

# 桥梁博物馆

MUSEUM OF  
BRIDGES



厦门路桥股份有限公司  
XIAMEN ROAD & BRIDGE CO., LTD.

4F



### 海沧大桥展示馆

Exhibition of Haicang bridge

2-12

5F



### 中国桥梁百年回顾展厅

Exhibition of A Review of Chinese Bridges in 19th Century

13-23

5F



### 摄影艺术展厅

Exhibition Hall of Photographic Arts

24-25

6F



### 监控中心

Supervision Center

26

## 桥梁博物馆

Museum of Bridges

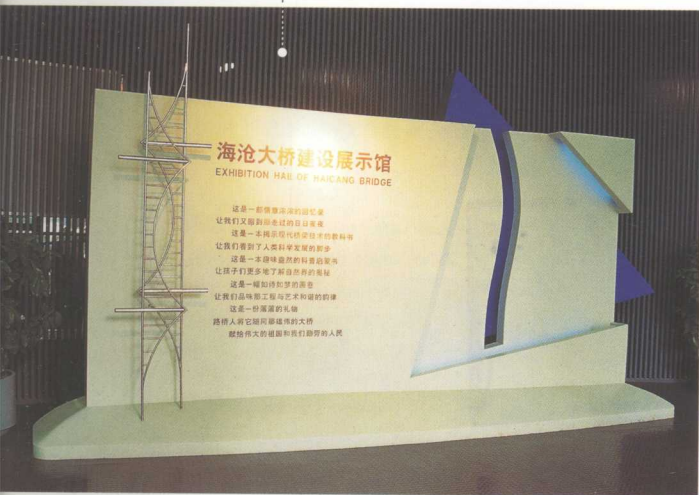
桥梁博物馆是我国迄今为止第一家也是唯一一家以桥梁为主题的博物馆。博物馆围绕桥梁科技、桥梁历史、桥梁文化及桥梁知识普及四个中心设计建设。博物馆一期展出面积近4000平方，分为三层，一层是海沧大桥建设展示馆，二层为中国桥梁100年回顾展、99路桥杯中国桥梁摄影艺术展及99路桥杯海沧大桥摄影作品展，三层为海沧大桥交通监控中心。

The Museum of Bridges is the first and the only museum in China, which takes bridge as its theme. The museum covers four parts in its design and construction: bridge technology, bridge history, and bridge culture and bridge knowledge. The exhibition area for the first stage has a space area of 4,000 m<sup>2</sup>, which consists of 3 layers. On the first floor is the exhibition hall of the construction of Haichang Bridge. The second floor is for the 100-year review on Chinese bridges: the 1999 Road & Bridge (R&B) Chinese bridges photographic arts exhibition and the 1999 R&B Cup Haichang Bridge photographs exhibition. The third floor is the transportation supervision center of Haichang Bridge.



# 序厅

Lobby



这是一部情意浓浓的回忆录

让我们又回到那走过的日日夜夜

这是一本展示现代桥梁技术的教科书

让我们看到了人类科学发展的脚步

这是一部趣味盎然的科普启蒙书

让孩子们更多地了解自然的奥秘

这是一幅如诗如梦的画卷

让我们品味那工程与艺术的和谐韵律

这是一份薄薄的礼物

路桥人将它随同那雄伟的大桥

献给伟大的祖国和我们勤劳的人民

This is a memorandum full of emotion,

Brings into us to hardworking days and rights.

This is a book revealing the modern bridge technology,

Allows us to trace the scientific development of human being.

This is a science publication filled with fun,

Enables our children to learn more of the natural mystery.

This is a picture of dream and hope,

Shares with us its rhythm of construction as well as arts.

This is a present, which R&B staff prepared,

Especially for our great motherland and our diligent fellow people.

## 前期工作厅

### Exhibition Hall of Preparation

海沧大桥工程全长5926.527M，其中桥长3140M，主桥长1108M，主跨648M，是世界第二座、亚洲第一座三跨连续全飘浮体系钢箱梁悬索桥。同时也是厦门历史上投资规模最大的交通基础设施项目，工程西起海沧投资区马青路，跨越厦门西海域和东渡港、仙岳路相连接，把厦门和海沧连为一体，是鹭岛继厦门大桥后又一条重要的对外通道。

海沧大桥的建设凝聚了党和国家领导人的关心与支持，李鹏、朱镕基、胡锦涛、李瑞环均亲临大桥视察指导工作，1999年4月江泽民总书记为海沧大桥题写了桥名。

The Haichang Bridge Project covers a length of 5926.527m. The bridge is 3140m in length. The main body is 1108m and the main span is 648m in length. It ranks the second in world and the first in Asia as a three-span continuous floating system steel box beam suspension bridge. Meanwhile it is also the largest transportation infrastructure project in Xiamen in history. The project starts from Maqing Road in Haichang Investment Zone in the west, spans over the sea surface west to Xiamen and ends at Xianyue Road in Dongdu Harbour. It connects Xiamen and Haichang as a complete body and thus becomes another important corridor to the mainland after Xiamen Bridge.

