board of directors and daily operational activities of the management. The company divides its strategic objectives into annual goals of subordinate units, establishes the evaluation system for senior managers, subsidiaries, business units, the center and managers of functional units based on objectives and responsibilities, and forms an incentive and restraint mechanism for the improvement of performance. Indicators and methods are identified for the evaluation which is based on annual objective management responsibility commitment and annual pay for performance of the managers is directly linked with evaluation results.

Policy of Information Disclosure

Strictly following relevant national laws and regulations, and requirements of the Securities Regulatory Commission and Hong Kong Stock Exchange, the company publishes regular reports and discloses of relevant information in a timely, accurate and complete manner to ensure that investors and stakeholders can keep abreast of the company's operation and management status. The company has also established dedicated units, posts and special mailbox to improve communication with investors. The company initiated or received more than 44 visits of investors in 2012. Information disclosure follows confidentiality regulation and there was no significant leakage or false report of important information in 2012.



Risk Management and Internal Control

In order to ensure the smooth proceeding of the production and management and all operational activities of the Company and ensure the achievement of corporate strategy, business objectives and shareholders' vision, the Company attaches great importance to risk prevention and internal control.



Risk Management Organization

The Company has established sound risk management organization system according to risk decentralized management, category management and centralized management principles. Risk Control Committee consists of strategic risk management team, market and operational risk management team, financial risk management team, legal risk management team, as well as risk business working group. The Company actively cultivates risk management culture, penetrates risk management concept into all aspects of management and business activities. In order to effectively control and prevent various risks, eliminate significant risk, the Company continued to carry out comprehensive risk management, organized and developed risk event information database update, implementation checks of risk incident response measures of previous year and risk early warning management work in 2012, which greatly enhanced the Company's ability to resist risks. On this basis, the Company prepared and issued Detailed Rules for Work Appraisal on Overall Risk Management of Times Electric In 2012. Accordingly inspect and evaluate the Company's completed work of overall risk management and bring it into the Company's performance appraisal system. The Company's 27 units (sectors) showed satisfactory results with full scores in appraisal of overall risk management work operation in 2012, except as one unit with minor deduction.

Risk Management System

The preparation and issuance of Detailed Rules for Work Appraisal on Overall Risk Management of Times Electric has formed a long-effect risk management mechanism. The Company formerly established the 2010 Internal Control System Assembly which covered all kinds of business activities of the Company's business management and included 225 internal control systems and 90 processes. The Company prepared and issued Internal Control Manual, Internal Control Evaluation Manual, Measures for Overall Risk Management and Measures for Risk Forewarning Management, which built a comprehensive framework of internal control system and risk management control system for the company. The Internal Control Evaluation Manual clearly defines the scope, methods, defects identification, report format and evaluation of internal control evaluation, and regulates the cycle, organization, processes, communication, reporting of evaluation and rectification work. The preparation and issuance of Measures for Overall Risk Management and Measures for Risk Forewarning Management has raised the Company's risk prevention capability, and made standardization and guidance for risk forewarning management work, promoting the Company's stable and sustainable development. On this basis, with the purpose of parallel improvement of management control level, internal control and risk management in 2012, the Company continued to develop overall risk management work, annual internal control self-evaluation and internal control defect rectification work. The preparation and issuance of Detailed Rules for Work Appraisal on Overall Risk Management of Times Electric has formed a long-effect risk management mechanism. Currently, the Company has achieved comprehensive coverage of internal control system and risk management control system, and built multi-dimensional internal control system and risk management control system covering various business fields.

Monitoring and Evaluation

The company firmly implemented the audit policy of "risk-oriented, taking control as the main line, governance as the goal, promoting standardization management of enterprises, strengthening risk management system, improving management level and enterprise efficiency", carried out audit and supervision at operational level and process level, and realized close integration of risk management, internal control and regular audit project. The Company continued to do well in annual overall risk management and internal control work in 2012; 22 internal management audit projects such as off-office auditing, annual business indicator benchmarking, special audit of research funds etc. were completed, and 121 management auditing suggestions were adopted; 841 engineering and contract audits brought about direct benefit of RMB 14,513,400 for the Company; the headquarter and other business units carried out multi-angle audit and assessment on operational activities.

Combat corruption and Uphold Integrity

Based on work schedule and tasks defined at the beginning of the year, Zhuzhou CSR Times Electric Co., Ltd. adheres to focusing on maintaining the Company's sound development, uses punishment and prevention system to construct qualified units and create activities as the carrier, insists on parallel management on education, system, supervision, punishment and disposal. The Company continues to strengthen work system of "individual responsibility, management and implementation in place" and awareness of fulfilling responsibility, and actively develops supervision on key points. The Company promotes organic joint coordination of internal monitoring, finance and audit in units and gradually forms a work layout of overall control and prevention, which effectively promotes balanced advancement of business units, code of corporate management and code of employee conduct, and realizes major risk control and basic safety for a year.

Work Developed in 2012 Mainly Includes as Follows:

Ongoing Supervision on Bid Invitation and Evaluation

Vigorously promote the bid invitation of projects such as infrastructure engineering, procurement of equipment and materials, management consultation, outsourced and outsourcing etc. and actively carry out business guidance and consultation on the process of bid invitation and evaluation to effectively contain disorderly conduct like surround-bidding, forging bidding etc. while training expertise teams and to effectively guard interest of the enterprise.

Persist on Warning Education

Continue to carry out conversion with newly employed and promoted cadres on incorruption before they take office and sign Letter of Commitment on Party Conduct of Incorruption; organize cadres and staff in important positions of grass-root units to visit Changsha Prison and Qiaotoubao Warning Education Site; open lectures on incorruption.

Continue to Carry out Annual Routine Supervision

Carry out routine supervision on business management, system flow and fulfillment of economic business activities, style of group, construction of team etc. and focus on supervising important fields and key links.

Achieve Results in Improving Quality of System

Actively motivate units, cadres and staff to participate in and give positive assistance and guidance to enhance pertinence on management and control of important economic business system flow, internal supervision ability of units and consciousness of work as per system flow.

Special Efficiency Supervision of Exclusive Suppliers Already Showing Early Results

The Company organizes related personnel to carefully analyze the cause of the existing exclusive supply phenomenon and carry out special supervision on the whole company. Raise management level of suppliers, reduce materials procurement risk and build newly approval procedures for exclusive suppliers through special supervision.

In 2012, under the support and effort of grass-roots party-government parties, consciousness of members and cadres at every level is obviously strengthened, which basically realizes major incorruption risk control and safety operation of the enterprise.

Important Honors of the Company >>



2012 Honor Roll

No.	Prize name	Awards
1	Gold award of the 14th China Patent for the patented project of "method and system of constant slip frequency vector control of linear Induction motor"	Academic management
2	First prize of the 18th National Business Management Modern Innovations for the project of "cross-border mergers and Integration based on realization of technical	
3	The major project prize of matchmaking and cooperation between Hunan Province	
4	The first and second prizes of management innovation in Hunan Province for "After-sale service management system construction of rail traction	
5	Key national new product: low sensitivity compound busbar	
6	Yearly grade A enterprise of tax-paying credit in 2010-2011	
7	First-class enterprise of national safety production (machinery)	Comprehensive management
8	Top 100 enterprises in the 1st China software business income in 2012	
9	Top 100 enterprises in China electronic information	
10	Two-oriented demonstration construction engineering project of Hunan Province	
11	Pass "AA import and export enterprise management qualification" by General	
12	Pass energy management system certification and approval	
13	"Green Enterprise" in Zhuzhou City, Hunan Province	
14	Advanced unit in safety production of Zhuzhou in 2011	
15	Advanced unit of management by objectives in Zhuzhou occupational disease prevention work in 2011	
16	Exemplary Faculty's Family in Zhuzhou	Individual
17	"March 8 Red Flag Groups" of CSR	
18	Outstanding entrepreneur in national electronic information industry in 2012: Li Donglin	
19	National women pioneering & excellent advanced individual: Chen Yanping	
20	Top ten innovative technical talents in Zhuzhou: Li Te	
21	Excellent entrepreneur in Zhuzhou: Yu Liu, Ma Shihong	

Enterprise Value and Interested Party >>

Company's values

Spirit of enterprise: Credit, Dedication, Innovation and Excellence

Missions: To benefit the country (shareholder), society, customers and employees with technology.

Vision: To become an international company with modern management concepts, advanced corporate culture, high core competence and that can fulfill social responsibility with excellent performance.

Values: Never forget where our achievements come from, the interests of shareholders are supreme; user first, the customer's needs are always our motive power; people-oriented, each employee will share the success with the Company.

Strategic Guiding Ideology in 2012: Actively implement strategic requirement of the Company and steadily control "quality, benefit and risk" with firm belief and well preparation; push forward excellent management engineering, strengthen endogenous development and break through difficulties in industrial development; fully carry out development strategies of "organizational efficiency" and "operational globalization" to ensure the smooth completion of work objectives for the year.

Concerns of Interested Party

Around the core goal of sustainable development, the Company pays close attention to various interested parties, continuously strengthens exchanges and communication with them, fully understands and collects their appeal points and combines with the actual situation of the Company to make responses positively. The Company has always been committed with the interested party to work together to create value, share value and promote sound and rapid development of the Company.

Stakeholders	Ways of Communication	Requirements & Expectations	Main Indicators
Government	Laws, regulations, release of policies, meetings, theme reports, report forms and visits	Abide laws and regulations, ensure tax revenue, provide job opportunities, and develop rail transit equipment industry.	Tax and job opportunities
Customer	Collecting comments, daily liaison and visits by sales representatives	Providing products and service with good quality and competitiveness, continuous improvement	Customer satisfaction rate and products qualification rate
Investors	Regular reports, unscheduled announcements, shareholders meetings and memorandums	Continuous improvement of company value, prevention of risks and ensured sustainable development	Profits, ROE, asset liability ratio, owner's equity, market value and minority interests
Employees	Construction of employee mark-based reward system, executives meeting day, consultation, democratic assessment, employee exchange forum and etc.	Providing employees with fair and comfortable working environment, more benefits and growth opportunities	Employee satisfaction, loyalty, turnover rate and investment on employee training.
Suppliers	Suppliers meeting, negotiations on agreements and contracts, regular visits, tendering meetings and collecting comments	Long-term cooperation with good profits	Project bidding, claim on quality defect to the suppliers and etc.
Community	Regular meetings, holiday parties, support for community activities	Well-organized manufacturing to promote a peaceful community with safe and healthy living environment	Investment on community constructions, times involved in activities and amount of donations

Opportunities and Challenges >>

In 2012, the Company's external environment changed greatly. Railway market restored to steady growth after 7.23 Accident and reform of railway system brought about uncertain factors to market competition. The Company will be faced with new opportunity and challenge.



Opportunities

Under the guidance of national policies, China's economic development strategy is shifting from scalar growth to quality-oriented development, from low cost expansion to high efficient innovation, from resources and environment consumption to resources conservation and environment friendly. In the field of rail transit equipment, the country encourages autonomous products to participate in market competition, which is a great opportunity for Times Electric advocating autonomous innovation to consolidate advantages and expand market shares.

