## **Impact Challenger Exhibition Halls and Convention Center**

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## 1. Introduction

Completed in 2006, Impact Challenger is the latest addition to the existing exhibition and convention facilities in Muang Thong Thani, on the outskirts of Bangkok to cater for the growing MICE market in Asia.

Designed by Pacific Architecture and Planning and engineered and built by Bouygues-Thai Co., Ltd., the 212,000 sqm facility is in 2005, the world's longest column free exhibition hall, Asia's largest indoor exhibition center and Thailand's largest ballroom.

This fast-track project was completed in 20 months with partial operation of the facility only 13 months after the first pile was driven in August 2004.

The 131 meter wide column free exhibition hall is achieved thanks to the roof structure which is composed of bolted space frame trusses 4.5 meter girth spanning 132 m. The choice of this technology allowed us to meet the very tight programme of construction and to mitigate the difficulties of site erection throughout the raining season.

This paper presents a summary technical description of the building and the erection methods of the large span roof structure.

## 2. Impact Challenger

Having successfully weathered the 1997 Asian Crisis, the owner, Impact Exhibition Management Co., Ltd. and especially its founder, Khun Anant Kanjanapas, felt the need to add an iconic building to complement the well established Impact Arena that hosted part of the events of the 1998 Asian Games.

Khun Anant set the main characteristic of the world largest column free exhibition hall to his Architect, Pacific Architecture and Planning Co., Ltd. from the inception of the project.

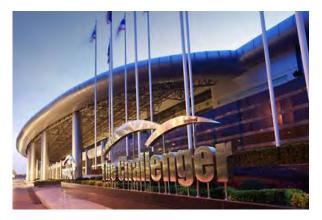


Fig. 1a: Impact Challenger

Impact Challenger is located in Muang Thong Thani on the northern outskirts of Bangkok, and is directly linked to the CBD by a toll based express way. Completed in 2006 after 20 months of works, the 212,000 sqm facilities cater for the growing MICE market in Asia. (Fig. 1a & 1b)