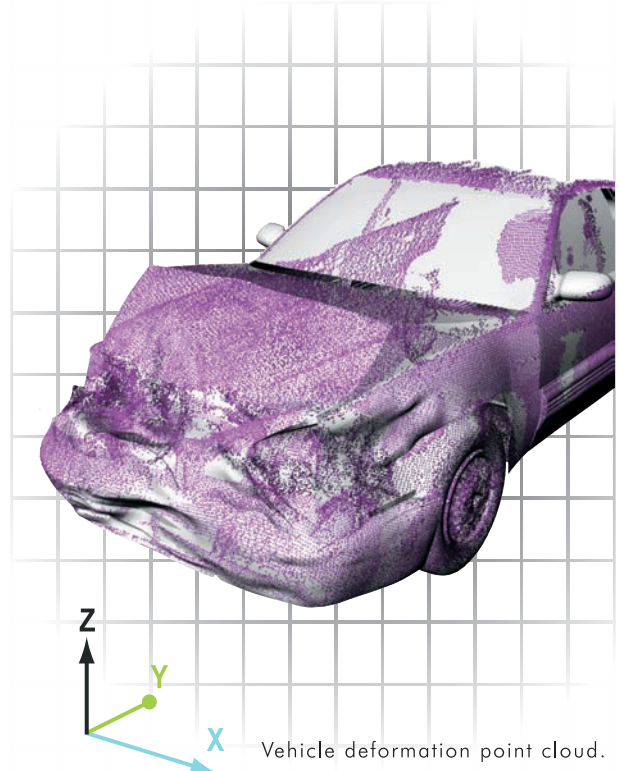


Laser Scanning

Packer Engineering brings new State-of-the-Art technology to the world of physical measurements and modeling, by offering 3-D laser scanning. This capability provides fast, accurate, and detailed measurements of objects and structures. Packer obtains images of large or small-scale objects without site disturbance and, unlike a photograph, the scanner allows immediate conversion into CAD formats such as IGES, DXF and AutoCAD.

The line-of-sight laser scanner performs a non-contact function indoors as well as outdoors, day or night, with lighting conditions not being a concern. The scanner does not interfere with the object being scanned, making it ideal for evidence preservation at the scene of the accident/incident.



Laser scan of a residential home

At a site or scene, the scanner captures desired areas using technology that recognizes reflectivity of surfaces and builds an image along with data points used for analysis or 3-D model construction. This gives the user a perspective which cannot be achieved through conventional methods such as traditional or digital photography.

Since major factors in digitizing an accident/incident scene are the speed and quality of the scan, the line-of-sight scanning device is thousands of times faster than traditional equipment. By utilizing this scanner, site clean-up can progress much quicker.

When using a total station, data collection needs to be limited in order to satisfy time constraints. Since the scanner captures a significantly higher level of detail than other devices, it documents everything in sight, allowing more data for analysis at a later date plus preservation of greater detail.

Laser Scanning

Laser Scanning Services

Through the years, buildings and facilities undergo major alterations. In many instances, these alterations are not recorded in the original construction plans. An initial scan completed prior to any alterations or renovations documents the current conditions. When making renovations or repairs, plans can be based on the exact, current status whether looking at walls, ceilings, openings, or pipes in true 3-D space.

Also, in industrial facilities, scans of complete production environments, including the facility itself and all equipment, prove beneficial when assessments and audits are necessary.

Industries Served:

- Automotive
- Building technologies
- Construction
- Manufacturing
- Aviation
- Rail
- Mining
- Architectural

Types of Projects:

Accident investigation and reconstruction

- Low-speed and high speed motor vehicle collisions
- Vehicle deformation and impact velocity determination
- Site and scene documentation
- Crime scene evidence preservation

Buildings, bridges, mines, piers and tunnels

- Document existing structures and facilities
- Collapses, damage or design defect
- Creation of “as-built” drawings

Fire and explosion evidence preservation

- Commercial/residential/industrial sites
- Chemical plants and storage facilities

Natural and man-made disasters

- Tornado, flood, hurricane and earthquakes
- Chemical spills, environmental catastrophes

Historical preservation

- Landmarks
- Museums
- Monuments
- Government buildings

Virtual Reality

- Training

