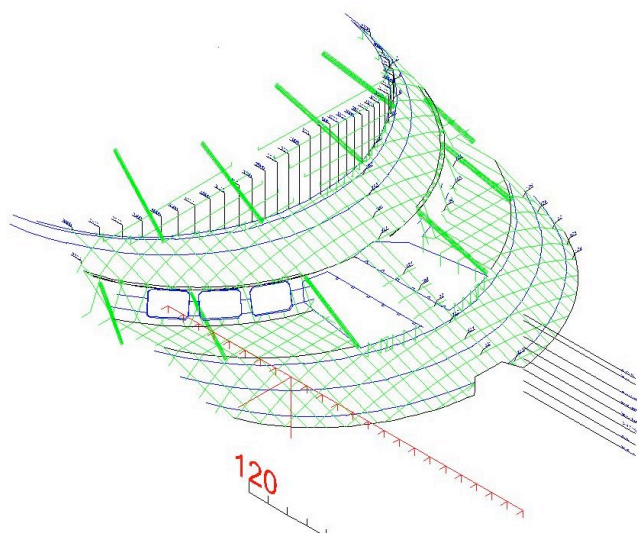


3-Dimensional Scanning

A COST EFFECTIVE WAY TO CREATE AS BUILT DRAWINGS AND MEASUREMENTS OF INTERIORS AND EXTERIORS.



Laser scanning

Partnership with Metrona, world leader in 3D scanning and 3D modeling.

Metrona is specializing in:

- Precision measuring, laser scanning
- Robot automation, laser measuring
- 3D modulation, cad

We can deliver all common formats used in auto, process, nuclear and construction industries.

Laser scanning is a means of obtaining a 360-degree data capture within x, y and z axis that provides a three dimensional view of a facility. With a scanning camera operating at ultra-fast speed, it collects up

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to 500,000 individual surface geometry measurements per second and creates a 'point cloud' that can be viewed with specialized software. It is a way to bring a 'smart' digital picture of a facility back to a designer who, using the industry's predominant 3D CAD modeling software, can design or redesign facilities.

Some of the more typical applications are:

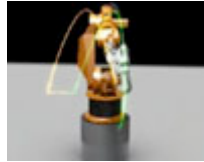
- Industrial piping.
- Machine installations.
- Robot cells.
- Building structures
- Curvatures and complicated geometrical surfaces.

Applications



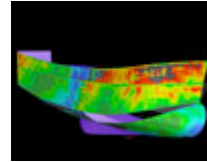
Machine Alignment

Precision assembly setups and processes



Machine Calibration

Identifying and eliminating deviations from nominal data



Part Inspection

Verification of parts according to dimensional tolerances



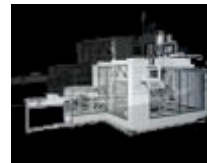
Reverse Engineering

Reality to virtuality, creating CAD from actual objects



As built documentation

Capturing reality, documenting what exists



Installation

Precise initial machine installation



Accident research

Documenting and researching collisions



Crime scene or accident documentation

Processes involved in reconstructing events



Dimensional calculations

Simple measurements to complex GD&T

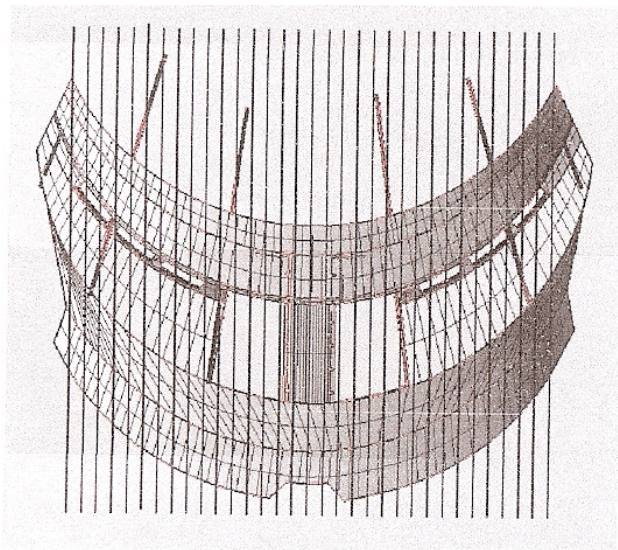
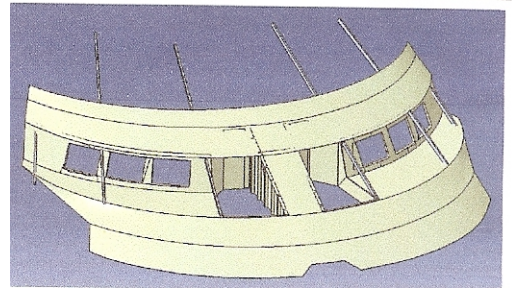
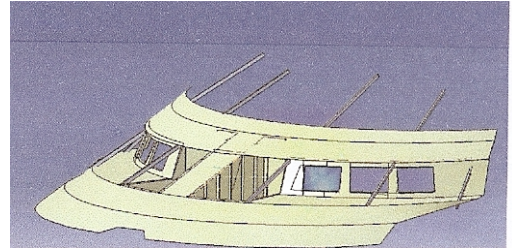
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Example:
As built drawings



