GETO
FORMWORK & SCAFFOLDING EXPERT

Chinese Listed Company
Stock Code: SZ 300986

志特集团

股票代码:SZ 300986

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华南基地二:广东省惠州市产业转移工业园
华东基地一:江西省抚州市广昌县工业园区
华东基地二:福建省福州市闽清县白中工业园区
华中基地:湖北省咸宁高新技术产业开发区
华北基地:山东省潍坊市临朐铝模板产业园
西南基地:重庆市潼南高新区现代制造产业园
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GETO Group

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Southern China Production Base II :
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Eastern China Production Base I :
Guangchang Industrial Park, Fuzhou City, Jiangxi Province
Eastern China Production Base II :
Baizhong Industrial Park, Minqing , Fuzhou City, Fujian Province
Central China Production Base:
Hi-tech Industry Development Zone, Xianning City, Hubei Province
Northern China Production Base:
China Aluminium Industrial Park, Linqu, Weifang City, Shandong Province
Southwest China Production Base:
Modern Manufacturing Industrial Park, Tongnan High-Tech District, Chongqing City
Northwest China Production Base:
The Circular Economy Park, Anding District, Dingxi City ,Gansu Province
Hainan Production Base:
Gold Medal Port Industrial Park, Lingao County, Hainan Province
ASEAN Production Base:
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INFRASTRUCTURE AND MIXED-USE BUILDING PRODUCT MANUAL

公建产品手册

模架专家 装配未来

做行业标杆 创世界名牌

SPECIALIZE IN ALUMINIUM FORMWORK AND CREATE WORLD FAMOUS BRAND

公司介绍
Company Profile

志特新材是一家专注于新型建筑铝模、爬架、装配式PC构件，业务涵盖民建及公建领域的A股上市公司（股票代码：SZ 300986），公司从江西广昌革命老区起步，运营总部设在粤港澳大湾区腹地广东中山翠亨新区，产品畅销海内外全球30多个国家和地区。

华南生产基地分别位于广东江门、惠州，华东生产基地位于江西广昌，华中生产基地位于湖北咸宁，华北生产基地位于山东潍坊，西南生产基地位于重庆潼南，西北生产基地位于甘肃定西，海南自贸港装配式建筑基地位于临高金牌港，海外基地设在马来西亚森美兰州。公司是行业内率先实现规模化、专业化、智能化，专注模架、装配式系统研发、设计、生产、租售、技术服务为一体的首批特级资质企业，竭诚为客戶提供超预期的优质服务。

公司产品涵盖铝合金标准层模板、地下室模板、变化层模板、屋面层模板、防空鼓装修模板、一体化隧道模板，爬架、爬模、塔式支撑、盘扣、单边支撑、悬挑等全系列模架产品，以及装配式构件产品的生产、供应，实现了“1+N”一站式服务战略模式落地。

未来，我们将以精进多年的信息化为依托，运用行业大数据、人工智能和物联网技术，打造全产业链生态圈系统，积极推动传统建筑向绿色智慧建筑革新转型。

GETO New Material is an A-share listed company (stock code: SZ 300986) focusing on new-type aluminium building formwork, self-climbing platform, and assembly precast concrete (PC) components,with civil and public construction fields covered. The company was established in Guangchang, an old revolutionary base in Jiangxi Province. Its global management headquarters was set up in Tsui Hang, a new district of Zhongshan in Guangdong Province, with the Greater Bay Area as its back-land. Our products are sold well in over 30 countries and regions around the world.

GETO Group has its Southern China production base located in Jiangmen and Huizhou of Guangdong Province, Eastern China production base in Guangchang, Jiangxi Province, Central China production base in Xianning, Hubei Province, Northern China production base in Weifang, Shandong Province, South-Western China production base in Tongnan, Chongqing Province, and North-Western China production base in Dingxi, Gansu Province. GETO Group also has its prefabricated construction base in Lingao Jinpai Port, a free-trade port in Hainan, and its ASEAN (Association of South East Asian Nations) production base in Negeri Sembilan of Malaysia. GETO is one of the first batch of super-qualified enterprises in the industry to realize scale, specialization, and intelligence, focusing on research and development, design, production, lease and sales, and technical services of aluminium formwork and assembly system. We are dedicated to offer high-quality products above expectation to our clients.

The products of our company include aluminium formwork system (for typical floors, basements, non-typical floors and roof floor), anti-hollowing formwork, integrated tunnel formwork, self-climbing platform, climbing formwork, tower-type scaffolding, ring-lock scaffolding, single-side wall framework, cantilever and other full range of formwork, scaffolding and precast component products, realizing the “N+1” one-stop solution service strategy.

With continuously improved information system we have from the past, we will initiate the industrial big data, artificial intelligence and IoT (Internet of Things) technologies to form omni-channel supply chain ecosystem in future. We actively promote innovation in transforming the conventional construction industry into a green and smart one.

