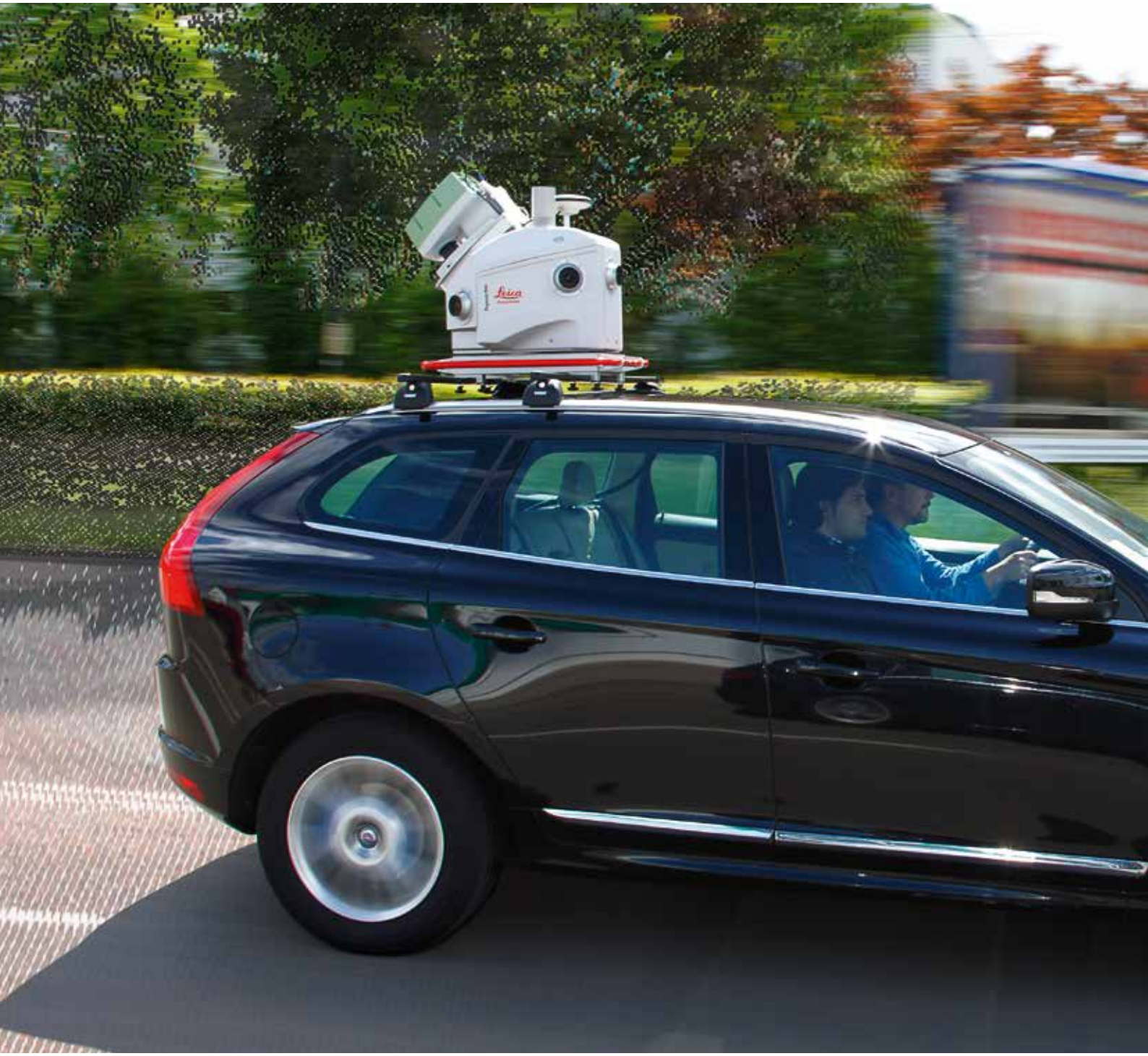
Leica Pegasus:MapFactory
Mobile reality capture



PART OF HEXAGON

- when it has to be **right**

Leica Geosystems

www.rusgeocom.ru

Leica Pegasus:MapFactory – Fast & efficient from data collection to feature extraction

Mission planning & data acquisition with Leica Pegasus:MDA

Leica Pegasus MDA is your mission planner before and co-pilot during data acquisition. It allows you to store the point cloud, images, IMU and GNSS data on your Leica Pegasus system. It provides a data preview and gives an overview of your system. When your mission is complete, you can download the data.

Accurate trajectory for indoor & outdoor with NovAtel Inertial Explorer

Inertial Explorer software is used to process the raw GNSS, IMU, SLAM and speed sensor observations to create a smooth trajectory that can be used to geo-reference the acquired image and point cloud data. This post-processing module reports the estimated trajectory accuracy.

Fast automated post-processing with Leica Pegasus:AutoP

Leica Pegasus:AutoP is the easy-to-use and efficient one-click post processing software. It automatically links the high dynamic camera images and point cloud scans to display a calibrated output of point cloud, image or external sensor data. The output can be used in the Pegasus:Viewer and Pegasus:MapFactory.

Quick check the data with Leica Pegasus:Viewer

Leica Pegasus:Viewer allows you to display and navigate through the processed images and point clouds. Set up hardware features like an advanced 3D mouse and make your first measurements. Pegasus:Viewer is free and you can share the data quickly.

