

大者思远 Foresight seeing

谋在全局 Overall thinking

合则双赢 Win-win cooperation

广州港湾工程质量检测有限公司

Guangzhou Harbour Engineering Quality Examination Co., Ltd.

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广州港湾工程质量检测有限公司  
Guangzhou Harbour Engineering Quality Examination Co., Ltd.





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# 企业宗旨

Enterprise purpose

诚信守诺、质量保证、优质服务、顾客满意

High-integrity, guaranteed quality, excellent service,  
and customer satisfaction

# 质量方针

Quality policy

公正、科学、准确、高效

Fair, scientific, accurate and efficient

# A | 企业 Enterprise

发展历程	Development History
公司简介	Introduction
资质	Qualification
组织架构	Organizational Structure
人才团队	Talent Team
技术实力	Technical Strength
足迹印记	Footprints



# 发展历程

## DEVELOPMENT HISTORY



1986年

被广州市建委评为广州市工程质量检测中心第一质量检测站。  
The first quality inspection station of Guangzhou engineering quality inspection center by Guangzhou Construction Committee in 1986.



1992年

第一批被广东省建委评定为建设工程的“壹级”企业试验室。  
The first batch of "first class" enterprise laboratories evaluated as construction projects by Guangdong Provincial Construction Committee in 1992.



1995年

10月，获得中国国家认证认可监督管理委员会资质认定计量认证证书。  
Obtained the certificate of competency for CMA from CNCA in October 1995



1997年

8月，首次获得交通部建设工程试验检测机构“甲级”水运工程试验检测资质。  
In August 1997, it was the first time to obtain the qualification of "Class A" waterway engineering test and inspection from the Ministry of Communications Construction Engineering Test and Inspection Institution.



2004年

1月，获得交通部基本建设质量监督总站水运工程材料甲级和结构甲级证书；  
8月，在广州市建设委员会备案。  
In January 2004, he obtained the certificate of Grade A of materials and Grade A of structure for water transport engineering of the Ministry of Communications Capital Construction Quality Supervision General Station.  
In August 2004, it was filed with the Guangzhou Construction Committee.



2006年

11月，改制成为“广州港湾工程质量检测有限公司”。  
In November 2006, it was transformed into Guangzhou Harbour Engineering Quality Inspection Co., Ltd.



2009年

3月，获得中国合格评定国家认可委员会实验室认可证书；12月，在广东省住房和城乡建设厅备案。  
In March 2009, Obtained the laboratory accreditation certificate of China National Accreditation Committee for Conformity Assessment.  
In December 2009, the Ministry of Housing and Urban-Rural Construction of Guangdong Province put it on record.



2011年

2月，获得交通运输部基本建设质量监督总站公路工程桥梁隧道工程专项证书。  
In February 2011, Obtained the special certificate of highway, bridge and tunnel engineering of the Ministry of Transportation Capital Construction Quality Supervision General Station.



2013年

3月，通过广东省建设工程质量检测资质延期申请。  
In March 2013, Postponement of Qualification for Quality Inspection of Construction Projects in Guangdong Province.



2015年

1月，通过实验室认可复评审；  
4月，通过计量认证复评审及扩项评审；  
11月，通过广东省建设工程质量检测资质延期申请。  
In January 2015, it passed the laboratory accreditation review.  
In April 2015, it passed the re-evaluation of metrological certification and the evaluation of extension items.  
In November 2015, the application for postponement of quality inspection qualification of construction projects in Guangdong Province was approved.



2016年

2月，通过公路工程桥梁隧道工程专项复评审；  
11月，新增南沙检测场所通过计量认证评审。  
In February 2016, it passed the special review of highway engineering, bridge and tunnel engineering.  
In November 2016, the newly added Nansha testing site passed the metrological certification review.



2018年

3月，通过计量认证复评审及扩项评审；  
4月，通过实验室认可复评审；  
5月，获得公路工程综合乙级证书；  
12月，通过广东省建设工程质量检测资质延期申请。  
In March 2018, it passed the re-evaluation of metrological certification and the evaluation of extension items.  
In April 2018, it passed the laboratory accreditation review.  
In May 2018, he obtained the comprehensive Grade B certificate of highway engineering.  
In December 2018, the application for postponement of quality inspection qualification of construction projects in Guangdong Province was approved.



2019年

3月，通过交通运输部工程质量监督局水运工程材料甲级和水运工程结构（地基）甲级复评审。  
In March 2019, it was re-assessed by the Engineering Quality Supervision Bureau of the Ministry of Communications and Communications for the first class of materials and the first class of structures (foundations) of water transport projects.



# 公司简介

## INTRODUCTION

广州港湾工程质量检测有限公司（以下简称公司）是具有独立法人地位的工程质量检验检测和仲裁的检验检测机构。公司于1986年被广州市建委评为广州市工程质量检测中心第一质量检测站；1992年第一批被广东省建委评定为建设工程“壹级”企业试验室；1993年10月，由交通部命名为交通部广州港湾工程质量检测中心；1995年10月通过了国家技术监督局计量认证，取得CMA资质；1997年8月首次取得交通部建设工程试验检测机构“甲级”水运工程试验检测资质；2004年1月获得了水运工程材料甲级、水运工程结构甲级证书；2009年3月获得实验室认可（CNAS）证书；2009年12月通过了广东省住房和城乡建设厅的资质备案；2011年2月获得公路工程桥隧专项证书；2018年5月获得公路工程综合乙级证书。到目前为止，公司具备在全国范围内承担水运工程、桥隧工程、公路工程、市政工程、铁路工程、房屋建筑等质量检验检测以及接受委托承担其他建设工程质量检验检测的资格。

公司已具备在资质认定范围内向社会提供具有公正性和合法性检测数据的能力。公司1993年3月1日起建立检验检测的质量管理体系，到目前为止，公司的管理体系文件已历经了多次改版，持续改进不断完善的管理体系文件，有效地确保了公司的技术能力水平得到了维持和进一步提高。

根据公司的业务开展需要，检验检测工作按专业分别划分为建材所、结构所、岩土所、南沙检测中心、中心试验室和勘察所。业务足迹遍布华南、华东、华北、华中、西南、东北、港澳等国内地区以及东南亚、南亚、中东、东非、西非、北非、南欧等海外区域的交通工程、桥隧工程、市政工程、铁路工程、房屋建筑等提供检验检测技术服务，受到了业主和客户的高度认可和信赖，赢得了良好的信誉。

Guangzhou Harbour Engineering Quality Inspection Co., Ltd. is an independent legal person status of engineering quality inspection and arbitration inspection and testing institutions. The company was appraised as the first quality inspection station of Guangzhou engineering quality inspection center by Guangzhou Construction Committee in 1986; the first batch of the company was appraised as the "first class" enterprise laboratory of construction engineering by Guangdong Construction Committee in 1992; The company was named as Guangzhou harbor engineering quality inspection center by the Ministry of communications in October 1993; The company passed the measurement certification of the State Bureau of Technical Supervision in October 1995; it was the first time that the Ministry of Communications acquired the qualification of "Class A" port and waterway engineering test and test organization for construction engineering test and test in August 1997; the certificate of Class A for materials and structure of waterway engineering was obtained in January 2004; Acquired Laboratory Accreditation Certificate in March 2009; the qualifications of the Housing and Urban-Rural Construction Department of Guangdong Province were approved for filing in December 2009; obtained Special Certificate of Highway Engineering Bridge and Tunnel in February 2011; obtained Highway Engineering Comprehensive Grade B Certificate in May 2018; Up to now, the company has the qualification to undertake the quality inspection and testing of water transport engineering, bridge and tunnel engineering, highway engineering, municipal engineering, railway engineering, housing construction and other construction projects in the whole country, as well as to accept the Commission to undertake the quality inspection and testing of other construction projects. We has the ability to provide the society with fair and legitimate testing data within the scope of qualification recognition.

The company has established a quality management system for inspection and testing since March 1, 1993. Up to now, the company's management system documents have undergone many revisions, continuous improvement and improvement of the management system documents, effectively ensuring that the company's technical capacity level has been maintained and further improved.

According to the company's business needs, inspection and testing work is divided into building materials institute, structural institute, geotechnical institute, Nansha testing center, central laboratory and survey institute. Business footprint throughout South China, East China, North China, Central China, Southwest China, Northeast China, Hong Kong and Macao and other mainland areas as well as Southeast Asia, South Asia, Middle East, East Africa, West Africa, North Africa, South Europe and other overseas regions to provide inspection and testing technology services, such as traffic engineering, bridge and tunnel engineering, municipal engineering, railway engineering, housing construction, etc., has been highly recognized and trusted by owners and customers, and won Good reputation.



# 资质 QUALIFICATION



# 组织架构

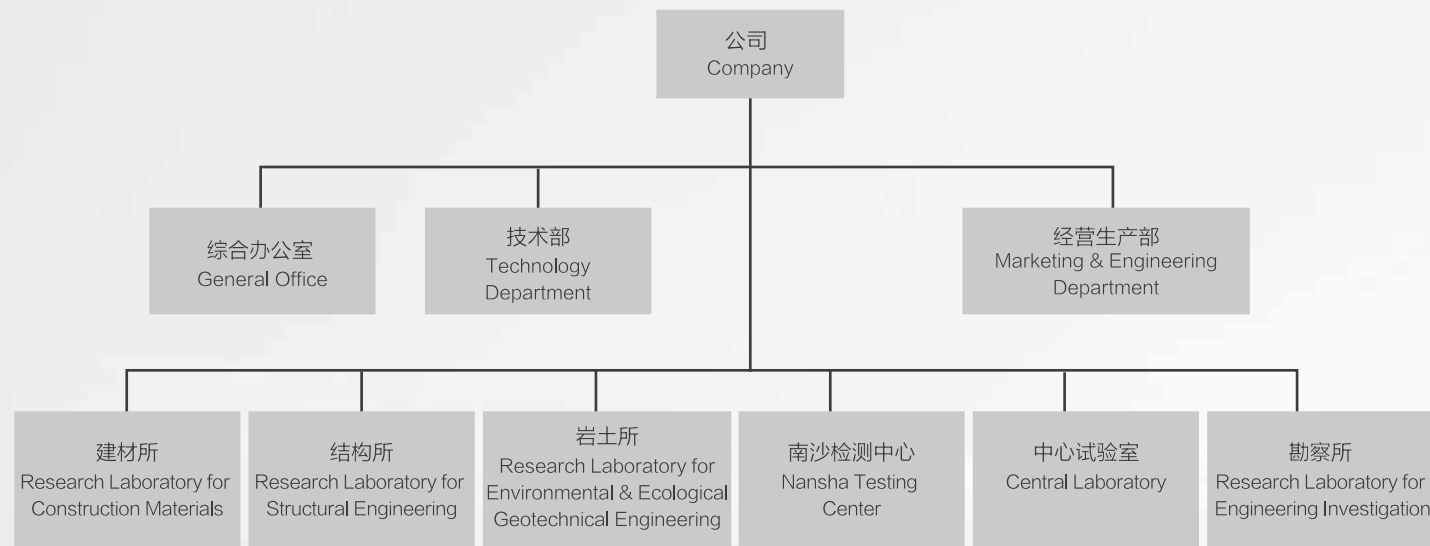
## ORGANIZATIONAL STRUCTURE



执行董事 董志良  
Managing Director Dong Zhiliang



总经理 胡利文  
General Manager Hu Liwen



姓名	职务	办公电话
周庆华	常务副总经理、技术负责人	020-84430394
姚 三	副总经理	020-28126338
刘 军	副总经理、质量负责人	020-84474296
张宝兰	副总经理、南沙检测中心主任	020-84680015
熊建波	建材所所长	020- 84232945
桑登峰	结构所所长	020-34127757
邱青长	岩土所所长	020-34128875
吴建平	中心试验室主任	020-28126491
秦志光	勘察所所长	020-34128875

# 人才团队

## TALENT TEAM

尊重知识 善用人才  
德才兼备 人尽其才

Respect knowledge and ensure well suited.  
Require both ability and political integrity  
and give full scope to the talents.

公司现有员工129人，教授级高级技术职称8人，高级技术职称29人，中级技术职称37人，博士5人，硕士53人，本科38人。公司有一级注册结构工程师、注册岩土工程师。

公司继往开来，不断强化、完善内部培训机制，提升员工素质、培养后备力量，打造一流的技术团队，实现员工与企业共同成长。

We have 129 staff. 8have professor level senior technical title, 29 have senior technical title, 37 have intermediate technical title, 5 are doctors, 53 are masters and 38 are undergraduates. we have a number ofregistered engineers, Including Registered Structural Engineer, Registered Geotechnical Engineerand Registered Cost Engineer, etc.

Linking the past to the future, we will continuously strengthen and improve our internal training system to enhance staff' s qualification & train reserve force. We will build a top class techni-cal team to achieve the goal of development of company as well as employee.



