The ZXtech

Intelligent learning elevator

Introduction of elevator training platform

19 years focus on elevator industry information
vocational training product development

CONTENTS

ZXTECH

SINCE 1999

**ZXTECH
21TH CENTURY**
PROVIDES YOU WITH A PROFESSIONAL
COMPREHENSIVE AND CONVENIENT

ZXtech (Shanghai) Co.,Ltd.

The Zxtech (Shanghai) Co.,Ltd. adheres to the concept of customer centered, focus on helping customer information and intelligent construction. The leading of virtual reality platform, logical coordination platform, elevator Internet of things and practical solutions can reshape the sales, design, production, engineering management and training methods. Making the enterprise intelligent and efficient operation. Our products and services extend throughout Asia, Europe and the Americas, and promote the exploration and advancement of the new digital mode of industry.

ETP.5000M.COM

EVERYWHERE,ETP'S SERVICE PROVIDES YOU WITH A PROFESSIONAL,
COMPREHENSIVE AND CONVENIENT PLATFORM.

INTRODUCTION OF

**EVERYWHERE,ETP'S SERVICE PROVIDES YOU W
A PROFESSIONAL,COMPREHENSIVE AND
CONVENIENT PLATFORM.**

Global information elevator trainin

ANNUAL TRAINING NUMBER   TRAINING MOD

46,000+PEOPLE   700+MOD

NO. OF TRAINNING   TRAINNING PRODUCT

F ZXtech

ITH

g solutions provider

DULE — COUNTRY COVERAGE — CUSTOMERS SERVED

OULES 10+COUNTRIES 100+CUSTOMERS

TS COVER COUNTRIES SERVICE CUSTOMERS

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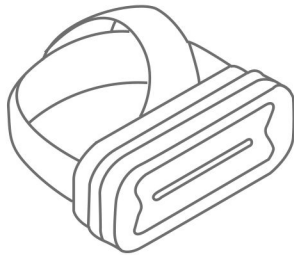
ETP
ELEVATOR TRAINNING PLATFORM
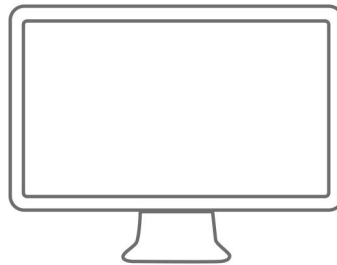
INTRODUCTION OF TRAINNING PRODUCTS

VALUE & ADVANTAGE

Platform introduction

| VR | PC | Mobile |

The elevator training platform (ETP) uses PC, virtual reality helmet, mobile phone and other terminal equipment to realize the integration of the three links of the elevator industry professional training management platform, which covers learning, training and testing. 19 years to focus on the elevator industry training service experience, subvert the traditional way, using the serious game teaching mode to build this training platform, improve training efficiency and effectiveness, and reduce training costs.

VALUE & ADVANTAGE

The value & advantage of the platform to the enterprise

The training efficiency is increased by 47%
High quality, standardized theory and simulation training, covering all staff, expanding the scope of direct training and improving training efficiency 47%.

The cost of training is reduced by 65%
Digital training reduces the cost of training trips, tardiness, training management, and reduces training costs by 65%.

Study anytime and anywhere
The elevator training platform (ETP), through visualization and game oriented training, applies mobile terminal learning without restriction of time and space. Immersive virtual reality training to enhance training effectiveness 59%.

Accurate training process analysis
The elevator training platform (ETP) makes a precise analysis of the learning process of the trainees, and gradually improves the training system through analysis, and adjusts the training emphasis in time.

VALUE & ADVANTAGE

The value & advantage of the platform oriented colleges and training structures

Provide curriculum content and teaching solutions
It provides a complete teaching plan, teaching contents and rich teaching assessment methods.

Emancipate the teacher
Avoid duplication of work, use digital assessment and intelligent score, artificial intelligence and big data analysis.

