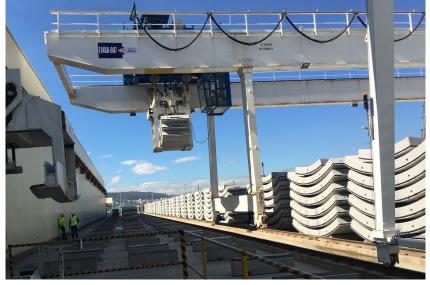
Underground Tunnel Line 1

Quito, Ecuador



Transport von Tübbingen im Werk © www.maxfrank.com

MAX FRANK Spain supplied fibre concrete spacers for the production of precast concrete parts for the Quito subway tunnel. A total of 30 containers were supplied.

The following product properties were essential for the selection of the fibre concrete spacers:

- High loads
- Low water absorption
- Reduced tolerances in the vibrating formwork

The Quito Metro is an underground rail mass transit system consisting of a single line in Quito, the capital of Ecuador.

The length of the underground tunnel of line 1 is 19 kilometres. Three tunnel milling machines worked in parallel on different tunnel openings. Seven different segment moulds were used for tunnel construction, a total of 42. The progress of the machine allowed a laying speed of one ring with seven segments per hour.



Type of building: Railway station

Clients and Developers: Stadtverwaltung Quito

Engineers/ Specialist Planners: Acciona Ingemey

Building contractor: Acciona Odebrecht https://www.odebrecht.com.ec/

Completion: 2017

Project link: http://www.metrodequito.gob.ec/

Underground Tunnel Line 1

Quito, Ecuador

Products used:





Transport of segments in the plant © www.maxfrank.com





Introduction of reinforcement with fixed spacers into the vibrating formwork





Fibre concrete spacer with wire and clamp $\ensuremath{\mathbb{C}}$ www.maxfrank.com



Stacked tubbings in the outdoor area $\ensuremath{\mathbb{C}}$ www.maxfrank.com