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1-1 塔式支撑 Tower support

五大优势
FIVE ADVANTAGES

五部件组成
5 components

迅速搭接
Quickly overlap

高至25米
The height can reach 25 meters

成本更低
Lower cost

模块化组装
Modular assembly

塔式支撑搭接方式
TOWER SUPPORT ERECTION METHOD

Step 1

搭底框架
Set up the base frame

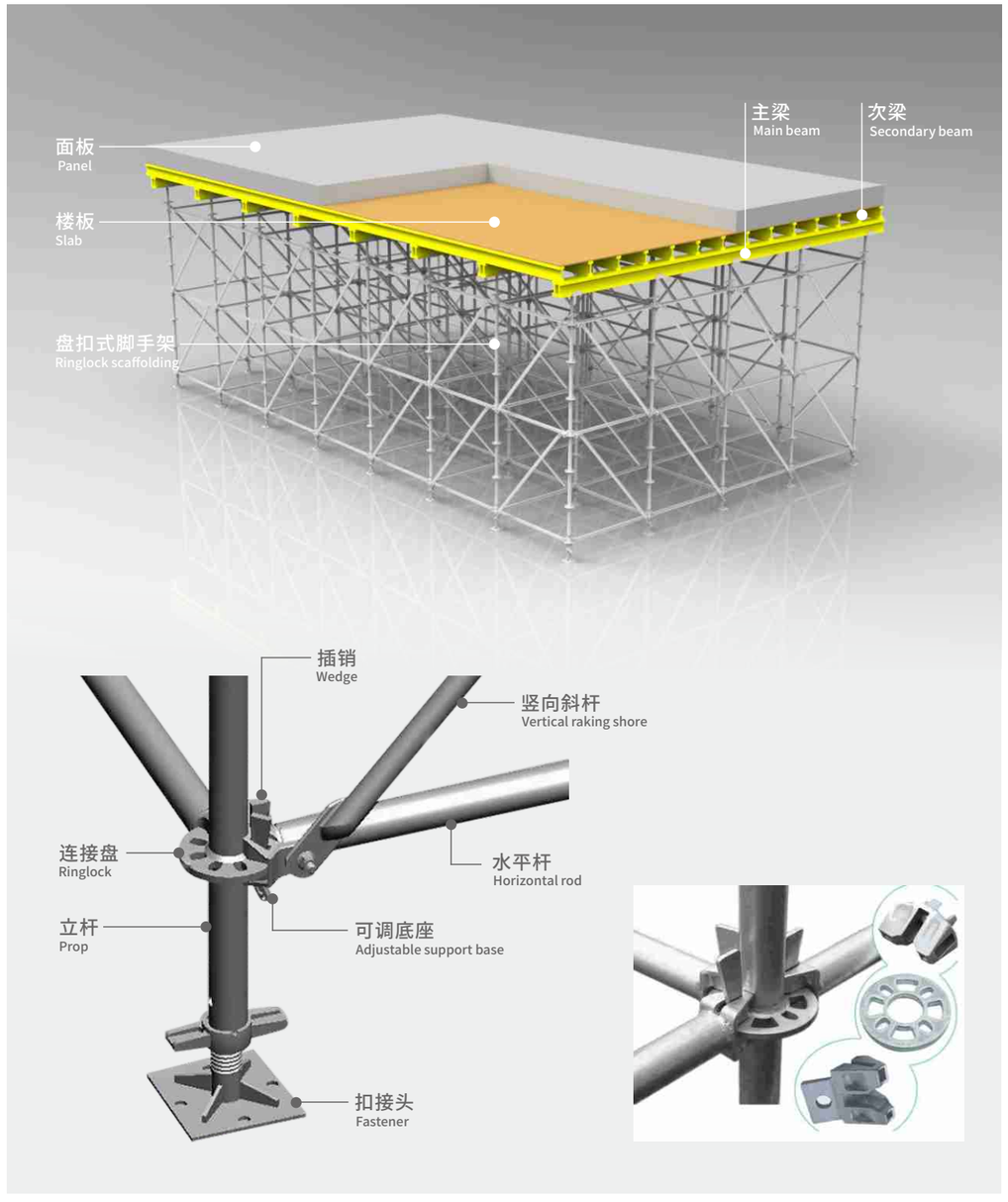
Step 2

安装桁架，拉斜杆
Install the middle truss and overlap the raking shore

Step 3

调水平顶端
Adjust the top level

1-2 盘扣脚手架 Ringlock scaffolding



盘扣脚手架材质
THE MATERIAL OF RINGLOCK SCAFFOLDING

- **立杆采用Q345B，壁厚3.2mm，横杆、斜杆采用Q235，壁厚2.75mm，可调底座、托座采用铸钢，圆盘和插销采用碳素铸钢ZG230-450牌号**

  Prop is made of 3.2mm thick Q345B, horizontal rod and raking shore are made of 2.75mm thick Q235, adjustable support base and bracket are made of cast steel, ringlock and wedge are made of ZG230-450 carbon cast steel

