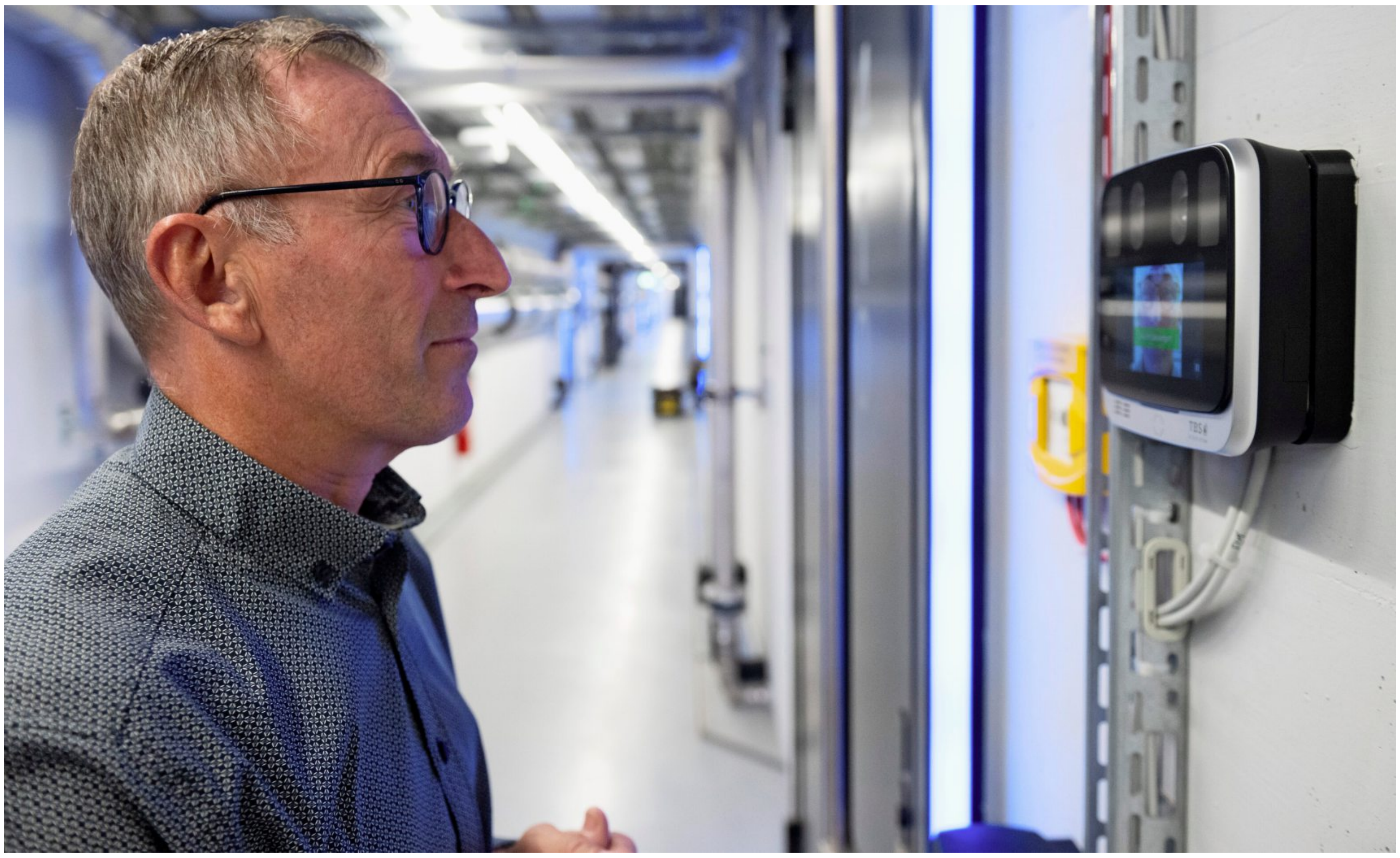
LIKE IN A SCIENCE FICTION MOVIE

There are many providers of biometric access systems. However, Touchless Biometric Systems from Pfäffikon SZ is one of the few companies worldwide that manufactures both software and hardware. This is what makes the company unique.

Natalie Ehrenzweig



Edwin Ebbing from EWL shows an iris scanner from TBS in the Stollen Luzern data center.