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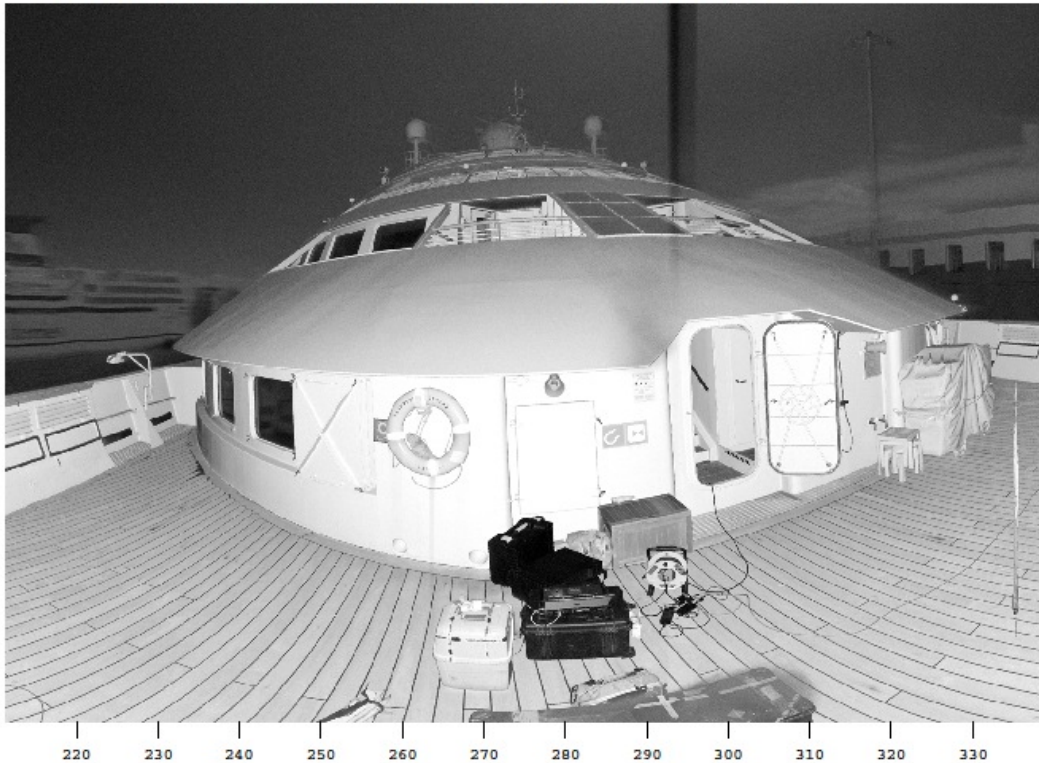
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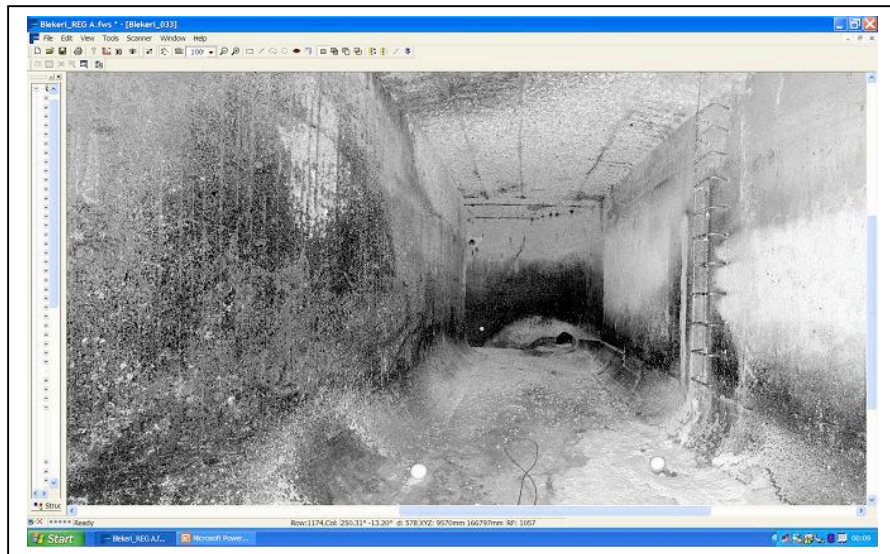
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Example of “raw scan”