- **构件表面处理为热镀锌，镀层厚度200μmm**

  The surface treatment of components is hot galvanizing with 200μmm plating thickness

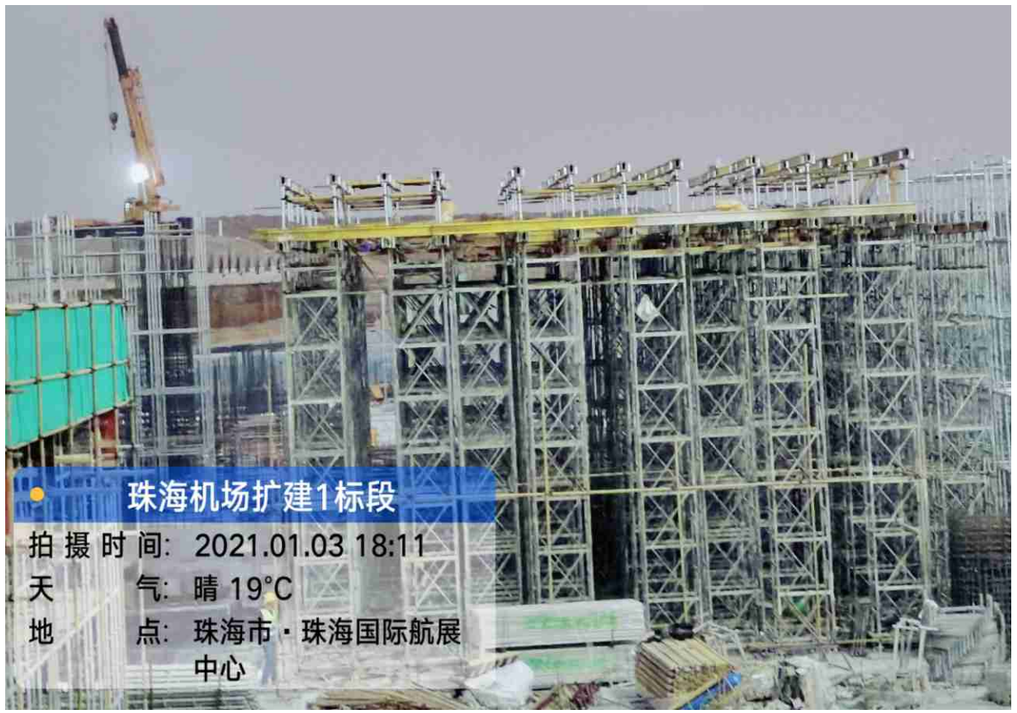
1-3 工程案例 Project cases

■ 深汕科教大道
Shen-Shan Kejiao Avenue

■ 珠海机场项目
Zhuhai Airport

工程总投资约48.02亿元，拟于2023年建成

Total investment is beyond 4.8 billion RMB, scheduled to be completed by 2023



■ 郑州地铁六号线

Zhengzhou Metro Line 6

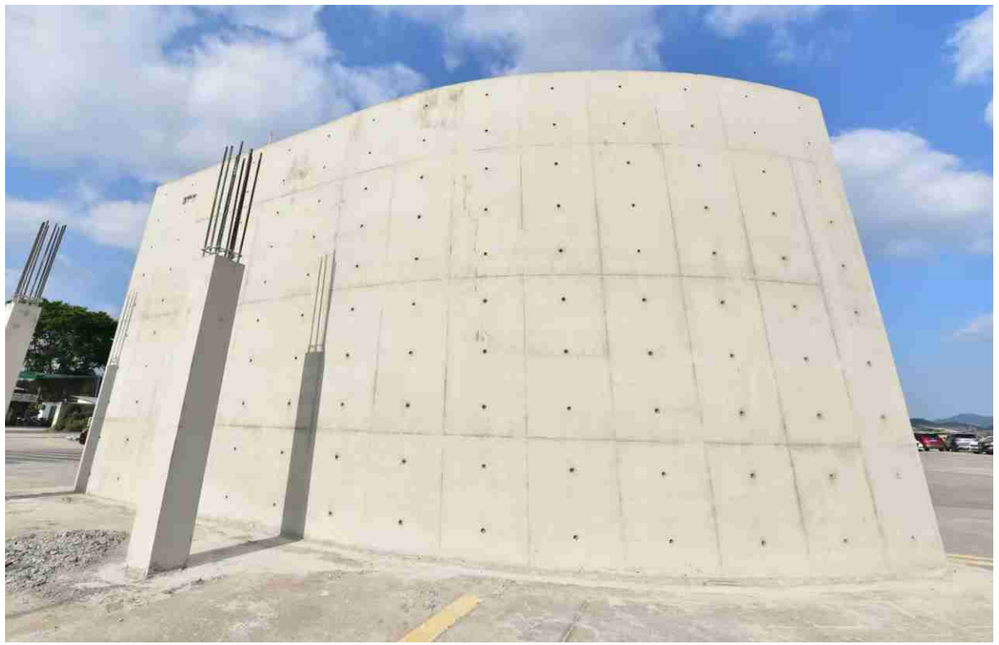
2-1 清水介绍 General introduction

■ **清水混凝土系直接利用混凝土成型后的自然质感作为饰面效果，不做其他外装饰的混凝土工程**

Fair faced concrete uses the natural texture of concrete after molding as the finishing effect and does not do other external decoration

