

# 中国建造

BUILT BY CHINA

上海环球金融中心建造纪实

CONSTRUCTION RECORD OF SHANGHAI WORLD FINANCIAL CENTER PROJECT

中国建筑股份有限公司 & 上海建工（集团）总公司编

CHINA STATE CONSTRUCTION ENGINEERING CORPORATION LIMITED

& SHANGHAI CONSTRUCTION GROUP EDIT

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中国建筑业出版社

CHINA ARCHITECTURE & BUILDING PRESS

## 图书在版编目(CIP)数据

中国建造 上海环球金融中心建造纪实/中国建筑股份有限公司&上海建工(集团)总公司编;王伍仁主编—北京:中国建筑工业出版社,2010  
ISBN 978-7-112-11718-5

I. 上… II. ①王…②中…③上… III. 高层建筑—建筑设计—上海市 IV. TU247.1

中国版本图书馆CIP数据核字(2010)第000378号

视觉策划:胡文杰

建成摄影:胡文杰

装帧设计:胡文杰、王静雯、王者风、刘雨抒

英文翻译:王伍仁、夏江

责任编辑:徐 纺

中国建造 上海环球金融中心建造纪实  
中国建筑股份有限公司&上海建工(集团)总公司 编  
王伍仁 主编

中国建筑工业出版社 出版、发行(北京西郊百万庄)  
各地新华书店、建筑书店 经销  
上海利丰雅高印刷有限公司制版  
利丰雅高印刷(深圳)有限公司印刷

开本:787×1100毫米 1/8 印张:32.5 字数:1150千字  
2010年2月第一版 2010年2月第一次印刷  
印数:1-2500册 定价:358元  
ISBN 978-7-112-11718-5

(18959)

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(邮政编码100037)

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戴立先

（以上名单以姓氏笔画为顺序）



谨以此献给改写世界超高层建造史的中国建造者们

DEDICATED TO THE CHINESE BUILDERS WHO HAVE REWRITTEN THE WORLD

SUPER SKYSCRAPER BUILDING HISTORY

阅读指南  
READER GUIDE

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PROJECT MANAGEMENT

垂直运输管理  
Vertical transportation management



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塔吊移位

M900D塔吊在444m高空从塔楼内部移至外部

Tower crane shifting

M900D tower crane is shifted to outside from inside of building over 444m high altitude.

1 2

1 塔吊在  
移位前。

1 In-shifting

2 移位后。

2 After shifting

2009年12月26日M900D塔吊在444m高空从塔楼内部移至外部

2009年12月26日M900D塔吊在444m高空从塔楼内部移至外部

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2009年12月26日M900D塔吊在444m高空从塔楼内部移至外部

立面示意

Elevation hint

\*P 037-139 翻页动画

\*P 037-139 roll animation

页码

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## Captions

时间备注

Time remark

序言

PREFACE

摩天大厦与“中国建造”

孙文杰

如果说城市是一个民族赓续绵延的记忆载体，建筑就是这个载体最重要的组成，最鲜明地记载着这座城市的辉煌或衰败。而今，以上海、北京为代表的中国许多大中城市，却正在逐渐失去她的记忆，其原因很大程度上是由于许多重要建筑（尤其是摩天大厦）大多与中国设计师、中国建造师无缘，而是由外国人设计和建造。而2008年8月落成启用的上海环球金融中心工程而言，虽然由外国建筑事务所设计，但却是世界建筑史上首次由中国建筑企业独立承揽、建造的外资摩天大厦，中国建筑企业通过总承包该工程向全世界展现了“中国建造”的一流水准。

2004年金秋，数以千计、满怀激情的“环球人”，从大江南北汇聚到了浦东陆家嘴Z4-1地块，拉开了建造世界第一高楼的帷幕。从那时起，用最先进的管理理念和方法、最先进的技术和装备、最短的工期、最优等的质量和最安全的施工过程来完成上海环球金融中心的建造便成了中国建筑股份有限公司、上海建工集团奋力追求的共同梦想。科学管理建环球精品，辛勤劳动树世纪丰碑。该项目收获了太多喜悦和荣耀，共获得两项世界第一高度认证、2008年度“世界最佳高层建筑”、上海市建设工程“白玉兰”奖杯、“世界最高观光厅”吉尼斯纪录认证、中建总公司科学技术奖（省部级）一等奖等殊荣，集中展示了全球房建领域最前沿的管理理念、建造技术和建造水准。

在上海环球金融中心建造实施过程中，两大集团主动承担重托，信守工程合约，追求互利共赢，与业主以及所有合作伙伴一起，不断提高管理品质，构建和谐施工氛围。为了确保上海环球金融中心在42个月的极限工

期里从图纸上的根根线条变为上海滩新的天际线，我们全部的工作、生活和思绪，都围绕这栋大楼的建造而展开。这不仅是中国改革开放30周年和建国60周年的成功和骄傲，而且眼前这令人信服的业绩证明：中国的建筑企业完全有能力独立承建世界顶级的摩天大厦，“中国建造”的能力已雄踞于世界建筑业的顶端。