Challenges

Reform of Ministry of Railways will weaken policy market of the industry, and market competition will be fiercer. Domestic and foreign enterprises will more frequently participate in competition of domestic rail transit markets, bringing potential competitive pressure to the Company's operational business.

Our solutions

Facing new opportunities and challenges, the Company makes use of existing strength and new opportunities to reduce unfavorable impact on the Company brought about by environmental change. The Company takes primary measures of continuous developing strategies of "organizational efficiency and operational globalization".

——Establish high-efficiency organizational modes, optimize the Company's resources allocation, strengthen business cooperative capability, fully explore the Company's potential, enhance core competitiveness, further consolidate the Company's autonomous brand position in markets and raise market shares.

——Grasp opportunities for development in overseas markets, rely on CSR overall Go Out strategy, quickly train and raise the Company's globalized operation capacity by various means, seek new growth points overseas, and realize transformation from domestic enterprise to globalized enterprise.

Technological Innovation and Product Responsibility

Technological Innovation >>

The Company's research and development management adheres to taking scientific innovation work as the tenet and developing activities on management improvement such as excellent management, delicacy management. The Company not only strengthens scientific research management, qualification and results management, intensity, breadth and depth of external scientific reporting management, but also further raises cost decreasing and benefit increasing to conduct revision and optimization of related management flow and system and enhances work efficiency and quality to fully guarantee orderly development of daily work and steady advancement of key work.

Introduction to Technical Research and Development

R& D management mechanism

Plan overall situation and prioritize major projects, consolidate optimum system of project appraisal and selection. In 2012, Times Electric adhered to "taking the Company's business work as the core task, quickly corresponding to the demand of strategic development and market exploration, and providing driving force of scientific innovation for the Company's industrial development". The Company took scientific research project enhancement as the carrier and sets up total 345 projects and 41 subject level major projects. At the beginning and the middle of the year, specialists of Technical Committee selected several major projects of great economic benefit, great technical breakthrough and important technical support for the Company's development after appraisals. New approved major projects enriched the content of major scientific research projects of Times Electric, developed management of approved projects and gave new vitality to continuous improvement of the Company's scientific research.

Intensify depth management of major projects and guarantee steady advancement of major projects. As major projects gradually increase with a large quantity, objective troubles such as daily coordination matters become more complicated and overloaded. Endeavor to strengthen depth management of major projects, subdivide key joints of major projects, formulate assessment procedure and template, prepare assessment plan monthly, and implement the plan step by step to realize overall coverage of assessment on all major projects' key joints. Print out inspection lists, inspect and assess on achieving rate of project schedule, completeness of results by stage, full sets of archived data, give modified suggestions and provide feedback to project groups for rectification to promote sound and benign development of major projects.

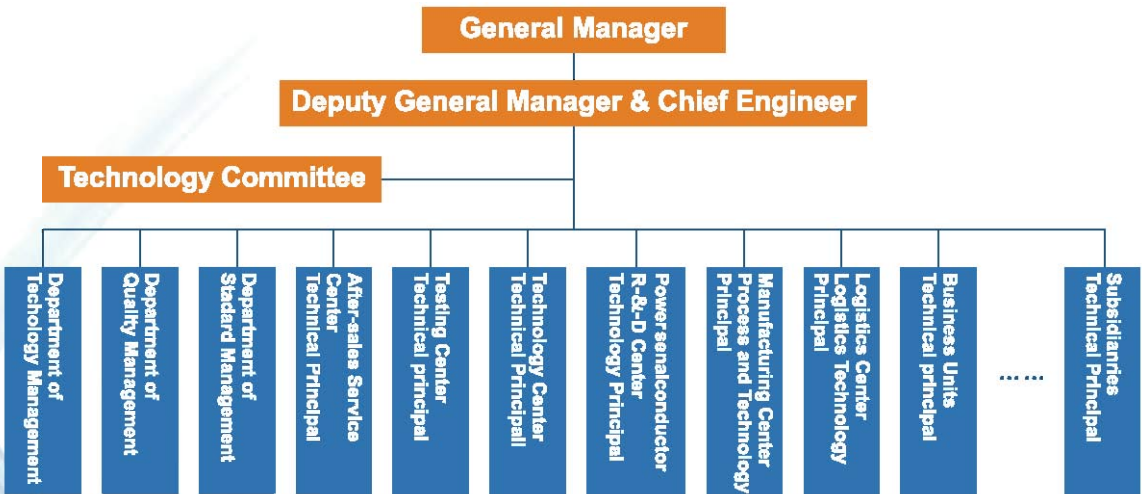


Figure: R & D management institution

Input for Scientific Research

Input for technological innovation is the basic protection to strengthen self-dependent innovation of enterprises. In order to achieve sustainable development of enterprises, CSR Times Electric continues to increase input for technological innovation, and the annual input for research and development has nearly reached 8% of sales revenue. In 2012, the research project approved by the Company has reached 345.

R & D team and advantage of hardware resources

The Company's scientific research and technological personnel accounts for nearly 50% of the total number of employees. On the basis of highly educated talents, train a professional research and development team with high qualities and efficiency through complete talent training system.

The Company also has powerful capabilities in scientific and development research, testing and inspection and system production, owning many specialized production bases with production workshop area of 100,000 square meters. As the largest superpower semiconductor production base in Asia, CSR Times Electric semiconductor third-tier base is capable of processing 100,000 silicon wafers of 6 inches annually with IGBT device packaging capability. Detection and testing system is constituted by over 20 labs, including vehicle-mounted electrical systems lab, electrical machinery lab, large-scale vibration test system lab, electrical equipment reliability and environmental engineering lab, passenger car electrical system lab, large-scale engineering machinery electrical system lab, networking product consistency lab, 3G information technology application lab etc. covering research test, type test and factory test in all fields.

Technology R & D results

The Company's scientific research and technological personnel accounts for nearly 50% of the total number of Actively report rewards on major issues and scientific achievements to promote the commercialization of scientific achievements. In 2012, the Company undertook total 20 major issues at the ministerial and provincial level with the highest project approval bonus on record, reported total 11 scientific and technological awards above the municipal and bureau level.

Impact of technological innovation

Steadily rising of patent quality

Intellectual property work is the driving force of the Company's autonomous innovation. The Company attaches importance to its intellectual property and respect other intellectual properties. In 2012, the Company was dedicated to raising staff's awareness of intellectual property protection, perfecting intellectual property management system, strengthening patent application, patent analysis and prewarning research, increasing trademark protection for export products, developing application, advertising and training of intellectual property. Therefore, intellectual property work shows a good trend.

In 2012, the Company applied total 169 patents, including 117 patents for invention. As of late 2012, the Company has applied accumulated 749 patents with 57.8% patents for invention, 428 valid patents with 35.3% patents for invention, and 66 registrations for copyright of computer software. In 2012, the Company's patent of "method and system of constant slip frequency vector control of linear induction motor" won the gold award of the 14th China Patent and the first prize of Hunan Province Patent.

Year of application	Numbers
2010	108
2011	157
2012	169
Total	434

Table: The number of patent applications in recent three years

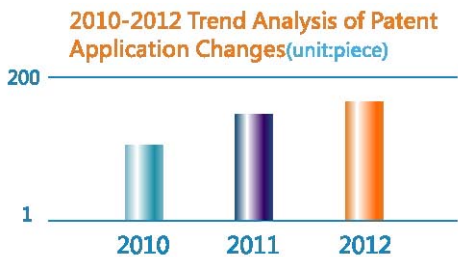


Figure: patent application trend over the past three years

Accelerated development in international and national industrial

In 2012, the Company completed 7 national standardization revising and 12 industrial standardization revising, took over 6 revising and participated in 32 international standard formulating. The Company obtained the right to formulate three new international standards, namely, IEC62845 Rail Transit and Freight Traction Wireless Reconnection Control System, IEC62847 Requirements and Testing Methods of Rail Transit and Rolling Stock Electric Coupler, IEC62848-1 Rail Transit, Rolling Stock, DC Arrester and Voltage Limiting Device, which became an important milestone of the Company's international standardization work and marked the Company's increased discourse power in core technical fields. The Company completed the draft of Electromagnetic Radiation Protection of High-speed Train, Rail Transit and Train Permanent Magnet Traction Motor, developed the scientific Research task of Research on Electric Traction Equipment and Systematic Standard System, repeatedly cleared up domestic and overseas standards and technical status of rail transit electrical field, and defined key emphasis in work of international and national standardization during "the 12th Five-year plan". Task research results has been well received among specialists in the industry and passed acceptance by Ministry of Railways; review 83 national standards managed by National Technical Committee on Traction Electrical Apparatus and System of Standardization Administration of China and 109 industrial standards managed by the Company, confirm effectiveness of standard and propose necessary revised opinions. The standard reviewing work this time is favorable for Improving availability and timeliness of related standards and reducing the risk caused by standards lagging behind markets to better guarantee safety of rail transit system and lay a solid foundation for further perfecting China railway standard system.

Major projects and pictures of awards



IGBT wafer of 3300V grade used for rail transit



The award representation meeting of the 14th China Patent



Technical appraising meeting on "large maintenance machinery network control system" of Times Electronics Company



The medal of awarding project for 14th China Patent Gold Award

Product Liability >>

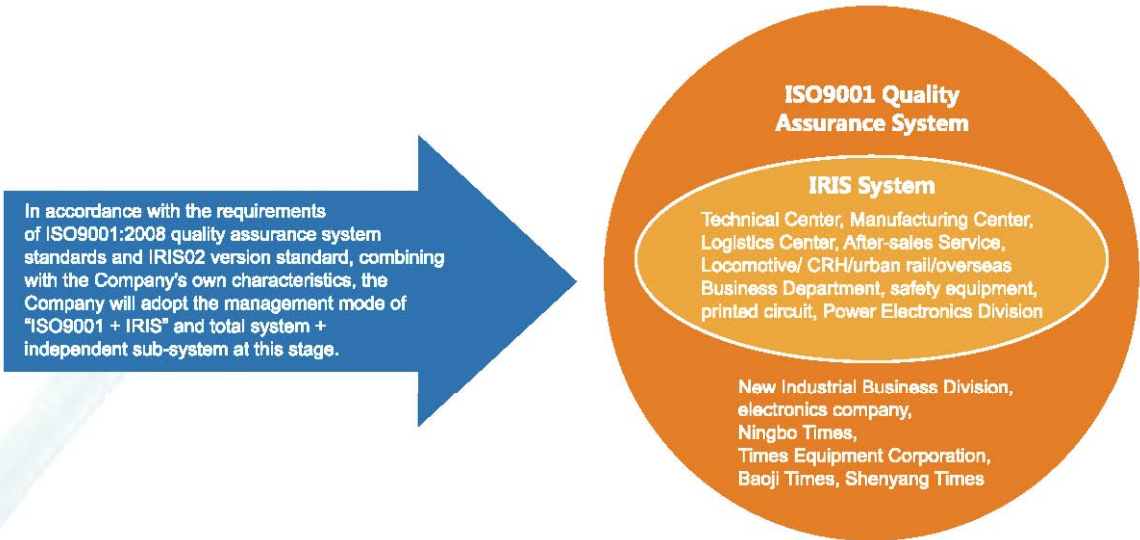
Product Quality Management

The company has always been taking quality as the core value. It held policies of “optimizing platform for sharing of knowledge, improving the ability of technological innovation, focusing on quantitative analysis of processes, setting up life cycle management, improving scientific prevention, enhancing awareness of quality and safety, paying attention to details and pursuing customer satisfaction in its product realization process and customer service”. The company continuously carries out researches and improvement for assurance mechanisms to control all aspects from product design to delivery.

