

Giant Observation Wheel in Bangkok

Samard BUDDEE
Structure Engineer
FSE Consultant Co., Ltd.
Bangkok, Thailand
samard@fseworld.org



Samard Buddee, born 1962, received his civil engineering degree from the King Mongkut's University of Technology Thonburi in Thailand. For more than 29 years, he has been working with many service life such as ; design, project management and retrofitting the structures.

Summary

The first giant observation wheel in Bangkok (Bangkok Eye) is completed in 2012, and still maintain the biggest observation wheel in Bangkok. This paper shows the engineering principles of foundation design for the giant wheel. The superstructure of the GOW model R60SV was imported from Dutch Wheels, Netherland.

Keywords: Observation; wheel; wind load; foundation; anchor bolt; erection.

1. Introduction

1.1 The Chronology of Giant Wheels

- 1.1.1 In 1896, Vienna Riesenrad-60 m diameter, 14 capsules with 15 person capacity.
- 1.1.2 In 1900, La Grande Roue, Paris – 80 m diameter, 36 capsules with 10 person capacity.
- 1.1.3 In 2001, London Eye -135 m diameter, 32 capsules with 25 person capacity.
- 1.1.4 In 2008, Singapore Flyer -150 m diameter, 32 capsules with 25 person capacity.

1.2 The Bangkok Eye

Bangkok Eye is located beside Chao Phraya River at ASIATIQUE The Riverfront. It is a 60 m in diameter with 42 capsules, 8 person capacity per capsule. The highest location of capsules is enable to entertain the view of Bangkok City with Chao Phraya River running through it. The attraction of Bangkok Eye also is promoted the numbers of tourist to visit ASIATIQUE as a whole.



ASIATIQUE has successfully combined two of the most popular shopping experiences in the city: a night bazaar and a mall. This once-bustling international trade port has been transformed, with over 1,500 boutiques and 40 restaurants housed under a huge replica warehouse complex (see Fig.1).

Fig.1: Bangkok Eye