

广州新白云国际机场一期航站楼

Guangzhou New Baiyun International Airport Phase I Terminal

主编单位：广东省建筑设计研究院

主编：Mark Molen（特邀） 陈雄（执行）

Editorial Department: Architectural Design and Research Institute of Guangdong Province

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Mark Molen, AIA

Mark Molen先生1957年生于美国犹他州盐湖城。1979年至1981年在意大利生活、学习。1983年毕业于犹他州立大学文艺复兴建筑系，获建筑系的学士学位。1985年毕业于犹他州立大学，获建筑学硕士学位。1988年至今任犹他州注册建筑师（1988-129476-0301），有超过25年的相关建筑设计专业经验。专长是建筑设计、规划及方案创作。对规划设计、方案和作品创造的每一个阶段都非常熟悉，主要负责概念设计的开发，并有效地制定出最后的设计方案。现任Yang Molen Design International主笔设计师、首席执行官。他所设计的建筑类型包括办公大楼、商业大厦、住宅小区、银行、医疗建筑设施和航空建筑，他的设计获得各式各样的奖项：2004年国际建筑奖、AIA设计奖、美国混凝土研究院设计奖、现代医学建筑设施设计奖。在中国赢得5项国际设计竞赛。1998年至2000年担任广州新白云国际机场航站楼方案设计和初步设计的主笔设计师，目前继续负责新白云国际机场扩建工程的设计。

Mark Molen was born in Salt Lake City, Utah of America in 1957. From 1979 to 1981, Mr. Molen lived and studied in Italy. In 1983, he graduated and received the Bachelors Degree from University of Utah, majoring in Renaissance Architecture. In 1985, he received a Master Degree in Architecture in University of Utah. He has been a licensed architect since 1988 and has over 25 years of experience on architecture design experience. Mr. Molen's talent lies in conceptual design and architecture design development, planning and the creation of structural concepts. He is familiar with all phases of planning, conceptual design and industrial design. Mr. Molen is a Principal Architect and CEO of Yang Molen Design International. He has designed office buildings, commercial malls, residences, banks, as well as medical and aviation facilities. Mr. Molen has won many architectural awards including: 2004 World Architecture Award, AIA Design Awards, US Concrete Institute Design Prize, Modern Healthcare Design Award and has won 5 International Design Competitions in China. From 1998 to 2000, Mr. Molen was the design architect for the Guangzhou New Baiyun International Airport and lead the concept design and preliminary design phases of the project. Currently taking charge of the design of the Guangzhou New Baiyun International Airport expansion project.



陈雄 Chen Xiong

陈雄，1962年7月生于中国广州。1983年华南工学院建筑学系工学学士学位。1986年华南工学院建筑设计研究院建筑理论与设计硕士研究生毕业，同年进入广东省建筑设计研究院工作。现任广东省建筑设计研究院副总建筑师，2004年筹建机场设计所并担任所长，是教授级高级建筑师、中国一级注册建筑师、首批内地与香港互认的专业建筑师。担任广州市建筑学会常务理事、广州市环境艺术委员会委员、广州市建设科学技术委员会规划建筑专业委员会委员。2004年被评为广东省建设系统先进工作者。在20年的专业生涯中，主持和参与了多项大中型工程项目的设计，他设计的建筑类型包括办公大楼、居住小区、旅馆、银行和航空建筑，在大跨度建筑和高层建筑等超大型工程方面积累了丰富的方案设计、施工图设计及工程处理的实践经验，并具有较强的组织协调能力，善于组织和管理大型设计团队。他的设计获得全国和广东省优秀设计奖。2000年至2004年担任广州新白云国际机场一期航站楼施工图设计及装修设计的总负责人，目前继续主持新白云国际机场扩建工程的设计。

