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Product News

Belt Conveying - as the Crow flies: Belt Conveyor Truss suspended on Ropes

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The Flyingbelt is an example of engineering prowess for a more cost effective, efficient and environmentally-friendly conveying solution compared to either conventional truck transportation or standard ropeway systems. In Brazil, one such system just started working for the raw material supply of a cement factory.



Part of the 7 km long Baroso Flyingbelt conveyor in Brazil. The distance between the pylons is up to 650 m. (Picture: © Sempertrans/Agudio)

The Italian ropeway manufacturer Leitner ropeways' subsidiary Agudio, together with Semperit Group's Sempertrans segment, have further developed a system for the transportation of bulk solids over long distances - the Flyingbelt, a conveyor belt suspended on ropes. Under difficult topographical conditions, the unique system transports 1500 tph of material from a limestone pit to a LafargeHolcim cement plant in South Eastern Brazil. The new Flyingbelt, with a length of approximately 7 kilometres, is actually the longest in the world.

"With the Agudio "Flyingbelt" we have installed a truely innovative bulk materials transportation system. The Sempertrans conveyor belt not only overcomes - at a height of up to 36 m - terrain that can only be accessed with difficulty, it also transports material efficiently and in an environmentally-friendly way, saving more than 40 truck journeys every hour", comments Thomas Fahnemann, CEO of Semperit Group.

Efficient and with low environmental Impact



The Flyingbelt transports 1500 tph of material from a limestone pit to a cement plant.

The conveyor belt was produced in the Sempertrans plant in France and shipped to Brazil. The customer LafargeHolcim was convinced by the lower long-term operating expenses and the higher transportation capacities. The electricity consumption of the new conveyor equipment is only around one third of that of conventional ropeway systems and its capacity almost quadrupled to 1500 tph, instead of the previous maximum of 400 tph.

In addition, the construction work needed on the ground for traditional conveyor belts, which encroaches significantly on nature and the landscape, was not necessary for the Flyingbelt in Brazil. Following the successful completion of the LafargeHolcim project, Sempertrans and Agudio plan to convince further customers about the new technology. New projects are in the pipeline, also in areas other than the core mining segment.