Quality Management System and Certification

The Company is based on ISO9001:2008 quality management standard to establish complete quality assurance system, complies with the requirements of IRIS standard (International Railway Standard) to control the quality of products, implementation process and production process, strictly executes and implements supplier management, and actively promotes project management and RAMS (reliability, maintainability, availability, safety) management.

Quality System Management Mode:



Certificate



ISO9001:2008

British BSI/ Germany TUV

The Company passed the British Standards Institute Limited (BSI) ISO9001: 2000 version quality system certification in 2005; passed 2008 version change certification in November 2009. In October 2010, Guangdong Rheinland Group (TUV) carried out ISO9001: which was passed review on October 2012



IRIS 02 (International Railway Industry Standard)

Germany TUV

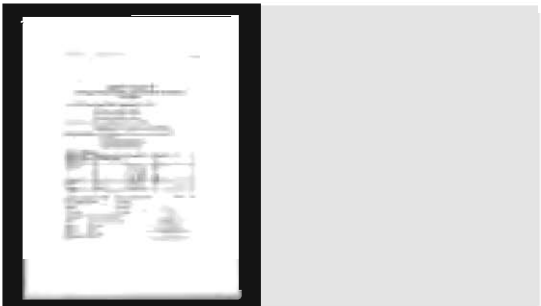
In October 2008, the Company passed Guangdong Rheinland Group (TUV) IRIS 01 certification, which was passed review on October 2012



CMMI Leve 3

SEI (Software Engineering Institute)

The Company passed CMMI- system three-level certification in December 2009



EN15085-CL4(Welding certification system for the rail transit industry)

Germany SLV

The Company passed EN15085-CL4 certification in November 2012

Quality Awards:

- The second prize of National Scientific and Technological Progress in 2011
- The first prize of National Management Innovation in 2011
- The 1st Provincial Governor Quality Award of Hunan Province in 2011
- National excellent quality management group for six years

- The first prize of Hunan Province Scientific and Technological Progress in 2011
- Excellent brand of China Financial Value in 2011
- Excellent enterprise of Hunan Province quality management group activities for six years

Quality Monitoring Method

The company has set up a complete system of quality management and assurance system covering the whole product life cycle including marketing, design and development, procurement, manufacturing and product services etc. through a number of certifications and effective monitoring of its processes.

Process monitoring:

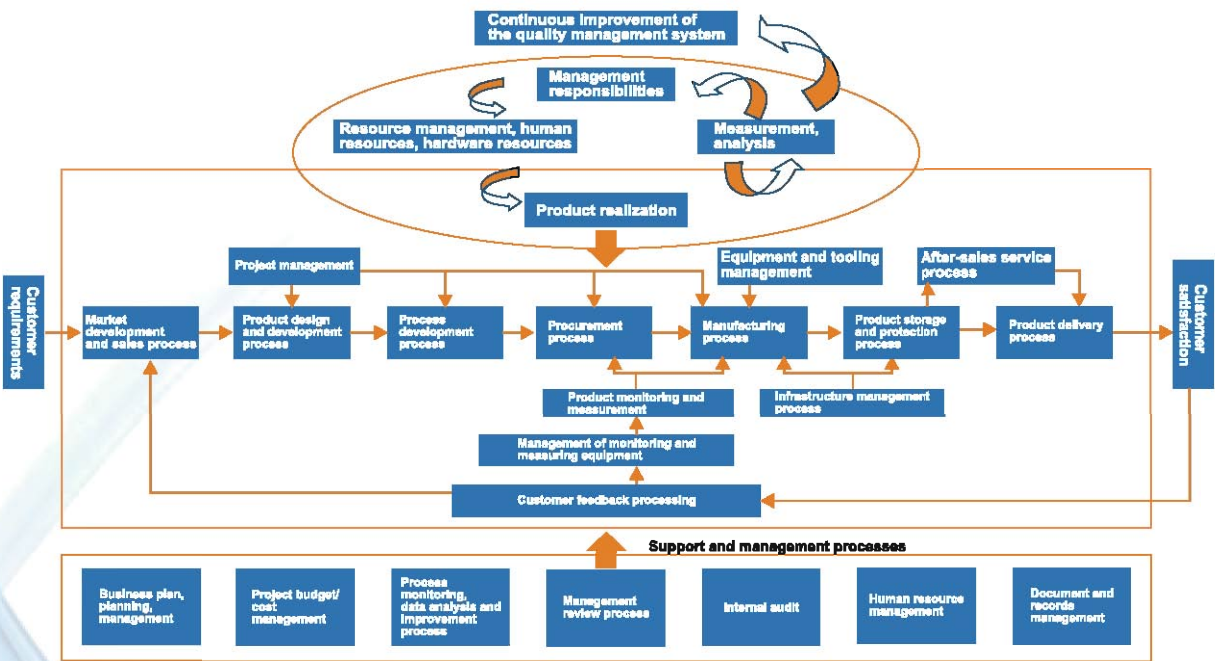
— Measure quality index, continuously improve system

The Company has established a overall process index measuring system, including sales, R & D, manufacturing, logistics, procurement and service, etc., comprehensively defined and quantized process quality and carried out measurement and monitoring.

— Internal audit, inspection:

The Company has established a three-dimensional continuous improvement system to ensure quality control through process review, process testing, internal and external audits and regular management review, non-scheduled quality inspection, data analysis, process improvement, etc., identify opportunities for improvement, require improved matters to implement responsibility and plans, carry out track and verification so as to guarantee to achieve the improvement goals and ensure that the whole quality management system will be continuously improved.

— Quality management of design and development process



Complete product development process system:

Complete product development process system: it supports the management and quality control of the entire lifecycle of mechanical products, electric products, software products development. The product development process is divided into different projects to achieve the quality control of design, realization, verification activities and design achievements in all links through the whole process from user needs to product type approval.

Product and design platformization:

The company gradually establishes relatively complete databases of products, technologies, standards of processes, guidelines and check items through practice, combines the databases with IT information systems and applies them the quality control of new product designs; the company also forms a platform for universal products that has been tested on many products and assessed for reliability so as to improve product design quality and reliability.

— Quality Management for Manufacturing Process

The company carries out on-site oriented technique improvement and lean production based on the company's goal of enhancing details. It establishes standard technique development process, technique management procedures and working standards for each position, and all workers for key positions shall be certified.

Complete operation and inspection files:

It provides detailed and comprehensive site work instructions and specifies each process during product processing in detail, and realizes in form of both excellent of picture and its accompanying essay, so that the site operational personnel can clearly and easily understand to avoid fault operation; meanwhile, it shall also support with corresponding work instructions for product inspection, process checklists, QC engineering drawings, etc., and carry out inspection and take photos to each key process in accordance with them.

Complete technical testing system:

The company's manufacturing bases are equipped with a complete technical testing system including AOI, flying probe test, online test, X-RAY inspection to check the welding quality of circuit boards and high and low voltage lines inspecting device to check the quality and reliability of wiring. A number of programs and measures are adopted to check the sealing of cabinets. The whole production process from a single board to the whole set including cabinet processing is effectively monitored.

Strict control of electronic components:

The company has also established a sound ESD and MSD control system for manufacturing bases to achieve the strict control on electronic components from workers, machine, material, methods, environment and measuring and so as to ensure product reliability.

Sound outsourcing suppliers' management system:

The company sets up outsourcing control group, the checking mode of the outsourcing inspectors stay on-site and the suppliers receive shift inspections. In addition, meetings are held every month to improve performance and quality of suppliers. Through these efforts, the company can improve the quality control mechanism on outsourcing suppliers from the development, prototyping, small batch production to mass production.

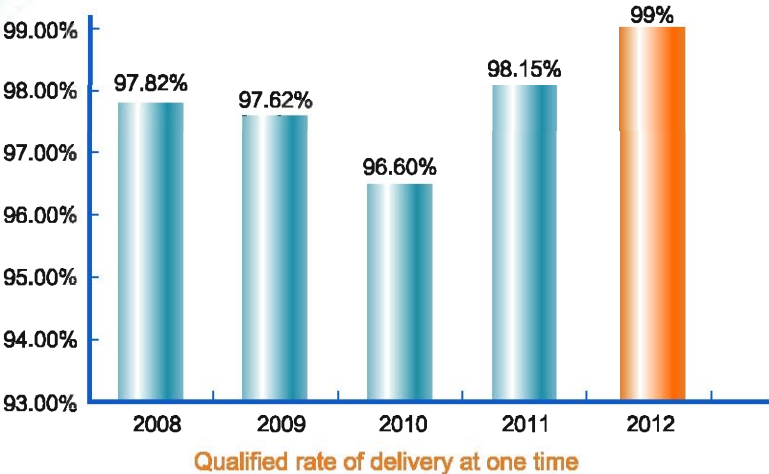
— Quality management informatization:

Strengthen quality management information construction, complete 2011 version upgrading of QMS system; meanwhile, optimize and perfect 4 modules such as “field failure management module, production process management module, material quality risk module”, business coverage newly increases 3 business units.

Modules Business	Field Failure Management Module	Production Process Management Module	Product Configuration Information Module	Customer Satisfaction Management Module	Guest Complaints Management Module	Test Defect Management Module	Material Quality Risk Management Module	Quality Supervision Management Module	Special Quality Checking Module	Platform Project Management Module
Electric Headquarter										
Safety Equipment Business Division										
Power Electronic Business Division										
Printed Circuit Business Division										
Times Electron										
Times Equipment										
Ningbo Times										
Baoji Times										
Shenyang Times										
Kunming Times										
Gugangzhou Times										
Hangzhou Times										
Beijing Information										

Illustration : Green marked parts have been implemented; Blue marked parts are implementing
Yellow marked parts are going to be implemented,and parts marked no color are not been spread yet.

— Product delivery quality



After-sale Service

After-sale Service Network

The company has a sound and global-covered after-sales service network. It has eight service offices in China, including Shenyang, Beijing, Shanghai, Chongqing, Guangzhou, Luoyang, Lanzhou and Zhuzhou and two CRH maintenance bases in Qingdao and Wuhan. More than 200 full-time staffs work for after-sale service, covering more than 70 service sites. There are also service stations in countries like Brazil, Kazakhstan and Turkmenistan, etc. The company launched its Green Shade service brand which focuses on fast, efficient and satisfactory service and provides free service during the warranty period and paid service after warranty ends.