# 技术实力

## TECHNICAL STRENGTH

### 专利Patents

#### 发明专利PATENT OF INVENTION

◆ 一种高效混凝土抗裂养护剂、其制备方法及应用	201610525305.3
◆ 土工合成材料垂直渗透系数测定仪	201510589502.7
◆ 间断供电开关电源组合式恒电位仪	201510193483.6
◆ 潮差区和水位变动区的钢板桩防护系统及其施工方法	201510161971.9
◆ 一种无损的测量及推定混凝土耐久性能的方法及系统	201410066949.1
◆ 一种基于水胶比监测的混凝土抗氯离子渗透性超前预测方法	201410204199.X
◆ 海工混凝土埋入式高活性牺牲阳极	201410748504.1
◆ 自提供电解质的电沉积修补混凝土裂缝系统	201410062065.9
◆ 一种混凝土抗裂能力数值化评价方法	201410088111.2
◆ 用于自密实混凝土的增稠剂、其制备方法及应用该增稠剂的自密实混凝土	201410095586.4

◆ A kind of high performance concrete crack agent and its preparation and application	201610525305.3
◆ Vertical Permeability Measurement Instrument for Geotechnical Synthetic Materials	201510589502.7
◆ A discontinuous power supply switching combined potentiostat	201510193483.6
◆ A steel sheet pile protection system and construction method in the zone of tidal range and fluctuating water level	201510161971.9
◆ A nondestructive method and system for measuring and inferring the durability of concrete	201410066949.1
◆ An advanced prediction method for chloride ion permeability of concrete based on water-binder ratio monitoring	201410204199.X
◆ Embedded high activity sacrificial anode for marine engineering concrete	201410748504.1
◆ Self-supplying electrolyte electrodeposition repairing concrete crack system	201410062065.9
◆ A numerical evaluation method for crack resistance of concrete	201410088111.2
◆ A thickener for self-compacting concrete, a preparation method thereof and a self-compacting concrete in which the thickener is applied	201410095586.4

#### 实用新型专利PATENT FOR UTILITY MODEL

◆ 一种防止混凝土开裂的墙体结构	201820497138.0
◆ 一种混凝土桩缺陷水下湿法修复装置	201820224935.1
◆ 一种基于阴极保护的水上钢结构腐蚀防护加固结构	201820031094.2
◆ 一种水下碎石桩施工桩管及施工系统	201820056816.X
◆ 一种海上钻孔取芯装置	201820472222.7
◆ 测量土压力下排水板弯曲通水量的装置	201820705900.X
◆ 一种适用于浅水区域的轻便式手推取样器	201720673497.2
◆ 一种棱镜快速强制对中装置	201721266798.X
◆ 一种适用于深水区域的淤泥质砂土重力式取样器	201720673483.0
◆ 一种用于校验测斜仪的测试平台	201720505081.X
◆ 一种综合管廊	201720639782.2
◆ 一种模拟海水全分区环境下材料结构腐蚀性能的试验装备	201620620062.7
◆ 一种水泥土搅拌桩钻头装置	201521016247.9
◆ 一种用于沉入物料中进行取样及检测的比重瓶	201520607507.3
◆ 间断供电开关电源组合式恒电位仪	201520246830.2
◆ 混凝土桩基耐久性修复系统	201520205553.0
◆ 潮差区和水位变动区的钢板桩防护系统	201520209490.6
◆ 适用于非水下混凝土结构耐久性修复的装置	201420520917.X
◆ 可用于潮湿及水下部位混凝土桩柱的维修加固用钢筋笼	201420179794.8
◆ 混凝土试件耐久性试验的加载系统	201420140819.3
◆ 海洋环境与动载耦合试验设备系统	201420004582.6
◆ 混凝土试件耐久性试验的加载系统	201320364376.1
◆ 海洋环境与动载耦合试验设备系统	201320361964.X
◆ 多功能高精度硬化混凝土试件处理机	ZL201420140819.3
◆ 大量程基于光纤光栅传感技术的钢筋锈蚀监测传感器	ZL201420004582.6
◆ 一种适用于真空预压地基处理技术的地下水位测试装置及其使用方法	ZL201320633147.5
◆ 一种高时间精度震源锤	ZL201320793512.9

◆ A kind of wall structure preventing concrete from cracking	201820497138.0
◆ A kind of underwater wet repairing device for concrete pile defects	201820224935.1
◆ A corrosion protection reinforcement structure for water-steel structure based on cathodic protection	201820031094.2
◆ The invention relates to a pile pipe and construction system for underwater gravel pile construction	201820056816.X
◆ The utility model relates to a drilling core extraction device at sea	201820472222.7
◆ A device for measuring the flow of curved drainage plates under soil pressure	201820705900.X
◆ A portable hand-push sampler suitable for shallow water areas , 201720673497.2	201720673497.2
◆ A PRISM Rapid Riding Device	201721266798.X
◆ The utility model relates to a gravimetric sampler of silt sand for deep water area	201720673483.0
◆ A Test Platform for Verifying Twisters	201720505081.X
◆ A composite pipe gallery	201720639782.2
◆ A test equipment for simulating the corrosion performance of material structures in a fully zoned seawater environment	201620620062.7
◆ A bit device for cement-soil mixing pile	201521016247.9
◆ A pycnometer for sampling and testing immersed in materials	201520607507.3
◆ Discontinuous power supply switching combined potentiostat	201520246830.2
◆ Concrete pile foundation durability repairing system	201520205553.0
◆ A steel sheet pile protection system in the zone of tidal range and fluctuating water level	201520209490.6
◆ Suitable durability repair of non-underwater concrete structures	201420520917.X
◆ A reinforced cage for repairing and strengthen wet and underwater parts of the concrete pile	201420179794.8
◆ A loading system for durability test of concrete specimens	201420140819.3
◆ Marine environment and dynamic load coupling test equipment system	201420004582.6
◆ The loading system of durability test of concrete test piece	201320364376.1
◆ Marine environment and dynamic load test equipment system	201320361964.X
◆ Multifunctional high precision hardened concrete specimen processor	ZL201420140819.3
◆ A large range teel corrosion monitoring sensor on fiber Bragg grating sensing technology	ZL201420004582.6
◆ A test device for underground water level of vacuum preloading ground treatment technology and its use method	ZL201320633147.5
◆ A high time accuracy seismic hammer	ZL201320793512.9

### 标准规范Standards

◆ 海港工程混凝土结构防腐技术规范	JTJ 275-2000	主编
◆ 建筑地基处理技术规范	DBJ 15-38-2005	参编
◆ 港口水工建筑物检测与评估技术规范	JTJ 302-2006	主编
◆ 海港工程钢结构防腐蚀技术规范	JTS 153-3-2007	参编
◆ 真空预压加固软土地基技术规程	JTS 147-2-2009	参编
◆ 水运工程大体积混凝土温度裂缝控制技术规范	JTS 202-1-2010	参编
◆ 港口工程地基规范	JTS 147-1-2010	参编
◆ 港口水工建筑物修补加固技术规范	JTS 311-2011	主编
◆ 水运工程混凝土施工规范	JTS 202-2011	参编
◆ 水运工程混凝土质量控制标准	JTS 202-2-2011	主编
◆ 海港工程高性能混凝土质量控制标准	JTS 257-2-2012	主编
◆ 土工合成材料测试规程	SL 235-2012	参编
◆ 海港工程钢筋混凝土结构电化学防腐蚀技术规范	JTS 153-2-2012	参编
◆ 硅烷/硅氧烷建筑防护剂中有效成分含量及有害物质测定方法	JC/T 2273-2014	参编
◆ 水运工程地基基础试验检测技术规程	JTS 237-2017	参编
◆ 码头结构检测评估单位资格认定标准	在编	主编
◆ 水运工程施工监控技术规范	在编	主编
◆ 水运工程地基基础施工规范	在编	参编
◆ 水运工程土工合成材料应用技术规范	在编	参编
◆ 水运工程结构防腐蚀施工技术规范	在编	主编
◆ 水运工程基桩试验检测技术规范	在编	主编

◆ Technical Specification for Corrosion Prevention of Concrete Structures of Seaport Engineering	JTJ 275-2000	Editor
◆ Technical Specification for Ground Treatment of Buildings	DBJ 15-38-2005	Associate editor
◆ Technical Specification for Detection and Assessment of Harbour and Marine Structures	JTJ 302-2006	Editor
◆ Technical Specification for Anticorrosion of Steel Structures for Seaport Engineering	JTS 153-3-2007	Associate editor
◆ Technical Specification for Vacuum Preloading to Improve Soft Ground	JTS 147-2-2009	Associate editor
◆ Technical Specification for Thermal Cracking Control of Mass Concrete of Port and Waterway Engineering	JTS 202-1-2010	Associate editor
◆ Code for Ground of Port Engineering	JTS 147-1-2010	Associate editor
◆ Technical Code for Repair and Strengthening of Harbor and Marine Structures	JTS 311-2011	Editor
◆ Specifcation for Concrete Construction of Port and Waterway Engineering	JTS 202-2011	Associate editor
◆ Quality Control Standard of Concrete for Port and Waterway Engineering	JTS 202-2-2011	Editor
◆ Quality Control Standard of High Performance Concrete for Seaport Engineering	JTS 257-2-2012	Editor
◆ Specification for test and measurement of geosynthetics	SL 235-2012	Associate editor
◆ Technical Specification for Electrochemical Anticorrosion of Reinforcement Concrete Structures in Harbour and Marine Engineering	JTS 153-2-2012	Associate editor
◆ Standard Test Methods for Determination of Effective Component and Harmful Substances in Silane/Siloxane Building Protecting Agents	JC/T 2273-2014	Associate editor
◆ Technical Code for Testing and Inspection of Port and Waterway Engineering Foundation	JTS 237-2017	Associate editor
◆ Standard for Qualification of Inspection and Evaluation Unit of Wharf Structure	Editing	Editor
◆ Code for Construction Monitoring Technologies on Port & Waterway Engineering	Editing	Editor
◆ Standard of Foundation Construction of Port and Waterway Engineering	Editing	Associate editor
◆ Application Specification of Geosynthetics for Port and Waterway Engineering	Editing	Associate editor
◆ Technical Specification for Anticorrosion Construction of Port and Waterway Engineering Structures	Editing	Editor
◆ Technical Code for Testing and Inspecon of Watering Engineering Foundation Pile	Editing	Editor



# 技术实力

## TECHNICAL STRENGTH

### 获奖项目Awards

- ◆ 离岸深水港建设关键技术与工程应用
- ◆ 提高海工混凝土结构耐久性寿命成套技术及推广应用
- ◆ 港珠澳大桥高品质混凝土构件预制安装关键技术
- ◆ 水下混凝土材料及耐久性研究
- ◆ 海港工程混凝土结构防腐蚀技术规范
- ◆ 深圳河二期工程土工合成材料试验研究
- ◆ 高性能混凝土控裂技术研究
- ◆ 大直径混凝土管桩和组合桩的沉桩机理、动测技术及控裂方法研究
- ◆ 港口水工建筑物检测与评估技术规范
- ◆ 海港工程钢结构防腐蚀技术规范
- ◆ PHC桩承载力及沉桩质量控制研究
- ◆ 深厚软土地基中超长PHC管桩承载性状研究
- ◆ 西部港口码头结构安全性检测评估技术研究
- ◆ 排水板综合性能试验研究
- ◆ 超长钢管桩和预应力混凝土桩可打性及沉桩施工动测控制技术指标研究
- ◆ 带承台基桩完整性检测技术与评价方法研究

- ◆ Key technology research and engineering application of offshore deepwater port construction
- ◆ Complete set of technology and its application for improving durability of marine concrete structures
- ◆ Key Technologies for Prefabrication and Installation of High Quality Concrete Components of Hong Kong-Zhuhai-Macao Bridge
- ◆ Research on underwater concrete materials and durability
- ◆ Technical Specification for Corrosion Prevention of Concrete Structures of Seaport Engineering
- ◆ Experimental study on geosynthetics in the second phase engineering of Shenzhen River
- ◆ Research on cracking control technology of high performance concrete
- ◆ Research on mechanism of sinking pile, dynamic measurement technique and crack control method of large diameter concrete pipe piles and composite piles
- ◆ Technical specification for detection and assessment of port and waterway engineering buildings
- ◆ Technical Specification for Anticorrosion of Steel Structure in Seaport Engineering
- ◆ Study on bearing capacity and quality control of PHC pile
- ◆ Study on bearing behavior of ultra long PHC pipe piles in deep soft ground
- ◆ Research on safety detection and assessment of the western port wharf structure
- ◆ Experimental study on comprehensive performance of drain bar
- ◆ Research on working feasibility and the sinking dynamic measurement control index of the long steel pipe piles and prestressed concrete piles
- ◆ Research on detection and assessment of pile integrity of cap

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| 国家级 | 科学技术进步奖一等奖 | 国务院        |
| 国家级 | 科学技术进步奖二等奖 | 国务院        |
| 省部级 | 科学技术二等奖    | 中国公路学会     |
| 省部级 | 科学技术二等奖    | 中国公路学会     |
| 省部级 | 科技进步二等奖    | 中国港口协会     |
| 省部级 | 科技进步三等奖    | 中国港口协会     |
| 省部级 | 科技进步三等奖    | 中国航海学会     |
| 省部级 | 科技进步三等奖    | 中国航海学会     |
| 省部级 | 科技进步三等奖    | 中国航海学会     |
| 省部级 | 科技奖三等奖     | 中国水运协会     |
| 省部级 | 科技奖三等奖     | 中国港口协会     |
| 省部级 | 科学技术进步奖二等奖 | 广东省科技厅     |
| 省部级 | 科学技术进步奖二等奖 | 中国航海学会     |
| 省部级 | 科学技术奖二等奖   | 中国港口协会     |
| 省部级 | 科学技术三等奖    | 中国航海学会     |
| 省部级 |            | 中国水运建设行业协会 |



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First Prize of Science and Technology Progress  
Second Prize of Science and Technology Progress  
Second Prize of Science and Technology Award  
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Third Prize of Science and Technology Progress  
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The State Council  
The State Council  
China Highway & Transportation Society  
China Highway & Transportation Society  
China Ports and Harbours Association  
China Ports and Harbours Association  
China Institute of Navigation  
China Institute of Navigation  
China Ports and Harbours Association  
China Water Transportation Construction Association  
China Water Transportation Construction Association  
China Ports and Harbours Association  
Guangdong Provincial Department of Science and Technology  
China Institute of Navigation  
China Ports and Harbours Association  
China Institute of Navigation  
China Water Transportation Construction Association



# 足迹印记

## FOOTPRINTS

### 主要合作单位

#### Major Cooperation Unit

##### 国内

中国交通建设集团有限公司  
中国保利集团有限公司  
中国国电集团公司  
中国海洋石油总公司  
中国石油化工股份有限公司  
中国华能集团公司  
中国广东核电集团有限公司  
中远船务工程集团有限公司  
中国船舶工业集团有限公司  
招商局国际有限公司  
和记港口集团有限公司  
神华集团有限公司  
华润（集团）有限公司  
广东省交通集团有限公司  
广东省粤电集团有限公司  
广东南粤集团建设有限公司  
广东省公路勘察规划设计院股份有限公司  
广东省航运规划设计院有限公司  
广州打捞局  
广州南沙明珠湾区开发有限公司  
广州原实投资管理有限公司

广州港集团有限公司  
东莞市虎门港控股有限公司  
珠海国际货柜码头（高栏）有限公司  
珠海长隆投资发展有限公司  
港珠澳大桥管理局  
深圳盐田国际集装箱码头有限公司  
深圳大铲湾现代港口发展有限公司  
深圳市前海开发投资控股有限公司  
湛江港集团有限公司  
宝钢湛江钢铁有限公司  
海南港航控股有限公司  
海南如意岛旅游度假投资有限公司  
宁波港股份有限公司  
厦门港务控股集团有限公司  
舟山甬舟集装箱码头有限公司  
金海重工股份有限公司  
云桂铁路云南有限责任公司  
中铁二局集团勘测设计院有限责任公司  
中交南沙投资发展有限公司  
中交珠海城际轨道交通投资建设有限公司  
贵州中交和兴高速公路发展有限公司

