



Laser Scanning

Laser scanning is a measuring technique in which a scanner makes an accurate three-dimensional point-cloud of an existing object or facility. The point-cloud is subsequently used to create a 3D model of this object/facility or to produce cross section curves, define volumes and make shape surveys etc.

Material

The models, point-cloud and other measurement materials can be delivered to the client in the desired format at short notice. The 3D modelling is done with the point-cloud software or some other software that is suitable for the client's future needs. The point-cloud material can also be used as a tool without any point-cloud modelling.

Rebuild Projects

In plant renovations we can 3D model all the existing machines, devices and constructions of the plant with laser scanning. The accurate three-dimensional information facilitates and speeds up detailed design remarkably and reduces design errors. Total design costs are reduced due to the avoidance of unpleasant surprises, the speeding up of installation and the shortening of shutdowns.

Small Objects

Laser scanning also makes it also easy to study small entities. Scanning makes it possible to study the shapes of objects and possible factory defects or damage thus become visible. Scanning creates 3D models for products which do not have drawings. The models are then used for example to facilitate strength calculations, space utilisation design or manufacturing.

Other Objects

Laser scanning is also utilised in the field of mine surveying, architecture, accident investigation, conservation of historically valuable objects and visualisations etc.

Scanners

We use different scanners for different purposes. Plant scanners operate rapidly and they also photograph the object. The accuracy of these scanners is about 2-5 mm. For individual items and small entities we use portable

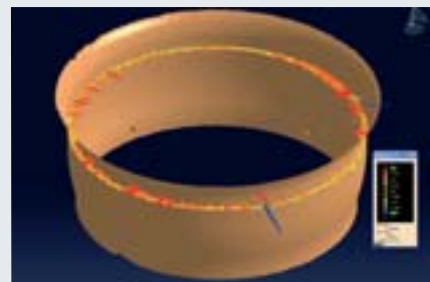
scanners with about 0,5 mm accuracy. For very demanding measurements of small pieces we use a solid precision scanner station that provides accuracy up to one hundredth of a millimetre. Other special scanners can also be used if necessary.

If you need professional help in the renovation of existing plants or in shape surveys of pieces, please contact us! We are at your service.

Laser Scanning, Range of Use:



Laser scanning of big plants and factories

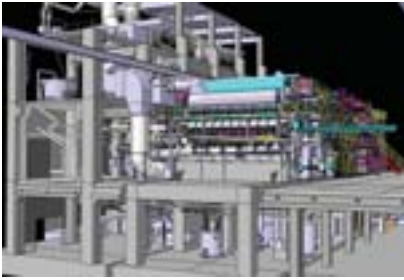


Shape surveys of pieces



Field and tunnel surveying

References



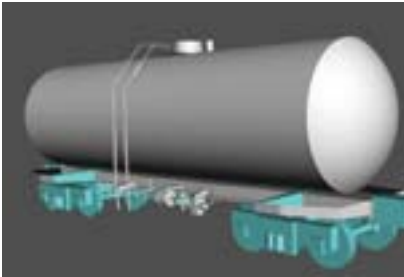
Metso Paper Oy, several paper machines



UPM-Kymmene, paper mills



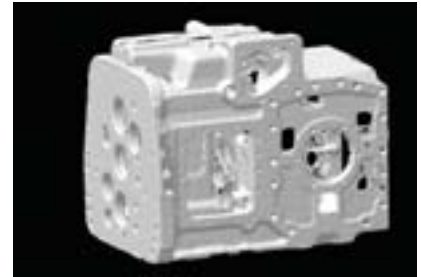
Fortek Oy, paper mills



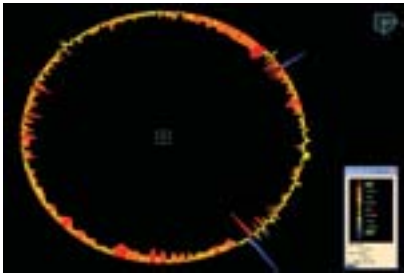
Neste Oil Oyj, loading spaces and equipment, tunnels



Oy Nautor Ab, shape surveys of boats



Valtra Oy, casting pieces



GE-Energy, water-power stations



SCA Obbola, black liquor tanks



Aker Yards Piikkio Oy, factory hall



Stalutube Oy, lines



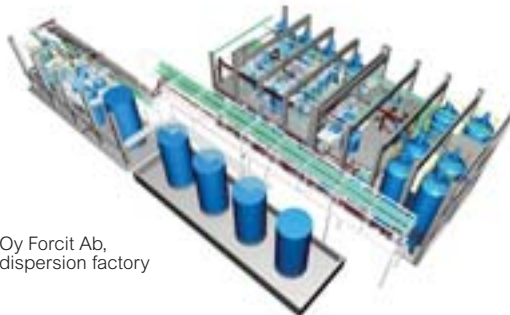
Small customers



NCC, soil heaps



Valmet Automotive, welding jigs



Oy Forcit Ab, dispersion factory



Moventas Oy, casting pieces, production site



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