The company gives responses to clients' demand, including demand analysis, scheme preparation, personnel dispatch, work coordination, information feedback etc. Currently, service responding mechanism at four levels has been implemented to realize the commitment of arriving at the site in 8 hours and solving problems in 24 hours for clients' satisfactory.

After-sale Service Net across the Country



Zhuzhou Service StationAddress:
Address: Inalde CSR Zhuzhou Electric Locomotive Co., Ltd,
Zhuzhou City.
Tel: 0731-28465403

Shanghai Service StationAddress:
Address: Room101 of Building 1, Lane 9669, HumIn Road,
Xuhui District, Shanghai City
Tel: 021-64360896

Wuhan Maintenance BaseAddress:
Address: Zhangjiapu Qingwang Road, Qingshan District,
Wuhan City
Tel: 027-88210945

Qingdao Maintenance BaseAddress:
Address: No.448, Aodong East Road, Shangma Industrial
Park of Chengyang District, Qingdao City
Tel: 15273301171

Xi'an Service Station
Address: No. 7 of 14th Floor, New Century Mansion, Fengcheng
2nd Road, Economic and Technical Development Zone of Xi'an City
Tel: 029-86214083

Shenyang Service Station:
Address: No. 5, Belsan East Road, Tied District,
Shenyang City
Tel: 024-25135336

Beijing Service Station
Address: Room 401, 1st Unit, Building 15, 2nd
District of Changfeng Park, Daxing District, Beijing City
Tel: 010-57158171

Guangzhou Service Station
Address: No. 190, Zhanyizhi Street, Linhe East Road,
Tianhe District, Guangzhou City
Tel: 020-38801872

Ziyang Service Station
Address: Inside Electric Locomotive Plant of Songtao
Town, Ziyang City
Tel: 028-26282751

Lanzhou Service Station
Address: Room 11B 8th Floor Xihuayuan Building, No. 124
Huoxing Street, Qilihe District, Nanzhou City
Tel: 15117076645

System construction of after-sale service position and standardization management of after-sale service

In order to construct scientific standardized position system, the Company developed work from five links of position clearing, information collecting and collating, position clearing implementation, position results output, position results acceptance under professional guidance of advisory bodies. After 2 months, after-sale service position clearing work will be finally completed and Position Management Manual of After-sale Service Center will be output. The manual includes organizational frame clearing, department responsibility clearing, employee position clearing and position description and position key KPI library. The position clearing has combined results of skills appraisal projects continually developed by after-sale service center before. The Company has classified skills and positions of employees engaged in technical service into 7 levels closely linked to remuneration, which will be formally implemented in December and has made an initial attempt for guiding employees to positively enhance skills and optimize distribution modes.



The Company strives to provide systematic and standardized service for clients. On the basis of original positions and product code of operation, after-sale service center integrates existing service work flow into "green shade service information platform". Work contents are issued in the form of service task with definite orders and clear flows to make field operation process easy to supervise and to guarantee service process and results under control. Meanwhile, strengthen service process supervision, maintain service quality standard, combine practical situation of field work, formulate and perfect service field guidelines, inspection appraisal, system of rewards and penalties; targeting at weak links of field management, strengthen supervision and inspection on service process to keep continuity and inheritance of supervision and management work. Implement supervision and management on service overall process maintain service quality standard, require the field to provide service as per the center's service specifications to prevent errors.

[Case]

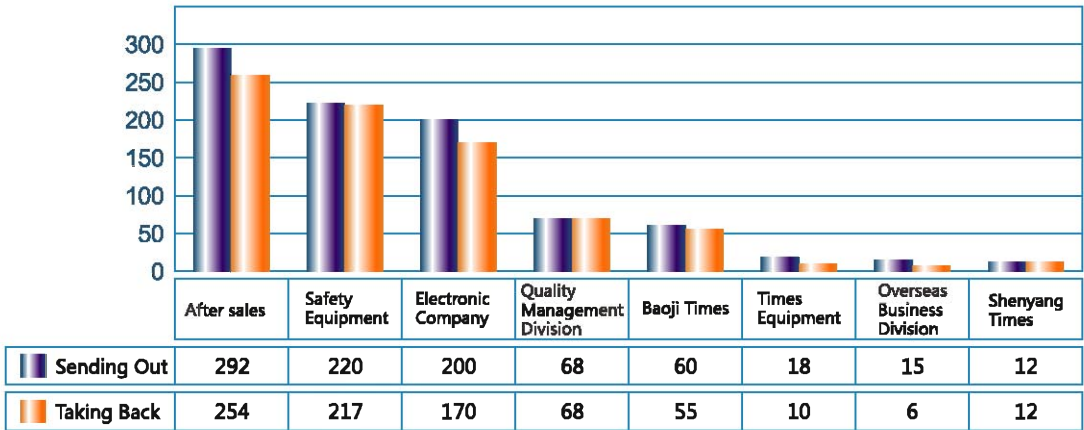
Special service for Beijing-Guangzhou High-speed Railway: "Beijing-Guangzhou High-speed Railway" was formally started operation on December 26, 2012, with total over 80 CRH trains of CRH380A, CRH380AL, CRH2C and CRH2E. After elaborately preparing The Plan on Special Service of Beijing-Guangzhou High-speed Railway and developing real-time service assurance work as planned, the special service was executed from December 20, 2012 and will end on April 19, 2013, lasting for 121 days. Personnel, accessories and other various resources are reasonably optimally configured according to time nodes.



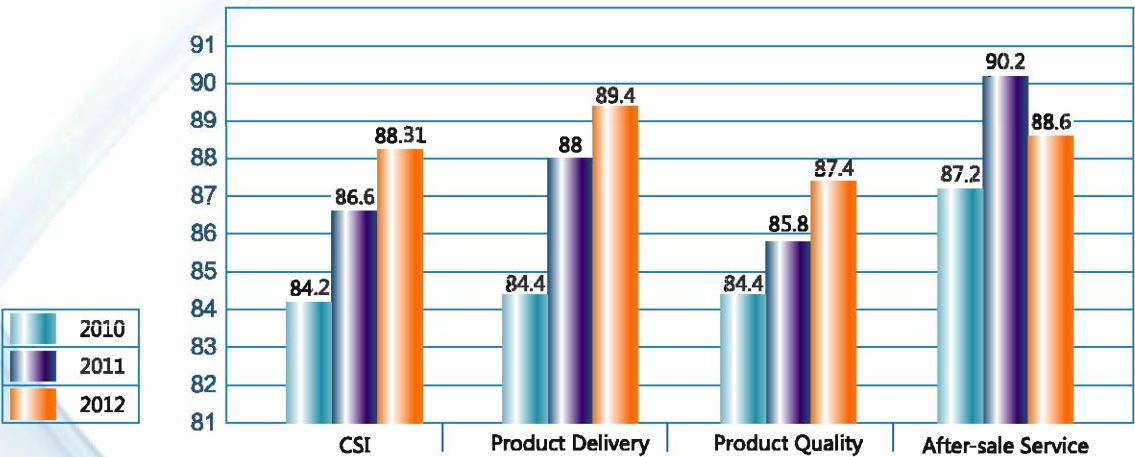
Customer satisfaction survey and customer complaints

Customer satisfaction

The company will continue to improve the quality of products and services and take the continuous improvement of customer satisfaction as the goal. In order to timely grasp the customer satisfaction to product quality and services, the Company organized an annual customer satisfaction measurement each year. The survey ways include questionnaire score, site visitation, etc. according to different customer groups, and the survey covers all customers of the Company. In 2012, Times Electric's basic thought of external customer satisfaction survey work was focusing on core products and considering other traditional products. Core products and involved vehicle types: urban rail subway, syntonyc type locomotive, CRH trains, safety monitoring equipment etc. Other traditional products and involved vehicle types: DC vehicle, internal combustion vehicle, passenger cars, engineering machinery, testing equipment etc. 135 users concerned were surveyed, including 8 subway corporation, 17 locomotive depots, 12 motor car institutes, 6 car depots, 10 main engine plants/system shops, 6 monitoring centers, 10 electricity sections/monitoring workshops, 3 local railway users, 33 track maintenance divisions/maintenance bases, 30 railway product corporations. In the survey, the coverage scale of prime type products is 100% and the coverage scale of users is over 90%.



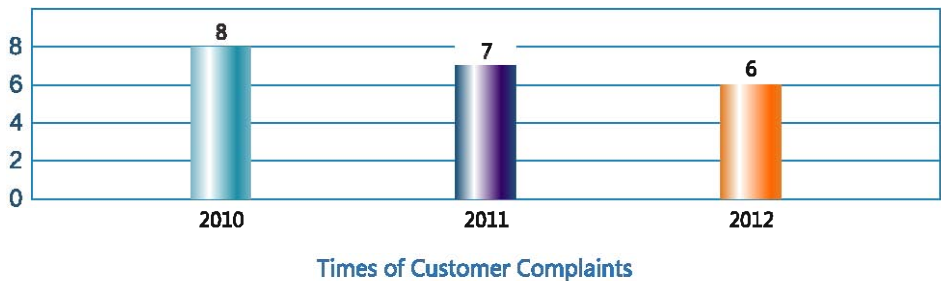
Customer Satisfaction Questionnaire Recovery in 2012



Comparison chart of the survey results of customer satisfaction over the past three years

Customer complaints

The Company attached great importance to customer complaints handling, and ensured that every customer complaint can be given rapid response and timely and effective treatment through system processes construction and information management:



Product safety

As a large-scale rail transit equipment manufacturing enterprise combining research and development, production, distribution and sales in one and core supplier of railway rolling stock parts, the Company's products are widely used in high-speed driving train, so the safety and reliability of products are directly related to the life safety of tens millions of passengers. Product quality is essential to safety, and safety is the life assurance of tens millions of passengers, and also the survival eternal way of enterprise. The Company has always put the product safety as the core of product quality. The Company is based on the technology security policy of "complying with railway safety standards, establishing product safety concept; understanding product safety effectiveness, improving safety rules and norms; producing safe and reliable products, ensuring train traffic safety", strictly check from aspects of "marketing, design, procurement, production, delivery and after-sales, and resolutely put an end to product quality and safety problems. Under the efforts of all staffs, there was no product quality and safety incident in 2012.

Guarantee of product safety (reliability)

Overall promotion on quality safety risk management.

In 2012, the Company built quality safety working team, organized special training and perfect risk management and control system; the Company formulated annual special working plan and advanced it solidly, completed risk source identification and formed risk source lists; the Company focused on promoting RAMS and implemented quality safety risk management on product design source.

Deepen the application of rail transit RAMS and LCC.