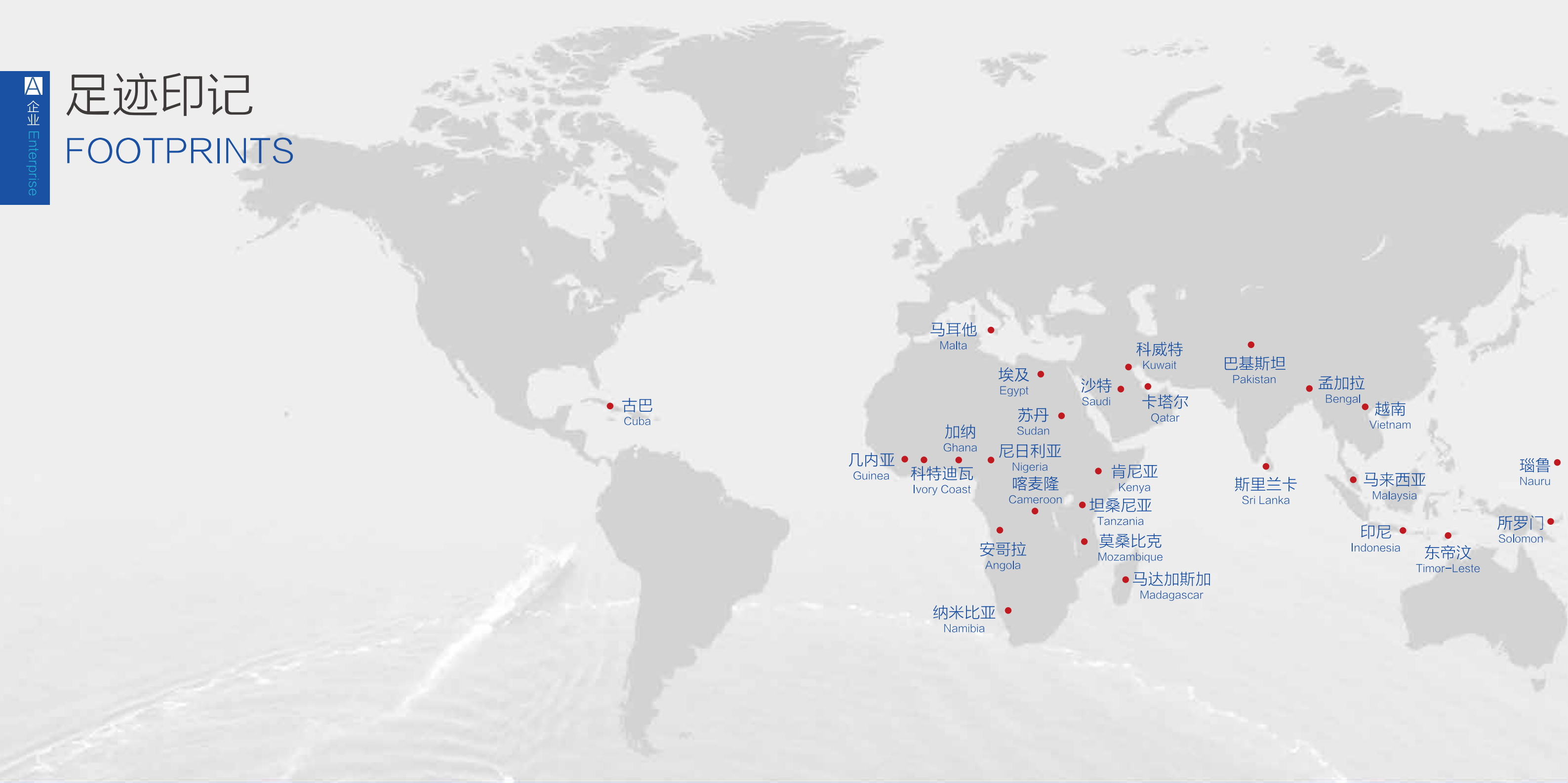
##### Domestic

China Communication Construction Group Co., Ltd.  
China Poly Group Corporation  
China Guodian Corporation  
China National Offshore Oil Corporation  
China Petroleum & Chemical Corporation  
China Huaneng Group Co., Ltd.  
China General Nuclear Power Group Co., Ltd.  
COSCO Shipyard Group Co., Ltd.  
China State Shipbuilding Corporation  
China Merchants Holdings (International) Company Limited  
Hutchison Port Holdings Limited  
Guangzhou Yuanshi Capital Ltd.  
Guangzhou Port Group Co., Ltd.  
Dongguan City Humen Port Holding Company Limited  
Zhuhai International Container Terminals (Gaolan) Co., Ltd.  
Zhuhai Chimelong Investment Development Co., Ltd.  
Hong Kong–Zhuhai–Macao Bridge Authority  
Shenzhen Yantian International Container Terminals Co., Ltd.  
Shenzhen Dachan Bay Modern Port Development Co. Ltd.  
Shenzhen Qianhai Development Investment Holdings Ltd.  
Zhanjiang Port (Group) Co., Ltd.  
Baosteel Zhanjiang Iron and Steel Co., Ltd.

Shenhua Group Corporation Limited  
China Resources (Holdings) Co., Ltd.  
Guangdong Provincial Communication Group Co., Ltd.  
Guangdong Yudean Group Co. Ltd.  
Guangdong Nanyue Group Construction Co., Ltd.  
Guangdong Province Highway Survey and Planning Design Institute Co., Ltd.  
Guangdong Province Planning and Design Institute for Water Transportation Co., Ltd.  
Guangzhou Salvage Bureau of the Ministry of Transport  
Guangzhou Nansha Pearl Bay Development Co., Ltd.  
Hainan Harbor & Shipping Holding Co., Ltd.  
Hainan Ruyi Island Tourism Resort Investment Co., Ltd.  
Ningbo Port Co., Ltd.  
Xiamen Port Holding Group Co.  
Zhoushan Yongzhou Container Terminal Limited.  
Jinhai Heavy Industry Co., Ltd.  
Yunnan–Guangxi Railway (Yunnan Province Section) Co., Ltd.  
China Railway Erju Group Corporation Survey and Design Institute Co., Ltd.  
CCCC Nansha Investment & Development Co., Ltd.  
CCCC Zhuhai Intercity Rail Transit Investment and Construction Co., Ltd.  
Guizhou CCCC Hexing Highway Development Co., Ltd.



# 足迹印记 FOOTPRINTS



## 国外

美国 AECOME集团  
美国 Egis国际公司  
美国 柏克德公司  
英国 Scott Wilson有限公司  
英国 合乐集团  
法国 Louis Berger公司  
法国 ARTELIA 集团

丹麦 COWI A/S集团  
荷兰 皇家豪思康宁集团  
巴西 EGT工程有限公司  
澳大利亚 沃利帕森斯 (WorleyParsons) 集团  
马来西亚 MMSB咨询公司  
马来西亚 檳城第二跨海大桥公司  
阿拉伯联合酋长国 辉固中东公司

斯里兰卡 斯里兰卡港务局  
沙特阿拉伯 红海湾集装箱码头公司  
埃及 苏伊士运河集装箱码头公司  
苏丹 苏丹海港公司  
安哥拉 安哥拉政府重建委员会  
安哥拉 安哥拉罗安达索尼尔斯石油服务中心  
安哥拉 安哥拉国家石油公司

## Overseas

USA AECOME Group  
USA Egis International Inc.  
USA Bechtel International Inc.  
UK Scott Wilson Ltd  
UK Halcrow Group  
France Louis Berger Group  
France Artelia Group

Denmark COWI A/S Group  
Holland Royal Haskoning  
Brazil EGT Engenharia  
Australia Worley Parsons Group  
Malaysia MMSB Consult Sdn Bhd  
Malaysia Jambatan Kedua Sdn. Bhd.  
United Arab Emirates Fugro Middle East B.V.

Sri Lanka Sri Lanka Ports Authority  
Saudi Red Sea Gateway Terminal Company Limited  
Egypt Suez Canal Container Terminal SAE  
Sudan Sea Ports Corporation of Port Sudan  
Angola Gabinete De Reconstrucao Nacional  
Angola Sonils Lda, Angola  
Angola Sonangol EP, Angola



# B | 业务 Business

业务范围

Scope of Business

行业典型业务

Industry Typical Business

业务展示

Business Exhibition

- ◆ 高性能混凝土配制及建筑材料检测 Preparation of high performance concrete and testing of construction materials
- ◆ 防腐材料性能检测 Performance detection of anticorrosion materials
- ◆ 土工试验、土工合成材料检测 Geotechnical test and geosynthetics testing
- ◆ 混凝土工程质量控制（含控温、控裂） Construction quality control of concrete (including temperature control, crack control)
- ◆ 水工建筑物结构监测、检测与评估 Detection, monitoring and assessment of harbor and marine structure
- ◆ 桩基检测 Pile foundation test
- ◆ 桥梁结构施工质量检测及桥梁施工监控 Quality detection of bridge structure construction and monitoring of bridge construction
- ◆ 地基基础工程检测与监测 Monitoring and testing for Ground and Foundation engineering  
基坑、建（构）筑物监测 Monitoring for Building excavation and Building(structure) engineering
- ◆ 路基路面工程检测 Field test of Subgrade and Pavement for highway engineering
- ◆ 隧道地质超前预报及检测、高边坡施工监测 Tunnel geology advanced prediction and testing, high slope construction monitoring and detection
- ◆ 工地试验室 Field laboratory
- ◆ 海外项目 Oversea projects





# 业务范围

## SCOPE OF BUSINESS

### ◆ 建筑材料

- 混凝土及混凝土原材料检测
- 混凝土配合比设计
- 钢材（含钢筋、型钢、焊接件及机械连接件等）物理化学性能检测
- 预应力材料（含钢绞线、预应力钢筋、锚夹具、波纹管等）物理力学性能检测
- 混凝土外加剂（减水剂、速凝剂、早强剂、膨胀剂、矿物外加剂等）检测
- 防腐材料（涂料、硅烷、牺牲阳极、阻锈剂、防腐剂等）性能检测
- 沥青及沥青混合料物理性能指标检测
- 混凝土植筋抗拔、粘结修补材料检测
- 高强螺栓性能指标检测
- 支座与伸缩缝检测
- 高分子防水材料、建筑防水卷材检测

### ◆ Construction Materials

- Testing of concrete & concrete raw materials
- Mix proportion design of concrete
- Physical and chemical properties detection of steel (including steel bar, formed steel, welding parts and mechanical connections, etc.)
- Physical and mechanical properties detection of prestressed materials (including steel strand, prestressed reinforcement, anchorage, sylphon bellows, etc.)
- Detection of concrete admixture (including water reducer, quick setting agent, early strength admixture, expansive agent, mineral admixture, etc.)
- Performance detection of anticorrosion materials (including coating materials, silane, sacrificial anode, rust inhibitor, corrosion inhibitor, etc.)
- Physical property index detection of asphalt & asphalt mixture
- Detection of extraction-resistant materials & bonding repair materials for concrete bonded rebar
- Performance index detection of high strength bolt
- Detection of bearing & expansion joint
- Detection of high polymer waterproof materials & building waterproof materials

### ◆ 结构工程

- 混凝土结构检测
- 桥梁结构检测及监测
- 桩基与基础锚杆检测
- 建筑物变形监测
- 结构试验与检测
- 钢结构质量检测

### Structural Engineering

- Detection of concrete structure
- Detection and monitoring of bridge structure
- Testing of pile foundation & foundation bolt
- Monitoring of building subsidence
- Indoor structural testing and detection
- Quality inspection of steel structure

### ◆ 岩土工程

- 土工试验
- 土工合成材料检测
- 地基原位测试
- 地基基础工程检测与监测
- 基坑、建（构）筑物监测
- 加固土（改良土）试验
- 路基路面现场测试

### ◆ Geotechnical engineering

- Geotechnical test
- Geosynthetics testing
- In-situ test of foundation
- Monitoring and testing for Ground and Foundation engineering
- Monitoring for Building excavation and Building (structure) engineering
- Reinforced soil (improved soil) test
- Field test of Subgrade and Pavement for highway engineering

### ◆ 隧道工程

- 隧道结构检测
- 隧道支护监控量测及超前地质预报
- 隧道环境检测、爆破振动监测

### ◆ Tunnel engineering

- Tunnel Structure Detection
- Monitoring measurement of tunnel support and advanced geology prediction Tunnel environment detection & blasting vibration monitoring

# 行业典型业务

## INDUSTRY TYPICAL BUSINESS

### ◆ 港口工程

- 新建码头实体验证性检测
- 海工高性能混凝土配合比设计
- 混凝土结构和钢结构耐久性检测评估
- 码头结构现状检测评估与鉴定（加固改造、海损事故等）
- 地基与桩基工程检测
- 软基、基坑、围堰施工监控
- 工地试验室
- 混凝土工程质量控制（含控温、控裂）
- 土工试验与土工合成材料检测

### ◆ Port Engineering

- Verification test of newly-built terminal entity
- Mix proportion design of high performance concrete for marine engineering
- Durability detection and evaluation of concrete structure and steel structure
- Assessment and identification of the current situation of wharf structure (reinforcement & reconstruction, marine accident, etc.)
- Testing of ground & pile foundation engineering
- Construction monitoring of soft ground, foundation pit & cofferdam
- Field laboratory
- Construction quality control of concrete (including temperature control, crack control)
- Geotechnical test and geosynthetics testing

### ◆ 工民建与市政工程

- 桥梁检测与监控
- 地基与桩基工程检测
- 基坑与地下空间施工监控
- 建筑物变形监测
- 建筑材料检测
- 主体结构工程现场检测

### ◆ Civil Engineering and Municipal Engineering

- Detection and monitoring of bridge
- Testing of ground & pile foundation engineering
- Construction monitoring of foundation pit & underground space
- Deformation monitoring of buildings
- Testing of construction materials
- Field test of main structural engineering

### ◆ 公路、铁路与水利工程

- 桥梁检测与监控
- 桩基与基础锚杆检测
- 基坑、边坡、路基工程施工监控
- 工地试验室
- 隧道环境检测、结构检测、爆破振动监测
- 隧道支护监控量测及超前地质预报
- 路基路面检测
- 混凝土工程质量控制（含控温、控裂）

### ◆ Highway, Railway and Water Conservancy Engineering

- Detection and monitoring of bridge
- Testing of pile foundation & foundation bolt
- Construction monitoring of foundation pit, slope & subgrade engineering
- Field laboratory
- Environmental detection, structural detection and blasting vibration monitoring of tunnel
- Monitoring measurement of tunnel support and advanced geology prediction
- Detection of subgrade pavement
- Construction quality control of concrete (including temperature control, crack control)



# 业务展示

## BUSINESS EXHIBITION

### 1 | 高性能混凝土配制及建筑材料检测 Preparation of high performance concrete and testing of construction materials

自公司成立之初，公司就致力于以水工构造物为主的高性能混凝土。依托水工构造物耐久性技术交通行业重点实验室的科技平台，老中青三代技术人员历经20多年的努力探索，主参编《海港工程混凝土结构防腐技术规范》、《水运工程混凝土质量控制标准》、《海港工程高性能混凝土质量控制标准》、《水运工程材料试验规范》等多部对交通行业影响深远的技术规范，令公司成为国内同行业领跑的佼佼者。其中，“提高海工混凝土结构耐久性寿命成套技术及推广应用”荣获国家科技进步二等奖。科技的传承、创新与发展，也促使公司专注产研结合，长期开展混凝土原材料，混凝土、钢筋、预应力筋；硅烷、涂料、修补材料、阻锈剂、阳极；沥青及沥青混合料；桥梁支座等检测项目，为国内外诸多重点工程提供高性能混凝土配合比设计及优化技术服务。

The company has been working hard on the research of high performance concrete & its durability mainly for harbor & marine structures ever since the establishment of the company. Relying on Key Laboratory of Harbor and Marine Structure Durability Technology, and more than 20 years of technical staff's efforts of three generations, the company has edited or participated in editing a number of technical specifications, such as Technical Specification for Corrosion Prevention of Concrete Structures of Seaport Engineering, Quality Control Standard of Concrete for Port and Waterway Engineering, Quality Control Standard of High Performance Concrete for Seaport Engineering, Testing Standard for Materials of Port and Waterway Engineering, etc., which have a far-reaching impact on transportation industry and promoted the company to being an outstanding enterprise of the industry. Project of Complete Technology to Improve Durability of Concrete Structures in Marine Environment and Its Application won the Second Prize of State Scientific and Technological Progress. The company pays much attention to science & technology preservation, innovation & development, and this pushed the company to pay much more attention to combining production with research. For long time, the company has been carrying out testing of construction materials such as concrete raw materials, concrete, steel bar, prestressed tendon, silane, coatings, repair materials, rust inhibitor, anode, asphalt, asphalt mixture, bridge bearing etc. Besides, the company has been providing mix proportion design of high performance concrete and its optimization technical service to many key engineering in and out of China.