■ **清水混凝土比普通混凝土在表面质量方面要求高，它的最终效果取决于模板设计、加工、安装、节点细部处理、钢筋绑扎、混凝土配制、浇筑、振捣、养护等多种因素，在成品保护、施工管理等方面也有较高要求**

Fair faced concrete has higher requirements on surface quality than ordinary concrete. The final effect depends on many factors such as formwork design, processing, installation, node detail treatment, reinforcement binding, concrete preparation, pouring, vibration and maintenance. It also has higher requirements on finished product protection and construction management



■ 应用范围 Scope of application

清水混凝土应用范围主要有：
The application scope of fair faced concrete mainly includes:

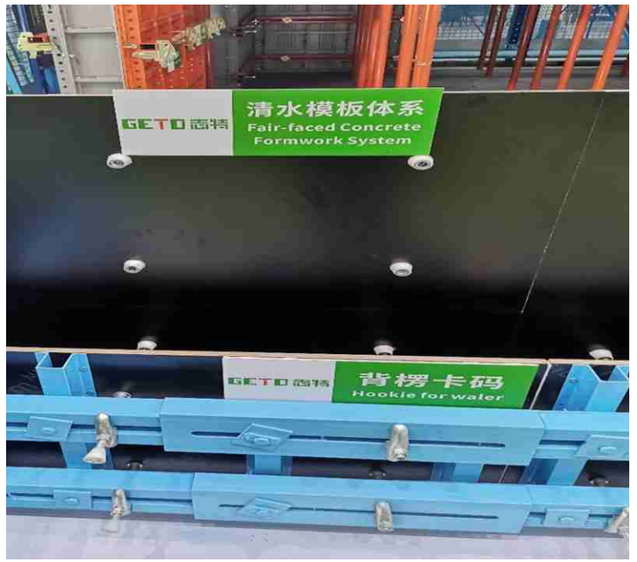
公共建筑
Public buildings

高层建筑
High rise buildings

其它建筑
Other buildings

- 公共建筑：如体育场馆、候机楼、车站、码头、剧场、展览馆等
  Public buildings: stadiums, air-terminals, stations, docks, theatres, exhibition halls, etc
- 高层建筑:写字楼、住宅楼
  High rise buildings: office buildings and residential buildings
- 其它建筑:科研楼、学校、构造物:桥梁、筒仓、高耸构造物等
  Other buildings: scientific research buildings, schools, structures: bridges, silos, towering structures, etc

■ 产品体系 Product system



铝框胶合板模板体系因其重量轻、安装效率高，浇筑清水混凝土表面质量好，模板可做标准大板，也可散拼散装等优势而被广泛应用于清水混凝土工程施工

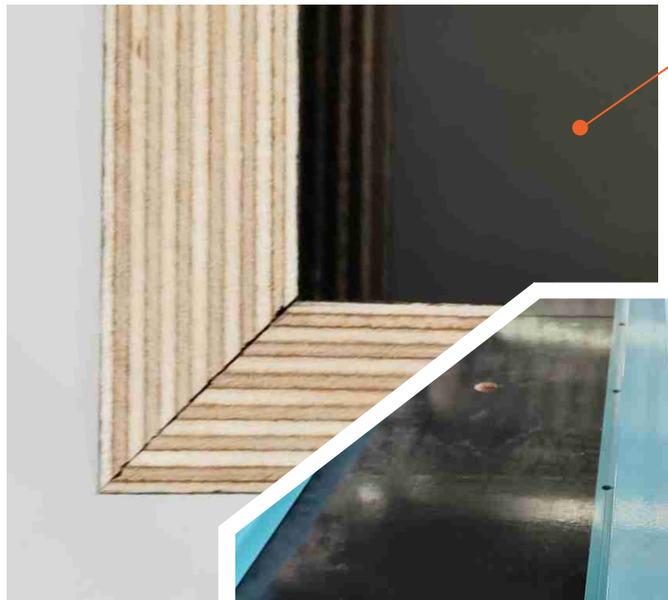
Aluminum frame plywood formwork system is widely used in fair faced concrete construction, for it has many advantages including light weight, high installation efficiency, good surface quality of cast-in-situ concrete, and the formwork can be used as standard large plate or in bulk