**Take the students as the center**
Education and pleasure, quickly grasp knowledge and skills in the game. Computer terminal intensive training, VR helmet end special intensive training, mobile terminal fragments time to learn, learn as you want.
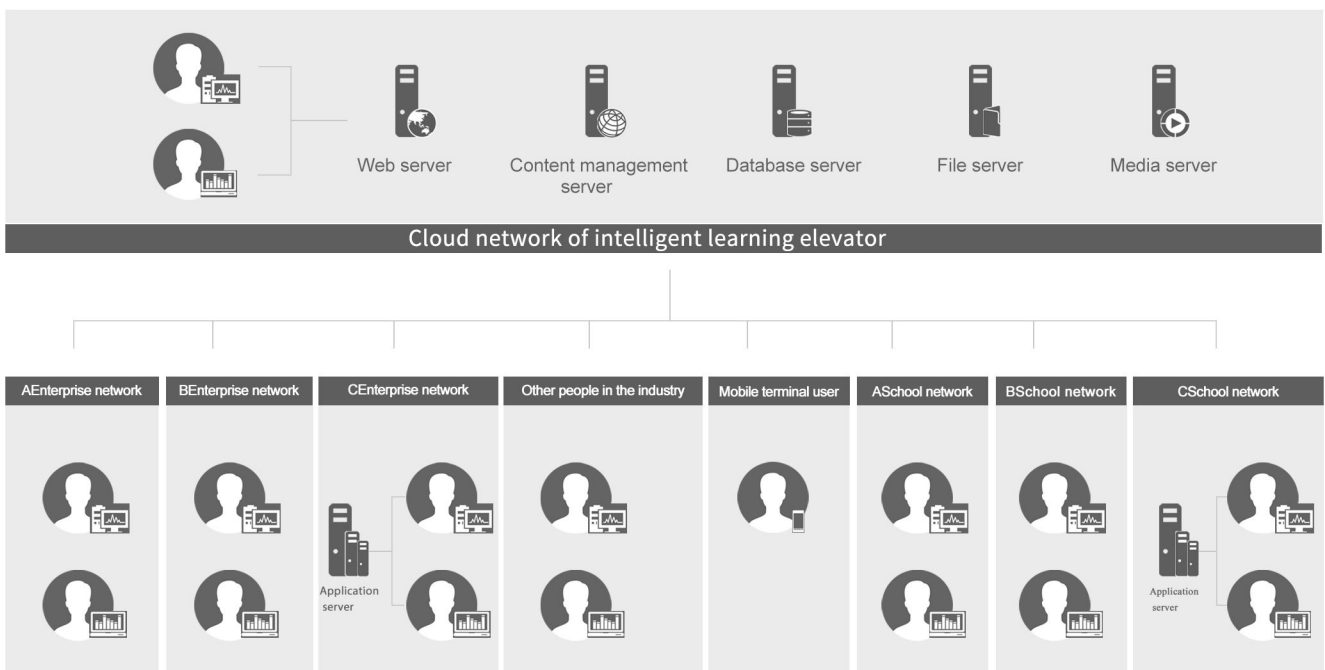
INTRODUCTION OF ETP

Design Concept

The platform is based on the complete training process design, including the complete learning, training and examination, the 3 training links, to improve the management function of the corresponding students, teachers and administrators.

Study · Practice · Test · Management
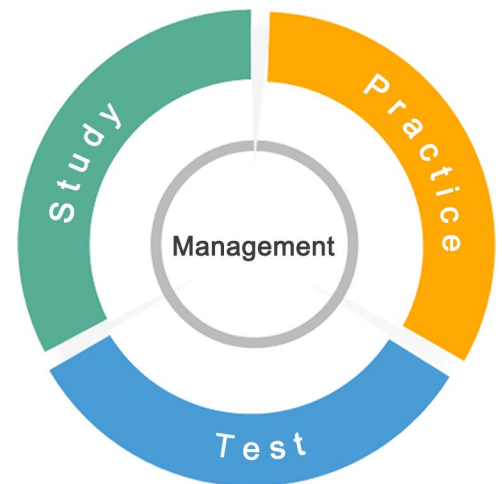
Architectural Features

The system uses SaaS cloud network architecture, and can deploy branch servers at enterprise level users. Enterprise users do not need to buy any hardware, only simply register. Enterprises need not be equipped with professional and technical personnel in IT. Enterprise branch servers maintain synchronization with cloud service information over the Internet. The scalability of the system is good, so it is easy to extend the support for new requirements.