港珠澳大桥主体混凝土结构耐久性监测  
Durability monitoring of main concrete structure of Hong Kong Zhuhai Macao Bridge

#### 典型项目 Typical Projects

##### 港口工程

深圳市盐田港区二期、三期及三期扩建工程码头主体高性能混凝土配制及原材料检测  
宝钢广东湛江钢铁基地项目码头及其配套工程原材料检测  
湛江港宝满集装箱码头一期工程道路、堆场工程原材料检测  
中委合资广东石化2000万吨/年重油加工工程原油码头工程原材料检测  
台山核电站厂前区防洪护岸工程原材料检测  
惠州港荃湾港区国际集装箱码头工程I标段工程原材料检测

##### 公路、铁路和水利工程

港珠澳大桥岛隧、桥梁工程原材料检测  
珠海市区至机场城际轨道交通工程拱北至横琴段原材料检测  
广中江高速公路原材料检测  
广佛肇高速公路原材料检测  
广东虎门二桥清水防腐高性能混凝土配合比设计  
杭州湾大桥高性能混凝土配制  
青岛海湾大桥耐腐蚀高性能混凝土配合比设计

##### 工民建与市政工程

广州之窗综合办公大楼混凝土原材料检测  
珠海横琴岛澳门大学新校区海底专用隧道工程高性能混凝土配制

##### Port Engineering

- High performance concrete preparation and raw material testing for main work of the second phase, the third phase and the third phase expansion engineering of Shenzhen Yantian Port
- Raw materials testing for terminal and its supporting engineering of Baosteel Iron and Steel Base Project in Zhanjiang Guangdong
- Raw materials testing for road & yard engineering of the first phase of Baoman Container Terminal of Zhanjiang Port
- Raw materials testing for crude oil port engineering of 20Mt/year heavy oil processing engineering of Guangdong Petrochemical, Petro China / PDVSA Joint Venture
- Raw materials testing for flood prevention and bank protection engineering of plant front area in Taishan Nuclear Power Plant
- Raw materials testing for the first section of international container terminal engineering for Huizhou Quanwan Port

##### Highway, Railway and Water Conservancy Engineering

- Raw materials testing for island, tunnel and bridge engineering of HongKong-Zhuhai-Macao Bridge
- Raw materials testing for Gongbei-Hengqin Section of Zhuhai Intercity Rail Transit Engineering from Urban to Zhuhai Airport
- Raw materials testing of Guangzhou-Zhongshan-Jiangmen Highway
- Raw materials testing of Guangzhou-Foshan-Zhaoqing Highway
- Fair-faced anti-corrosion high performance concrete mix proportion design for Humen Second Bridges in Guangdong Province
- High performance concrete preparation for Hangzhou Bay Bridge
- Corrosion resistance high performance concrete mix proportion design for Qingdao Bay Bridge

##### Civil Engineering and Municipal Engineering

- Concrete raw materials testing for the comprehensive office building of Window of Guangzhou
- High performance concrete preparation for the special undersea tunnel engineering of the new campus of University of Macau in Hengqin Island



青岛海湾大桥耐腐蚀高性能混凝土配合比设计  
Corrosion resistance high performance concrete mix proportion design for Qingdao Bay Bridge



虎门二桥清水防腐高性能混凝土配合比设计  
Fair-faced anti-corrosion high performance concrete mix proportion design for Humen Second Bridges in Guangdong Province



深圳市盐田港区二期、三期及三期扩建工程码头主体高性能混凝土配制及原材料检测

High performance concrete preparation and raw material testing for main work of the second phase, the third phase and the third phase expansion engineering of Shenzhen Yantian Port



● 离子色谱试验  
Ion chromatography test



● 氯离子浓度测试试验  
Chloride concentration test



● 涂层拉拔试验  
Coating drawing test



● 混凝土抗氯离子渗透试验  
(RCM法)  
Concrete ion penetration  
resistance test(RCM)



● 沥青延度试验  
Asphalt ductility test



● 螺栓扭力系数试验  
Bolt torque coefficient test



## 2 | 防腐材料性能检测 Performance detection of anticorrosion materials

凭借在耐久性领域的技术优势与优良传统，公司多次为大型工程项目提供经济、有效的防腐蚀检测、防腐蚀技术咨询及优化设计。由公司主参编的《海港工程混凝土结构防腐蚀技术规范》、《海港工程钢结构防腐蚀技术规范》、《海港工程钢筋混凝土结构电化学防腐蚀技术规范》等技术规范，对提高我国港口水工建筑物防腐蚀技术水平、促进工程建设健康发展具有重要意义和作用。

Relying on our technical superiority and fine tradition in the durability realm, the company has provided anticorrosion monitoring, technical consultation and optimization design effectively at favorable prices for lots of large-scale construction engineering. The company has edited or participated in editing industry standards including Technical Specification for Corrosion Prevention of Concrete Structures of Seaport Engineering, Technical Specification for Anticorrosion of Steel Structures for Seaport Engineering, Technical Specification for Electrochemical Anticorrosion of Reinforcement Concrete Structures in Seaport Engineering. These standards play an important role in upgrading the anticorrosion level and promoting the engineering construction development for harbor structures in a healthy way in China.

### 典型项目 Typical Projects

#### 涂层质量检测

广东新中国船厂有限公司易地建厂小虎岛造船基地项目钢管桩及钢板桩防腐涂层检测  
湛江港霞山港区散货码头工程水工和软基处理工程码头混凝土结构防腐质量控制  
杭州湾大桥混凝土表面湿固化涂料涂装比选检测  
山东东营黄河大桥混凝土表面涂层质量控制

#### 硅烷检测

港珠澳大桥主体工程桥梁工程CB04标合同段混凝土硅烷检测  
福州港罗源湾港区将军帽作业区一期工程码头主体及引桥混凝土表面硅烷浸渍检测

#### Coating Quality Detection

- Steel pipe pile and steel sheet pile corrosion prevention coating detection for Xiaohu Island Ship-building Base Project of Guangdong New China Shipyard Co., Ltd
- Wharf concrete structure corrosion prevention quality control for hydraulic and soft ground improvement engineering of bulk cargo terminal engineering in Xiashan Port Area of Zhanjiang Port
- Concrete surface moisture curing coating comparison & selection testing for Hangzhou Bay Bridge
- Concrete surface coating quality control for Yellow River Bridge in Dongying, Shandong

#### Silane Detection

- Concrete silane detection for CB04 Section of the bridge engineering of main work of Hong Kong - Zhuhai - Macao Bridge
- Concrete surface silane soakage detection for main work and approach bridge of the first phase engineering in Jiangjunmao Work Zone, Luoyuan Port Area, Fuzhou Port



杭州湾大桥混凝土表面湿固化涂料涂装比选检测

Concrete surface moisture curing coating comparison & selection testing for Hangzhou Bay Bridge



港珠澳大桥主体工程桥梁工程CB04标合同段

#### 混凝土硅烷检测

Concrete silane detection for CB04 Section of the bridge engineering of main work of Hong Kong - Zhuhai - Macao Bridge



山东东营黄河大桥混凝土表面涂层质量控制

Concrete surface coating quality control for Yellow River Bridge in Dongying, Shandong



# 3 | 土工试验、土工合成材料检测 Geotechnical test and geosynthetics testing

公司拥有先进、齐全的土工试验、土工合成材料试验检测设备，在土工试验、土工合成材料试验检测方面具有丰富的经验，是国内较早开展土工合成材料试验检测的单位之一。公司在开展技术服务的同时，始终注重科技研发，主持完成的“深圳河二期工程土工合成材料试验研究”、“排水板综合性能试验研究”、“疏浚土的固化与改性试验研究”等多项课题获省部级科技进步奖。公司积极参与行业规范制定，主编或参编了《土工合成材料测试规程》和《水运工程土工合成材料应用技术规范》等多部行业规范，代表了行业发展水平。

## 典型项目 Typical Projects

### 港口工程

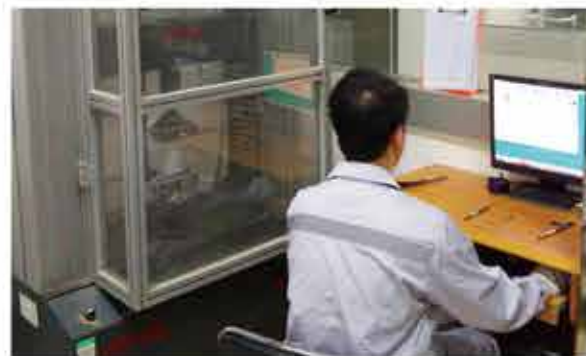
广州港南沙港区一期、二期、三期工程疏浚吹填及软基处理工程  
土工试验、土工合成材料检测  
广州港南沙港区粮食及通用码头工程土工试验、土工合成材料检测  
深圳港盐田东港区工程土工合成材料检测  
珠海港高栏港区集装箱码头辅助港区工程土工试验、土工合成材料检测  
东莞市虎门港沙田港区西大坦作业区驳船码头工程土工合成材料检测  
东莞市虎门港麻涌港区海昌散杂货码头工程道路堆场及辅助设施工程  
土工合成材料检测  
湛江港宝满集装箱码头拆装箱服务区工程（一期）地基处理工程土工试验  
中科合资广东炼化一体化项目码头工程重件运输道路和管廊道路工程  
土工合成材料检测  
深中通道项目S03合同段材料检测  
广州港南沙港区四期工程(疏浚与陆域形成工程)

### 公路、铁路与水利工程

港珠澳大桥珠海连接线工程土工合成材料检测  
广中江高速公路项目土工合成材料检测  
大广高速公路（粤境段）土工合成材料检测  
广深高速公路厚街服务区北行路基检测  
西部沿海高速珠海支线延长线工程土工合成材料检测  
省道 S114线清新珠坑至阳山新圩段路面改造工程土工合成材料检测

### 工民建与市政工程

广州市内环路工程路基检测  
广州市洲头咀隧道工程第二标段土工试验  
珠海长隆国际海洋旅游度假区工程土工试验、土工合成材料检测  
珠海市情侣北路（南段）片区市政道路工程土工合成材料检测  
珠海横琴新区天沐河防洪及景观工程（防洪工程部分）土工合成材料检测  
汕头市东部城市经济带市政基础设施建设项目第五合同段工程土工试验、土工合成材料检测  
湛江水上运动中心项目水运工程土工试验  
华润电力海丰电厂水下插排工程土工合成材料检测



◆ 土工合成材料强度拉伸试验  
Tensile test of geosynthetics



◆ 塑料排水板纵向通水量试验  
Longitudinal flow capacity test of plastic vertical drain



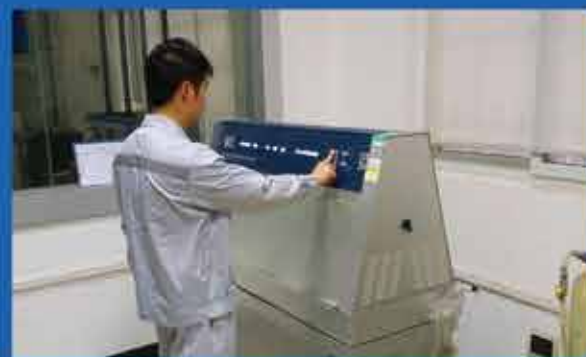
◆ 土工合成材料氙灯老化试验  
Xenon lamp aging test of geosynthetics



◆ 动三轴试验  
Dynamic triaxial test



◆ 固结试验  
Consolidation test



◆ 土工合成材料紫外光老化试验  
Ultraviolet aging test of geosynthetics

The company has advanced and well-equipped equipment for geotechnical test and geosynthetics testing and has rich experience in geotechnical test and geosynthetics testing. We are one of the first to undertake geosynthetics testing in China. Besides technical service, we pay quite a lot attention to research and development. We won provincial and ministerial level science and technology progress awards on lots of research projects directed and completed by us, for example, “experimental study on geosynthetics in the second phase engineering of Shenzhen River”, “experimental study on comprehensive performance of drain bar”, “experimental study on curing and modifying of dredging soil” and so on. We have taken an active part in writing specifications (as editor or associate editor) including Specification for Test and Measurement of Geosynthetics and Application Specification of Geosynthetics for Port and Waterway Engineering, which are a symbol of development level of the industry.