The construction of Haichang Bridge received great concern and support from CPC and NPC leaders, such as Li Peng, Zhu Rongji, Hu Jintao, Li Ruihuan have come to the site to examine the construction process. In April 1999, President Jiang Zheming inscribed the name for Haichang Bridge.



#### 序 言

海沧大桥工程是厦门历史上投资规模最大的交通基础设施项目。工程西起海沧投资区马青公路，跨越厦门西海域和东渡港，由海沧东与仙岳路相接，把厦门岛和海沧投资区连为一体，是厦门岛又一重要的对外通道。工程全长5926.527米，其中桥长3140米，主桥长1108米，主跨648米。是亚洲第一座大跨三跨连续全飘浮体系钢箱梁悬索桥；西端连接为大桥宽幅预应力混凝土连续高架桥，跨径达148米；东端立交为一座三跨全高架、全定向匝道特大跨径立交桥，右端立交是一种融城市公园、交通和桥于一体的新型现代立交工程。



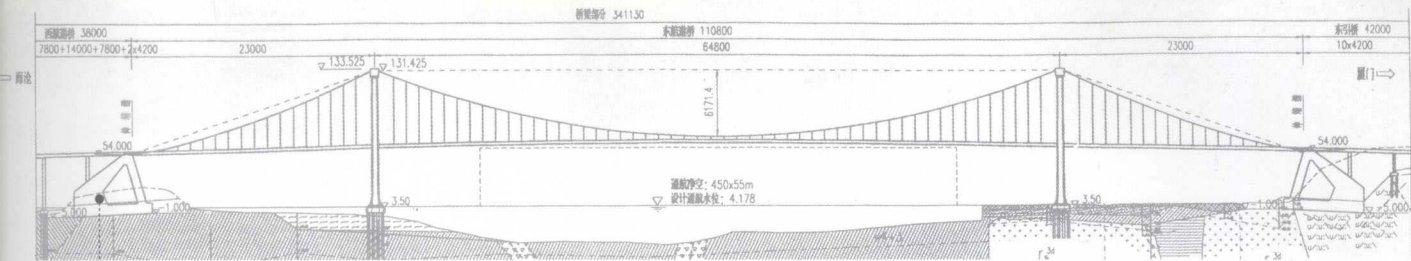
## 设计厅

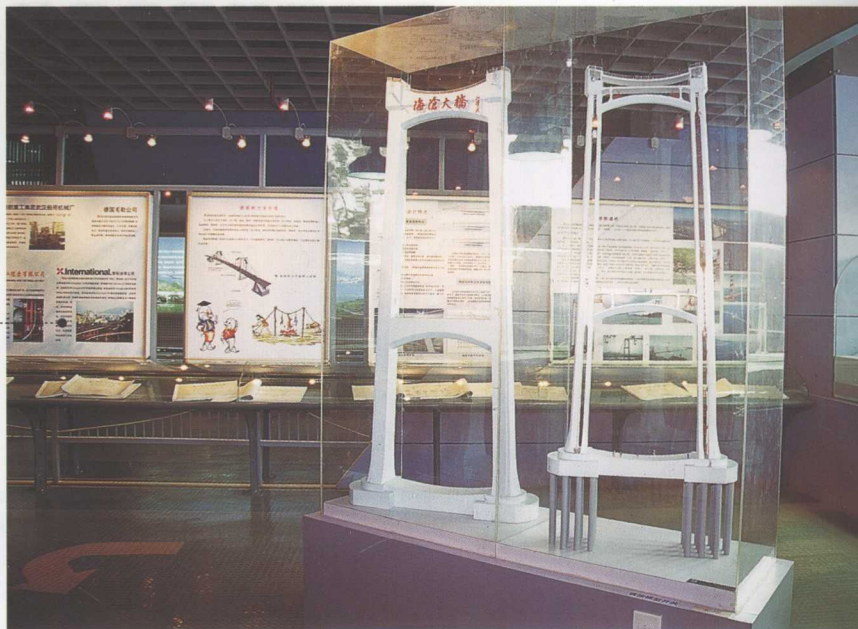
Exhibition Hall of Design

设计厅展出的内容有：海沧大桥东西航道桥的模型及其地质剖面，东渡立交桥及石塘立交桥的模型，海沧大桥伸缩缝模型及桥面防撞护栏、索夹、吊索、主索鞍、散索鞍、及主缆截面模型。

Its contents include: the model of the eastern and western channel bridges of Haichang Bridge and its geographical section, the models of Dongdu Overpass and Shitang Overpass, the model of the expansion joint of Haichang Bridge and other parts like anti-collision railing (cable clinch) suspension cable, main cable saddle and assistant cable saddle and main cable section model.