The implementation of the special project of Rail Transit RAMS and LCC Application has perfected and optimized RAMS/LCC management procedure. Four pilot projects of Georgia CRH trains project, Wuxi subway project, network platform product DTECS-2 and TPX21C displayer are defined; establish pilot projects of RAMS design, RAMS testing verification, RAMS manufacturing, operation instruction and modules of RAMS maintenance to form the corresponding sample documents.

Develop key material technical research, manage and upgrade special work.

Make full use of expert resources, widely collect design resources to develop special work of "five equipment", deeply implement technical certification and build standard procedures for material technical certification. On the basis of this opportunity, perfect technical specification, develop power capacitor and other 6 key material technical researches; improve key links of technical certification, strengthen material testing verification, management and control of key industrial arts, build a complete tracking mechanism from material selection to mass production application. Meanwhile, perfect the using conditions, indexes, parameters etc. in technical specification, and strengthen requirements on material application from design, industrial arts, testing, quality etc.

Product certification

In 2012, the Company passed 10 product certifications of expansion projects:

CERTIFICATES	CERTIFIED PRODUCTS OF DESCRIPTION	CERTIFICATES	CERTIFIED PRODUCTS OF DESCRIPTION
	<p>Passenger car charger</p> <p>Description:8KW passenger car charger certified by China Railways Product Certification Center (CRCC)in December 2012</p>		<p>Auxiliary converter</p> <p>Description:TGF11 auxiliary converter certified by CRCC in December 2012</p>
	<p>Single-phase inverter for passenger car</p> <p>Description:3.5kAV single-phase inverter for passenger car certified by CRCC in December 2012</p>		<p>Control unit of auxiliary converter</p> <p>Description:Control unit of TE274-0400000 auxiliary converter certified by CRCC in December 2012</p>
	<p>contravariant power passenger car air conditioning</p> <p>Description:2×35kAV+15 kAV contravariant power of passenger car air conditioning certified by CRCC in December 2012</p>		<p>Dc600 power supply device of locomotive auxiliary electrical cabinet</p> <p>Description:DC600 power supply device of TGF44 locomotive auxiliary electrical cabinet certified by CRCC in December 2012</p>
	<p>AC drive traction converter</p> <p>Description:TGA6C AC drive traction converters certified by CRCC in December 2012</p>		<p>Traction converter power module</p> <p>Description:CBD-3000S traction converter power module certified by CRCC in December 2012</p>
	<p>Auxiliary converter module</p> <p>Description:TE274— 380000 auxiliary converter module certified by CRCC in December 2012</p>		<p>Train power supply monitoring subsystem</p> <p>Description:TAX3rain power supply monitoring subsystem certified by CRCC in December 2012</p>

Improved test verification system

Approval and authorization

The Company successively invested and constructed testing labs with qualification of national level and provincial level, which have been

- Accredited lab of China National Accreditation Service for Conformity Assessment (CNAS)
- Traction and Control National Key Lab for Locomotive and CHR Trains
- Signed lab of China Railways Product Certification Center (CRCC)
- China Metrology Accreditation Detection Center

Detection and testing capability

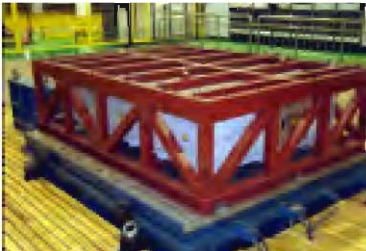
RAMS lab:RAMS lab owns 60m³ walk-in test chambers of high-low temperature thermal-humidity, rain and dust, 5m³ salt mist test chamber, 2.8m³ thermal-humidity test chamber with rapid temperature variation, combined test chamber of temperature, humidity and vibration; the newly increased electrodynamics vibration generator with 20t rated thrust has won three first positions in China, including 3m×3.5m table facet (the largest in China), stroke of 3 inches (the maximum in China), and 2.75 times of impacted thrust (initial realization); Combine with EMC lab and complete large electric railway equipment's compatibility test of electromagnetic environment, climatic environment and mechanical environment as per standard.



Walk-in rain test chamber



Walk-in dust test chamber



Vibration experiment of system-level product

Electronic device lab

Relying on RAMS test and EMC test, electronic device lab can undertake functional research and qualification test of electronic devices (such as microcomputer control cabinet, drive control unit, train running monitoring and recording device, electric measuring transducer, electric measuring indicator etc.) for track transit concerning all control, regulation, protection, power supply etc.



High-low Temperature Thermal-humidity Test Chamber

Passenger Train Electrical System Laboratory

It uses corresponding power supply, load, measurement and control system to build all types of trunk passenger train electrical system, locomotive auxiliary power for CRH, etc. to establish 1:1 system test platform.



AC converter test system



DC converter test system



Small power supply test system



Module and drive test system

EMC lab

In EMC lab, the testing frequency of EMI system is up to 18GHz, and the testing frequency of EMS system is up to 8 GHz, fully covering 3G fields. The testing capability of EMC lab plays a leading role in the industry again.



Environmental protection

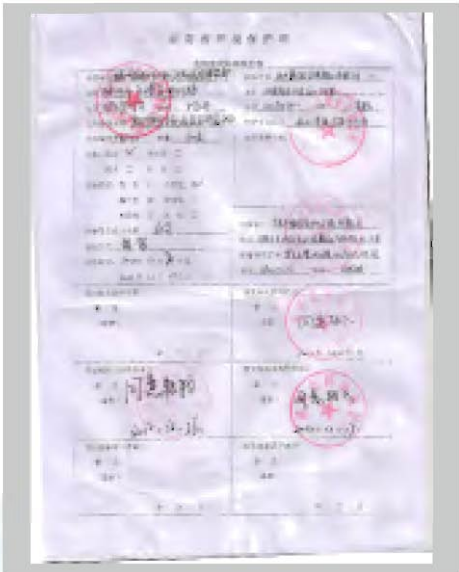
Environmental Protection policy: >>

Uphold the concept of respect for employees and environmental protection, seep the safety and environmental protection ideas into all production and business activities of the Company, pursue pollution-free, disaster-free, protect the legitimate interests of the employees, create good social image of the Company and seek for sustainable development.

Environmental protection performance management data >>

Industrial solid waste and hazardous waste disposal

Year	Waste thinners and other organic matters (Ton)	Waste copper mud and printed board (Ton)	Others (Ton)	Total (Ton)
Hazardous waste in 2010	20	29	15	64
Hazardous waste in 2011	25	30	15	70
Hazardous waste in 2012	26	28	15	69



Hazardous waste transfer approval sheet



Hazardous waste transfer sheet

Our Company separately collects and stores solid wastes as per common industrial solid wastes and hazardous wastes. Our company firstly considers recycling common solid wastes to the greatest extent and sends unrecyclable common solid wastes to qualified units for hazard-free treatment and hazardous wastes to units concerning hazardous waste treatment for treatment. Our Company strictly follows relevant national laws, regulations and policies in the process of hazardous waste treatment Get approval first and then transfer hazardous wastes; fill out Hazardous waste transfer sheet upon transferring and then report to Zhuzhou Environmental Protection Agency for the record. In 2012, the Company generated total 69 tons hazardous wastes in the process of production that were sent to units concerning hazardous waste treatment for treatment such as Zhuzhou Environmental Protection Agency for treatment with the qualified treatment rate of 100%.

Waste water discharge and gas emission standards

In 2012, the Company strictly followed relevant national laws and regulations to manage sewage treatment stations and waste gas treatment facilities. Discharge data supervised and monitored by monitoring authorities and government environmental protection administration entrusted by the Company conformed to relevant laws and regulations. No environmental illegality or environmental pollution incidents occurred. In 2011, the Company generated about 395,000 tons industrial waste water and the standardized discharge amount treated by sewage treatment station was up to 395,000 tons with the treatment rate of 100%.



Waste water online monitoring system



Waste water treatment facilities

Year	waste water Discharge value (ten thousand ton)	Waste water disposal value (Ten thousand ton)	Ratio of standard waste water discharge
2010	34	34	100%
2011	39	39	100%
2012	39.5	39.5	100%

Environmental improvement project

In 2012, our Company reconstructed the only 10 tons coal-fired boiler to be gas-fired boiler. Using clean energy of gas, our Company will reduce 4 tons dust emission and 34 tons SO2 emission every year to improve working conditions and image of the Company.



The original coal-fired boiler



The newly built gas-fired boiler

Environmental management >>>

Environmental Management System and Certification (Management thinking + investment + picture of certification)

In May 2006, the Company passed ISO14001 environmental management system certification of British Standards Institution (BSI) Company. All the time, the Company continuously improved corporate environmental management system operating performance through performance monitoring, internal audit, supervision and auditing, management review and other process controls of environmental management system.



ISO 14001 Environmental Management System Certificate

Environmental protection products

In the process of production, the Company always advocated the “Green” concept of CSR brand core value, vigorously promoted environmentally friendly materials and environmentally friendly process so as to create environmentally friendly green products for society.

Environmental compliance description (Compliance inspection and related penalty) >>>

During project construction, the Company actively carried out construction, extension and reconstruction so as to ensure that the environmental protection facilities and construction projects be designed, constructed and put into operation at the same time. In 2012, the work of environmental appraisal and approval of Industrialization Construction Project of High Power IGBT was completed.

In the process of production and operation management, the Company complied with the provisions of country, Ministry of Environmental Protection, provincial and municipal environmental protection laws and regulations, and timely obtained, updated and conveyed relevant environmental protection regulations and standards, took new regulations and standards as a basis to conduct routine environmental protection management within the Company, positively executed corporate environmental protection obligations and implemented the principles and policies of national energy saving and emission reduction. There was no punishment event by relevant departments as violation of environmental regulations and won “Zhuzhou Green Enterprise” in 2012.

Energy saving, consumption- decreasing and comprehensive treatment >>

Energy saving and consumption- decreasing

In 2012, the Company has always taken energy saving and emission reduction as the important content of sustainable development strategy, seriously implemented the policies, regulations, standards of country, local government and higher authorities on energy management and taken many measures at the same time so as to carry out a series of effective works.

Conduct energy system certification, perfect energy management system and build energy consumption kpi appraisal mechanism

Set an objective of the Company's comprehensive energy consumption of output value per RMB 10,000 decreasing by 4% than that of last year; energy consumption amount is put into responsibility documents of departments (units); integrate documents concerning energy management.

Energy management knowledge training and energy-saving publicity

Organize personnel related with energy management in departments (units) of the Company to have energy management knowledge training in order to enhance their energy management and awareness of energy-saving.



Develop water-saving promotion campaigns and water balance testing work;reconstruct water supply pipe network system and save cost of RMB 100,000 after reconstruction.

Conduct frequency conversion renovation of power supply compression system and optimize boiler and central air-conditioning system to save cost of RMB 150,000 per year.

