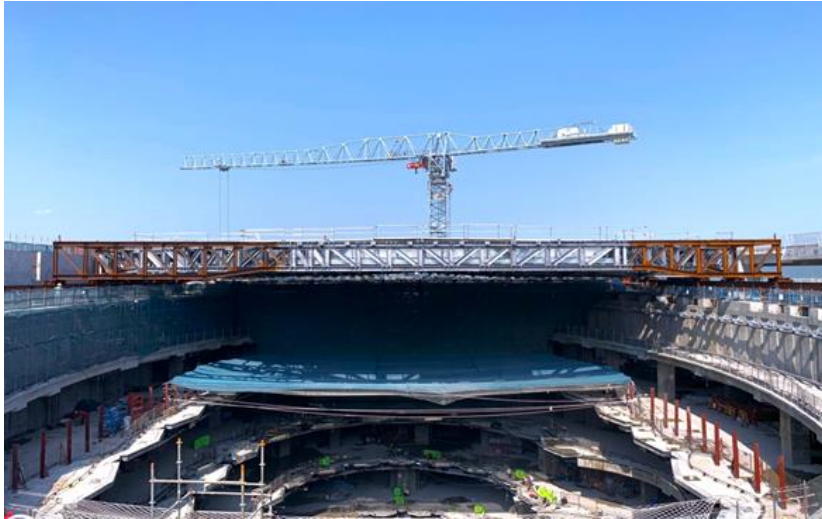


Project Profile: Heavy Launching of 1,600 Tonne Roof Dome Truss at Sky City Chek Lap Kok



Skycity is a major integrated commercial development and is a core part of the strategy to expand and transform Hong Kong International Airport (HKIA) into an 'Airport City'. Developed in phases the gross floor area is 350,000 square meters of retail, dining and entertainment facilities.

Due to the size of the project the roof structure is supported on a very large roof dome truss. The total weight of the truss is 1,600 Tonnes.

Harmony Construction Co. Limited were requested by the Developer New World Development Co. Limited to launch the 1,600 T roof truss across the oval shaped walls of the structure.

The roof truss was lifted in section by crane and assembled on a specially constructed launching platform. The Main Contractor provided temporary steel rails longitudinally to allow pushing of the heavy 13 number roof trusses one after the other.

In January 2022 Harmony utilised four electronically synchronised hydraulic jacks to push the truss into position. The total duration of the project was 3-months.

All works were carried out by the specialist labour and engineering expertise of Harmony Construction Co. Limited.

During the works the following equipment was utilised to ensure the push was even and no rotation of the truss occurred:

- 4 number hydraulic jacks
- 1 number pushing pump
- 1 number electronic synchroniser

Heavy Launching

Launching of 1,600 T Roof Dome Truss

Contract Value

\$HK 1,650,000

Duration

3-months (2022)

Client

Hong Kong Airport Authority

Designer and Architect

New World Development Co. Limited

Main Contractor

Roxy Limited part of New World Development Co. Ltd.

Heavy Launching Equipment

Harmony Construction Co. Limited

Heavy Launching Contractor

Harmony Construction Co. Limited

Further Information

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