### Port Engineering

- Geotechnical test and geosynthetics testing of soft ground improvement, dredge and hydraulic reclamation engineering for the first, second and third phases of Nansha District of Guangzhou Port
- Geotechnical test and geosynthetics testing of grain and universal terminal engineering in Nansha District of Guangzhou Port
- Geosynthetics testing of Eastern Port Engineering of Yantian Port in Shenzhen
- Geotechnical test and geosynthetics testing of auxiliary port engineering of Gaolan Container Terminal in Zhuhai Port
- Geosynthetics testing of barge berth engineering in Western Datan Operation Area, Shatian District of Humen Port in Dongguan
- Geosynthetics testing of road, yard and auxiliary facility engineering for Haichang Bulk Cargo Terminal in Machong District of Humen Port in Dongguan
- Geotechnical test of ground treatment of vanning and devanning service area engineering (Phase 1) in Baoman Container Terminal of Zhanjiang
- Geosynthetics testing of heavy cargo road and pipe gallery road engineering for the integrated wharf engineering of Guangdong Refinery invested by China Petroleum & Chemical Corporation and Kuwait National Petroleum Company
- ShenZhen-ZhongShan Bridge Project S03 Contract Segment Material Testing
- Nan sha Port Phase IV Projects ( Dredging and Land Formation Project )

### Highway, Railway and Water Conservancy Engineering

- Geosynthetics testing of Hong Kong-Zuhai-Macao Bridge (connection line in Zhuhai)
- Geosynthetics testing of Guangzhou-Zhongshan-Jiangmen Highway
- Geosynthetics testing of Dalian-Guangzhou Highway (Section in Guangdong)
- Subgrade and pavement detection of north section of the service area in Houjie for Guangzhou-Shenzhen Highway
- Geosynthetics testing of road extension engineering of Zhuhai Branch Line of Western Coastal Highway
- Geosynthetics testing of pavement reconstruction of Provincial Highway S114 from Zhukeng Town of Qingxin County to Xinwei Town of Yangshan County

### Civil Engineering and Municipal Engineering

- Subgrade and pavement detection of Guangzhou Inner Ring Road
- Geotechnical test of the second bid section of Zhoutouzui Tunnel Engineering in Guangzhou
- Geotechnical test and geosynthetics testing of engineering of Zhuhai Chimelong International Ocean Tourist Resort
- Geosynthetics testing of municipal road engineering for Northern Lovers Road (south part) in Zhuhai
- Geosynthetics testing of flood prevention and landscape engineering (flood prevention part) for Tianmu River in Hengqin New Area, Zhuhai
- Geotechnical test and geosynthetics testing of the fifth contract section of municipal infrastructure engineering for The Eastern Urban Economic Zone of Shantou
- Geotechnical test of waterway transportation engineering of Zhanjiang Water Sport Center
- Geosynthetics testing of underwater inserting drainage engineering of Haifeng Power Plant Project of China Resources Power Holdings Company Limited



## 4 | 混凝土工程质量控制（含控温、控裂） Construction quality control of concrete (including temperature control, crack control)

混凝土裂缝控制团队是一支理论扎实、经验丰富、极富创新力的团队，致力于为大体积混凝土裂缝控制提供及时、有效的综合解决方案，现已成功为多个大型项目的码头胸墙及面层、桥墩、箱梁、沉管隧道、船闸、大坝及混凝土路面等大体积混凝土提供温度应力的有限元模拟计算、现场温度应变监测技术服务，并对混凝土开裂风险进行实时评估，提供行之有效的控制措施，获得了业主单位的高度评价。应用成果《混凝土抗裂能力数值化评价技术研究》先后荣获2项省部级二等奖。

The team of concrete crack control has solid theoretical knowledge, rich experience and abundant innovative ideas. They devote themselves to provide timely and effective comprehensive solutions to control mass concrete cracks. They have successfully provided temperature stress finite element simulating calculation and field temperature strain monitoring technical services for mass concrete such as wharf crest wall and surface, bridge pier, box girder, immersed tube tunnel, lock, dam, concrete pavement and so on of many large-scale engineering. They also assess the risk of concrete crack in real time and provide the effective measures of crack control. The team has been highly appraised by the owner units. The application result of Research of Concrete Cracking Resistance Numerical Evaluation Technology won two second prizes at the provincial or ministerial level.

### 典型项目 Typical Projects

京杭运河淮安三线船闸大体积混凝土控温控裂  
港珠澳大桥主体工程岛隧工程预制沉管节段裂缝控制  
珠江隧道工程大体积混凝土温度控制  
广州洲头咀沉管隧道预制沉管温度应变监控及控裂  
佛山汾江路南延线工程沉管结构耐久性及控裂技术研究  
江西南昌红谷隧道沉管裂缝控制  
浙江衢州船闸大体积混凝土裂缝控制

- Temperature and crack control of mass concrete of Huaian 3# Ship Lock of the Beijing-Hangzhou Grand Canal
- Crack control of precast immersed tube segment of island & tunnel engineering of the main work of HongKong-Zhuhai-Macao Bridge
- Temperature control of mass concrete of Zhujiang Tunnel Engineering
- Temperature strain monitoring and crack control of precast immersed tube for Guangzhou Zhoutouzui Immersed Tunnel
- Research of the structure durability and crack control technology of immersed tube of south extension line of Foshan Fenjiang Road
- Crack control of immersed tube of Nanchang Red Valley Tunnel in Jiangxi Province
- Mass concrete crack control of Quzhou Ship Lock in Zhejiang Province



港珠澳大桥主体工程岛隧工程预制沉管节段裂缝控制

Crack control of precast immersed tube segment of island & tunnel engineering of the main work of HongKong-Zhuhai-Macao Bridge



京杭运河淮安三线船闸大体积混凝土控温控裂

Temperature and crack control of mass concrete of Huaian 3# Ship Lock of the Beijing-Hangzhou Grand Canal



浙江衢州船闸大体积混凝土裂缝控制

Mass concrete crack control of Quzhou Ship Lock in Zhejiang Province



江西南昌红谷隧道沉管裂缝控制

Crack control of immersed tube of Nanchang Red Valley Tunnel in Jiangxi Province



广州洲头咀沉管隧道预制沉管温度应变监控及控裂

Temperature strain monitoring and crack control of precast immersed tube for Guangzhou Zhoutouzui Immersed Tunnel









港珠澳大桥主体混凝土结构耐久性监测与评估  
Concrete structure durability monitoring and assessment of main work of Hong Kong-Zhuhai-Macao Bridge



湛江港码头结构检测  
Terminal structure detection of Zhanjiang Port



山东日照岚山区耐久性监测与评估  
Durability monitoring and assessment of Lanshan Port District in Rizhao, Shandong



盐田二期格型钢板桩牺牲阳极保护检测评估  
Detection and evaluation of sacrificial anode cathodic protection for cellular steel sheet piles in phase II engineering of Yantian Port



惠州某码头事故检测评估  
Detection after accident of a terminal in Huizhou



珠海某码头事故检测评估  
Detection after accident of a terminal in Zhuhai



## 6 | 桩基试验检测 Pile foundation detection

公司致力为港口、公路、铁路、电力、工民建和市政工程等领域提供桩基工程全方位的技术服务和整体解决方案；倾力为行业创造价值，包括“超长钢管桩和预应力混凝土桩可打性及沉桩施工动测控制技术指标研究”等一批科研项目获得了省部级科技进步奖，部分技术成果得到了交通运输部重点推广，同时我们主编了如《水运工程桩基试验检测技术规范》等多部行业规范与标准，引领行业技术发展。

We are committed to providing comprehensive technical services and integrated solutions for pile foundation engineering in various fields like port engineering, highway engineering, railway engineering, electric power engineering, civil engineering and municipal engineering. We've made every effort to accelerate the development of the whole industry. A number of our research projects won the provincial or ministerial level science and technology progress awards, including "research on working feasibility and the sinking dynamic measurement control index of the long steel pipe piles and prestressed concrete piles". Ministry of Transport has put priority on the development of part of those achievements. We, who lead the technology development of the industry, are the editor of many specifications including Technical Specification for Foundation Pit Testing of Port and Waterway Engineering which is one of our achievements.

### 典型项目 Typical Projects

#### 港口工程

广州文冲船厂桩基检测  
广州港黄埔区新港油码头结构加固改造工程桩基检测  
深圳港盐田港区集装箱码头、三期扩建、西港区工程桩基静载试验  
珠海港高栏港区集装箱码头桩基检测  
湛江港霞山港区散货码头轨道及配套土建堆场桩基检测  
海南省洋浦港油品码头及配套储运设施工程水工工程桩基检测  
广州南沙国际邮轮码头工程桩基检测  
中科合资广东炼化一体化项目码头工程桩基检测  
深圳港妈湾港区海星码头1#~4#泊位改造工程水工工程桩基检测  
宝钢广东湛江钢铁基地项目码头及其配套工程桩基检测

#### 公路、铁路与水利工程

港珠澳大桥主体工程桩基抽芯检测  
广中江高速公路桩基检测  
佛山广明高速公路延长线工程桩基抽芯检测  
新建贵广铁路13标段工程桩基检测  
港珠澳大桥澳门口岸桩基检测  
广东省东山至潮州古巷公路桩基抽芯检测  
广东省龙川至怀集公路桩基抽芯检测  
广东省汕湛高速公路桩基抽芯检测  
珠海洪鹤大桥桩基抽芯检测  
珠海香海大桥桩基抽芯检测  
南海明珠大桥桩基试验检测  
湛江东海岛至雷州高速公路桩基试验

#### 工民建与市政工程

广州南沙横沥镇灵山安置区一期试验桩静载试验  
五羊-本田摩托（广州）有限公司工场扩能工程桩基检测

#### 其它工程

华润海丰电厂3000T重件码头桩基工程检测  
大唐国际广东珠海佳蓬海上风电场工程桩基检测  
中委惠来大涌浪开敞海域码头沉桩及安全保障关键技术研究



#### Port Engineering

- Pile foundation test of Guangzhou Wenchong Shipyard
- Pile foundation test for oil terminal structure reinforcement engineering of new port of Huangpu District, Guangzhou Port
- Pile foundation static loading test of container terminal, Phase III expansion & west port engineering of Shenzhen Yantian Port
- Pile foundation test for container terminal of Zhuhai Gaolan Port
- Pile foundation test for bulk cargo terminal track and the supporting construction yard in Xiashan District of Zhanjiang Port
- Pile foundation test for water engineering of oil terminal and supporting storage facilities of Hainan Yangpu Port
- Pile Foundation Inspection of Guangzhou Nansha International Cruise Terminal Project
- Pile Foundation Inspection of Wharf Engineering of Zhongke Joint Venture Guangdong Refining and Chemical Integration Project
- Inspection of hydraulic engineering pile foundation for 1#~4# berth reconstruction project of Haixing Wharf in Mawan Port Area, Shenzhen Port
- Inspection of pile foundation of Baosteel Guangdong Zhanjiang Iron and Steel Base Project Wharf and its supporting projects

#### Highway, Railway and Water Conservancy Engineering

- Pile foundation test with core drilling for main work of Hong Kong-Zhuhai-Macao Bridge
- Pile foundation test for Guangzhou-Zhongshan-Jiangmen Expressway
- Pile foundation test with core drilling for extension engineering of Foshan Guangzhou-Gaoming Highway
- Pile foundation test for 13th Bid Section of newly-built Guiyang-Guangzhou Railway
- Pile Foundation Inspection of Hong Kong-Zhuhai-Macao Bridge Macao Port
- Pile foundation test with core drilling for Dongshan-Chaozhou Guxiang Highway in Guangdong Province
- Pile foundation test with core drilling for Longchuan-Huaiji Highway in Guangdong Province
- Pile foundation test with core drilling for Yuzhan Expressway in Guangdong Province
- Pile foundation test with core drilling for Honghe Bridge in Zhuhai
- Pile foundation test with core drilling for Xianghai Bridge in Zhuhai
- Pile foundation test for Nanhai Mingzhu Bridge
- Pile foundation test for Zhanjiang East Island to Leizhou Expressway

#### Civil Engineering and Municipal Engineering

- Pile static loading test for the first phase of Settlement Region at Lingshan, Hengli Town, Nansha, Guangzhou
- Pile foundation test for factory expansion engineering of Wuyang-Honda Motors (Guangzhou) Co., Ltd.

#### Other Engineering

- Pile foundation test for 3000t heavy cargo terminal of Haifeng Power Plant Project of China Resources Power Holdings Company Limited
- Pile foundation test for Jiapeng Offshore Wind Farm of Datang International Power Generation (Guangdong Zhuhai) Co., Ltd
- Key technology research of pile sinking & security of open sea area in Huilai Dachonglang by Petro China / PDVSA Joint Venture



#### 深圳港盐田港区集装箱码头桩基检测

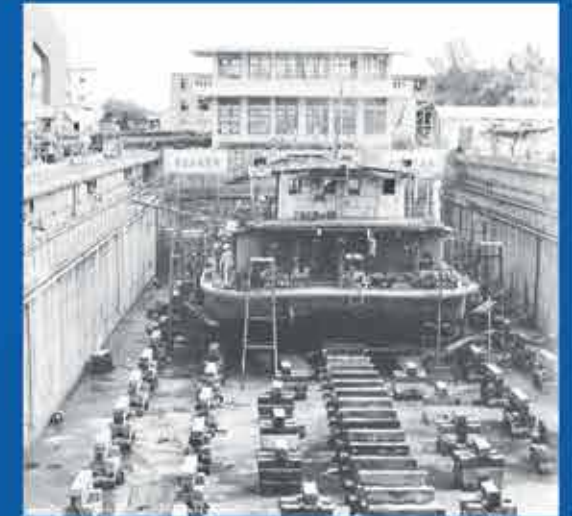
Pile foundation test for Shenzhen Yantian International Container Terminal



#### 珠海港高栏港区集装箱码头桩基检测

Pile foundation test for container terminal of Zhuhai Gaolan Port





广州文冲船厂桩基检测  
Pile foundation test of Guangzhou Wenchong Shipyard



珠海市洪鹤大桥工程及鹤洲南互通工程桩基抽芯检测  
Core-pulling Testing of Pile Foundation of Honghe Bridge Project and Hezhou South Interchange Project in Zhuhai City



港珠澳大桥主体工程桩基抽芯检测  
Pile foundation test with core drilling for main work of Hong Kong-Zhuhai-Macao Bridge



# 7 | 桥梁结构施工质量检测及 桥梁施工监控 Quality detection of bridge structure construction and monitoring of bridge construction

公司桥梁技术团队是一支年轻优秀、充满激情、勇于创新的团队，立志为我国桥梁技术发展贡献自己的力量。公司以力求完美的态度在斜拉桥、拱桥、悬索桥、组合型桥等各种桥型的项目上为客户提供优质的技术服务和可靠的解决方案。公司富有创新精神，在钢桁梁斜拉桥、预应力斜拉桥、自锚式悬索桥的工程上完成了多项科研课题与专利。未来，公司将继续为桥梁设计、监测、检测与评估技术发展做出努力。

Our bridge technology team, a young, excellent, passionate and innovative team, is firmly determined to make contribution to bridge technological development. We strive for perfection. As a result, we are able to provide high-quality technical services and reliable solutions to the engineering of various bridges such as cable-stayed bridge, arch bridge, suspension bridge and combination bridge. We are rich in innovation and have accomplished a number of research projects and obtained patents in bridge engineering such as steel truss girder cable-stayed bridge, prestressed cable-stayed bridge and self-anchored suspension bridge. In the future, we will continue to make efforts to the technological development of bridge design, monitoring, detection and evaluation.