Item	2010	2011	2012
Electricity (kWh)	36051100	45251200	48841700
Coal (tons)	5761.00	5000	4020
Gasoline (tons)	74.7	104	125
Diesel fuel (tons)	32.8	60	72.13
Natural gas (m³)	1836640	3120000	2604500
Tap water (m³)	756597	1054000	910400
Comprehensive energy consumption per ten thousand Yuan added value (ton/ ten thousand Yuan)	0.067	0.065	0.0172

Energy Consumption of Times Electrics from 2010 to 2012

Comprehensive treatment

In 2012, the Company's comprehensive treatment and safety work were conducted closely concentrating on the Company's requirements of central tasks and stipulations of Detailed Rules for Objective Assessment on Comprehensive Treatment and Safety Work, and completed job objectives of 2012 with satisfactory results.

Construction of comprehensive treatment agency and perfect rules and regulations

Based on the Company's actual situation and requirements of comprehensive treatment work, the Company has timely adjusted the organization and personnel concerning comprehensive treatment and safety work, further perfected work responsibility and division, and completed annual signing of Responsibility Documents of Comprehensive Treatment and Safety Work with subordinated units in the form of Responsibility System of Comprehensive Treatment on and Goal-Management. Meanwhile, the Company urges departments (units) to build multi-level internal safety management system, realizing overall coverage of comprehensive treatment and safety management work through "horizontal and longitudinal management and individual responsibility" and forming joint management and participation of comprehensive treatment work for every one. The Company builds and improves overall contingency plan and special contingency plan. On the basis of overall contingency plans, the Company has 10 special contingency plans to ensure timely and orderly disposal of emergency circumstances.



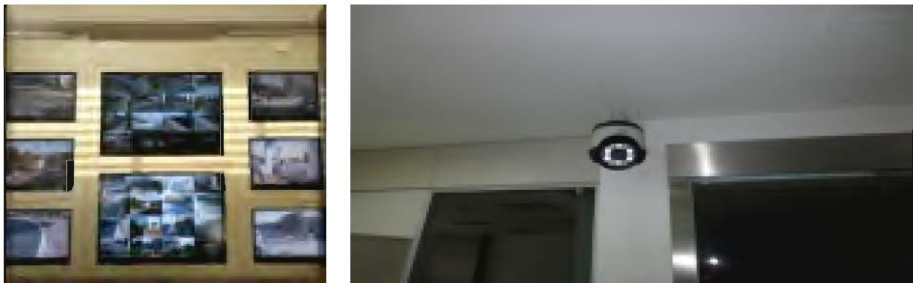
Build "individual responsibility" and implement responsibilities

Adhere to the construction principle of "individual responsibility" firmly, continuously perfect emergency team construction in actual work and focus on the way of commissioned management (Times Property Company) and demobilized soldiers; based on the aim of "coming for fight and fight for success", build a safety and emergency team with higher degree of specialization and keep on physical training and skill training at least twice a week and regular training competitions. In this way, individual soldier capability is improved. Once emergency events take place, the Company will transfer soldiers and redeploy overall safety prevention layout targeting at the Company's safety prevention situation. In 2012, regional safety management and control mode of whole-to-part and part-to-whole was formed to forcefully ensure the Company's safety.



Continuous improved construction of material prevention and technical prevention and obvious improvement of functions roles

Effective and complete facilities of fence, door and window lock, TV monitor, infrared alarm in the headquarter and units



Joint construction of police and civilian, military and civilian

Timely know about and convey information on comprehensive treatment and safety, formulate work program, construct efficient working mechanism to complete military and emergency training assigned by superior military command and stability maintenance, counter-disaster, civil air defense maintenance.



Emergency management

The headquarter and units organize emergency exercises twice to have Increased safety awareness, responsibility awareness ,service awareness and emergency awareness of safety personnel and emergency personnel, The Company's emergency disposal capacity and emergency management level will be continuously improved and ensured.

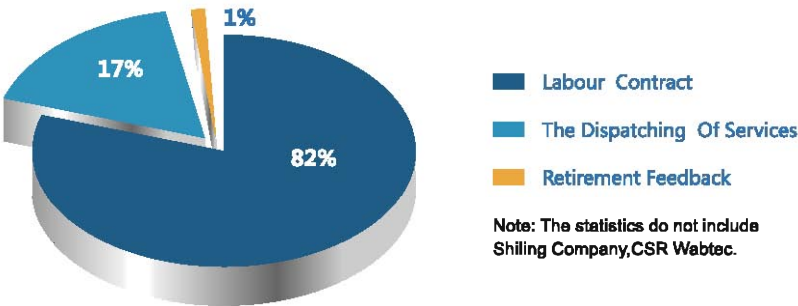


Care staff

Our staff >>

Staffs are the valuable wealth of the Company and the foundation of the Company for development. The Company will use staff strictly in accordance with the laws and will never harm the interests of employees. Currently, all staffs have signed labor and employment contracts with the Company either directly or indirectly by the dispatch company, of which the signing rate has reached 100%. Meanwhile, the Company also pays close attention to the interests of staffs and creates favorable atmosphere so as to be conducive to their contributions and obtain good development.

Until December 31,2012, The staffs of the Company Have Reached 5160



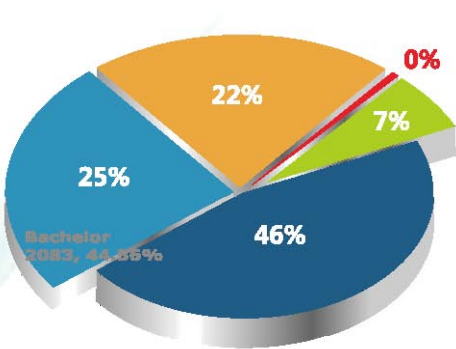
Ways of labor and employment

Diversified Labor

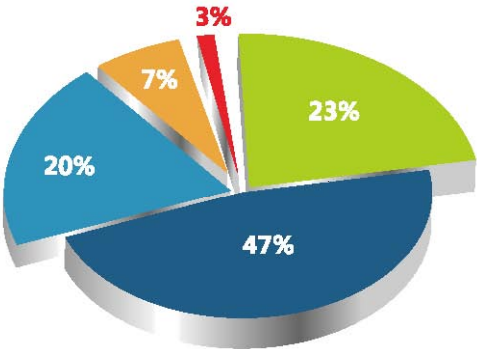
Current labor

The Company continues to strengthen management and optimization of human resources to set up a highly educated and young team with advanced techniques and strong professional skills. The company has a number of personnel with core techniques and management skills, laying the foundation for sustainable development.

The staff in the Company is with low mobility. Over the last three years, the staff loss rate was controlled within 5%, which was 4.47% in 2012.



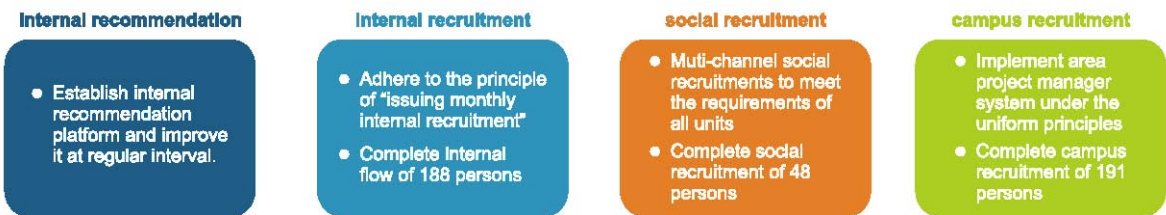
Doctor	Master	Undergraduate	Junior College	Lower than junior college
0%	7%	46%	25%	22%



Under 25	26-35	36-45	46-50	Over 50
23%	47%	20%	7%	3%

Staff recruitment

Based on different demands of talents for various positions, the Company builds multi-channel recruitment methods such as internal recommendation, internal recruitment, social recruitment, campus recruitment etc. and conducts innovative recruitment for IGBT talents and overseas talents, providing talent support for major Industrial development.



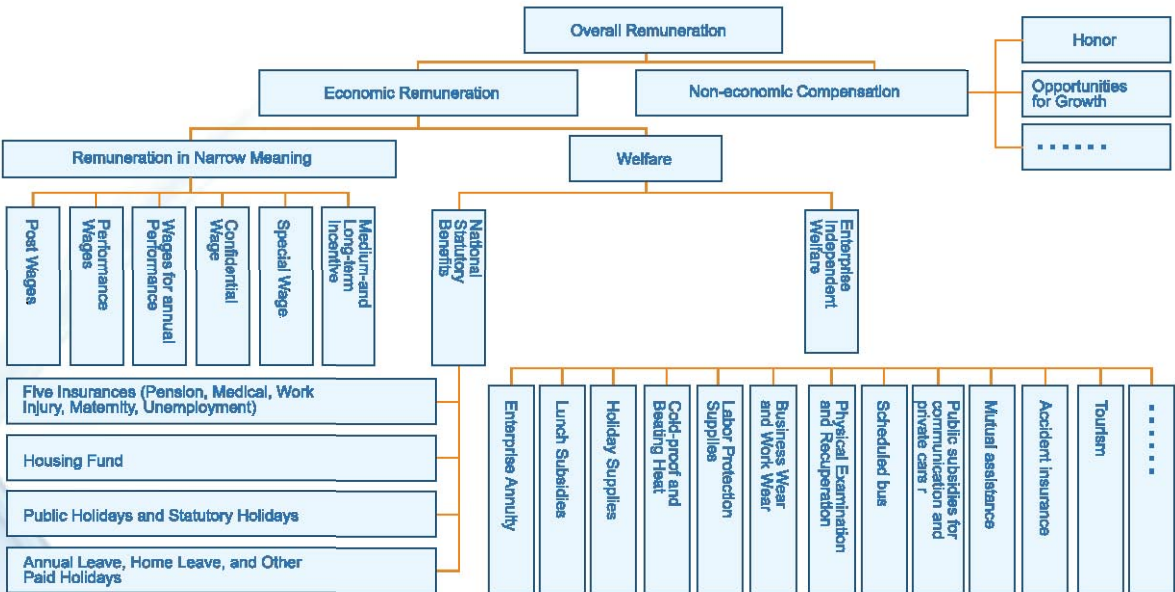
Staff salary and benefits

The Company adheres to the principles of efficiency priority and equity balance, and builds salary system integrated with position, capability and performance. Compared with the original salary system, the new salary system defines confirmative factors of salary, designs different proportions of salary points based on different career development channels, clarifies specific contents and methods of salary assessment and adjustment, and strengthens the concept of performance-based salary.

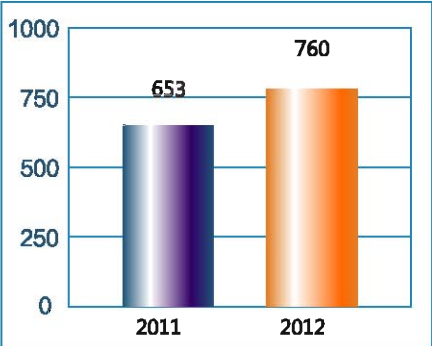
In accordance with national laws, regulations and related policies, the company pays statutory benefits for its staff including basic pension insurance, basic medical insurance (including medical insurance for major diseases), employment injury insurance, maternity insurance, unemployment insurance and housing fund etc. It also provides corporate benefits for staff including annuities, lunch subsidies, labor protection, holiday supplies, physical Examination, recuperation, transportation and communication subsidies, support, accident Insurance for one-child families etc.