Web server · Content management server · Database server · File server · Media server

Cloud network of intelligent learning elevator

AEnterprise network · BEnterprise network · CEnterprise network · Other people in the industry · Mobile terminal user · ASchool network · BSchool network · CSchool network

Application server

Application server

INTRODUCTION OF ETP

Feature list

Online learning	System information	Online Test	Training management	Knowledge base	Statistical function	Interactive communication
■ Online learning (Purchase course)	■ System informati-on	■ Test paper manag-ement	■ Demand research	■ Classification of knowledge base	■ Statistical function	■ Message board
■ Personal inform-ation	■ Test library man-agement	■ Examination	■ Training plan	■ Knowledge base management		■ Forum
	■ Educational admi-ni stration mana-gement	■ Test management	■ Training and Impl-ementation			
	■ Information mas-		■ Training evaluation			
	■ Organizational ma-nagement					
	■ Platform manage-ment					
	■ Institution manage-ment					
	■ System log					
	■ Preference Preference					

Main Function Introduction

Curriculum management

Curriculum management is divided into four parts: curriculum list, curriculum creation, curriculum editing and knowl-edge base management. It is mainly about the management of the course and the content of the course.

Test library management

The theoretical test library manage-ment includes three types: single choice, multiple choice and true or false. The management function of test library is to add, modify, delete and query. The questions in the test paper are randomly selected from the test database according to the rules of the test paper generation.

Educational administration management

The educational administration management includes six modules: teacher information, student man-agement, professional setting, knowledge base classification, student classification and teacher classification, which are mainly classified and managed for teachers, students, majors and knowledge

Organizational management

Organizational management is mainly to the management of employees within the company, including five modules: employee management, post setting, job title, work group and department information, to realize the online management of human resources.

Test paper management

The main function of the "test paper management" is to make the teacher easy to create and edit the test papers.

Test management

When there are a large number of tests, teachers can set up test questions in the test management and choose the test papers for each test. Students will not change their questions if they are closed or refreshed. Each time a student makes a question, the data will be submitted to the server once each modification is made.

Training management

With a standard and universal train-ing process, from the training of drafting, forecast name, training reg-istration, training, training end to the maintenance of the training record, the user training records can be sys-tematically and electronically main-tained.

Statistical function

Statistical analysis is a macroscopic analysis of the whole station. Through the analysis of website data, hot professionals, popular teachers and excellent teachers are screened out on the homepage of the website. You can also count the results of the examinees in each subject.

INTRODUCTION OF ETP

Support Hardware Introduction
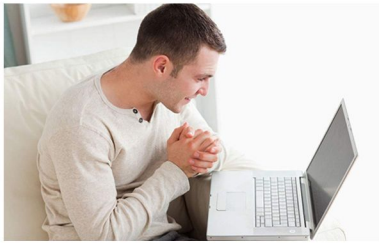
It can support the mainstream computer hardware configuration and operation system. It can achieve mass application under the original configuration and reduce the cost of hardware.
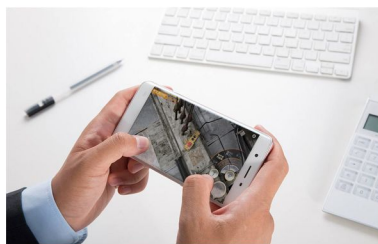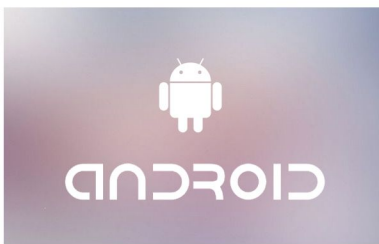
Support Android and IOS systems. Support most of the models on the market. Users can learn and train with fragmentation time., not limited by time and place, but can learn anytime and anywhere.

The application of the latest VR helmet, VR data glove and other equipment, provides closer to the real physical simulation, multi person interactive simulation, bring it a more natural, realistic immersive VR experience.

INTRODUCTION OF ETP

Resource Type

Virtual Simulation Course   `Support hardware: smart phone, PC, HTC VIVE`

Subversion of the traditional way, the use of serious games for training and assessment. Simulate the real elevator operation environment, bring trainee to immersive and interactive learning experience. Detailed record of learning behavior, accurate analysis of practical results. It can also get a more real and immersive experience by wearing virtual reality wearable devices. After the learning process is completed, the memory retention rate of knowledge is improved through virtual simulation training process.