海沧大桥是世界第二座三跨连续全飘浮悬索桥，这种结构的桥梁优点在于：整体结构抗震、抗风性能强；线型优美；行车顺畅。

Haichang Bridge is the second three-span continuous floating suspension bridge in the world. Its merits are strong anti-seismic and anti-wind capability, elegant appearance and convenient transportation.

# 施工厅

## Exhibition Hall of Construction

海沧大桥钢箱梁总长1104M，总重15800吨，全桥钢箱梁分为94个节段，其中标准梁长12M，宽36.6M，高3M，重156吨，最大梁段重达206吨。

施工厅设计了海上桩基平台的施工和钢箱梁的吊装等动感场景式模型，游客在这里可以动手参与，模拟操作。

Haichang Bridge's steel box beam body is 1104m in length, 15800 tons in weight and consists of 94 segments. A standard beam is 12m long, 36.6m wide and 3m high, weighing 156 tons. The heaviest beam is 206 tons in weight.

Here we display the operating models of the construction on the sea, the lifting assembly of the steel box beams etc. Tourists can participate by operating the models.

此外，施工厅还系统展示了大桥关键工序的施工，包括先导索过海、主缆的架设、钢箱梁的吊装、主缆的防护、桥面铺装“五大战役”。

Besides, this hall shows the construction of the key parts of the project, which include "Five Major Campaigns": Leading the cables across the sea, laying the main cables, lifting assembly of the box beams, maintenance of the main cables and the bridge surface placement.



# 科技厅

Exhibition Hall of Technology



海沧大桥的低速风洞试验模型。

The low-speed wind tunnel models of Haichang Bridge .

→ 科技厅展示还包括：锚碇大体积混凝土温控防裂研究；混凝土抗海蚀和抗碳化试验耐久性研究；混凝土基本性能试验研究；主缆防护涂装；预应力锚固系统；西航道桥结构分析及模型试验研究；风洞试验研究；厦门海沧大桥悬索桥施工监控；钢箱梁桥面沥青混凝土铺装。

It also includes: the research of temperature controlled anti-crack methods of large concrete anchor pieces, concrete anti-rust and anti-carbonization durability research, concrete basic functions test and research, the maintenance painting of main cables, prestressing anchor system, western channel bridge structure analysis and model experiment research, wind tunnel experiment research. Construction supervision of the suspension body of Haichang Bridge, the placement of asphalt concrete on the steel box beam surface.