Staff of the Company can have days-off for public holidays, wedding and maternity leave. In addition, they enjoy an annual leave according to national Regulations on Paid Annual Leave and Paid Annual Leave for Corporate Staff.

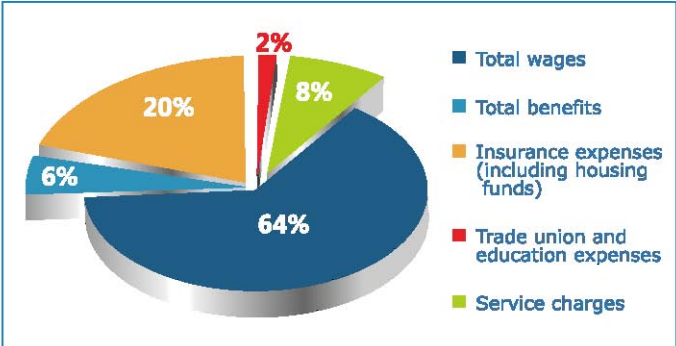
The Company has launched the philosophy of overall remuneration since 2007. The Company extended the concept of remuneration and incorporated the welfare and relevant career development, job interest and other non-economic rewards, so that the staff can fully understand the returns given by the Company, which enhanced the incentive to payment.



Growth and composition of total compensation (wages and surcharges)



Growth of total compensation



Composition of total compensation

Skill upgrading and career development >>>

Training and management

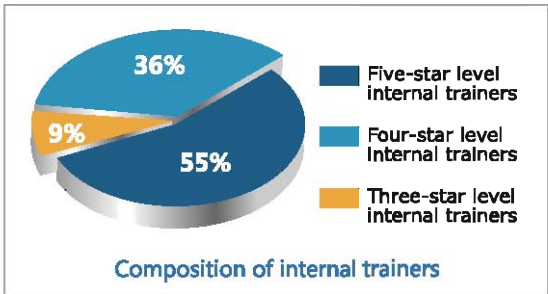
The Human Resources Department actively organized resources based on wide investigation on training needs and the analysis on different demands of the development strategies, sector operations and staff professional development training, and carried out multilevel, multi-form, and many-sided training by employing internal and external lecturers, sending out and inviting in professionals.

Human Resources Department continues to develop something new from the old on training management. Human Resources Department strengthens monitoring and benchmarking of training plans to ensure the implementation of training project at the organizational level. Through continuous implementation of Training Management Credit System, employees change from “passive learning” to “active learning” at the individual level. The department makes full use of “training resource sharing platform” to realize training resource sharing and improve work efficiency of training management. In 2011, the Company introduced ISO10015 international training management standard. In 2012, on this basis, Human Resources Department fully cleared existing training management system.



The Company's Internal trainer team continues growing and realizes dynamic management through selection and assessment. The Company has 252 existing internal trainers, including 138 internal trainers at three-star level, 90 internal trainers at four-star level and 24 internal trainers at five-star level. In order to fully activate internal training resources and arouse internal trainers' teaching passion to a greatest extent, Human Resources Department selected and trained a group of elite trainers with proficient skills in the Company's existing internal trainers. In 2012, Human Resources Department successfully held the 1st Internal Trainers Skills Competition.

In 2012, the Company's total investment of training was about RMB 9,394,600. The Company completed training time of 379994.5H and training time per capita of 80.21H, including internal training periods of 324377H, accounting for 85%, external training time of 55572.5H, accounting for 15%; 5047 training projects were completed, and the implementation rate of the Company's annual training plan was 92.59%.



[Case]

Training projects such as "Basic Oral English Class", "Basic Business English Writing class", "International One-hundred Team and Advanced Business English Listening and Speaking Elite class", "Series Trainings on Elites for Logistics Center", "Series Training on Urban Rail Marketing Knowledge", "Training on Labor Disputes and Employee Relation Management", "The 5th Discipline—Systematic Training" have been completed.

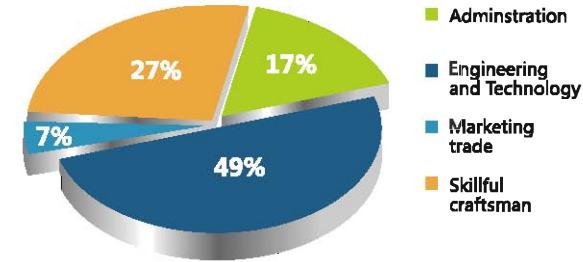
Engineering Master Class cooperated with school of electrical engineering of Zhejiang University has opened and completed training of 5 courses in 2012. Graduate summer internship of Southwest Jiaotong University and internship of postgraduates with combined training of Southwest Jiaotong University have been arranged.

The Company actively organizes relevant personnel to participate in various special trainings held by CSR and CSR Zhuzhou Institute, such as "International Advanced Business English Talents Training", "Training on CSR Middle-level Leadership", "British Training Project of International Talents", "Training on International Project Managers", "Training Camp of Backup Management Personnel of CSR Zhuzhou Institute".

Staff's career development

The Company mainly relies on the "4+5" career development system to plan four career development channels, including technology, management, production and marketing, so that each staff can be based on different career categories and along the planned career development channels to achieve their own career development. Currently, the staffs over C-level account for 19%.

At present, the Company owns a group of experts with core technologies in the industry and operation management personnel, including 3 CSR "chief technical experts", 9 CSR "technical experts", 20 CSR "top technical talents", 4 CSR "top management talents".



Note: Scope of data statistics covers DYNEX Company, excluding Shiling, CSR Wabtec.

Health and safety >>

Safety objective and index control

In 2012, the Company had no person with liability accident death, serious injury, newly increased occupational disease, or minor injury. Baoji Times passed Grade Two Enterprise Certification of Safety Production Standardization.

Occupational Health Safety Management System

In 2012, the Company put Shenyang Times into scope of EHS system certification, and continued to improve the Company's EHS management system operational performance and smoothly passed OHSAS18001 and ISO14001 system certification and verification through identification and compliance evaluation of occupational health and safety laws and regulations, and process control of EHS system documents concerning optimization, internal audit, supervision and verification, management review.



OHSAS18001 Certificate of Occupational Health Safety Management System

Consolidate grass-roots safety management and fully develop standardized safety production construction in teams and groups

Safety management focuses on grass-roots management. In 2012, the Company started standardized safety production construction in teams and groups. After developing work by stage such as advancement, standardization, overall promotion of pilot teams and groups, training and communication of group leaders on safety standardization, summarization and appraisal, safety management levels in teams and groups have been much raised, basically meeting four requirements of standardized management, namely "standardized safety education", "standardized safety management", "standardized safety inspection and hidden danger rectification", "standardized safety cultural construction". As of the late 2012, standardized safety rate in teams and groups was more than 90%.



Safety training of foreman/group



Strengthen safety education training and raise overall safety awareness and skills

In 2012, the Company organized safety management personnel, EHS system internal auditors, group leaders, special type operators, new employees, operators of occupational hazard etc. to develop safety training classes through sending out and inviting in professionals, with more than 7,000 trainees for the year. Meanwhile, the Company held National Painting and Calligraphy Exhibition and Celebrities Pen Club on Safety Production, creating thick atmosphere of safety culture in the Company. Safety awareness and safety skills of various personnel were further raised through development of safety training and activities. Up to 2012, the Company has 29 registered safety engineers and initially formed a team of safety management professionals.



Focus on safety investment and forcefully develop overhauling and rectification of potential safety hazard

The Company's leaders attach importance to safety production and carry out front-line field safety inspection and night shift safety inspection, who lead safety management departments to carry out 22 safety inspections and discover 756 potential hazards for the year. The Company invests RMB 5,102,300 to improve staff's working conditions and rectify potential safety hazards. The implementation rate of rectifying potential hazards for the year is up to 100%. In 2012, the Company invested RMB 8,920,900 to allocate articles for labor protection and health allowance and heatstroke prevention materials to employees, demonstrating the Company's concept of people-oriented safety management.



Safety inspection in Baoji Times
by general manager of the Company



Field safety inspection by secretary
of the sub-Party committee

Main projects of safety investment in 2012

No.	Main projects of safety investment	Invested capital (ten thousand Yuan)
1	Eliminate collapsed roof risk of Physical and Chemical Room in printed circuit business unit, enhance treatment effect of organic exhaust gas of intercharacter, and improve operating conditions of intercharacter.	60
2	Enhance high-voltage electrical safety in test sites of the Manufacturing Center and reduce high-voltage tests' burning loss to products and damage to people	170
3	Improve working conditions in coating workshops of the Manufacturing Center and reduce odors generated from manual coating platform upon coating	10
4	Detect special equipment and facilities and lighting protection facilities, examine occupational health and occupational hazardous factors, and rectify potential safety hazards	270.23
5	Allocate articles for labor protection and health allowance and heatstroke prevention materials	892.09
6	In total	1402.32

Concern about staff health and develop occupational disease prevention

The Company's occupational disease prevention adheres to focusing on prevention and combining prevention and treatment. The Company organizes operators engaged in occupational hazards to develop occupational health check-up and timely concerns about staff's health conditions to prevent occupational diseases. The Company also develops occupational hazard factor detection on occupational hazard operating points, cares about staff's working conditions, and evaluates the current situation of occupational disease prevention work in order to lay a solid foundation for the Company's continuous improvement in occupational disease prevention work.

Interests of staff >>

Worker's Congress

As the basic form of enterprise implementing democratic management, Workers' Congress is an authority for workers to exercise the power of democratic management in accordance with provisions of laws. Based on the principle of democratic centralism, the Company builds the Workers' Congress system in accordance with relevant stipulations in Trade Union Law.

The 151 existing staff representatives were elected from cadres (staff) in departments (units), involving personnel in the Company's mangement, technology, production, marketing. The Workers' Congress system has strengthened the Company's democratic management, guranteeed staff to exercise the right of democratic management according to the law, fully displayed staff's initiative and creativity, and advanced effective improvement of enterprise quality and economic benefit. Council of Trade Unions is the operating mechanism of Workers' Congress and responsible for daily work of Workers' Congress.



Staff's rationalization and feedback mechanism

In order to promote steady advancement of business development, harmonious labor relation and stable staff team, the Company accepts staff's rationalized proposals through multi-channels and multi-forms with 9307 staff rationalization amount and 100% adoption of staff rationalized proposals.

Set up "leadership reception day system" .

The Company's leaders receive grass-roots staff's visits at the regular time each week and listen to staff's suggestions personally.

Set up online staff hotlines.

The Company's general manager and secretary of the Party committee listen to staff's suggestions about their concerned issues in turns through online communication in Youth Forum. There are 100 staff's opinions answered.

Set up contact sites for public opinions and serve grass-roots staff.