Video Course   `Support hardware: smart phone, PC`

The learning content is based on 3D animation rendering techniques, which accurately and vividly teach elevator installation and maintenance knowledge and skills. Provide a multilevel training content. The learning process changes from traditional text books to images and sounds, and students

Interactive Courseware Course   `Support hardware: smart phone, PC`

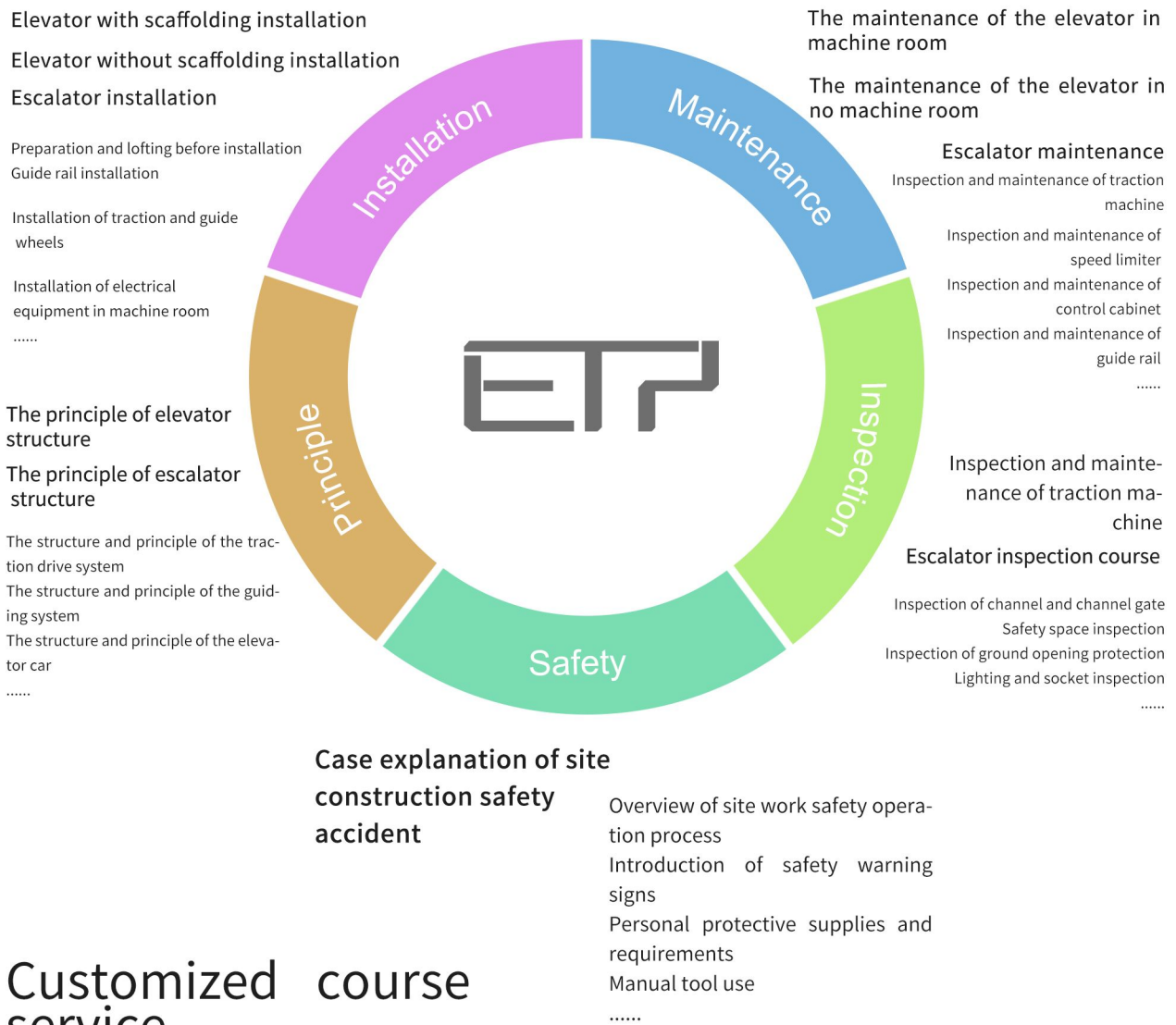The well-designed course learning process enables learners to learn knowledge points actively, exploitively and logically. Through simple interaction, students can quickly master the key knowledge and complete the test for relevant knowledge points after the courseware is finished. The results of the test can be recorded by the platform as one of the data sources for evaluating the training effect.