2-2 主要构件 Main components

■ 面板 Panel

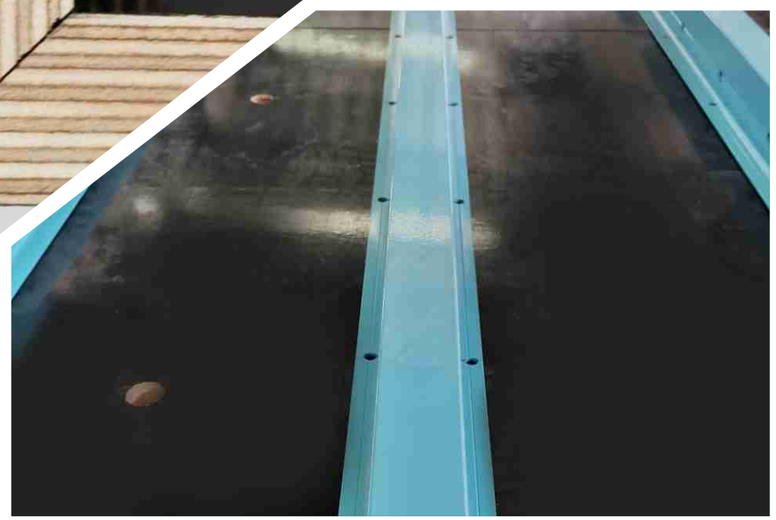
面板采用18mm厚13层芬兰双面覆膜Wisa板或优质国产面板，面板尺寸为1220mm×2440mm或依据明蝉缝、孔眼间距来确定，面板与“几”字型竖向背楞之间通过螺钉连接，主背楞搭接两块标准模板来保证模板拼接处平整无缝隙

The panel adopts 18mm thick 13 layer Finnish double-sided coated WISA board or high-quality domestic panel. The panel size is 1220mm × 2440mm, or determined according to the open cicada joint and hole spacing. The panel is connected to the vertical walers by tie rods, and the waler is overlapped with two standard templates to ensure that the formwork splicing is flat and seamless



18mm厚13层芬兰双面覆膜Wisa板或优质国产面板

The panel adopts 18mm thick 13 layer Finnish double-sided coated WISA board or high-quality domestic panel



■ 背楞体系 Waler system

竖向背楞使用 60×75×3mm“几”字型铝制背楞，间距不超过300mm

The vertical aluminum waler size is 60×75×3mm, with spacing not exceeding 300mm

横向背楞使用两根40×60×3mm田字型铝管，中间加焊 30×50×2mm铝制方管组成，间距500mm

The horizontal waler use 2pcs of 40× 60× 3mm aluminum pipe, which connected a 30 ×50×2mm aluminum square tubes by welding, with a spacing of 500mm

横向背楞与竖向背楞之间使用专用连接件连接固定

Special connectors are used to connect and fix the horizontal waler and vertical waler

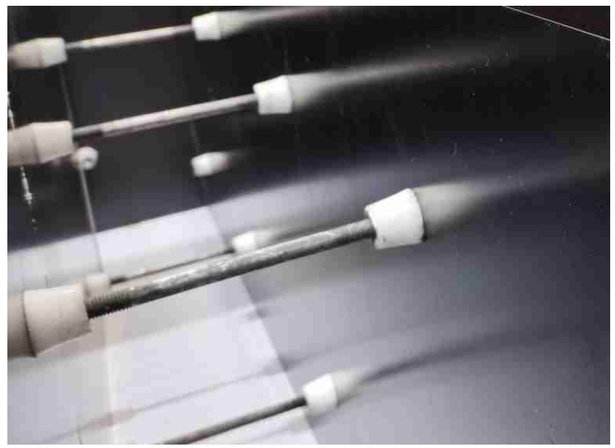
■ 对拉螺栓 Split bolt

内外两侧模板之间采用定制清水螺杆体系（五段式螺杆体系）进行拉接

The customized fair faced concrete tie rod system (five section tie rod system) is used for pull connection between the internal and external formwork

对拉螺杆基座采用专用铸钢垫片，选择M10 高强对拉螺杆，有防水要求的位置应设置防水挡片

Special cast steel gasket shall be used for split screw base, M10 high-strength split bolt shall be selected, and waterproof baffle shall be set at the position with waterproof requirements



