



## Al Tayseer Towers Hotel Mecca, Saudi Arabia

### Project Overview and Details

The Al Tayseer Towers Hotel project in Mecca is one of the largest building projects in Saudi Arabia. The hotel design is based on five, 40 floor towers containing a total of 5.000 rooms and has been built to meet the increasing numbers of pilgrims in Mecca.

“Originally the project was planned with the installation of static balancing valves in the cooling systems, but we convinced the consultant who was responsible for the project that Frese’s dynamic balancing valves would be a more efficient and economical solution”, says Yasser H. Awwad, Frese’s Regional Sales Manager in Saudi Arabia.

The installation of dynamic valves in the hotel’s cooling system can reduce pump energy consumption in the building by up to 35% due to a higher Delta T and increased system stability, with a further saving of up to 50% achievable through simplified system design and optimal pump control. A significant saving compared to cooling systems using traditional valves.

### Solution

The hotel’s cooling system was installed with

- 6,500 Frese ALPHA dynamic balancing valves
- 19,500 Frese Ball Valves
- 6,500 Frese strainers

The building is served by 34 chillers, each rated at 350 tons to deliver a total cooling capacity of 11,900 tons. The hotel was scheduled to welcome the first guests in December 2013.

KNOWLEDGE

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Energy-saving valves