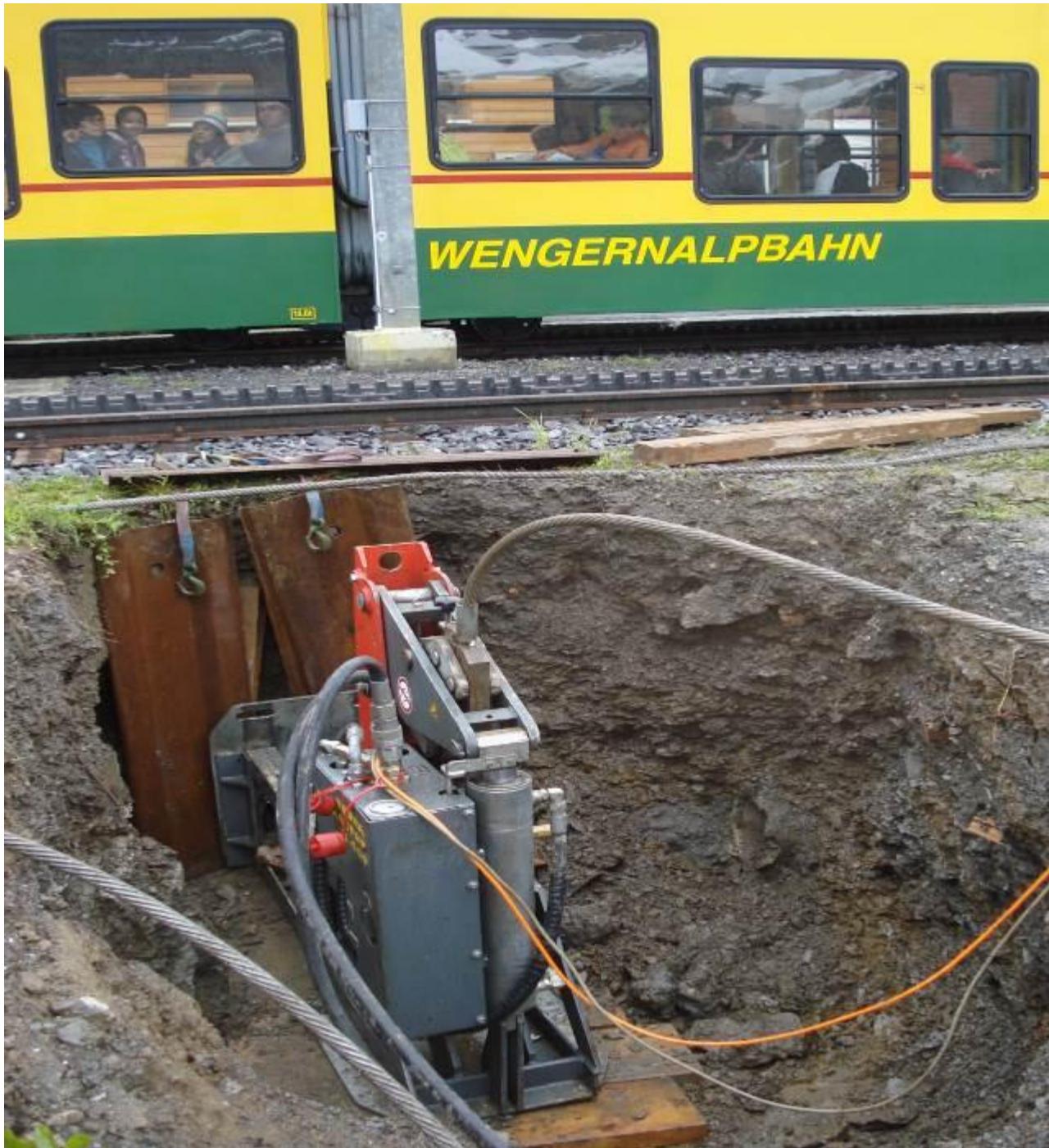


Cable Burster in the Swiss Alps



A sewer line had to be renewed on the Wengernalp in the Swiss Alps. This was done by the contractor Künzi + Knutti of Adelboden with the TERRA-EXTRACTOR X 400. The old concrete pipe was blocked. It runs underneath the two railway tracks of the Wengernalpbahn (Railway Company of Wengernalp). The Wengernalpbahn connects the cities Lauterbrunnen and Grindelwald with the Kleinen Scheidegg with an altitude of 2'061 m (6'800 ft). It is the longest rack and pinion railway in the world. Open trench was impossible. This renewal had to be done trenchless!

All machinery and material was carried by rail from Lauterbrunnen to Wengernalp.

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The equipment is loaded onto a wagon of the Wengernalpbahn.



Arrival at the Wengernalp.



The picture shows the
TERRA-EXTRACTOR X 400
in the terrific Swiss Alps.



The pulling cable is slid through the cable burster and through the old pipe.

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The cable burster X 400 is lifted into the working pit.



The cable coupling is assembled onto the pulling cable.



The 3-wing cutter and the expander cone are assembled onto the cable coupling.



The expander chuck is mounted onto the new pipe.

Completely assembled and ready for bursting.

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Tourists from all parts of the word watch the bursting procedure.



The 3-wing cutter bursts the old concrete pipe.



The expander cone displaces the old pipe sidewise and produces a large channel for the new pipe.



The 3-wing cutter arrives in the working pit.



The new pipe is pulled in.

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