## 典型项目 Typical Projects

### 斜拉桥

澳门西湾大桥拉索检测  
贵广铁路13标段北江特大桥主桥施工监控  
惠州市合生大桥结构检测  
重庆市涪陵长江大桥结构检测

### 拱桥

惠州龙门麻榨大桥结构检测  
韶关十里亭大桥结构检测与荷载试验

### 悬索桥

蚌埠市淮河公路桥（自锚式悬索桥）施工全过程仿真分析

### 组合桥

佛山西站跨桂丹路刚架拱连续梁桥施工监控  
湘潭莲城大桥桥梁施工监控、荷载试验、钢结构表面防腐及桥梁结构仿真分析

### 连续梁桥

珠机城轨前山水道连续梁桥施工监控  
江门大桥结构检测与荷载试验  
惠州鹅岭立交线形与应力监测



贵广铁路13标段北江特大桥主桥施工监控

Construction monitoring of Beijiang Main Bridge at north of 13th Bid Section of Guiyang-Guangzhou Railway



### Cable-stayed Bridge

- Cable detection of Sai Van Bridge in Macao
- Construction monitoring of Beijiang Main Bridge at north of 13th Bid Section of Guiyang-Guangzhou Railway
- Structure detection of HuiZhou Hesheng Bridge
- Structure detection of Chongqing Fuling Yangtze River Bridge

### Arch Bridge

- Structure detection of Huizhou Longmen Mazha Bridge
- Structure detection and load test of Shaoguan Shilting Bridge

### Suspension Bridge

- Construction simulation analysis for the entire process of Bengbu Huaihe River Highway Bridge (Self-Anchored Suspension)



### Combination Bridge

- Construction monitoring of steel arch continuous beam bridge across Guidan Road in Foshan West Railway Station
- Construction monitoring, load test, steel structure surface anticorrosion and bridge structure simulation analysis of Xiangtan Liancheng Bridge

### Continuous Beam Bridge

- Construction monitoring of continuous beam bridge of Qianshan Channel of Zhuhai Intercity Rail Transit Engineering from Urban to Zhuhai Airport
- Structure detection and load test of Jiangmen Bridge
- The linear and stress monitoring of Huizhou Eling Overpass Bridge







佛山西站跨桂丹路刚架拱连续梁桥施工监控

Construction monitoring of steel arch continuous beam bridge across Guidan Road in Foshan West Railway Station



湘潭莲城大桥桥梁施工监控、荷载试验、  
钢结构表面防腐及桥梁结构仿真分析

Construction monitoring, load test, steel structure surface anticorrosion and bridge structure simulation analysis of Xiangtan Liancheng Bridge



## 8 地基基础工程检测与监测 Detection and Monitoring of Foundation Engineering

公司致力于为港口、公路、铁路、市政、工民建、水利等工程建设行业的地基基础工程检测与监测提供优质服务，为客户提供科学公正的检测结果与及时准确的监测数据。公司从事监测、检测等基础性技术服务同时，加强科技研发，推动产研结合，并通过开展技术咨询业务，让技术助力生产，创造价值。公司完成的“水运工程施工监控关键技术研究”、“围海造陆形成的复杂地基的加固处理研究”、“深井降水联合强夯加固大面积超软弱地基技术开发研究”、“吹填造陆超软土地基加固成套技术研究及应用”等一大批科研成果经权威专家鉴定处于国际领先或先进水平，获多项省部级科技进步奖。公司主编了《水运工程地基基础试验检测技术规范》、《水运工程施工监控技术规范》等多部行业规范与标准，引领行业技术发展。

Our company makes great efforts to offer high quality & efficient monitoring & testing of Ground and Foundation engineering for construction in water transport engineering, highway engineering, railway engineering, municipal engineering, civil engineering, hydraulic engineering, etc. We always give scientific, fair, accurate and timely detection results and accurate data to our clients. Besides, we strengthen the R&D of science and technology. We push forward the combination of production & research and carry out technical consultation service to create more value. We won many provincial and ministerial level scientific and technological progress awards with our achievements in scientific researches, such as “Key technology research on waterway construction monitoring”, “Research on treatment of ultra soft ground of reclamation area”, “Developmental research on soft ground improvement by dynamic compaction combined with dewatering”, “Complete technology research and application for ultra soft ground improvement of land reclamation”. Many of our achievements have been verified to be of international leading or advanced level by authoritative experts. We edited many industry norms and standards including Technical Code for Testing and Inspection of Port and Water Transport Engineering Foundation, Code for Construction Monitoring Technologies on Port and Waterway Engineering which lead the technology development of the industry.

### 典型项目 Typical Projects

#### 港口工程

广州港南沙港区软基处理监测、检测  
广州港出海航道三期围堰监测  
广州港南沙港区三期工程监（检）测  
珠海港高栏港区软基处理监测、检测  
中科合资广东炼化一体化项目第三方监测及检测  
海口市东海岸如意岛项目护岸地基处理挤密砂桩检测

#### 公路、铁路与水利工程

广明高速公路延长线工程软基监测  
汕头市东部城市经济带工程围堰监测

#### 工民建与市政工程

珠江隧道工程基础灌砂试验  
广州南沙新区明珠湾区软基处理监测  
江门滨江体育中心项目地基处理工程施工监测  
深圳至中山跨江通道主体工程（S09标）DCM检测  
深圳至中山跨江通道主体工程（S03标）地基处理检测  
深圳市海洋新兴产业基地陆域形成工程

#### 其它工程

华润海丰电厂软基处理、护岸、防波堤及高边坡施工监测



深圳至中山跨江通道主体工程（S09 标）DCM 检测

Testig of DCM for Main Project of Cross-River Passage from Shenzhen to Zhongshan ( Bid S09 )

#### Port Engineering

- Monitoring and detection of soft ground improvement in Nansha District, Guangzhou Port
- Cofferdam monitoring of the third phase engineering of navigational channel in Guangzhou Port
- Monitoring and detection of the third phase engineering of Nansha District of Guangzhou Port
- Monitoring and detection of soft ground improvement in Gaolan District of Zhuhai Port
- Monitoring and detection for the integrated engineering of Guangdong Refinery invested by China Petroleum & Chemical Corporation and Kuwait National Petroleum Company
- Sand compaction pile detection of ground treatment of revetment wall in Ruyi Island Engineering in Haikou City

#### Highway, Railway and Water Conservancy Engineering

- Construction monitoring of soft ground in the highway extension engineering of Guangzhou-Gaoming Highway
- Monitoring of cofferdam structure in the Eastern Urban Economic Zone of Shantou

#### Civil Engineering and Municipal Engineering

- Engineering foundation sand filling test of Zhujiang Tunnel
- Monitoring of soft ground improvement in Pearl Bay of Nansha New District in Guangzhou
- Construction monitoring of ground treatment engineering of Riverside Sport Center Project in Jiangmen
- Testig of DCM for Main Project of Cross-River Passage from Shenzhen to Zhongshan ( Bid S09 )
- Testig of ground treatmeng for Main Project of Cross-River Passage from Shenzhen to Zhongshan ( Bid S03 )
- Land formation Engineering of Marine Emerging Industry Base in Shenzhen

#### Other Project

- Construction monitoring of the soft ground improvement, revetment wall, breakwater and high slope of Haifeng Power Plant of China Resources



珠江隧道工程基础灌砂试验

Engineering foundation sand filling test of Zhujiang Tunnel



深圳市海洋新兴产业基地陆域形成工程监测检测项目

Land formation Engineering of Marine Emerging Industry Base in ShenzhenShenzhen to Zhongshan



广州港南沙港区三期工程监（检）测

Monitoring and detection of the third phase engineering of Nansha District of Guangzhou Port





海口市东海岸如意岛项目护岸地基处理挤密砂桩检测  
Sand compaction pile detection of ground treatment of revetment wall in Ruyi Island Engineering in Haikou City



汕头市东部城市经济带工程围堰监测  
Monitoring of cofferdam structure in the Eastern Urban Economic Zone of Shantou City





# 9 | 基坑、建（构）筑物监测 Monitoring for Building foundation pit and Buildings (structures) engineering

公司秉承“为顾客创造精品，为社会创造财富”的理念，为港口、铁路、公路、市政、工民建、水利等工程项目基坑施工安全保驾护航，立足监控量测，并提供基坑支护技术咨询，为客户创造良好的社会、经济效益。同时致力于引领行业发展，积极开展技术研发，公司完成的“复杂软土层深基坑降水维护一体化设计与安全监控关键技术研究”等科研项目获得了省部级科技进步奖。

We adhere to the philosophy of “creating top quality for customer & creating wealth for community”, aiming to provide the safety assurance for foundation pit construction of port engineering, railways engineering, highways engineering, municipal engineering, civil engineering, hydraulic engineering and so on. Based on good control of monitoring and measurement, high-end foundation pit supporting technology service is provided to create good social and economic benefits for customers. At the same time, we are striving to lead the industry development. We play an active role in carrying out technology research. Some provincial or ministerial level science and technology progress prizes have been issued to our research projects, such as “Key technology research on integration design & safety monitoring for dewatering supporting of deep foundation pit in complicated soft ground”.

## 典型项目 Typical Projects

### 港口工程

广州文冲船厂基坑监测

中山神湾伟航船厂造船基地深基坑监测

京杭运河淮安三线船闸基坑施工监测

### 公路、铁路与水利工程

澳门大学新校区海底专用隧道工程围堰施工监控

港珠澳大桥主体工程岛隧工程沉管预制厂施工监测

贵广铁路13 标隧道基坑监测

深圳宝安区沙井河片区排涝工程河口泵站基坑与水闸基坑施工监控项目

珠海市区至珠海机场城际轨道交通拱北至横琴段项目工程施工监测

汕头市东部城市经济带河口治理及综合开发项目塔岗围片区水利工程水闸工程南港闸站基坑安全监测实施项目

### 工民建与市政工程

中交邮轮母港二号地块基坑监测

中交汇通中心基坑监测

广州南沙2015NJY-10地块（南恒）基坑监测

广州南沙2012NJY-2地块（南珠）基坑监测

广州南沙2014NJY-8地块（明珠湾开发大厦）基坑监测

港珠澳大桥澳门口岸施工监测监控

中交南方总部基地工程基坑支护设计和监测

中交港湾大厦基坑支护监测

珠海口岸广场基坑监测



珠海口岸广场基坑监测

Construction monitoring of foundation pit of Zhuhai Port Square

### Port Engineering

- Construction monitoring of foundation pit of Guangzhou Wenchong Shipyard
- Deep foundation pit monitoring for shipbuilding base of Zhongshan Shenwan Weihang Ship Factory
- Construction monitoring of foundation pit of Huaian 3# Ship Lock of Beijing-Hangzhou Grand Canal

### Highway, Railway and Water Conservancy Engineering

- Cofferdam construction monitoring for special undersea tunnel engineering in the new campus of University of Macau
- Construction monitoring for immersed pile precast yard of island & tunnel engineering of main work of HongKong-Zhuhai-Macao Bridge
- Tunnel foundation pit monitoring of 13th Bid Section of Guiyang-Guangzhou Railway
- Construction monitoring of foundation pit for sluice and pumping station construction of drainage engineering in Shajinghe Area, Baoan District, Shenzhen
- Construction monitoring for Gongbei-Hengqin Section of Zhuhai Intercity Rail Transit Engineering from Urban to Zhuhai Airport
- Foundation pit safety monitoring for south harbor sluice gate station construction of hydraulic sluice engineering of river management and comprehensive development project in Tagangwei District of Eastern Urban Economic Zone of Shantou

### Civil Engineering and Municipal Engineering

- Monitoring of building excavation for Plot 2 of Cruise home port of CCCC
- Monitoring of building excavation for Huitong center of CCCC
- Monitoring of building excavation for Plot 2015NJY-10 in Nan sha district of Guangzhou
- Monitoring of building excavation for Plot 2012NJY-2 in Nan sha district of Guangzhou
- Monitoring of building excavation for Plot 2014NJY-8 ( Development Building of Ming zhu Bay) in Nan sha district of Guangzhou
- Construction Monitoring and Monitoring of Hong Kong-Zhuhai-Macao Bridge Macao Por
- Foundation pit supporting design and monitoring for CCCC South Headquarters Base
- Monitoring of foundation pit supporting of CCCC Gangwan Building
- Construction monitoring of foundation pit of Zhuhai Port Square



珠海市区至珠海机场城际轨道交通拱北至横琴段项目工程施工监测

Construction monitoring for Gongbei-Hengqin Section of Zhuhai Intercity Rail Transit Engineering from Urban to Zhuhai Airport





中交邮轮母港二号地块（中交蓝色海湾）基坑监测

Monitoring of building excavation for Plot 2 of Cruise home port of CCCC



2012NJY-2地块（南珠）基坑监测

Monitoring of building excavation for Plot 2012NJY-2 in Nan sha district of Guangzhou



2014NJY-8地块（明珠湾开发大厦）基坑监测项目

Monitoring of building excavation for Plot 2014NJY-8 ( Development Building of Ming zhu Bay) in Nan sha district of Guangzhou



中交汇通中心基坑监测

Monitoring of building excavation for Huitong center of CCCC



贵广铁路13 标隧道（佛山隧道）基坑监测

Foundation pit monitoring of tunnel (Foshan Tunnel) of 13th Bid Section of Guiyang-Guangzhou Railway



广州南沙2015NJY-10地块（南恒）基坑监测

Monitoring of building excavation for Plot 2015NJY-10 in Nan sha district of Guangzhou

## 10 | 隧道地质超前预报及检测、高边坡施工监测 Tunnel geology advanced prediction and testing, high slope construction monitoring and detection

公司在隧道地质超前预报与高边坡施工监控量测方面拥有国际一流的技术设备，多年来积累了丰富的技术经验。团队成立以来，服务了一批国家及地方重点工程，并攻克了多项技术难点。公司完成的“公路高边坡的自动化监测技术及运营期安全监控、预警系统”等一批科研成果经权威专家鉴定处于国内领先或先进水平，获多项科技进步奖项。未来，公司将继续为隧道超前地质预报与高边坡施工监控量测技术发展做出努力，打造更多精品工程。

We have international advanced technology and equipment as well as rich technical experience in tunnel geology advanced prediction and high slope construction monitoring and detection. Ever since the team's establishment, the team has served a large number of national or local important engineering and conquered various technical difficulties. Some provincial or ministerial level science and technology progress prizes have been issued to our research projects, such as "Research on safety monitoring and early warning system of the high slope of the highway in operation period". In the future, we will continue to make efforts to the development of tunnel geology advanced prediction and high slope construction monitoring and detection. We will strive to create more high-quality engineering.