## 建设管理及景观工程展厅

Exhibition Halls of Construction Management  
and Sightseeing Project

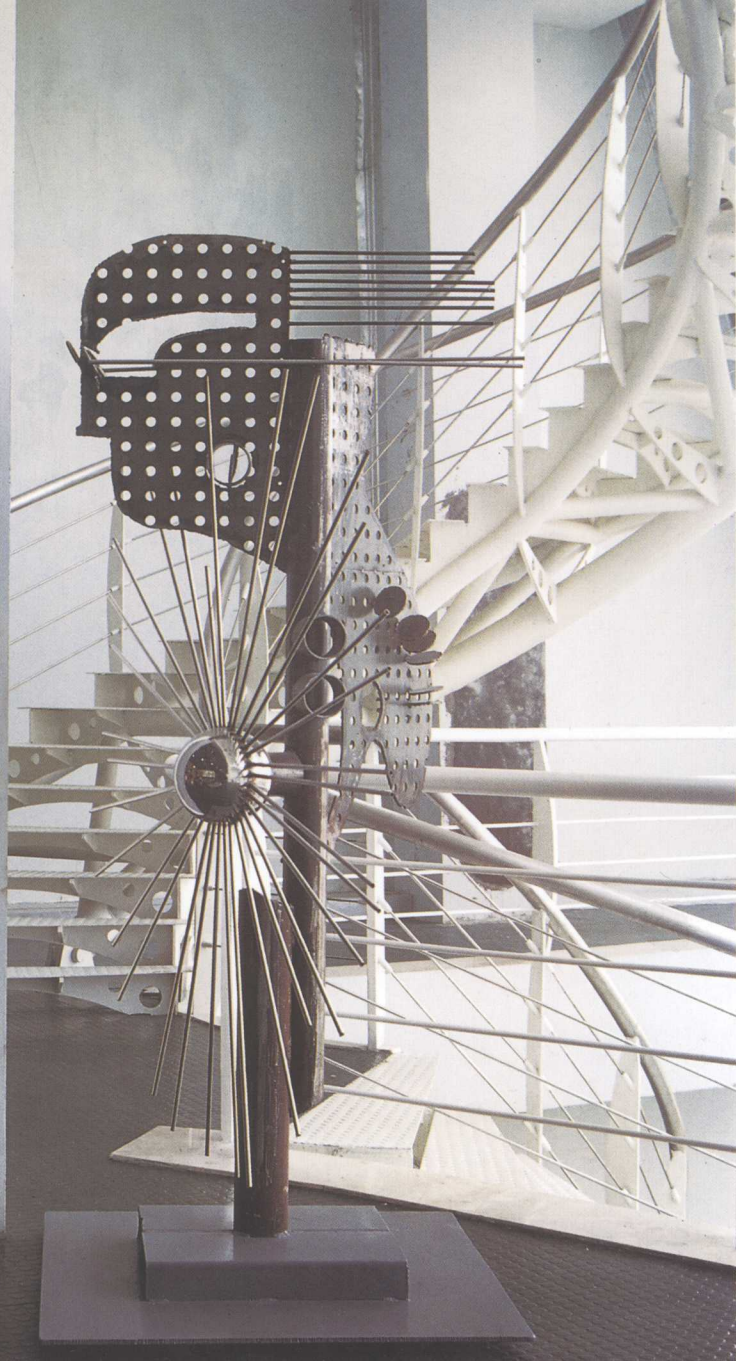
为保证大桥建设有序、高质地运行，工程设有指挥部、监督办、监理等多个施工管理机构。

In order to ensure the orderly and quality construction process, the project has construction management offices, such as Command Office and Supervision Office.

景观工程展厅全面展示了桥梁色彩、桥梁夜景设计方案的产生过程。

The Project View Hall comprehensively reveals the decision process of the two plans concerning bridge colors and bridge night views.







# 中国桥梁百年回顾展

Exhibition of A Review of Chinese  
Bridges in 19th Century

中国桥梁百年回顾展按历史年代划分为五大版块：1、古代桥梁部分；2、1900年~1949年部分；3、1950年~1978年部分；4、1979年~1999年部分；5、未来部分。展示以历史年代为主线索、以桥梁科技为辅线索，对每一阶段的重点桥梁及人物都作了详细介绍。在介绍各阶段桥梁的建设背景、建设成果、建设规模的同时，展馆还介绍了各阶段桥梁建设的主要技术特征，并与同时期世界主要桥梁强国的桥梁建设、发展及技术状况相比较，通过比较来反映中国桥梁建设水平由先进到落后又到赶上的整个历程。

The review of Chinese bridges in 19th century is divided into 5 parts according to different historical stages:

1. Ancient bridges; 2. 1900-1949; 3. 1950-1978; 4. 1979-1999; 5. Future. The exhibition takes historical order as the main thread, with the bridge technology as the assistant thread. Thus it makes a detailed description of the key bridges and important people at each stage. Apart from the construction backgrounds, achievements and scales, the exhibition also introduces the main technical characters of bridges at different stages. What is more, it also makes comparison with the advanced bridge construction development and technology of the same period to reflect the development of Chinese bridge construction, form its advanced status to a backward position, then regained the advanced status.

展馆循环放映中国桥梁百年回顾展的相关资料片，通过文字、图片、模型、多媒体、声像、雕塑等多种方式，游客可充分地认识桥梁、了解桥梁。

The exhibition hall also plays relevant information movies on Chinese bridges in 19th century. The tourists thus deeply understand the bridges through words, pictures, models, multimedia devices, sounds and sculptures.



# 古代厅

Exhibition Hall of Ancient Masterpieces



我国古代桥梁多用木、石、藤、竹乃至皮革之类的天然材料，锻铁出现以后有了简单的铁链桥。它们的强度都很低。木、藤、竹，皮革类易腐烂，能够保留至今的古代桥梁多为石桥。中国古代著名石桥有：①河北赵州安济桥、②北京卢沟桥、③泉州安平桥。

In ancient times, Chinese bridges were usually built with natural materials, such as wood, stone, rattan, bamboo or even leather. Later on iron chain bridges came into being. Yet all the above had poor intensity, as wood rattan, bamboo and leather rot away easily. Therefore the existing ancient bridges are usually stone ones. To list some famous stone bridges: 1. Zhaozhou Anji Bridge in Hebei Province 2. Lugou bridge in Beijing 3. Anpin Bridge in Quanzhou of Fujian Province.