Mr.Chen Xiong was born in Guangzhou of China in July, 1962. Graduated in 1983 from the Architectural Department of South China Institute of Technology with the Bachelor Degree of Engineering.In 1986 completed the graduate programs of Architectural Theories and Design at South China Institute of Technology, and in the same year entered Architectural Design & Research Institute of Guangdong Province. Mr. Chen is Senior architect,registered architect (Gradel) and the deputy chief architect of Architectural Design & Research Institute of Guangdong Province. Director of the Airport Design Group since 2004. Member of Guangzhou Environmental Art Committee, member of urban planning and architectural design expert committee under Guangzhou Construction Science and Technology Committee. Model Worker of Guangdong construction sector in 2004. A designer winning awards on national and provincial levels. During the two decades of professional practising, Mr. Chen has taken charge of and been involved in many large and middle sized projects ranging from office, residential, hotel to bank and terminal, which provides him rich experiences in designing and handling large scale projects. He also has a strong ability of coordination, management and leadership in large design groups. He got some Excellent Design Prizes of national and Guangdong Province. From 2000 to 2004, he has been director of the architectural construction documents design and interior design of Guangzhou New Baiyun International Airport Terminal. Currently taking charge of the design of the New Baiyun International Airport expansion project.

献给为广州新白云国际机场航站楼工程建设做出贡献的人们！

Dedicated to those who contribute to construction at Guangzhou New Baiyun International Airport Terminal!

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广州新白云国际机场是二十一世纪初广州最新的门户形象……

Guangzhou New Baiyun International Airport - a brand new gateway image for the City of Guangzhou in the 21st century

















夜幕降临，随着一架架飞机降落在新机场，随着老机场跑道灯光的渐渐熄灭，一个令世人瞩目的时刻到来了：2004年8月5日，广州新白云国际机场正式启用。作为我国三大枢纽机场之一，一个按照中枢理念设计、建设、营运的崭新机场，经过近10年的筹划，4年的规划设计，3年零10个月的建设，终于在花都一片荒芜的土地上崛起。这一次转场成功既是广东建筑业的一大成就，也是我国民航史上一个重要的里程碑。

沿着绿树成荫、繁花似锦的机场高速一路向北行驶，一座气势磅礴、柔和雅致的航站楼展现眼前。在蓝天白云之下，地平线上一组流畅有力的弧线，勾勒出独特的建筑形象，高低起伏，充满动感，在亚热带植物的衬托下体现出中国南大门的雄伟气势。

新机场的投入使用，强化了广州地区的交通枢纽功能，优化了我国民航运输网络，还将大大改善广东省、广州市的投资环境，提高广州的国际影响力和竞争力，巩固和加强其作为珠三角、华南地区中心城市地位，为建设现代化大都市迈出了重要的一步。

机场作为广州市面向未来的门户，航站楼无疑是这个门户的标志。建成后的航站楼在形象塑造、空间设计、环境处理、流程布局、陆侧交通规划、空侧机坪规划等方面都达到了较高的水平，反映了中国特别是广州最新的建筑技术水平，展示了新世纪中国大型标志性建筑的先进性与独特性。其规划设计体现了以下几方面的特色：

1.建筑形象个性鲜明，设计风格清新。航站楼整体造型线条流畅，并选用许多新型的建筑材料，如可透光的张拉膜顶篷，三维曲面的铝合金屋面，倾斜的圆锥形弧面点式玻璃幕墙，有韵律排列的钢结构人字形柱，有节奏成行的张拉膜采光窗。呈现在人们眼前的是一座具有高科技风格，造型简洁流畅，现代化大型国际航空港形象。

2.空间宏伟壮观，视野开阔，风采各异。主楼办票大厅、连接楼迎客厅以及指廊候机厅是三个最主要的功能空间。办票大厅尺度恢宏，立面幕墙通透明亮，大厅中间两排巨型立柱，拱形钢结构上盖张拉膜，空间宏伟高耸而富有纪念性。连接楼迎客厅舒展开阔，室内外空间交融，张拉膜采光窗送下柔和充足的光线。指廊候机厅则由于顶棚的高低起伏而充满张力和动感。设计者力求通过巨大的空间、开阔的视

野，带给旅客强烈的视觉冲击力，使其感受到飞行和宇宙的意味。

3.装修与建筑风格统一，内部环境清雅舒适。航站楼的室内装修延续了现代、简洁、流畅、精美的建筑风格，在几个主要的大空间，将钢结构、屋面板、张拉膜、点式玻璃幕墙成为空间装饰的语言。材料选用花岗石、地毯、铝板、玻璃、不锈钢等，采用中间偏冷的主色调，如银灰、灰白、浅灰、深灰，使室内环境浑然一色，加上大量运用自然光，意境清雅，体现大型交通建筑的神韵。室内细部也作了精心设计，如形式独特的办票岛、系统完整的标志牌，还有点式玻璃电梯、栏杆、隔断等等，使候机环境美观舒适。