2-3 合作方式 Cooperation mode

■ 清水模板供应商
Fair faced concrete supplier

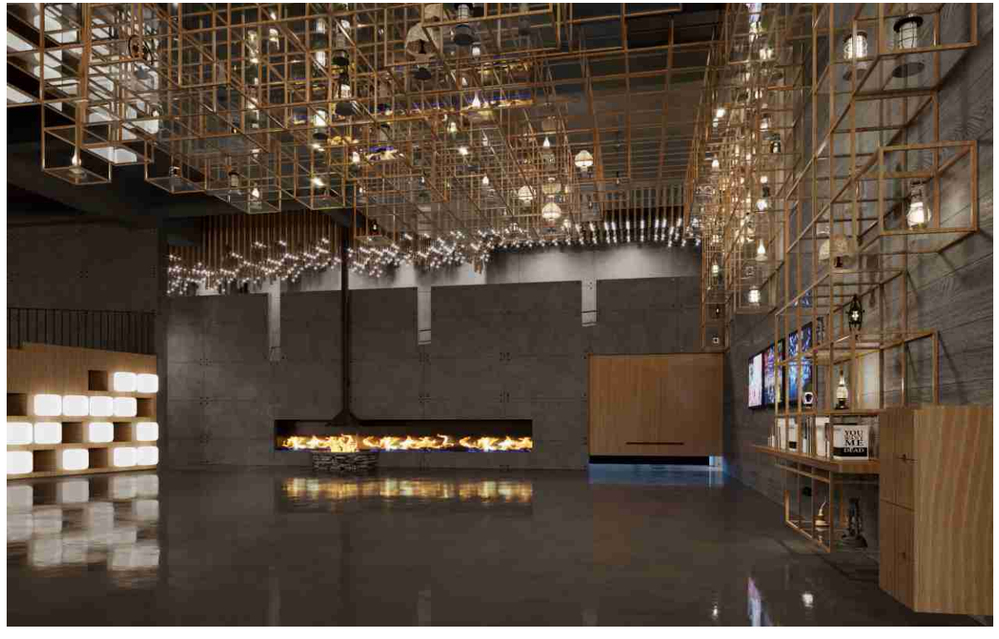
■ 专业分包
Sub contractor

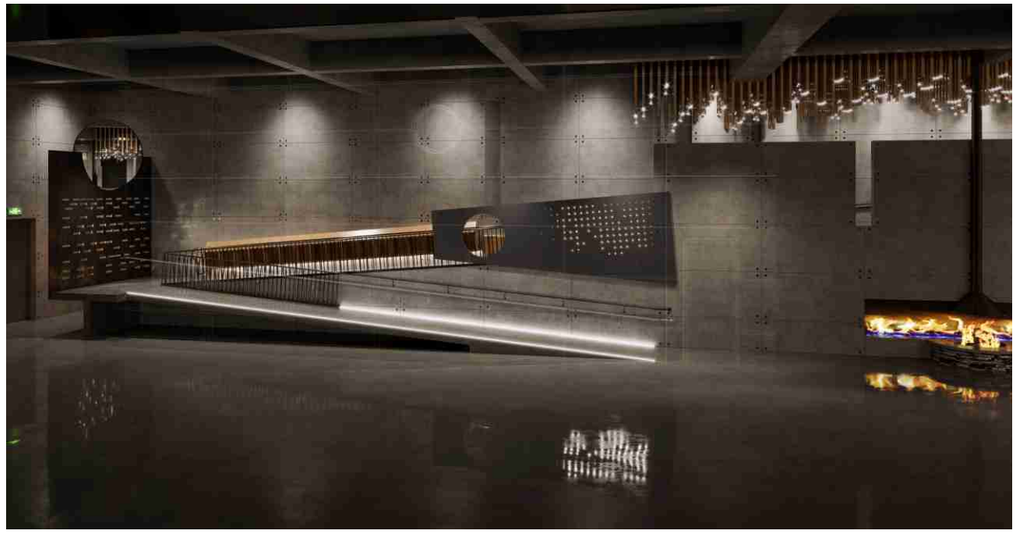
■ 模板设计咨询
Formwork design consultation

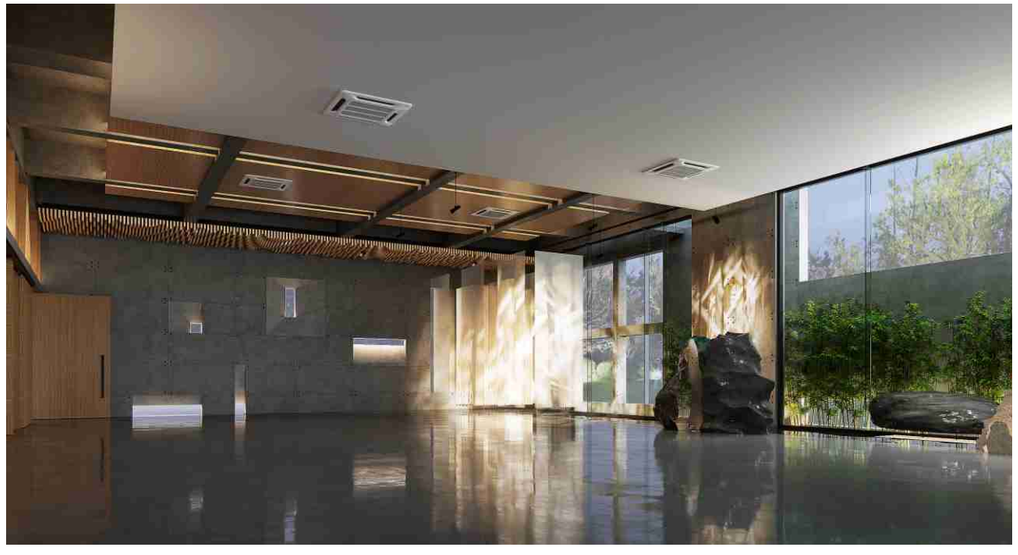
■ 清水工程全过程咨询
Project consultation of fair faced concrete