### 典型项目 Typical Projects

广明高速高边坡监测  
佛山广明高速公路延长线工程高边坡工程监测  
深圳河一期工程边坡施工监测  
新建铁路云桂线（云南段）站前工程隧道超前地质预测预报及监控量测评估  
贵州省道真至瓮安高速公路TJ01、04、05、10、11合同段隧道超前地质预报、监控量测  
贵州省道真至新寨高速公路福寿场至流河渡段隧道超前地质预报和监控量测  
贵州省道安高速公路TJ03 标高边坡工程监测  
广东省广连高速公路TJ02~ TJ14标高边坡、隧道监控量测及隧道超前地质预报  
广东省开春高速公路TJ06~ TJ08标高边坡、隧道监控量测及隧道超前地质预报  
新建珠海市区至珠海机场城际轨道交通拱北至横琴段项目

- High slope monitoring of Guangzhou-Gaoming Highway
- High slope engineering monitoring of extension line of Guangzhou-Gaoming Highway in Foshan
- Construction monitoring of slope for the first phase engineering of Shenzhen River
- Advanced geology prediction and assessment of monitoring measurement of station-front tunnel engineering of newly built Yunnan-Guangxi Railway (Section in Yunnan)
- Tunnel advanced geology prediction and tunnel monitoring measurement of TJ01, 04, 05, 10 & 11 Bid Sections of Daozhen-Weng'an Highway in Guizhou Province
- Tunnel advanced geology prediction and tunnel monitoring measurement of Fushouchang-Liuhedu Section of Daozhen-Xinzhai Highway in Guizhou Province
- High slope engineering monitoring of TJ03 Bid Section of Daozhen-Weng'an Highway in Guizhou Province
- Tunnel advanced geology prediction, tunnel monitoring measurement and High slope engineering monitoring of TJ02-TJ14 Bid Sections of Conghua City, Guangzhou - Lianzhou Highway in Guangdong Province
- Tunnel advanced geology prediction, tunnel monitoring measurement and High slope engineering monitoring of TJ06-TJ8 Bid Sections of Kaiping - Yangchun Highway in Guangdong Province
- Construction of Gongbei Hengqin section of intercity rail transit from Zhuhai City to Zhuhai Airport



深圳河一期工程边坡施工监测

Construction monitoring of slope for the first phase engineering of Shenzhen River





广东省开春高速公路TJ06~ TJ08标高边坡、隧道监控量测及隧道超前地质预报

Tunnel advanced geology prediction, tunnel monitoring measurement and High slope engineering monitoring of TJ06-TJ8 Bid Sections of Kaiping - Yangchun Highway in Guangdong Province



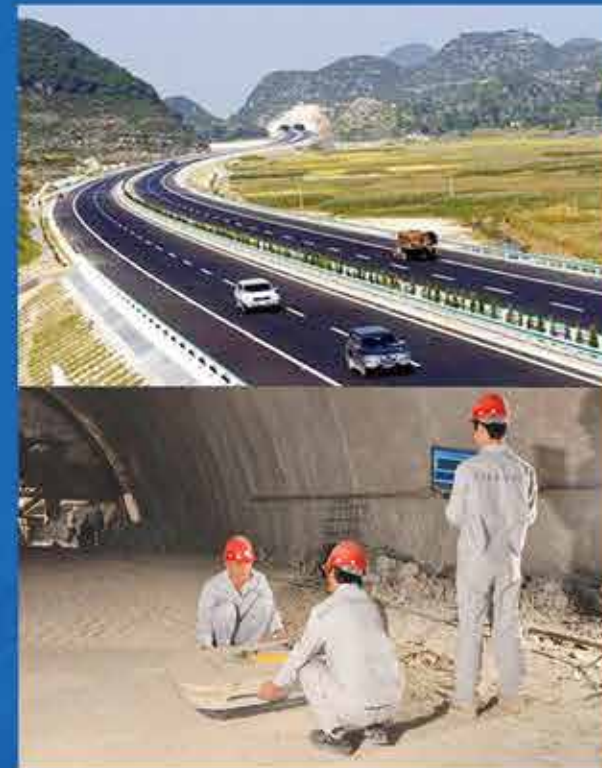
广东省广连高速公路TJ02~ TJ14标高边坡、隧道监控量测及隧道超前地质预报

Tunnel advanced geology prediction, tunnel monitoring measurement and High slope engineering monitoring of TJ02-TJ14 Bid Sections of Conghua City, Guangzhou - Lianzhou Highway in Guangdong Province



新建珠海市区至珠海机场城际轨道交通拱北至横琴段项目

Construction of Gongbei to Hengqin section of intercity rail transit from Zhuhai City to Zhuhai Airport



贵州省道真至瓮安高速公路TJ01、04、05、10、11 合同段隧道超前地质预报、监控量测

Tunnel advanced geology prediction and tunnel monitoring measurement of TJ01, 04, 05, 10 & 11 Bid Sections of Daozhen-Weng'an Highway in Guizhou Province



新建铁路云桂线（云南段）站前工程隧道超前地质预测预报及监控量测评估

Advanced geology prediction and assessment of monitoring measurement of station-front tunnel engineering of newly built Yunnan-Guangxi Railway (Section in Yunnan)



佛山市广明高速公路延长线高边坡工程监测

High slope engineering monitoring of extension line of Guangzhou-Gaoming Highway in Foshan



# 11 | 工地试验室 Field laboratory

公司自成立以来，先后承建了水运、公路、铁路等工程建设行业多个重大工程项目的标准化中心试验室，全面肩负工程项目中的原材料试验检测及混凝土质量控制工作。所属试验室均以“一流的设备、一流的人员、一流的管理”高标准、高起点建设，始终秉承“独立、科学、公平、公正”的服务宗旨有序开展各项试验检测工作，对工程质量的控制提供强有力的技术支持，为工程项目的顺利开展保驾护航。

Ever since its establishment, the company has undertake many large standardization central laboratories in fields of water transport engineering, highway engineering, railway engineering and so on, being fully in charge of the raw materials testing & concrete quality control. The laboratories have been constructed at high standard & high starting point in the principle of “first-class equipment, first-class staff & first-class management”. Every testing & detection work has been carried out orderly in the service aim of “independent, scientific, fair & just”. The company provides strong technical support for construction quality control and assures engineering been carried out successfully.

## 典型项目 Typical Projects

- 东帝汶帝巴湾新集装箱码头项目工地试验室
- 开平至阳春高速公路JC-01中心试验室
- 广州从化至清远连州高速公路二中心试验室
- 马来西亚东海岸铁路项目第六分部工地试验室
- 科特迪瓦阿比让港口扩建项目工程工地试验室
- 加纳特马新集装箱码头项目工地试验室
- 广州从化至清远连州高速公路工地试验室
- 贵广铁路13标中心试验室
- 中交股份联合体港珠澳大桥岛隧工程沉管预制厂试验室
- 中交四航局珠海市区至珠海机场城际轨道交通工程中心试验室
- 茂名港博贺新港区防波堤工程工地试验室
- 贵州省道安高速公路中心实验室
- 中交四航局云桂铁路云南段项目经理部中心试验室
- TBPP-GZGW SITE LABORATORY
- JC-01 Center Laboratory of KaiPing-YangChun Expressway
- The Second Center Laboratory of Guangzhou-Qingyuan Expressway
- Field laboratory of the 6th Division in Malaysia East Coast Rail Link (ECRL) Project
- Field laboratory of Expansion Project in Abidjan Port of Ivory Coast
- Field laboratory of Tema New Container Terminal Project
- Field laboratory of Guangzhou Conghua-Qingyuan Lianzhou Highway Project
- Central laboratory of 13th Bid Section of Guiyang-Guangzhou Railway
- Immersed tube precast yard laboratory of island and tunnel engineering of HongKong-Zhuhai-Macao Bridge by Joint Venture of China Communications Construction Co., Ltd.
- Central laboratory of Zhuhai Intercity Rail Transit Engineering from Urban to Zhuhai Airport by CCCC Fourth Harbor Engineering Co., Ltd.
- Field laboratory of breakwater engineering of Bohe New Port Area in Maoming Port
- Central laboratory of Guizhou Provincial Daozhen - Weng'an Highway
- Central laboratory of Project Management Office of Yunnan-Guangxi Railway (Yunnan Section) by CCCC Fourth Harbor Engineering Co., Ltd.



中交股份联合体港珠澳大桥岛隧工程沉管预制厂试验室

Immersed tube precast yard laboratory of island and tunnel engineering of HongKong-Zhuhai-Macao Bridge by Joint Venture of China Communications Construction Co., Ltd.



贵广铁路13标中心试验室

Central laboratory of 13th Bid Section of Guiyang-Guangzhou Railway



开平至阳春高速公路JC-01中心试验室

JC-01 Center Laboratory of KaiPing-YangChun Expressway



广州从化至清远连州高速公路二中心试验室

The Second Center Laboratory of Guangzhou-Qingyuan Expressway



贵州省道安高速公路中心实验室

Central laboratory of Guizhou Provincial Daozhen - Weng'an Highway





### 东帝汶帝巴湾新集装箱码头项目工地试验室

TBPP-GZGW SITE LABORATORY

#### 一、东帝汶工地试验室

检测公司在东帝汶帝巴湾新集装箱码头项目设立的现场试验室TBPP-GZGW SITE LABORATORY于2019年6月30日举行了揭牌仪式，目前已正式运营。

TBPP-GZGW SITE LABORATORY占地约350平方米，该试验室设有力学室、土工、集料室、混凝土搅拌室、养护室以及办公室等。截至目前，试验室已具备开展混凝土、钢筋、集料、土工及地基检测等22项试验检测的能力，后续将陆续增加无机结合料稳定材料、路面砖以及岩石等近20项检测参数。届时，检测公司东帝汶现场试验室将拥有承揽近50项试验参数的资质能力，并将成为东帝汶国家范围内试验参数覆盖最广的试验室。

##### 1、TBPP-GZGW site laboratory

TBPP-GZGW SITE LABORATORY, which was established in Tibar Bay Port Project (East Timor) by Guangzhou Harbor Engineering Quality Examination Company, was unveiled on June 30, 2019 and is officially in operation now.

TBPP-GZGW SITE LABORATORY covers an area of around 350 square meters, including one mechanics room, one mixing room, two soil and aggregate rooms, two offices, one curing room and one warehouse. Up to now, the laboratory has the testing qualification to conduct 22 test parameters on concrete, steel bars, aggregate, soil and foundation testing, and will continue to increase nearly 20 test parameters on materials stabilized with inorganic binders, pavement bricks and rock and so on. At that time, TBPP-GZGW SITE LABORATORY will have the qualification to undertake nearly 50 test parameters, which will become the biggest laboratory covering the widest testing scope in East Timor.



#### 二、马来西亚东海岸铁路项目第六分部工地试验室

公司承建的第一个海外铁路项目工地试验室，由戴帽公司TESTECH授权，采用欧洲标准、马来西亚标准等进行原材料检测、混凝土质量控制、路基检测等。标段总长度119.85km，填方1700多万方，混凝土100多万方

##### 2、Field laboratory of the 6th Division in Malaysia East Coast Rail Link (ECRL) Project.

This laboratory, which is authorized by TESTECH, Co., Ltd, is the first railway site laboratory project of our company oversea. Wide range of test service such as raw materials detection, concrete quality control or roadbed detection, etc., are held based on European standard, Malaysian standard and other related standards. The length of this section is 119.85 kilometers in total with more than 17 million square meters of embankment and at least 1 million square meters of concrete.



#### 三、科特迪瓦阿比让港口扩建项目工程工地试验室

采用欧洲标准和英国标准进行原材料检测及码头沉箱、胸墙、扭王块等实体检测。主要工程量有新建一座现代化的集装箱码头、一座滚装泊位和一座通用杂货泊位。

3、Field laboratory of Expansion Project in Abidjan Port of Ivory Coast  
All the detection of raw materials, caissons, breast walls, accropodes of the wharf are in accordance to the European and British Standard. The construction mainly includes a modern container terminal, a rolling berth and a general cargo berth.



#### 四、加纳特马新集装箱码头项目工地试验室

通过母体内审和BCC公司外审认定试验室的管理体系和技术能力满足评价准则要求，开展了混凝土原材料、钢筋及土工材料的检测及混凝土质量控制工作。

4. Field laboratory of Tema New Container Terminal Project  
The management system and technical ability of the laboratory had been complied the requirements of evaluation criteria affirmed by maternal internal audit and BCC external audit. The inspection of concrete raw materials, rebar and geotechnical materials and the quality control of concrete are carried out here.



#### 五、广州从化至清远连州高速公路工地试验室

广连高速公路工地试验室是公司获得公路工程综合乙级等级资质后的第一个公路项目工地试验室，工地试验室负责标段内路基、桥梁、涵洞工程的原材料检测、混凝土质量控制和现场实体结构检测的自检工作。

##### 5. Field laboratory of Guangzhou Conghua-Qingyuan Lianzhou Highway Project

This laboratory is the first site laboratory of highway project after the company has obtained the Class-B qualification of the highway engineering comprehensive grade. The site laboratory is responsible for raw material inspection of roadbed, bridge and culvert engineering in the located section, the quality control of concrete and physical structure site tests, etc.