COURSE INTRODUCTION

General Course System

The general course system is divided into 5 main categories: structure theory, installation, maintenance, inspection and safety. Each category contains rich and complete knowledge modules and knowledge points. It can provide basic training for enterprises, and provide authoritative, complete and rich teaching system and content for professional courses of Elevator Engineering Specialty in vocational colleges.

Elevator with scaffolding installation

Elevator without scaffolding installation

Escalator installation

Preparation and lofting before installation
Guide rail installation

Installation of traction and guide wheels

Installation of electrical equipment in machine room
......

The maintenance of the elevator in machine room

The maintenance of the elevator in no machine room

Escalator maintenance
Inspection and maintenance of traction machine
Inspection and maintenance of speed limiter
Inspection and maintenance of control cabinet
Inspection and maintenance of guide rail
......

The principle of elevator structure

The principle of escalator structure

The structure and principle of the traction drive system
The structure and principle of the guiding system
The structure and principle of the elevator car
......

Inspection and maintenance of traction machine

Escalator inspection course

Inspection of channel and channel gate
Safety space inspection
Inspection of ground opening protection
Lighting and socket inspection
......

Installation | Maintenance | Inspection | Safety | Principle

ETP

Case explanation of site construction safety accident

Overview of site work safety operation process
Introduction of safety warning signs
Personal protective supplies and requirements
Manual tool use
......

Customized course service

It can provide customized services for 3D animation, SCORM courseware and virtual simulation course, and customize various types of curriculum resources according to user needs and process flow. To help users complete the digitalization of training resources and the construction and completion of training knowledge system.

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ELEVATOR TRAINNING PLATFORM

COURSE INTRODUCTION
General course introduction

The principle of elevator／Escalator structure

This course introduces the classification, composition, structure, function and working principle of the elevator eight systems. And the key parts such as traction machines, speed limiters, door machines, control cabinets, cars and other components disassembly, assembly process and sub components structure principle. The principle of escalator structure mainly covers the classification, composition, structure, function and working principle of truss, drive system, guide system, handrails system, safety protection system, stave and other systems and components. It includes 14 modules and 40 knowledge points.

『**Courses can be taught through teaching resource animation and SCORM courseware.**』
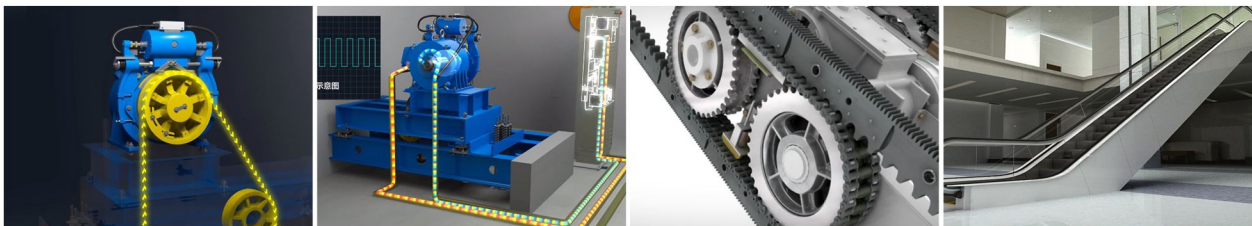
Installation safety clampy clampy clamp	Guiding system	Installation of floor doorr	Electrical power drive system
Safety protection system	Door system	Traction system	Weight balance system
Car system			

| Debug of rated speed operationin param eters and classification of escalator and automatic sidewalk | Structure and principle of escalator truss and drive system | Structure and principle of escalator delivery system and | Structure and principle of escalator safety protection device and lubrication system |
| The structure and principle of the escalator electric control system | | | |

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COURSE INTRODUCTION
General course introduction

Installation course of machine room traction elevator with scaffolding

This course introduces the installation technology and installation process of scaffolding with machine room traction elevator. The content of the course is based on the installation technology and installation process of the mainstream elevator manufacturers on the market. The course contents include 75 knowledge points under 22 large-scale modules.

