



**BAU**

CONGRESS CHINA 2019

**BCC国际建筑科技大会**

**Nov 5-7, 2019 · Shanghai**

Shanghai New International Expo Centre  
SNIEC-W5

The future of building for China

## 主题简介 Abstract

### 世茂洲际深坑酒店的设计和施工挑战

#### Design and Construction Challenges of the Shimao Intercontinental Quarry Hotel

松江世茂洲际酒店是度假酒店设计创新方案的典范。其利用 90 米深、平面面积达 250x3000 米的废弃大型采石场这一独特而非比寻常的地理位置，不仅为住客和访客提供了新的体验，而且为一个通常被认为无用的区域赋予了新的生命和实际用途。我们可以将这种类型的开发称为“棕地的成功回收利用”。然而，这一不寻常的选址同样充满挑战。这座建筑实际上是一座颠倒的高耸摩天大楼，并在上下两端加以固定。由于其用途为度假酒店，因此建筑物的这种倒置性造成了诸多技术问题，从结构、抗震到机械服务，以及供水管理、排水和运营。通过成功攻克这些难题，我们获得了一座独特的创新建筑，不仅无缝融入特殊的周围环境，而且以别具一格的手法将自然雕琢与人为创造合为一体。这种不寻常选址的其他优势还体现在其被动可持续性方面。这些要归功于相邻采石场崖壁的热惯性和近 20 米深的湖泊所产生的特殊微气候条件。在我的报告中，我将回顾从概念到细节设计的整个历程，展示该项目的施工进度，解释如何克服并以创新方式解决不寻常地理位置所带来的各种技术挑战，同时探讨超越传统设计解决方案、寻求全新建筑结构设计途径所带来的各项优势。

The Shimao Intercontinental Hotel in Songjiang is an example of an innovative approach to resort hotel design. It takes advantage of a unique and unusual location in a disused 90-metre-deep rock quarry covering an area of 250 × 3,000 metres and thus, in addition to providing a new experience for the guests and visitors, contributes to giving new life to an area which would normally be thought of as lost to any practical use. We can call this type of development 'successful recycling of a brownfield site'. However, unusual locations bring their challenges. The inverted nature of the building – which is in fact an upside-down skyscraper or a so-called 'groundscraper' (a tall building fixed at both ends) creates technical problems ranging from structural and seismic to mechanical services, water management, drainage and operational matters associated with its function as a resort hotel. Solving these difficulties gives us the benefit of a unique and innovative building, seamlessly integrated into its special environment and forming a unified expression of natural and manmade forms. The additional benefits of such an unusual location can also be seen in the form of passive sustainable features derived from the special microclimate conditions generated by the thermal inertia of the adjacent rock quarry cliffs and its almost 20-metre-deep lake. In my talk, I shall look at the design development from the concept to the detailed design and show the construction progress of this project, explaining how the various technical challenges presented by such an unusual location have been overcome and innovatively resolved. I will also discuss the benefits presented by the choice to go beyond conventional design solutions and to seek new innovative paths in architecture.



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## 演讲嘉宾 Gusset

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**Martin Jochman**

英国建筑师Martin Jochman获得英国皇家建筑师学会建筑硕士学位，在世界各地许多大型建筑的设计和施工方面拥有30多年的经验。他是上海洲际世茂仙境酒店的设计师，这是一家88米深的地下酒店，曾是中国一座废弃的采石场。2012年，Martin Jochman在中国上海成立了JADE+QA工作室（Jochman Architecture Design Environment Ltd + Quarry Associates (HK) Ltd），以便在与开发商签订合同后继续世茂深坑酒店的设计工作。自开业以来，JADE+QA在中国完成了五个大型项目的建设，并在英国设立了办事处。2011年，他设计的上海洲际世茂酒店获得香港国际地产投资交易会（MIPIM）亚洲大奖金奖。

Martin Jochman Dip Arch RIBA is a British architect with over 30 years of experience in design and construction of many major buildings around the world. He is the designer of the InterContinental Shanghai Wonderland, an 88-metre deep underground hotel that was built in an abandoned rock quarry in China. In 2012, Martin Jochman established Studio JADE+QA in Shanghai, China (Jochman Architecture Design Environment Ltd + Quarry Associates (HK) Ltd), to continue the work on the Shimao Quarry Hotel after signing a contract with the developer. Since opening the studio, JADE+QA have completed construction of five major projects in China and established an associated office in the United Kingdom. In 2011, he was awarded a gold prize for the Shimao InterContinental hotel at the MIPIM Asia awards in Hong Kong.