

High and dry through the Gotthard tunnel

Endress+Hauser provides measurement technology for tunnel drainage

After 20 years of planning and construction, Switzerland celebrates the completion of the Gotthard Base Tunnel. At 57 kilometers, it's the world's longest railroad tunnel. 2,300 meters of solid rock rises above the new line at its deepest point. The construction must not only withstand extreme mountain pressure but also substantial volumes of mountain water must be prevented from seeping in.

To make sure the entire tunnel stays dry, two drains were laid in the floor of each of the single-track tubes. The drainage system separates the (clean) mountain water from the (mostly clean) wastewater that is drained off for removing impurities during operations or in the event of an accident. Every second, five liters of wastewater are carried away from each tunnel tube in every direction. The water is collected in catch basins at both ends of the tunnel and checked for any pollution.

A project of symbolic character

The measurement technology for the tunnel drainage originates from process automation specialist Endress+Hauser: 180 instruments, some explosion protected, and three measuring panels detect flow volumes and levels of mountain and wastewater, conductivity, the pH value and the turbidity of the wastewater. For Stefan Bürki, in charge of the project at Endress+Hauser Switzerland, the installation has a very special meaning: "I am proud to be part of this once-in-a-lifetime project!"

For press photos, please visit www.alptransit.ch/en/media/image-gallery/

The Endress+Hauser Group

Endress+Hauser is a global leader in measurement instrumentation, services and solutions for industrial process engineering. The Group employs 13,000 personnel across the globe, generating net sales of more than 2.1 billion euros in 2015.

Structure

With dedicated sales centers and a strong network of partners, Endress+Hauser guarantees competent worldwide support. Our production centers in 12 countries meet customers' needs and requirements quickly and effectively. The Group is managed and coordinated by a holding company in Reinach, Switzerland. As a successful family-owned business, Endress+Hauser is set for continued independence and self-reliance.

Products

Endress+Hauser provides sensors, instruments, systems and services for level, flow, pressure and temperature measurement as well as analytics and data acquisition. The company supports customers with automation engineering, logistics and IT services and solutions. Our products set standards in quality and technology.

Industries

We work closely with the chemical, petrochemical, food & beverage, oil & gas, water & wastewater, power & energy, life science, primaries & metal, renewable energies, pulp & paper and shipbuilding industries. Endress+Hauser supports its customers in optimizing their processes in terms of reliability, safety, economic efficiency and environmental impact.

History

Founded in 1953 by Georg H Endress and Ludwig Hauser, Endress+Hauser has been solely owned by the Endress family since 1975. The Group has developed from a specialist in level measurement to a provider of complete solutions for industrial measuring technology and automation, with constant expansion into new territories and markets.

For further information, please visit www.press.endress.com or www.endress.com

Contact

Martin Raab
Group Media Spokesperson
Endress+Hauser AG
Kägenstrasse 2
4153 Reinach BL
Switzerland

Email martin.raab@holding.endress.com
Phone +41 61 715 7722
Fax +41 61 715 2888