Feature extraction & digital surveying with Leica Pegasus:MapFactory

Leica Pegasus:MapFactory allows you to use the stereoscopic images and point cloud to measure and extract from your acquired data natively within ArcGIS or AutoCAD. After your objects are measured and meta-tagged, the software enables you to export to all common industry standard formats.

Workflow: In 4 Steps from data collection to CAD files

Data acquisition

- Mission planning and data acquisition

Post-processing

- Process trajectory, point cloud, images and external sensors

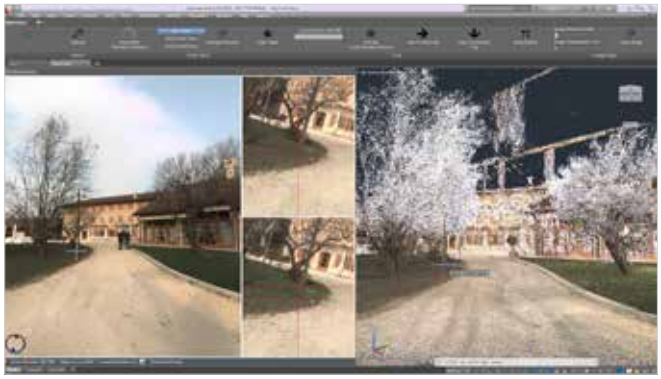
Extract information

- Native workflow for ESRI ArcGIS and Autodesk AutoCAD
- Adjust and clean the point cloud
- Create automated cross sections
- Create longitudinal profiles
- Automated extraction of billboards, poles and road lines

Export the data

- 3D reshaper
- Microstation
- Cyclone
- Terrasolid
- TopoDOT

Native workflows in CAD and GIS - From automatic change detection to advanced roads & highways tools



Autodesk AutoCAD

Pegasus:MapFactory for AutoCAD integrates advanced functionalities:

- Automatic Change Detection highlights position changes of objects between two scans in a given time frame
- Virtual Surveying feature extraction to geocode on-the-fly from the captured data
- Floorplan extraction facilitate the creation of 2D scale maps for buildings interior
- Recap-format tightly integrates panorama images and point clouds

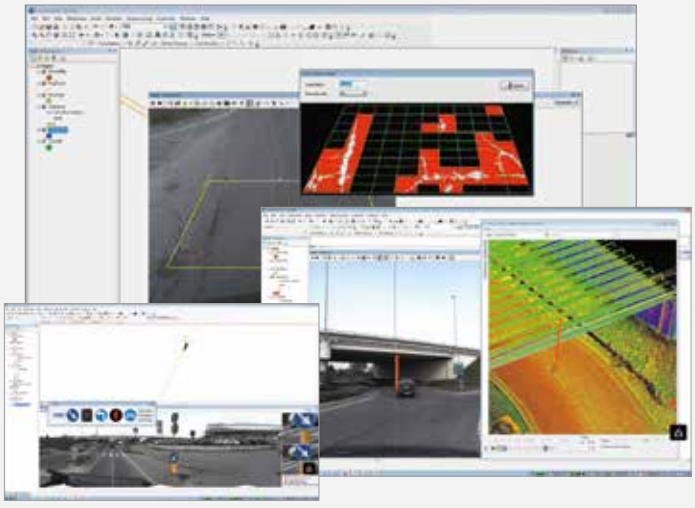
ESRI ArcGIS

Pegasus:MapFactory for ArcGIS offers guided semi-automatic extraction tools:

- Recognising road lines by the intensity of the point cloud data for fast feature extraction and data validation
- Poles are detected from the point cloud. They can be classified by feature, height, diameter, and the position is stored and highlighted in the base map
- Cross sections are fast to create by assigning a reference line, the software automatically creates vertical and longitudinal cross sections in a given spacing one after the other

Automatic road analysis tools

- **Roads** signs are automatically detected, classified and geo-referenced with one click
- **IRI (international roughness index)** can be obtained by the point cloud data
- **Crack index** is automatically calculated from the images delivered by the pavement camera. The indexing can be conformed to your local indexing standards
- **Rut depth analysis** automatically recognises holes of certain depth. The road damage is highlighted and georeferenced in the images and point clouds
- **Vertical clearances** automatically recognise all obstacles above a certain height and clashes are outlined and georeferenced
- **High resolution orthoimage** (up to 3 mm pixel size) are obtained from the pavement camera and become a very important base map for crack defects classification



Clearance analysis, road signs extraction, pavement crack indexing and bill board extraction

Revolutionising the world of measurement and survey for nearly 200 years, Leica Geosystems creates complete solutions for professionals across the planet. Known for premium products and innovative solution development, professionals in a diverse mix of industries, such as surveying and engineering, safety and security, building and construction, and power and plant, trust Leica Geosystems to capture, analyse and present smart geospatial data. With the highest-quality instruments, sophisticated software, and trusted services, Leica Geosystems delivers value every day to those shaping the future of our world.

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Leica Pegasus:Two
Mobile reality capture

Leica Pegasus:Stream
Mobile reality capture

Leica Pegasus: Backpack
Mobile reality capture

Leica ScanStation P30/P40
Because every detail matters

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