

SIEMENS

Ingenuity for life

Tunnel Digitalisation Center

Hagerbach, Switzerland

Get right inside tunnel digitalization

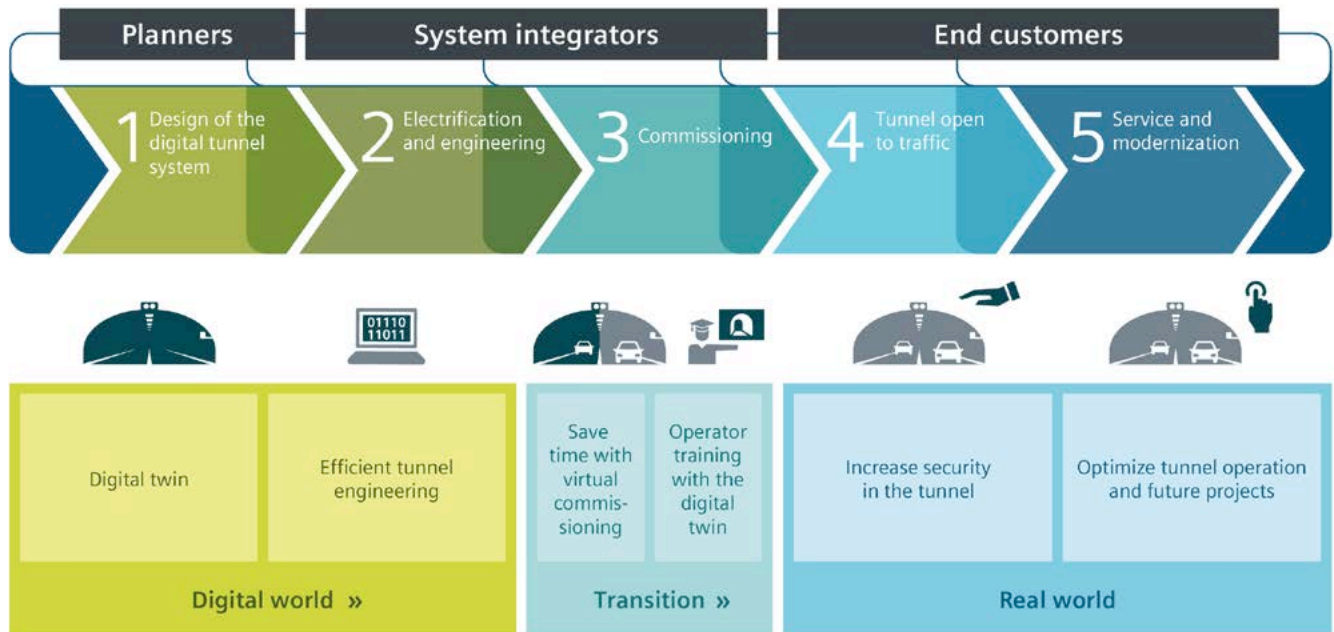
The 5.5 km long Hagerbach Test Gallery in Flums, Switzerland, houses a unique test laboratory – the “Tunnel Digitalization Center” (TDC). The TDC facilitates the demonstration and simulation of tunnel applications in a real-life environment using vivid examples. Whereas the conventional implementation of new tunnel solutions on site entails high expenditure and can only take place after completion of the tunnel itself, the TDC shows you how the digital twin delivers genuine added value for commissioning and testing before the work is done on the actual construction. The TDC is equipped with numerous control and automation solutions. You can, for example, test the functions of the TIA Portal engineering framework. The TIA Portal creates added value in every phase of your tunnel project – from planning and engineering right through to commissioning.

As the TDC is a joint initiative between SCAUT, Siemens AG and other industrial partners, you can also experience, in live action, how automation solutions can be easily integrated into new or existing complex tunnel projects.



Experience new technologies and innovative concepts in live action on a 1:1 scale – at the Tunnel Digitalization Center

The focus at the TDC is on cross-phase and cross-discipline system solutions that span the entire value chain as well as the entire life cycle of tunnel systems – starting with planning using BIM and the subsequent framework construction and electro-mechanical installation through to the operational phase and digital maintenance services.



Benefit from digitalization

In addition to reducing complexity, the Tunnel Digitalization Center focuses on cutting time requirements, optimizing economic efficiency and raising productivity. This goal is achieved using standardized, efficient engineering and a high degree of automation. As a consequence, your tunnel can be brought into service sooner, thanks to virtual commissioning, training and simulations.

Digitalization, however, does come with its own challenges. With the increasing connectivity of machines and industrial systems, there is also a growing risk of cyber attacks. Appropriate protective measures are therefore obligatory, particularly in critical infrastructure systems. In order to protect your tunnel comprehensively from cyber attacks, both from within and from the outside, Siemens offers a holistic Defense-in-Depth concept. The high level of security and optimized maintenance thus enable the sustainable and long-term operation of your tunnel.



Would you like to visit our site? Then please contact us. We will be happy to arrange an individual appointment with our experts.

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