4.流程布局独特，方便扩建及分期实施。航站楼的流程布局：有明显的中轴线，主体形象突出，出发与到达完全分开；而短指廊组合的航站构形，可以最大限度地利用机坪空间，停靠更多的机位，分期灵活，扩建方便。

时至今日，新机场的运行已经一年多，它为南来北往的客人提供了很好的服务，其造型、空间和环境也给人们留下了难以忘怀的印象。毫无疑问，这个目前全国规模最大的航站楼是千千万万建设者群策群力、努力拼搏的结果。新机场的建成标志着广州正面向国际、面向未来，以坚定的信念、无比的干劲，实现现代化大都市的梦想。

本书的出版，将是对广州这一世纪工程诞生的很好的纪念和总结，这本图文并茂的专集也是我国为全面介绍航站楼工程而出版的少有的大型著作。

应广东省建筑设计研究院陈雄副总建筑师之邀，欣然命笔，谨以此文作序。

As the curtain of night fell on the old airport where the lights along the runways went out one by one while planes landed on the new airport in Guangzhou, the moment that attracted wide attention had come - Guangzhou New Baiyun International Airport was officially completed and began operations on August 5, 2004. It is one of the three major hub airports in China, designed, constructed and operated under the central hub concept. After nearly a decade of preparation, four years of planning and designing, and forty-six months of construction, a brand new airport finally rose up at Huadu, which boasts a great achievement of Guangdong's architectural industry and is also an important milestone in China's civil aviation history.

When you drive along the approaching road lined with trees and flowers, the modern terminal building with strong curves in front of your eyes gradually unfolds under the blue sky and white clouds, addressing a dynamic powerful image as the south gateway to the city.

Being an important step to build Guangzhou into a modern metropolis, the new airport strengthens the city's function as a transportation hub, optimizes the country's civil aviation transportation network, and will greatly improve the investment environment of Guangzhou in a larger area, make the city more internationally influential and competitive, and consolidate its position as the center of the Pearl River Delta and south China.

If the airport can be regarded as the gateway to the future, the terminal building is no doubt the symbol of the gateway. It reaches a high level in all aspects including architectural design, space arrangement, environment planning, passenger flow organization, landside transportation planning and airside apron planning, which reflects the latest achievement of architectural technology in China, particularly in Guangzhou, and showcases the advancement and uniqueness of China's large-scale landmark buildings in the new century.

The design displays the following features:

1. It erects a distinctive architectural image in a clear-cut style.

With flowing lines and new materials, such as the transparent tension membrane ceiling, the hyperboloidal metal roof, the slanting tapering drilled glass curtain, the rhythmically arranged inverted V steel columns and tension membrane windows, it presents a picture of a large-scale modern international airport with a simple yet high-tech flavor.

2. It provides splendid large spaces with wide views and different styles. The check-in hall at the main building, the meeting hall at the connecting building and the waiting halls at the concourses are the three main types of functional spaces. The check-in hall uses bright and transparent curtain walls as its elevations. In the middle of the hall there are two rows of giant columns, and the arch steel structure is covered with tension membrane. All these help create a magnificent and memorial space. The meeting hall adopts an extending layout that enjoys an interaction between indoor and outdoor spaces with soft lighting coming inside from the tension membrane windows. The waiting halls at the concourses are full of tension and dynamics due to the undulating form of the top ceiling. Through the use of large space and wide view, the designer tries to create a strong visual impact that implies aviation in the universe.

3. The interior decoration is the extension of the architecture and forms a simple, elegant and comfortable interior environment. It continues the architectural spirit of modernity, simplicity, streamlinedness and exquisiteness. In the major large spaces, steel structure, ceiling panels, tension membrane, fixed point glass curtains are used as the major language of space decoration. Materials used include granite, carpet, aluminum, glass and stainless steel, while a coldish neutral tone including silver gray, off-white gray, light gray and dark gray is employed to set up a harmonious interior environment. Together with the massive use of natural light, the space embodies a simple yet elegant spirit of a large-scale transportation building. All the details, such as the check-in islands, the sign system, the fixed point glass paneled escalators, the handrails and partition walls, are elaborately designed to orchestrate a pleasant comfortable environment.

