

Burj Chalifa: Highest skyscraper in the world has BUTTING design & structure pipes

Burj Chalifa, the tallest building in the world, was opened in Dubai at the beginning of January 2010, after a construction period of about six years. The giant, where in future 12,000 people are to live and work, towers 828 metres above the emirate. It is intended as the future centre of a new city development area, called Downtown Dubai, and its total of 200 storeys represent a technical and logistical challenge of the highest order in every respect: The wind-speed alone at this height is enough to take your breath away.

BUTTING too has played its part in this huge project by manufacturing and supplying design and structure pipes which run round the outside of the building horizontally and thus “disguise” the Burj.



The BUTTING design and structure pipes are each interconnected to cover nine pipe levels, distributed over all levels of the skyscraper. The high quality of our pipes and the promise of short delivery times, which was kept for all 4 deliveries, were the crucial criteria for our customer.

In addition to their decorative function, the pipes must also fulfil requirements in relation to load: The tower is supplied on all levels with external Building Maintenance Equipment (BME). Maintenance and cleaning of the facades is to be performed using a total of 13 lift systems, which in each case go out from a so-called parking zone within the building. In this context, the BUTTING structure pipes also serve partly as rails on which the lift systems which the lift systems are shunted on to, and then travel along.

11,200 m of pipes with an external diameter of 273 mm, in wall thicknesses of 3.0 mm, 5.0 mm, 8.00 mm and 12.50 mm were produced by BUTTING. Delivery took place in fixed lengths of 5 to 12 m. Because of the maritime atmosphere in Dubai with a high salt content in the air, the material AISI 316L / 1.4404 was used.

A particular challenge in producing the pipes was that the required external diameter tolerance for the subsequent bend processes had to be complied with in a uniform manner for the complete batch in the project.

Now, after the Burj Tower has been completed, the eyes of the whole world will be on Dubai – and that applies to the proud suppliers from Knesebeck too.

BUTTING – Progress by Tradition