为了记录上海环球金融中心建造全过程，给建筑业留下里程碑式的发展印迹，给总包、分包共计1万多名参建员工留下永久回忆，并为申报国家科技进步奖奠定坚实基础，同时也为了进一步扩大工程的知名度和美誉度，由两大集团共同编撰《中国建造：上海环球金融中心建造纪实》一书。本书以环球大厦建造过程中的图片为主，通过一系列图片展现该工程建造过程中所体现出的卓越的建造管理水平、高超的建造技术、叹为观止的建造难度、超常的建造速度，从而树立中国建筑股份有限公司、上海建工集团顽强拼搏、勇于争先、奉献精品、服务社会的大型央企的积极形象。

我们深知，任何摩天大厦的高度都会被不断刷新，上海环球金融中心也难以幸免。但是，只要我们不断站在新的起点前行，敢于挑战、永不言败，我们必将登峰造极，长久地雄踞于世界建筑业之林。

最后，谨以此书献给“环球”建设者，献给关心“环球”建造的社会各界同仁，献给业界专家、学者。

Skyscraper and “Built by China”

Sun Wenjie

If the city is said to be a memory carrier of nation's continuation, building might be the most important component of this carrier, which records the city's splendor or downfall most vividly. Today, in China, a number of large and medium cities, the representatives in which, including Shanghai and Beijing, are gradually losing their memories, which is to great extent due to that most of important buildings (especially skyscrapers) do not involve Chinese designers or builders in construction, instead, they are designed and built by foreigners. For the Shanghai World Financial Center project (hereinafter called as "SWFC"), which was completed and put into use in August 2008, it is designed by a foreign architectural firm, however, it is the first foreign-invested skyscraper, which is independently contracted and built by Chinese construction enterprises in the world construction history. Chinese construction enterprises have demonstrated first-class level of "Built by China " to the world through general contracting of this project.

In golden Autumn of 2004, thousands of "SWFC People" full of passion all over the country, converged to Pudong Lujiazui block Z4-1, launching the construction of world's highest building. Since then, to complete construction of Shanghai World Financial Center with the most advanced management concepts and methods, the most advanced technology and equipment, the shortest duration, the best quality and the most safe construction process has become a common dream, for which, China State Construction Engineering Corporation Limited and Shanghai Construction Group are striving. Scientific management is to build global masterpiece, and hard working is to establish century monument. This project harvests so much joy and glory, winning certification of two highest items in the world, "the World Best Tall Building" in year 2008, "Magnolia Cup" of construction projects in Shanghai, two certificates of Guinness Record of "the World Highest Observation Deck" and "the World

Highest Hotel", first prize of Science and Technology Award (Provincial Level) of China State Construction Engineering Corporation and other awards, and intensively showing the most advanced management concepts, construction technology and construction standards in housing construction field in the world.

During construction and implementation of Shanghai World Financial Center, the two groups initiatively undertake the great trust, strictly abide construction contract, pursue mutual benefit and win-win situation, continuously improve management quality and build a harmonious construction atmosphere with the owner and all partners. In order to ensure that Shanghai World Financial Center can be transformed from various figures in the drawings into the new skyline at the Bund of Shanghai within the ultimate duration of 42 months. All our work, life and thoughts are overwhelmed around construction of this building. This is not only the success and pride of the thirtieth anniversary of China's reform and opening up, and the sixtieth anniversary of the founding of People's Republic of China, but also, the convincing performances before our eyes prove: Chinese construction enterprises are fully capable of undertaking construction of top skyscrapers in the world independently, and the capacity of "Built by China " has dominated in the top of the world construction industry.

In order to record the whole construction process of Shanghai World Financial Center, to leave milestone development slot for the construction industry, to give a permanent memory to the main contractor and subcontractor, over 10,000 construction participants in total, and to lay a solid foundation for declaration of National Science and Technology Award, meanwhile, to further expand popularity and reputation of this project, the two groups jointly compile a book of "Built by China—Construction record of Shanghai World Financial Center project". This book is mainly about pictures of construction process of Shanghai World Financial Center, showing excellent construction

management, superior construction technology, stunning construction difficulties and extraordinary construction speed embodied in the process of construction through a series of pictures, so as to establish positive image of large central state-owned enterprises, such as China State Construction Engineering Corporation Limited and Shanghai Construction Group, which is competing tenaciously, bold to be the front-runner, offering masterpiece and serving for the society.

We know quite well that height of any skyscraper will be constantly increased, which is also inevitable to Shanghai World Financial Center. However, as long as we continue to proceed from a new starting point, dare to challenge and never give up, we will definitely reach the peak of perfection and dominate in the world construction field for a long time.

Finally, we dedicate this book to builders of Shanghai World Financial Center, to colleagues of all society alliance, who show concerns about construction of SWFC, and to experts and scholars in this field.

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OPENING

# 开篇