4. The special layout of passenger flow provides convenience to future expansion and construction by stages. The layout of the terminal building features a clear central axis, an outstanding image of the main body, and a complete separation of departures and arrivals. Meanwhile, the concept of short concourses maximizes the capacity of the apron space to offer more parking stands, which also ensures flexible construction stages and easier future expansion.

Up to the present, the new airport has been operating for nearly one year and offering first class services to passengers from all over the world. Its architectural form, space and environment also leave people an unforgettable impression. Doubtless to say, the terminal building, which is the largest in scale for now in China, is the result of the collective wisdom and efforts from thousands of people involved. Its completion marks the fact that Guangzhou, opening up to the outside world and facing the future with firm confidence and matchless drive, is on her way to realize her dream of becoming a real international metropolis.

The publishing of this book will be a great opportunity to commemorate and summarize this "Project of the Century" in Guangzhou, and also enriches the publications of terminal buildings not so commonly seen in our country.

The Preface is cheerfully written for the book under the invitation of Mr Chen Xiong, Deputy Chief Architect of Architectural Design and Research Institute of Guangdong province.

序言	12	Preface		建筑空间	91	Interior	
论文	17	Thesis		主楼办票大厅	97	The Check-in Hall in the Main Building	
面向未来的广州城市门户	18	A Spectacular Front Door to the City and the Future		室内设计风格 材质及色彩选择	100	The Interior Design, Materials and Colors	
——新白云机场的规划与发展		——The Planning and Development of New Baiyun International Airport		主楼立柱与中庭	102	The Columns and the Atriums of the Main Building	
广州机场设计竞赛	22	The Design Competition of Guangzhou New Baiyun International Airport		照明设计	102	The Lighting Design	
构筑崭新的国际空港	25	To Create a Brand New International Airport		连接桥	106	The Connecting Bridges	
——航站楼建筑设计		—— Architectural Design of the Phase I Terminal		连接楼三层商业厅	108	The Shopping Area on the 3rd Floor of the Connecting Building	
航站楼结构设计	30	The Structural Design of the Phase I Terminal		连接楼二层到达厅	108	The Arrivals Hall on the 2nd Floor of the Connecting Building	
				指廊候机大厅	115	The Waiting Hall in the Concourses	
				连接楼到港大厅	117	The Arrivals Hall	
规划设计	33	Planning & Design		主楼商业厅	120	The Commercial Area in the Main Building	
独特的航站楼	37	A Unique Terminal		主楼地铁站厅	122	The Subway Station Hall in the Main Building	
机场区位及交通衔接	38	The Location and Transportation Network		贵宾室	125	The VIP Room	
航站楼构形	39	The Layout of the Terminal		头等舱、商务舱候机室	127	First Class and Business Class Waiting Areas	
				机电设计、专用系统及细部设计	131	M&E Design/Systems for Special Purposes/Detail	
建筑外观	57	Exterior		机电设计	132	M&E Design	
建筑形象及其标志性	59	The Architectural Image as a Landmark		办票岛	134	Check-in Islands	
主楼玻璃幕墙	69	The Glass Curtain Wall of the Main Building		行李系统	137	The Baggage Handling System	
连接楼玻璃幕墙	73	The Glass Curtain Wall of the Connecting Buildings		主要旅客流程	141	Major Passenger Flows	
张拉膜系统	78	The Tension Membrane System		引导标识系统	142	The Signage	
金属屋面系统	83	The Metal Roofing System		细部设计	147	Detail Design	
屋盖系统、人字形柱	84	The Roofing System、Inverted-V Columns					
登机桥	89	The Boarding Bridges		工程大事记	149	The Memorabilia	
				航站楼设计团队	158	Design Team	
				航站楼有关数据	164	Basic Info	
				本书编辑团队及编辑单位	165	Editorial Team and Firms	
				编后记	166	Afterword	