

3D Laser Scanning for Insurance Purposes

Plowman Craven has been at the forefront of applying the latest measurement technology to assist asset recording and investigation teams in a multitude of environments. 3d laser scanning and the recent rapid advance in high-dynamic range photography have led to quicker delivery response, greater accuracy and easier interpretation.

Insurance Companies, forensic investigators, emergency teams, health and safety executives have all benefited from fast access to accurate measurement information.

Applications:

- Condition and asset recording
- Scene capture and preservation of evidence
- Subrogation
- Examination of witness/customer statements
- Event/scenario progression
- Expert witness support
- Modelling and analysis
- Archive recording and reconstruction
- Collision scene management

We have been involved on a considerable number of crime scenes, counter terrorism, incident investigations and reconstructions, as well as recording pre-incident information both for asset and condition surveys.

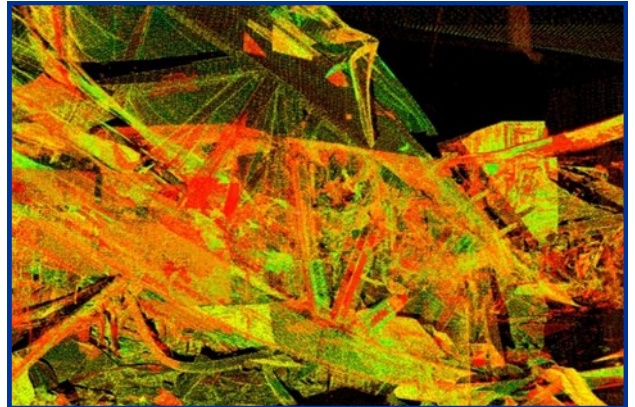
Plowman Craven has been involved in many notable high profile projects including:

- The Princess Diana inquiry
- Parliamentary Estate
- Windsor Castle
- Hampton Court
- 2005 London bombings
- Ipswich serial murders
- Potters Bar rail incident
- Yarl's Wood Removal Centre
- Atherstone Warehouse fire

3D Laser Scanning

Mainstream laser scanning instruments collect high accuracy (+/- 3mm) data at over 500,000 points a second, providing millions of measurements in three dimensions called point clouds.

The result is an organised digital representation of a subject which is delivered quickly, efficiently and accurately. Real-time access to this data provides critical measurements instantly, or post process, provides the measurement platform to perform data analysis through to creating 3D models.



3D Laser Scanning – Fire Damaged Building

Our specialist close range scanners can capture the details of objects which require sub-millimetre accuracy and a high resolution. Objects are captured and modelled to tolerances finer than a human hair. Data can then be supplied for animation, 3D printing or milling.



3D Laser Scanning – Meshed Raw Data

Benefits of 3D laser scanning:

- Rapid site data collection
- Completeness of data – reduces returns to site
- Immediate data archive record and accessible measurements
- Operates remotely and in difficult situations
- Improved safety and non contamination
- Collects data from complicated environments

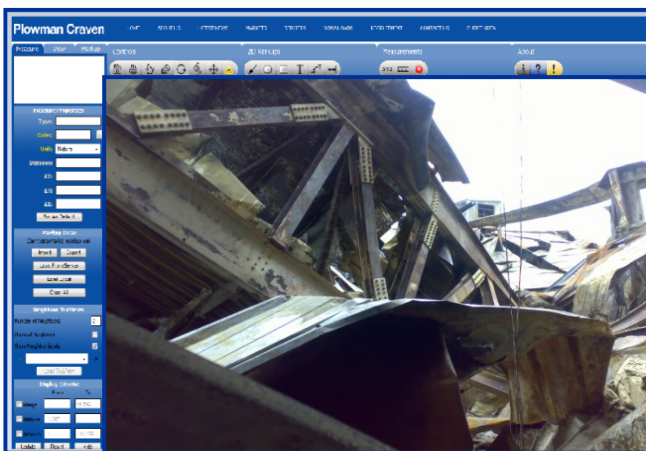


High Dynamic Range Photography (TruView)