2-4 工程案例 Project cases

■ 企一照明研发楼
KEEY R&D building







上海企一集团江门工厂产品检测区
KEEY product inspection area in Jiangmen factory

施工单位：广东耀南建设集团有限公司
工程地点：广东江门

3-1 爬模介绍 General introduction

■ 液压爬模的动力来源是本身自带的液压系统，液压系统包括液压油缸和上下换向盒，换向盒可控制导轨爬升或架体爬升，通过液压系统可使模板架体与导轨间形成互爬，从而使液压爬模稳步向上爬升，液压爬模在施工过程中无需其它起重设备，操作方便，爬升速度快，安全系数高

Driven by its built-in hydraulic mechanism, which includes a hydraulic cylinder and an up-and-down reversing box, GETO Hydraulic Self-climbing Formwork System can climb up steadily, without relying on the jobsite lifting equipment. Being easy in operation, fast-paced and safe in use

既可直爬，也可以斜爬，是高层建筑物施工和桥梁施工的首选模板体系

It can achieve both vertical and inclined climb-ups, becoming the preferred formwork system for the construction of high-rise building and bridge

本公司生产的标准液压爬模型号为ZT150。爬模的模板一般为钢模、木模板、铝模或铝框木模板等

Our current standard model is ZT150, coming along with a wide range of options in the form panels like steel, timber, aluminum, or plywood panel with aluminum frame

3-2 爬模原理 Lifting-up mechanism

■ 液压爬模的顶升运动通过液压油缸对导轨和爬架交替顶升来实现

The climb-up of the formwork system is achieved through alternately lifting the guide rail and the climbing frame by the hydraulic cylinder

■ 导轨和爬模架互不关联，二者之间可进行相对运动

The guide rail and the climbing frame are independent to each other, and relative movement can be carried out between the two

■ 当爬模架工作时，导轨和爬模架都支撑在埋件支座上，两者之间无相对运动

When at work, they are both supported on the embedded bracket, without relative motion between them

■ 退模后立即在退模留下的爬锥上安装受力螺栓及埋件支座，调整上、下换向盒棘爪方向来顶升导轨，待导轨顶升到位，就位于该埋件支座上后，操作人员立即转到吊平台拆除导轨提升后露出的位于吊平台处的埋件支座、爬锥等

After formwork stripping, the bearing bolt and the embedded bracket will be immediately installed on the climbing cone. The detent of the up-and-down reversing box will be redirected to lift the guide rail. When the guide rail is lifted up in place, the operator should immediately remove the embedded bracket and climbing cones at the lifting platform that are exposed after the lift-up

■ 在解除爬模架上所有拉结之后就可以开始顶升爬模架，这时候导轨保持不动，调整上下棘爪方向后启动油缸，爬模架就相对于导轨运动，通过导轨和爬模架这种交替附墙，互为提升对方，爬模架即可沿着墙体上预留爬锥逐层提升

After releasing all fastening devices, the climbing frame can be lifted, while the guide rail remains in place. After adjusting the direction of the detent, turning on the cylinder, the climbing frame will move against the guide rail. In this way, the climbing formwork can be lifted on a floor-to-floor basis along the embedded climbing cones

3-3 爬模特点 Features

快 液压爬模既可直爬，也可斜爬，模板爬升速度快
Speedy and adaptable to both vertical and inclined lift-ups

稳 液压爬模既可整体爬升，也可单榀爬升，爬升过程平稳、同步、安全
Safe and flexible to perform climb-ups in different ways: single unit separately or all units simultaneously

省 爬模架体一次组装后，一直到顶不落地，节省了施工场地，减少模板(特别是面板)的碰伤损毁
Spacing saving and formwork face protected -no further formwork assembly and dismantling after the first installation

全 提供全方位的操作平台，施工单位不必为重新搭设操作平台而浪费材料和劳动力
Integrated with working platform, construction units don’ t have to rebuild the working platform, which saves materials and labour

小 结构施工误差小，纠偏简单，施工误差可逐层消除
Minimum construction error -it can be eliminated floor by floor

降 模板自爬，原地清理，大大降低了塔吊的吊次
Self-climbing and crane-independent

3-4 组装过程 Erection process

首次安装流程

1.支模，钢筋绑扎完毕后设置埋件,浇筑混凝土
2.拆模，安装附墙装置,搭设脚手架，绑扎上层钢筋，钢筋绑扎完毕后，拆除部分爬模区域支撑架
3.吊装下架体及下挂架
4.铺设下架体及下挂架平台和防护，安装导轨和液压系统
5.吊装上架体，铺设平台及防护,设置模板底托，吊装模板
6.铺设顶层平台和悬挑平台
7.将模板与架体连接，合模，浇筑混凝土