Image: Boris Bürgisser (October 22, 2025)

Anyone who rings the doorbell at Touchless Biometric Systems (TBS) in Pfäffikon SZ will be greeted by a normal intercom system and door buzzer. However, it is quite different for the company's customers. TBS produces biometric access and time recording systems – for example, for the Lucerne energy supplier EWL. Behind the ice rink in Tribschen, EWL operates the StollenLuzern data center. The high-security data center offers 1,640 square meters of IT system space for approximately 600 racks, i.e., server cabinets. Companies can rent space for their server hardware in the former civil defense bunker.

"Among other things, we offer maximum security here with the TBS access system," explains Edwin Ebbing, holding his eye up to the camera. The reader identifies the sales manager and opens the first door into an antechamber. He can take the photographer and the author here. To enable them to enter the tunnels, he collects their IDs and prepares the access system. Meanwhile, three customers enter. They stand individually in the airlock, allow the reader to verify their eyes, and the door to the tunnels opens. "There are life detection sensors in the airlock, and only one person at a time can be in the airlock," explains Edwin Ebbing.

Far ahead of Asian competitors

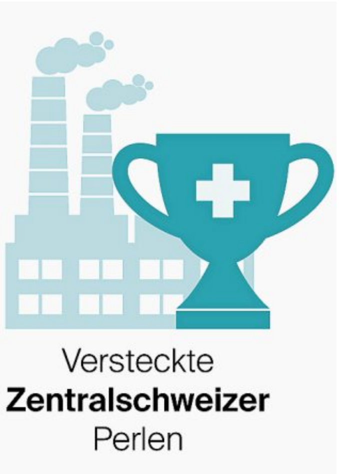
The system ensures that only authorized persons can enter, monitors that no one remains inside, and allows customers access around the clock, seven days a week. "There is a scanner on every door, and each rack is opened with an iris scan. We don't need badges. In my opinion, the system is the safest and best because the eye hardly changes over the course of a lifetime and you always have it with you," says Edwin Ebbing with a smile.

There are many providers of biometric access systems. "But we are one of the few full-service providers. We produce the devices and the software." emphasizes Daniel Kohler, CEO of TBS. The company offers a complete biometrics portfolio for access control and time recording. "With our software developed in Europe, we are far ahead of our Asian competitors in terms of architecture, security, flexibility, and user interface," he says happily.

In addition, smaller providers lack higher-level server software. "We have built up a strong platform over the last ten years and can therefore integrate our solutions into large security systems such as those from Siemens or Dormakaba. And with our software, we meet every conceivable special requirement our customers may have," explains Daniel Kohler.

Increasingly a software company

TBS was founded in 2003 by a German inventor who was already experimenting with contactless fingerprint technology at the time. "Swiss investors then bought the company.



Shortly afterwards, TBS received millions in project funding from the US National Institute of Justice for the contactless capture of all ten fingerprints," recalls the Chairman of the Board of Directors.

The company has now equipped over 5,000 installations worldwide. Its customer base includes over 80 partners, including many large security companies. Among the end customers are many well-known names, from Changi Airport in Singapore to the US Department of Defense. The market in the Middle East is particularly important, where TBS solutions are used in dozens of government organizations, says Daniel Kohler.

"Our flagship products are manufactured here in Switzerland. Regardless of whether our own hardware or third-party hardware is used in individual cases, the software always comes from TBS," says the Chairman of the Board of Directors. TBS is still a manufacturer today, but above all and increasingly a software company. The company employs a total of around thirty people.

Life detection protects against dummies

When doors can be opened using iris recognition, it is reminiscent of science fiction films, in which such technologies are sometimes tricked. Daniel Kohler: "It's not quite that simple. Even if the multi-encrypted database could be hacked, the data, which is never stored in raw form, would be useless. The devices are also well protected against known dummies or photos thanks to live detection."

At many airports, on our cell phones, or on social media, we often disclose our data without thinking twice, whereas it would be much better protected in a corporate environment, says Kohler. Nevertheless, skeptical employees of customers would always have the option of continuing to use an access card or PIN code on TBS devices. However, in practice, hardly anyone wants to do this.

The chairman of the board of directors has no doubt that biometrics is the solution of the future:

"The trend is toward convenience and speed. Ideally, the person won't even have to stop." In addition to expanding its partner network and developing a Swiss "low-cost line," TBS also wants to extend its services to border protection and control, offering applications not only for employees but also for passengers at airports, for example.

Note

No other country produces as many "hidden champions" per capita as Switzerland. According to the definition of emeritus economics professor Hermann Simon, these are companies that are among the top three in their market worldwide or number one on their continent, have annual sales of less than CHF 5 billion, and are virtually unknown to the general public. There are also numerous hidden gems in Central Switzerland. Is your company one of them? Get in touch with us: *wirtschaft@luzernerzeitung.ch*