『**Courses can be taught through teaching resource animation and SCORM courseware.**』

Preparation and lofting before installation	Guide rail installation	Installation of traction and guide wheels	Courses can be taught through teaching resource animation and SCORM courseware.
Installation of speed limiter	Installation of counterweight	Installation of car	Installation of car top equip-ment
Installation safety clamp	Installation of car door	Installation of floor door	Installation buffer
Installation of bottom pit tensioner	Installation of speed limiter and traction wire rope	Installation of compensation chain	Installation of electrical equipment and wiring at the bot-tom of the pit
Installation of accompanyi-ng cable	Installation of hoistway cable and lighting	Installation of hoistway switc-h, flat layer sensor	Installation of call, floor mo-nitor
Debug of rated speed operation	Debug of rated speed ope-ration preparation		

COURSE INTRODUCTION
General course introduction

Installation course of machine room traction elevator with no scaffolding

This course introduces the installation technology and installation process of machine room traction elevator without scaffolding. The content of the course is based on the installation technology and installation process of the mainstream elevator manufacturers on the market. The course contents include 81 knowledge points under 22 large-scale modules.

『Courses can be learned through teaching resources animation, training and examination through simulation courses.』

|			
Preparatory work before installation of no scaffolding	Installation of top floor working platform	Lofting	Installation of traction and speed limiter
Installation of electrical equipment in the machine	Installation of bottom pit working platform	Installation of electrical equipment and wiring at the bottom of the pit	Installation of car
Installation of car door	Installation safety clamp	Installation of counterweight	Installation of speed limiter and traction wire rope
Installation of compensati-on chain	Installation of accompanying cable	Installation of car mobile platform	Debug of rated speed oper ation preparation
Guide rail installation	Installation of floor door	Installation of car top equip-ment	Installation of hoistway cable and lighting
Installation of hoistway switch, flat layer sensor	Inspection of car top enviro-nment, floor monitor		

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COURSE INTRODUCTION
General course introduction

Maintenance course of machine room traction elevator

This course introduces in depth the methods and requirements for maintenance of machine room elevator. It includes 33 modules and 109 knowledge points.

『Courses can be learned through teaching resources animation, training and examination through simulation courses.』
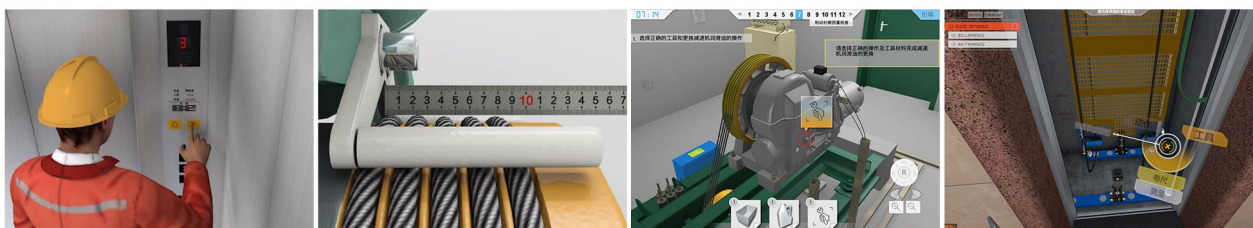
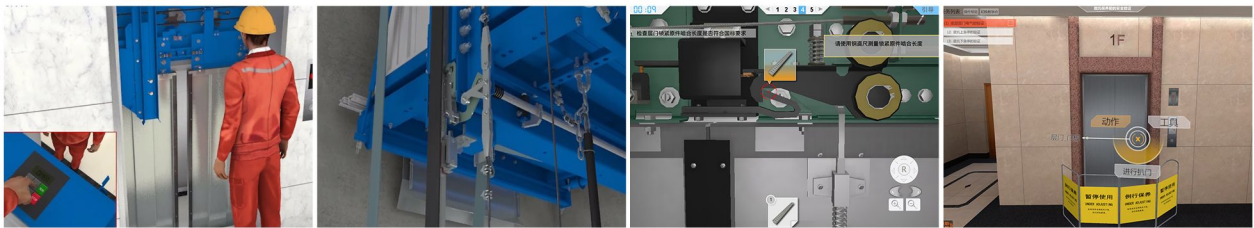|			
Elevator service preparat-ion	Inspection and maintenance of the machine room environ-ment	Inspection and maintenance of traction machine	Inspection and maintenance of manual emergency opera-tion device
Inspection and maintena-nce of speed limiter	Inspection and maintenance of control cabinet	Inspection and maintenance of the traction rope and speed limiter	Inspection and maintenance of hall door devicet
Inspection and maintenance of hoistway protection switch	Inspection and maintenance of hoistway lighting	Inspection and maintenance of counterweight	Inspection and maintenance of the tensioner wheel of the speed limiter
Inspection and maintenance of the buffer	Inspection and maintenance of compensation chain	Inspection and maintenance of car bottom guide shoe	Inspection of random cable
Inspection and maintenance of safety clamp	Inspection and maintenance of bottom pit environment	Inspection and maintenance of car top guide shoe	Inspection and maintenance of guide rail
Inspection and maintenance of door area sensor	Inspection of car top enviro-nment	Inspection and maintenance of car top device	Inspection and maintenance of reverse ropes at car top
Inspection and maintenance of the car frame	Inspection and maintenance of the car frame	Inspection and maintenance of car operation	Inspection and maintenance of car lighting and COP function
Inspection and maintenance of ceiling, floor, car wall	Inspection and maintenance of level station buttons and level station position indica-	Inspection of fire switch fun-ction	Experiment and test
Rescue of machine room elevator			

