



Press Release

Wangen i. A., 25th. Oktober 2006

The accident research department of VW and Z+F present a new approach of dynamic laser scanning with the IMAGER 5006 on this year's INTERGEO®

The IMAGER 5006 was improved fundamentally compared to its predecessor, the IMAGER 5003. The improvements are visible in the new overall concept, in the easier handling, the higher data quality, the wider ambiguity interval and a higher resolution. The improvements offer the opportunity to enlarge the range of applications for owners and operators of the IMAGER 5006.

One of the new areas of application, a system which is able to scan while the vehicle, the scanner is mounted on, is moving, is developing at the moment. Also here Zoller + Fröhlich (Z+F) did pioneer work. Already in 1992 Z+F developed the first profil scanner, able to scan tunnels of driving railway vehicles. This influenced the development of the IMAGER series. Nowadays all IMAGER models can be used in the profiling mode. All owners and operators of IMAGERS have the opportunity to mount the scanner on a vehicle (see pictures) to scan and to document the actual state of streets, accident spots and other elongated areas.

At this year's INTERGEO exhibition in Munich Z+F and VW presented an innovative and cost-efficient approach for the area of vehicle bounded measurement. The task to fulfil was: To scan a one



kilometre long accident spot in less than 10 minutes with a relative accuracy better than ten centimetres. For localisation no further than the sensors of the vehicle are used. Using just the car sensors for positioning means also that the costs for such a vehicle will be cut down dramatically. The sensors already integrated in the breaking system of the vehicle, deliver real-time data about speed, wheel positioning, wheel turn, tilting and so on. So the position of the vehicle can be calculated and combined with the scanner data. In that way the environment is scanned exactly, area-wide in 3D of a road vehicle, in a locale graticule. If necessary the data can be provided in a superior graticule by connecting it with external sensors like e.g. GPS. Accident spots can be scanned fast and complete of the driving vehicle. Due to that the accident spots can be cleared fast. There is no need to block roads completely, because the vehicle can float along the



accident side with the traffic. Furthermore the personal is save in the vehicle and does not interfere with the traffic. Z+F and VW offer a cost-effective solution for vehicle bound measurement which is accessible to all owners of a IMAGER 5006.

In the picture you can also see a solution for static measurement of a vehicle. Therefore a telescope mast is assembled on the side of the vehicle. The IMAGER 5006 is mounted on the mast and can be lifted up to four meters. With its help a great area around the vehicle can be scanned. Here the features of the "stand-alone" concept are clearly visible. Only the head of the scanner is mounted on the mast. There is no need for cable connections to the vehicle. The current supply is warranted with an internal battery pack and the data can be stored on an internal HDD. The scanner can be operated via a Bluetooth connection with a PDA of the vehicle.

Economic, goal-oriented, easy to handle and easy to adjust to new areas of applications. These are the features of the IMAGER 5006.

Z+F in cooperation with its partners is always interested in finding new areas of applications for the IMAGER models.



Kontakt

Zoller+Fröhlich GmbH; Simoniusstr. 22; 88239 Wangen i. A.; Germany

Tel.: +49 7522/ 93 08-0; Fax: +49 7522/93 08-252

info@zf-laser.com; j.meixner@zf-laser.com; www.zf-laser.com

Volkswagen AG; K-GEFFB Unfallforschung; P.O. Box 1777; 38436 Wolfsburg; Germany

Tel.: +49 5361/ 9 35159; Fax: +49 5361/9 30194

markus.jungmichel@volkswagen.de; www.volkswagen.de