Branch president serves as the Company's liaison officer for public opinions, establishes the local union covering the Company's overall system and liaison sites serving grass-roots staff, and deeply understand staff's thinking and appealing situation.

Implement staff points award system.

Reward grass-roots staff's rationalized suggestions, encourage and guide staff to actively participate in the Company's management innovation and production quality improvement. In 2012, total 9288 proposals for improvement were received.



The Company's leaders paying a visit to grass-roots service sites.

The leaders call on staff conversaciones and ask for information about the Company's development, staff's occupational development, welfare etc. The leaders also designate relevant units (departments) to settle problems proposed by staff and answer 128 staff's questions.

Recreational and sports activities

The Company proposes the cultural concept of "happy work and healthy life" and actively advocates healthy and civilized life-style.

Create platforms for colorful cultural activities.

Cultural activity is the form of demonstrating happy life. The Company creates platforms for cultural activities and organizes various healthy mass cultural activities, such as the annual Spring Festival Fellowship Party, chorus contest of "Youth Embrace Times", theme lecture of Healthy Work and Happy Life, reading activity of "Three Books for Women" etc. Those activities greatly enrich staff's spiritual cultural life and enhance staff's life quality and spiritual realm.

Establish brand for sports activities in a new stage.

Sports activity is the important constituted part of spiritual civilization progress. The Company integrates featured activities of grass-roots units and with the platform of all-round recreation and sports center, successively establishes societies and clubs of badminton, photography, dance, riding etc. and opens training classes of yoga, aerobics, folk dance, aero-latin etc. The Company is in the leading position of balls contests among CSR Zhuzhou Institute, which raises staff's sense of pride and happiness and stimulates staff to devote to the Company's new development

Social harmony

Supplier management >>

Procurement policy and commercial specifications

Currently, the Company has established perfect supplier management system to continuously monitor and track the supplier's performance and ensure stable quality of products. The Company has also formulated New Supplier Development and Management Approach, which clearly defines that the new suppliers shall establish ISO9001 quality management system as quality assurance and identifies responsibilities in aspects of quality requirements, safety environmental protection and occupational health by signing Quality Assurance Protocol and Safety Environmental Protection Agreement of Parties Concerned. In addition, the Company also signed Economic Activities Incurrupt Government Liability Agreement with suppliers to specify the business conduct of the two parties, consciously accept the supervision of suppliers and prevent the occurrence of acts of corruptions. In 2011, through the implementation of the supplier's life cycle management system project of common materials and customized component materials, combining with the collection, study and discussion to advanced supplier management file in international railway industry, the Company further improves the management system of suppliers and tool template.

Establish and improve supplier's performance evaluation system, the purchasing department shall organize relevant departments to carry out performance evaluation to suppliers from quality, delivery, price and service each year, which increases the evaluation of the supplier to credibility, facilitates to select outstanding suppliers, establishes benchmark and eliminates the one with poor performance.

Financial support from supplier

The Company's social responsibility lies in not only raising its corporate social responsibility but also driving the whole supply chain. Continuous development and enhancement of corporate social responsibility will encourage and support suppliers to become enterprises with a sense of social responsibility. The Company establishes strategic alliance with suppliers in long-term cooperation and formulates code of conduct for suppliers and requires suppliers to establish effective management system. The Company organizes training and field empathic learning for suppliers and shares experience in market, technology and management. The Company organizes special support team and expert group to provide technical innovation, quality control, cost management and control, production management etc. for suppliers with weak local strength, and leads suppliers to develop together and make contribution to society with the Company. In 2012, based on the principle of justice, fairness, win-win cooperation, the Company signed Annual Product Quality Protocol, Annual Price Protocol, Annual Win-win Protocol of Cost Decreasing and Benefit Increasing and other strategic frame agreements with prime suppliers, and cooperates with suppliers to create more value for society and customers and strive for excellent development.



【Case】

- (1) The Company assists Jinsheng Company to build up coating process capacity, establish the process quality control system for coating process. Current prime quality issues of coating can be solved through process optimization and new materials introduction. Jinsheng Company changed from a manual workshop to be a professional coating plant.
- (2) Personnel concerning organizational design, process and quality analyze cracking problems of Times Metal's aluminium alloy welding sections, and prevent repeated quality problems through a series of process work such as finding out causes of problems, formulating precautions, preparing rectification measures, process test and improvement, complete process parameters, draft process flow etc.
- (3) The Company conducts retraining work for over 30 welders from supplier of aluminum alloy for subway with accumulated 250 hours of training, and carries out personnel operating qualification certification based on product requirements.
- (4) In order to enhance suppliers' welding capability and control management capability, the Company provides support for three key suppliers of welding products and helps suppliers to set up EN15085 welding quality system and strengthen control and management on welding process. Three suppliers pass EN15085 system certification once only.
- (5) The Company popularizes the concept of advanced quality management, application of 8D reports and 5why analysis and other quality professional tools among prime suppliers, which promotes suppliers to enhance capability of analyzing and solving quality problems and raises capability and quality of quality personnel.

Local procurement

The Company steadily implemented nearby and local procurement policies under the premise of win-win benefit and quality assurance to foster local matching suppliers and increase the local employment rate. The local purchasing situation in recent three years as follows:

Year	The proportion of local external cooperating suppliers in total suppliers	The proportion of external cooperating local procurement amount in the total procurement amount	The proportion of local outsourcing suppliers of the total suppliers	proportion of outsourcing local procurement amount in the total procurement amount
2010	60.1%	95.1%	16.26%	22.45%
2011	67.44%	96.11%	16.78%	24.77%
2012	68.2%	95.77%	18.1%	28.3%



Public charity >>

In 2012, the Company actively developed various theme activities of social responsibility devotion such as social assistance and support, public interest assisting students, environmental practice etc. to repay society gratefully and actively perform the Company's social responsibility.

Volunteer Union of United Evening News organizing activities for social dedication of "Warm the Double Ninth Festival by Loving Heart and Travel New Zhuzhou Together".

Further developing the good tradition of dedication to society, volunteers give delicate care in life and spirit to the lonely elderly people and help them to feel Zhuzhou's change and beautiful scenery. 60 elderly people, individually accompanied by league members, visited Shennong City Square and watched water curtain performances at the lakeside of Shennong Lake, laughing and smiling.



Volunteer Union of United Evening News developing love devotion activities of "Sending Autumn Blessings and Bring Social hope" in certain labor camp

Volunteers give delicate care in life to people in the labor camp and help them to build and correct confidence, and to better understand society, themselves and life values.



Develop supporting education and donation activities for Xiangshui Primary School in Wangxian Town, Liling County.

358 books and magazines (including nearly 100 new books), some stationery and sports goods like football, battledore, rope skipping, shuttlecock etc. were donated to LiLing Xiangshui Primary School.



Develop donation activity of "Little Goodness Showing Great love" for western Hunan.

In order to further promote Lei Feng spirit, raise hope for more people and gather collective power to help more people in need, Youth League branches of CSR Times Electric, CSR Times Power and CSR Times Electronic held donation activity with the theme of "Little Goodness Showing Great Love" for western Hunan in the late March.

Donation activity provides a good platform of dedication for people and builds up an invisible bridge for communication between donors and recipients, which not only promotes Lei Feng spirit but also raises hope for recipients.



Participate in environmental protection and trailwalk activity of "Hiking along Xiangjiang River" in Zhuzhou.

The trailwalk activity further enhances volitional quality of young people, exercises team spirit and urban team, well displays CSR overall image, and make contributions to protection of Xiangjiang River, Firefly Caring Student etc.

Universities communication of "going out" activities.

It builds up a good brand image of the Company in colleges and universities and provides intelligent support for the Company introducing talents and cultural promotion. In March and November of 2012, the Company respectively completed advertising activity of "The Famous Enterprise's Road" with Employment and Occupational Development Association of Zhejiang University, and Electrical School of Harbin Institute of Technology.



Fellowship activity of Happy Promise.

In order to further help unmarried young staff to enlarge friend circles, the Company's Youth League Committee organizes Youth Fellowship Activities for many times. Young men and women combine freely to DIY cakes, biscuits, chocolates etc. and naturally communicate with each other, get to know each other and make appointments in the working process.



Looking Forward to the Future

1. Guided by market demand and international advanced level, the Company is dedicated to build a technical team representing the level in the industry with high performance. Fully absorbing and introducing technical results, raising proprietary intellectual property rights and core technical level, the Company will become the domestic technical leader in fields of rail transit electric drive and automatic control system, and the world-leading enterprise as well. The Company will be dedicated to concentric diversified development of core technology, occupy the strategic high ground of relevant emerging industries and conceive large-scale new pillar industries.

2. The Company strives to be such a preferred supplier deeply trusted by users with the most comprehensive strength and the highest market shares in national railway drive system and related accessories field. The Company also will be the domestic self-owned brand preferred supplier with the most complete product lines in domestic urban rail market, the best cost performance, the highest comprehensive occupancy rate and the best service. The Company aims to be the preferred supplier of domestic import substitution in high-end industrial drive, converter products and core components.

3. The Company's manufacturing system will realize the initial transformation from focusing on industrial implementation capability to focusing on control capability of industries and supply chains. The Company will construct a professional main manufacturing base that ranks the first rating in converter industry and well-known in the world with rapid response and high efficient operation. The Company will build a manufacturing system based on national market layout, cooperating multiple manufacturing points, high quality starting points, various product categories. The Company will adopt joint venture or sole proprietorship and build a foreign manufacturing system branch based on global division of work.

4. The Company will firmly implement global strategy by stage, gradually perfect global procurement mode and establish global manufacturing and supply chain system. In order to enhance the position in overseas market, the Company will accelerate the international acceptance of its prime type products in the form of domestic host machines export, single export or cooperative export etc. The Company will build competitive advantages in overseas field through cooperative relation between overseas manufacturing branch and territorial system & host machine integrator. The Company will strengthen territorial competitiveness to avoid tariff and trade barriers through establishing overseas sales networks or joint venture (sole proprietorship) enterprises.

5. The Company will select and target industrial benchmark to formulate the catching-up plan by year. The Company will accumulate management experience suitable for its feature through pilot sites and initially establish a multi-national, multi-industry and multi-category corporate organizational management system adaptable to the industrial developing trend. The Company will continue to raise internal management level with the tool of information and standardization, and strengthen the capability of internal audit and risk control.

6. The Company will firmly and steadily keep human resources reserve for long-term objectives, preferentially allocate human resources to high-end links formed by product value and fields with large long-term demand gap of resources for industrial development; The Company will also initially establish multi-industry and internationalized talent training in future, performance assessment modes under the complex management system, and a one-hundred elite team with internationalized marketing, management and industrial expansion.

7. The Company will optimize safety and environmental protecting management system, produce green and environmental protecting products, build green and environmental protecting enterprise and perform international contact organizational responsibility to ensure the Company's safety operation and sustainable development.



株洲南车时代电气股份有限公司
ZHUZHOU CSR TIMES ELECTRIC CO., LTD.