# 12 | 海外项目 Oversea projects

二十世纪九十年代中后期，公司承接了第一个国外桩基检测项目，从此开启了走向海外市场之路。20多年以来，公司在海外的足迹走过了东南亚、中东、东非、西非、北非等区域，完成的业务类型包括桩基检测、地基检测、地基监测、工程勘察、工程物探、高性能混凝土配制、混凝土控温控制、防腐与耐久性监测、混凝土防腐设计、基坑监测、地基处理设计咨询、桩基础优化设计咨询等。公司以过硬的技术水平与出色的外语沟通能力，得到了AECOM、WorleyParsons、Maunsell、Bechtel等国际知名的设计、咨询公司的高度认可，为项目的工程质量和经济效益提供了有力的保障。

In late 1990's, we undertook our first overseas foundation pit detection engineering, and thenceforth started to enter the overseas market. In the nearly 20 years, our footprints have spread across many countries in Southeast Asia, Middle East, East Africa, West Africa, North Africa and so on, completing business covering pile foundation test, ground detection, ground monitoring, engineering investigation, engineering geophysical exploration, preparation of high performance concrete, temperature control & crack control of concrete, monitoring of anticorrosion & durability, concrete anticorrosion design, foundation pit monitoring, consulting and design of ground treatment, optimization design for pile foundation, etc. With excellent professional technology and outstanding foreign language skills, we are highly appraised by famous overseas design & consulting companies including AECOM, WorleyParsons, Maunsell and Bechtel, and we provide high quality technical services to our clients to guarantee the quality and economic benefits.

### 典型项目Typical Projects

- 东帝汶帝巴湾新集装箱码头项目

斯里兰卡科伦坡城市固体废物处理工程

斯里兰卡科伦坡港口城市政项目基础设施和景观一期工程

纳米比亚国家储油设施码头项目桩基检测

坦桑尼亚达港改扩建工程桩基检测项目

马耳他马尔萨什洛克港直立式沉箱防波堤工程摩擦系数大比尺模拟试验

越南和黄国际集装箱码头软基处理设计和咨询

马来西亚槟城二桥桩基检测

孟加拉国东方炼油厂码头钢管桩涂装及牺牲阳极联合保护

斯里兰卡汉班托塔港二期工程基坑边坡和围堰监测

巴基斯坦瓜达尔码头工程高性能混凝土配制及防腐涂层设计

科威特巴比延岛海港一期一阶段路桥及地基处理工程试验段监测

卡塔尔多哈海军码头与港池护岸工程施工勘察及地基检测

卡塔尔多哈新港码头及内防波堤工程项目地基处理设计、检测和混凝土控温控制

沙特JEC港疏浚与回填工程地基检测、施工勘察和降水设计

沙特RSGT工程码头混凝土块体温度、裂缝控制

肯尼亚 Port of Mombasa Berth 19 & Adjacent Stacking Areas 项目
- 肯尼亚蒙巴萨港KIPEVU桥外加电流防腐设计

桩基检测

莫桑比克纳卡拉走廊水工程工程桩基检测

莫桑比克彭巴油气服务中心一期项目

纳米比亚鲸湾港新集装箱码头桩基和地基检测

安哥拉罗安达油码头桩基高应变检测

安哥拉船坞及车间工程桩基检测

安哥拉罗安达渔业南部码头桩基检测

安哥拉洛比托扩建工程桩基检测

安哥拉纳米贝湾突堤卸油码头工程桩基检测

安哥拉LNG海工程工程桩基检测、钢管桩牺牲阳极阴极保护优化设计

安哥拉国家石油公司SONAREF炼厂水工项目分项工程地基检测

喀麦隆克里比深水港工程地基监测检测、钢管桩检测

几内亚科纳克里集装箱码头扩建工程项目地基检测

苏丹港码头混凝土涂层防腐设计

苏丹港码头钢管桩铝合金牺牲阳极保护和钢筋混凝土梁板涂层防腐设计

埃及塞得东港集装箱码头二期水工项目地基监测检测、码头检测及混凝土防腐蚀设计



纳米比亚国家储油设施码头项目桩基检测

Pile foundation inspection of the national oil storage facility terminal project in Namibia

### Tibar Bay Port Project

- Metro Colombo Solid Waste Management Project
- Colombo Port City Development Project Package IB
- Pile foundation inspection of the national oil storage facility terminalproject in Namibia
- Pile Foundation Testing Project for Reconstruction and Expansion Projectin Dares Salaam Port, Tanzania
- Large scale simulation test of friction coefficient for vertical caissonbreakwaterengineering of Marsaxlokk Port in Malta
- Technical design and consultation of soft ground improvement for Saigon International Terminal inVietnam
- Pile foundation test of Penang Second Bridge in Malaysia
- Steel pipe pile coating and sacrificial anode protection of Bangladesh Oriental Refinery Wharf
- Monitoring and detection of foundation pit, slope & cofferdam of the second phase engineering of Hambantota Port in Sri Lanka
- Preparation of high performance concrete and design of corrosion prevention coating for Gwadar Terminal Engineering in Pakistan
- Monitoring of the test section of ground treatment and road & bridge engineering for the first stage of the first phase of Boubyan Port in KuwaitConstruction monitoring and ground detection of bank revetment engineering for navy pier and harbor basin of Doha Port in Qatar
- Ground treatment design, ground detection and concrete temperature control and crack control of new pier and inner breakwater engineering of Doha Port in Qatar
- Ground detection, construction monitoring and precipitation design for dredging and filling engineering of JEC Port in Saudi
- Temperature and crack control of concrete block of RSGT Engineering Terminal in Saudi
- Design of impressed electric current anticorrosion protection for Kipevu Bridge in Port of Mombasa in Kenya,
- Mozambique Pemba Oil and Gas Service Center Phase I
- ProjectPile foundation test for engineering of Port of Mombasa Berth 19 & Adjacent Stacking Areas in Kenya
- Pile foundation test for hydraulic engineering of Nacala Corridor in Mozambique
- Pile foundation test and ground detection for new container terminal of Walvis Bay in Namibia
- High strain test of pile foundation of Luanda Oil Terminal in Angola
- Pile foundation test for docks and workshops engineering in Angola
- Pile foundation test for south of fishing trade wharf of Luanda in Angola
- Pile foundation test for extension engineering of Lobito in Angola
- Pile foundation test for jetty oil unloading wharf engineering of Namibe Bayin Angola
- Design Optimization of cathodic protection by sacrificing anodes for steel pipe piles and pile foundation test of LNG Marine Project in Angola
- Ground detection for hydraulic engineering of Sonaref, Sonangol EP, Angola
- Ground monitoring & detection & steel pipe pile detection fordeepwater port engineering in Kribi,Cameron
- Ground detection for expansion engineering of Conakry Container Terminal in Guinea
- Design of anticorrosion coating for concrete of Port Sudan
- Design of aluminum alloy sacrificial anode for steel pipe piles and anticorrosion coating for reinforced concrete beams and slabs of Port Sudan
- Ground monitoring & detection, wharf detection & concrete anticorrosion design of hydraulic engineering for the second phase of container terminal of East Port Said in Egypt



巴基斯坦瓜达尔码头工程高性能混凝土配制及防腐涂层设计

Preparation of high performance concrete and design of corrosion prevention coating for Gwadar Terminal Engineering in Pakistan





斯里兰卡科伦坡港口城市项目基础设施和景观一期工程  
Colombo Port City Development Project Package IB



东帝汶帝巴湾新集装箱码头项目  
Tibar Bay Port Project



斯里兰卡汉班托塔港二期工程基坑边坡和围堰监测  
Monitoring and detection of foundation pit, slope & cofferdam of the second phase engineering of Hambantota Port in Sri Lanka



斯里兰卡科伦坡城市固体废弃物处理工程  
Metro Colombo Solid Waste Management Project



坦桑尼亚达港改扩建工程桩基检测项目  
Pile Foundation Testing Project for Reconstruction and Expansion Project in Dares Salaam Port, Tanzania



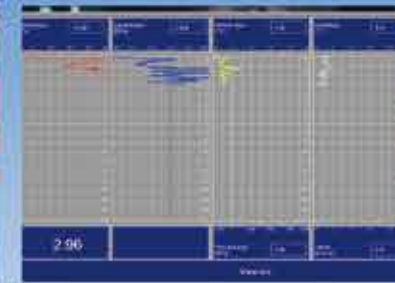
马耳他马尔萨什洛克港直立式沉箱防波堤工程摩擦系数大比尺模拟试验  
Large scale simulation test of friction coefficient for vertical caisson breakwater engineering of Marsaxlokk Port in Malta





肯尼亚蒙巴萨港KIPeVU桥外加电流防腐设计

Design of impressed electric current anticorrosion protection for Kipevu Bridge in Port of Mombasa, Kenya



卡塔尔多哈新港码头及内防波堤工程项目地基处理设计、检测和混凝土控温控裂

Ground treatment design, ground detection and concrete temperature control and crack control of new pier and inner breakwater engineering of Doha Port in Qatar



苏丹港码头钢管桩铝合金牺牲阳极保护和钢筋混凝土梁板涂层防腐设计

Design of aluminum alloy sacrificial anode for steel pipe piles and anticorrosion coating for reinforced concrete beams and slabs of Port Sudan



越南和黄西贡国际集装箱码头软基处理设计和咨询

Technical design and consultation of soft ground improvement for Saigon International Terminals, Vietnam





纳米比亚鲸湾港新集装箱码头桩基和地基检测

Pile foundation test and ground detection for new container terminal of Walvis Bay in Namibia

喀麦隆克里比深水港工程地基监测检测、钢管桩检测

Ground monitoring & detection & steel pipe pile detection for deepwater port engineering in Kribi, Cameroon



沙特JEC港疏浚与回填工程地基检测、施工勘察和降水设计

Ground detection, construction monitoring and precipitation design for dredging and filling engineering of JEC Port in Saudi





莫桑比克纳卡拉走廊水工工程桩基检测  
Pile foundation test for hydraulic engineering of Nacala Corridor in Mozambique



马来西亚槟城二桥桩基检测  
Pile foundation test of Penang Second Bridge in Malaysia



莫桑比克彭巴油气服务中心一期项目  
Mozambique Pemba Oil and Gas Service Center Phase I Project



# C | 仪器设备、软件

## Equipment & software

主要仪器设备、软件

Major Equipment & Software



# 主要仪器设备、软件

## MAJOR EQUIPMENT & SOFTWARE

公司试验室总面积超过5000m²，拥有各种试验检测仪器1000多台(套)。仪器设备配置齐全，涵盖了建筑材料、结构工程和环境生态岩土三大专业领域的试验检测项目，拥有包括电液伺服疲劳试验机、气相色谱质谱联用仪、MALA PRO EX地质雷达、MALA X3M地质雷达、NOVA系列无电缆静力触探系统、动态信号测试分析系统DH5922、加拿大RST数字式测斜仪、徕卡TS30全站仪/超站仪、tritek ntd 水下测厚仪、跨孔透射法超声波检测仪、微机控制电液伺服万能试验机、锚固静载试验机、全自动双联高压固结仪、TGP206A隧道地质超前预报系统等一批国际先进的试验检测设备。另外，公司还配备了各种大型计算分析软件，如midas Civil 桥梁结构分析与设计软件、AQWA水动力分析软件等。

The company has 5000-square meter testing laboratories and more than 1000 sets of different kinds of laboratory testing equipment. The laboratories are completely equipped with all kinds of testing equipment for the test items in the fields of construction material, structural engineering and environment & ecological geotechnical engineering. There is a number of international advanced test equipment including the electro hydraulic servo fatigue testing machine, gas phase chromatography mass spectrometry hyphenated instrument, Mala PRO EX geological radar, Mala X3M ground penetrating radar (GPR), Nova series cableless CPT system, DH5922 dynamic signal test and analysis system, Canadian RST digital measuring inclinometer, Leica TS30 total station instrument / super station instrument, Tritex NTD underwater thickness gauge, cross hole transmission method ultrasonic detecting instrument, computer control electro hydraulic servo universal testing machine, anchor static load test machine, full automatic double high pressure consolidation apparatus and TGP206A tunnel geology advanced prediction system. In addition, the company is also equipped with a variety of large computation analysis software such as Midas Civil bridge structure analysis and design software, AQWA hydrodynamic analysis software and so on.



MALA PRO EX地质雷达  
Mala PRO EX geological radar



微机控制电子拉力试验机  
Microcomputer Controlled Electronic  
Tension Testing Machine



换气式热老化试验箱  
Air-exchange thermal aging test



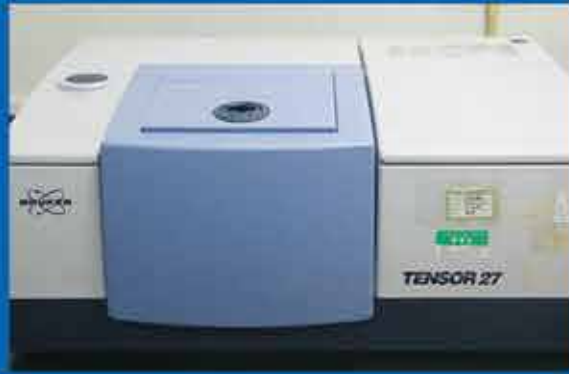
基桩动测仪  
Pile Integrity Tester



TIP热异常桩身完整性测试仪  
TIP Thermal integrity Profiling



微机控制电液伺服压剪试验机  
Computer control electro hydraulic servo  
pressure shear test machine



红外光谱仪  
Infrared spectrometer





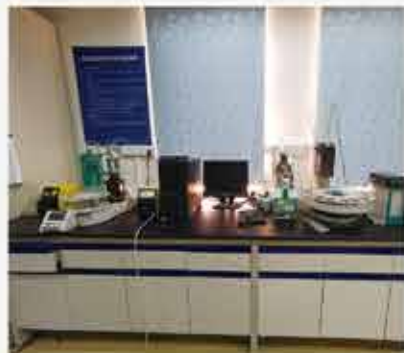
微机控制电液伺服万能试验机  
Computer control electro hydraulic  
servo universal testing machine



恒温水养护箱 沸煮箱 恒温干燥箱  
Constant Temperature Water  
Maintenance Box Boiling Box Constant  
Temperature Drying Box



水泥游离氧化钙快速测定仪  
Rapid Measuring Instrument for Free  
Calcium Oxide of Cement



自动电位滴定仪  
Automatic Potentiometric Titrator



气相色谱质谱联用仪  
Gas phase chromatography mass spectrometry hyphenated instrument



锚固静载试验机  
Anchor static load test machine



NOVA系列无电缆静力触探系统  
Nova series cableless CPT system



路面摩擦系数  
Friction coefficient of pavement



自动弯沉仪  
Automatic deflectometer



橡塑低温脆性试验机  
Rubber-plastic Low Temperature  
Brittleness Testing Machine



徕卡TS30全站仪/超站仪  
Leica TS30 total station instrument /  
super station instrument



电液伺服疲劳试验机  
Electro hydraulic servo fatigue  
testing machine



多功能路况快速检测系统侧图  
Side view of multifunctional road condition fast detection system



# D | 员工 Staff

员工风采 Staff Style





# 员工风采 STAFF STYLE

