

IT'S ALL ABOUT SPEED

Brand new VIBSCANNER® 2 by PRUFTECHNIK is to break all speed records



One of Oktoberfest's landmarks: the „Olympia Looping”.
Maintained with VIBSCANNER® 2 by PRUFTECHNIK.

The original Munich Oktoberfest has a 200-year-old tradition and is today also strongly related to safety and security. Although it is globally known as the world's largest “beer fest”, visitors of the Oktoberfest also find the greatest and most modern mobile amusement rides ever.

The legendary, record-breaking “Olympia Looping”, once the biggest mobile roller coaster with five subsequent loopings, is one of these. For years, it has attracted several hundreds of thousands of joyful customers.

But to guarantee their safety, all tracks, powertrains, brakes and conductions must work with 100 percent reliability. PRUFTECHNIK supports the safety maintenance every year to ensure a safe ride.



The powertrains take the wagons up to the point of release at 54 m (2,126”) of height. Any lack of maintenance or inappropriate safety measures may jeopardize the safety of the visitors. PRUFTECHNIK helps to ensure the optimum performance during the complete life cycle.

The ride's 62 powertrains lift the wagons up to an altitude of 54 meters (2,126 inches). The operator and owner called GKN, a maintenance service provider, needs to check the reliability of the powertrains, which include 76 measurement points, in order to receive the accreditation for the Oktoberfest from the controlling body TÜV Süd before the fest starts.

Factors like narrowly constructed powertrains and cardan shafts as well as exposed height and limited access force the technicians to use a Hot-Spot Analysis with thermography since conventional visual inspecting methods did not work efficiently on this extreme ride. To check the reliable operation of the powertrains, the new High-Speed data collector VIBSCANNER®2 by PRUFTECHNIK came into action for one of its very first high profile jobs.

Indeed some malfunction due to pinpointing was found through the measurement followed by in-depth vibration analysis. The fail-

ure could immediately be eliminated and repaired, and the measuring task went on – up to the highest point of 54 meters (2,126 inches) where the train is released and accelerates up to a top-speed of nearly 100 km/h (62 mi/h).

Throughout the years, the "Olympia Looping" has become a special landmark of the Oktoberfest. The roller coaster must run – and it always has – partly due to the great efforts and the expertise of PRUFTECHNIK Condition Monitoring services.

The result:

Thanks to the VIBSCANNER® 2, the complete measuring task could be shortened down to only one thirds of the time that was needed in the previous years. But despite maximum speed and minimum time at the machine, the measurement data is fully reliable and repeatable. The device is designed to meet the highest data quality in the shortest time span.



The brand new VIBSCANNER® 2 by PRUFTECHNIK in action taking a measurement on one of the base powertrains. Due to its lightweight and handiness, it can operate in any environment – even on a roller coaster.

When climbing up the 54-meter-high (2,126-inches-high) roller coaster with all its 76 measurement points it usually takes some time, during which the technician can enjoy the beautiful environment of Bavaria's capital city. These times are over – now each measurement only takes just a split of the time usually required using industry standard equipment and the technician is up to the top in no time.

In concrete numbers the time needed in 2016 was 4 to 5 hours. In 2017 it took only 1,5 hour.



According to all safety measurements the technician can now speed up the ascend to the highest measurement point. The actual measurements only takes a split of time compared to industry standard equipment.




▶ Made in Germany
 ▶ Global Presence
 ▶ Qualified Support
 ▶ Quality Service

PRÜFTECHNIK Dieter Busch AG
 Oskar-Messter-Str. 19-21
 85737 Ismaning
 Germany
 Tel.: +49 89 99616-0
 Fax: +49 89 99616-200

www.pruftechnik.com
 A member of the PRUFTECHNIK Group