COURSE INTRODUCTION
General course introduction

Maintenance course of no machine room traction elevator

This course introduces in depth the methods and requirements for maintenance of elevator. It includes 31 modules and 97 knowledge points.

『Courses can be learned through teaching resources animation, training and examination through simulation courses.』

|			
Elevator service preparation	Inspection and maintenance of traction machine	Inspection and maintenance of manual emergency operation device	Inspection and maintenance of speed limiter
Inspection and maintenance of control cabinet	Inspection and maintenance of the traction rope and speed limiter	Inspection and maintenance of hall door device	Inspection and maintenance of hoistway protection switch
Inspection and maintenance of hoistway lighting	Inspection and maintenance of counterweight	Inspection and maintenance of the tensioner wheel of the speed limiter	Inspection and maintenance of the buffer
Inspection and maintenance of compensation chain	Inspection and maintenance of car bottom guide shoe	Inspection of random cable	Inspection and maintenance of safety clamp
Inspection and maintenance of bottom pit environment	Inspection and maintenance of car top guide shoe	Inspection and maintenance of guide rail	Inspection and maintenance of door area sensor
Inspection of car top enviro-nment	Inspection and maintenance of car top device	Service and maintenance of the reverse ropes of the car	Inspection and maintenance of the car frame
Inspection and maintenance of car door device	Inspection and maintenance of car top device	Inspection and maintenance of car top device	Inspection and maintenance of ceiling, floor, car wall
Inspection and maintenance of level station buttons and level station position indicators	Inspection of fire switch function	Rescue of no machine room elevator	

COURSE INTRODUCTION
General course introduction

Maintenance course of escalator

This course introduces in depth the maintenance technology and maintenance process of escalators. The content of the course is based on the mainstream maintenance technology and maintenance process of the mainstream elevator manufacturers on the market. The course contents include 75

『Courses can be learned through teaching resources animation, training and examination through simulation courses.』
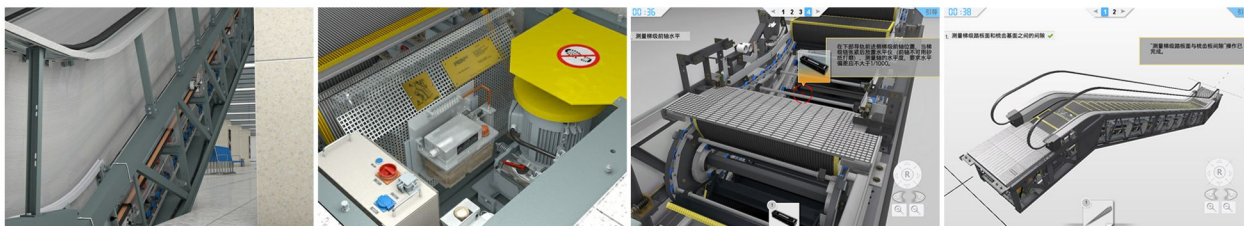
Escalator service preparation	Inspection of equipment operation	Inspection of escalator's automatic operation function and emergency stop button function	Function inspection of escalator maintenance operation device
Inspection of the upper and lower ends	Inspection and maintenance of the machine room	Inspection and maintenance of parts such as apron, cover, railing and so on	Inspection and maintenance of stave
Chain lubrication	Drive shaft lubrication	Inspection and test of safety switch	Inspection and maintenance of guide device
Inspection and maintenance of drive device	Inspection of the braking distance of unloaded downlink	Inspection and maintenance of the mainframe brake device	Inspection and maintenance of the handrails system
Inspection and maintenance of additional brake	Fault diagnosis and eliminati -on of escalator		