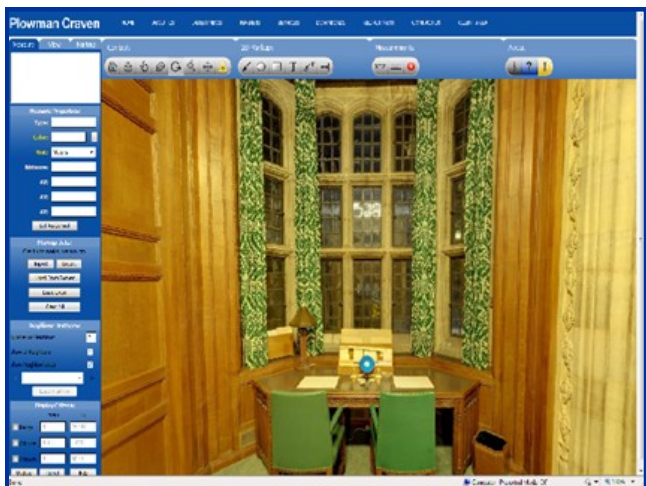
From laser scanned on-site positions, high dynamic range photography can be taken and mapped onto the actual point cloud data.

This can be viewed within the supplied free and easy to use “TruView” application which provides the user with a high definition photorealistic duplicate of the site environment. The user can pan, zoom and accurately measure any visible details. Comments, remarks and hyperlinks can be added and views can be saved and exported.

An added advantage is its multi-user capacity – unlimited password-protected access via the internet/intranet allows virtual real-time interactive communication between relevant parties.



Interactive 'TruView' – Fire Damaged Building



Interactive 'TruView' – Internal Condition and Asset Record

Condition and asset recording

The application of 3D laser scanning and 'TruView' provides considerable benefits to the recording and archiving of both external and internal environments.

By collecting information in this way, an architectural feature or object can be reconstructed if damaged or destroyed. It also provides an accurate pre-incident condition or asset record to assist in any post-incident investigation or analysis.



Sub millimetre laser scanning – Lord Mayor's Coach

Benefits of TruView:

- Early access to data and quicker decision making
- High dynamic range photography
- Measurement and investigation
- Internet access and multi-user facility
- Move around easily in a visual tour of the site
- Attach notes/hyperlinks/legal documentation



Post incident and forensic investigation

An accurate record and the ability to interrogate information post-incident is key to any investigation or analysis.

Scanning technology enables a 'snap shot' of the scene to be recorded geometrically for either future reference or for immediate investigation.



3D Laser Scanning – Post Incident Recording

'TruView' and other deliverables such as 3D models, visualisations and reconstructions have proved to be an essential aid for investigating teams and, at the same time, can help to minimise legal costs.

Laser scanning can be operated in any environment ranging from heavy industrial spaces through to domestic incidents. It can be used to increase the validity and enhance the effectiveness of customer or witness statements during any investigation.

All of this is backed up by a dedicated and experienced team of Plowman Craven surveyors and 3D modellers who are available on a 24/7 callout basis. All are security vetted and have attended courses on forensic awareness.

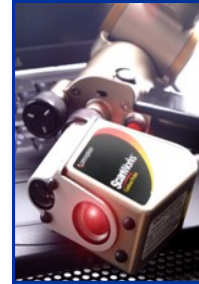
Free Consultation

Plowman Craven is a neutral, independent organisation whose expertise can be used by all parties involved.

We are happy to visit your office to provide a free consultation and further discuss your unique requirements and the benefits of laser scanning. Please contact us for further information.



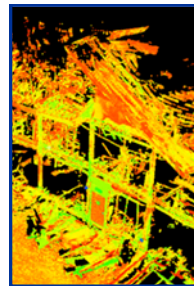
Crime



Legal



Terrorism



Fire



Traffic

About Plowman Craven

Plowman Craven is an innovative Geomatics company, a trusted name which offers a broad range of measurement services across numerous and diverse markets. Operating worldwide, our highly skilled and motivated team make a difference by providing timely, collaborative and accurate solutions to meet your requirements.

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