Installation Process

1) Erect the formwork, assemble reinforced bars, set embedded parts, and pour the concrete
2) Striking the formwork, mount the working bracket, erect the scaffolding, assemble rebars. After the rebar work is done, remove part of the shoring scaffold where the Self-climbing formwork is to be located.
3) Crane and install the lower frame and lower hanging rack
4) Set up working platform around the lower frame and lower hanging rack , install the guide rail and hydraulic system
5) Crane and install the upper frame, set up the working platform, lift up the formwork
6) Mount the top platform and suspended platform
7) Connect the formwork to the frame, mount the rest of formwork , and pour the concrete


■ 放置爬模埋件
Place the Buried parts


■ 安装附墙装置
Installation of Attached Device


■ 安装爬模架体
Installation of the Frame System


■ 安装爬模平台
Installation of the Platform


■ 安装防护网片
Installation of Protective Net


■ 安装液压电气系统
Installation of Hydraulic System


■ 安装模板
Installation of Formwork


■ 安装完成，合模打灰
Mount the Formwork

3-5 爬升流程 Climbing process

1.浇筑混凝土浇筑完毕，绑扎上层钢筋
2.拆模，安装附墙装置
3.提升导轨，拆除吊平台处埋件支座
4.爬升爬模架体
5.合模，浇筑下层墙体混凝土

1) After pouring the concrete, tie up the rebars for the upper floor
2) Strike the panels and mount the working bracket
3) Lift up the guard rail, remove the embedded bracket and climbing cones at the lifting platform
4) Lift up climbing frame
5) Mount the formwork and pour the concrete for the wall

3-6 适用范围 Applicable projects

■ 超高层建筑（150米以上）核心筒、框架结构核心筒、剪力墙
Super high-rise buildings' (above 150 meters) core tube, frame structure core tube, shear wall

■ 基础设施-高桥墩、桥梁索塔、大坝
Infrastructure like high bridge piers, bridge pylons, dams

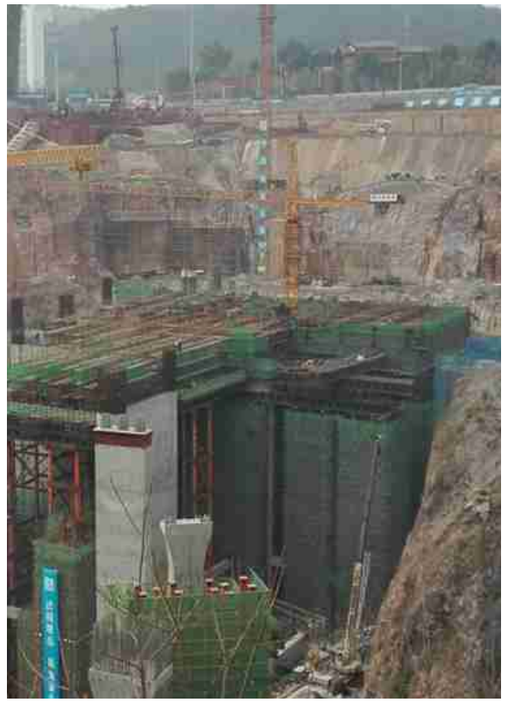
■ 高耸建筑
Towering buildings

■ 不适用—外框混凝土结构
Not applicable for those buildings of outer frame concrete structure

3-7 工程案例 Project cases

■ 深圳湾一号
The One Shenzhen Bay

■ 湘江欢乐城
Xiangjiang Happy City



■ 广州欢聚大厦
Guangzhou JOYY building

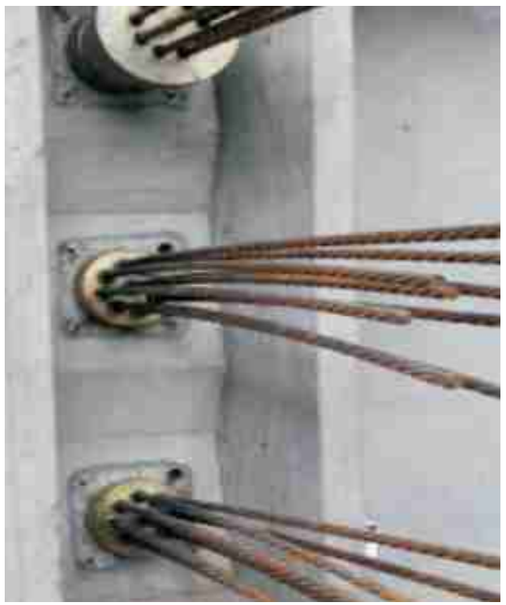
4-1 钢模板体系介绍 General introduction

■ 高铁墩帽
High-speed train pier cap

GANG FORM
SYSTEM

■ 液压箱梁模板
Hydraulic box beam formwork

■ T梁模板
T beam formwork



■ 隧道钢模
Tunnel Gang form