ETP
ELEVATOR TRAINNING PLATFORM

COURSE INTRODUCTION
General course introduction

Inspection course of machine room elevator

The depth of elevator inspection method and standards. It includes 6 modules and 65 knowledge points, including machine room (machine equipment) and related equipment inspection, hoistway equipment inspection, car and counterweight test, suspension device, compensation device and re-volving part protection inspection, car door and floor door inspection, and related test. It enables users to master comprehensive knowledge such as inspection methods and inspection standards.

『Courses can be learned through teaching resources animation, training and examination through simulation courses.』

Machine room (machine equipment) and related equipment

Hoistway and related equip-ment

Car and weight

Suspension, compensator and protection of rotating parts

Car door and floor door

Experiment

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COURSE INTRODUCTION
General course introduction

Case explanation of site construction accident

This course demonstrates the safety accidents that occur easily during the installation and maintenance of the elevator, and provide solutions for the cause of the accident, and prevent the recurrence of the same kind of accident. The existing courses include 10 modules and 50+ accident cases.

『 **Courses can be learned by animated resources**』

Safety accidents caused by unchecked equipment before construction	Safety accidents caused by wrong handling of goods method	Safety accidents caused by incorrect use of tools during construction	Safety accidents caused by incorrect operation methods during construction
Safety accidents caused by operational errors in collaborative operation	Safety accidents caused by cross work	Safety accidents caused by weak awareness of safety	Safety accidents caused by improper arrangement of working environment
A safety accident caused by a wrong working habit	Safety accidents caused by non - wearing safety equipment		

COURSE INTRODUCTION
General course introduction

Safety course of site operation

This course introduces in depth the construction safety process and operation process. The course contents refer to the mainstream safety process and operation process of the mainstream elevator manufacturers on the market. The course contents include 68 knowledge points under 25 large-scale

『Courses can be learned through SCORM courseware.』

Overview of site operation safety	Introduction of safety warning signs	Introduction and use of personal protective equipment	Security matters of Manual tools use
Safety matters for the use of electric tools	Use, carry, and store security of tools	Safety requirements and precautions for manual handling	Safety requirements and precautions for mechanical handling
Safety of falling protection and safety guardrail	The safety of temporary climbing and scaffolding	Electrical safety 1	Electrical safety 2
fire safety	Short wiring safety	Safety of operation in machine room 1	Safety of operation in machine room 2
General safety rules in hoistway operation	Operation in hoistway - Safety of car mobile platform operation	Operation in hoistway - Safety of the car top operation 1	Operation in hoistway - Safety of the car top operation 2
Bottom pit operation safety 1	Bottom pit operation safety 2	Safety of through hoistway operation	Fire operation safety
Escalator and automatic sidewalk safety			

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ELEVATOR TRAINNING PLATFORM

CASE INTRODUCTION

Skill competition

"China elevator professional skills competition is sponsored by the industrial skills identification elevator industry sub center of the Ministry of human resources and social security, CO sponsored by ZXtech (Shanghai) Co., Ltd., which is responsible for providing a special platform for the Chinese elevator professional skills competition test. The test platform contains the theory and 3D test system, at the same time, ZXtech serves as a member of the competition expert group and provides test and technical support services for the competition.

The final stage of the competition held a total of 13 competitions in 12 cities throughout the country. ZXtech organized a total of 13 competition training camps and 26 pre competition training. A total of 471 contestants participated in the competition, and nearly 5000 people were directly involved in the competition. The competition is divided into 3 stages: preliminary, final and grand final. There were 17 tests in theory, 24 tests in 3D, and 9 tests in virtual reality helmet.

Successful case

For more information, please pay attention to the WeChat public number......