C:\Users\Anders\Documents\My Documents\Scanning\Seaborne\Legend\Scans\Legend003.flr



Tank scanned from inside



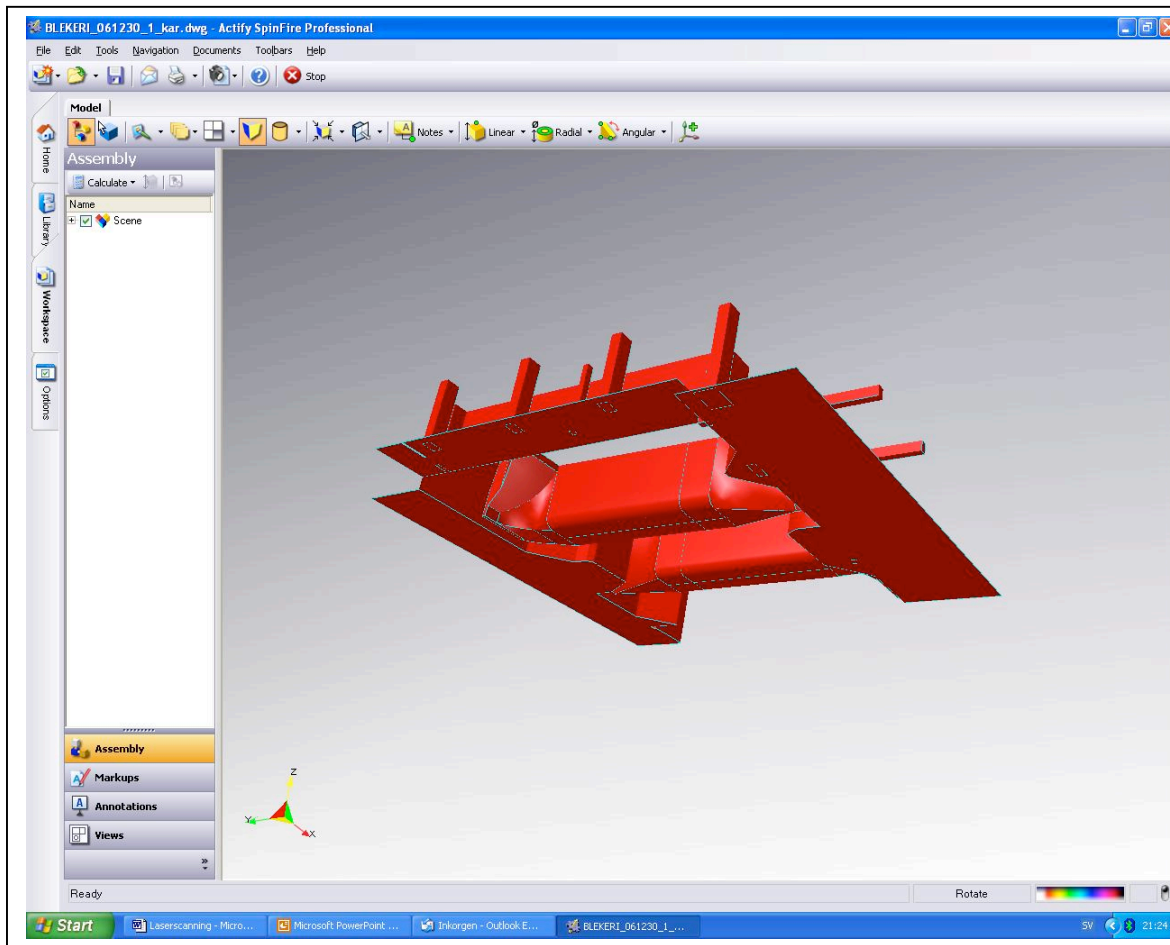
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Complete 3d model in any common cad or surface program.



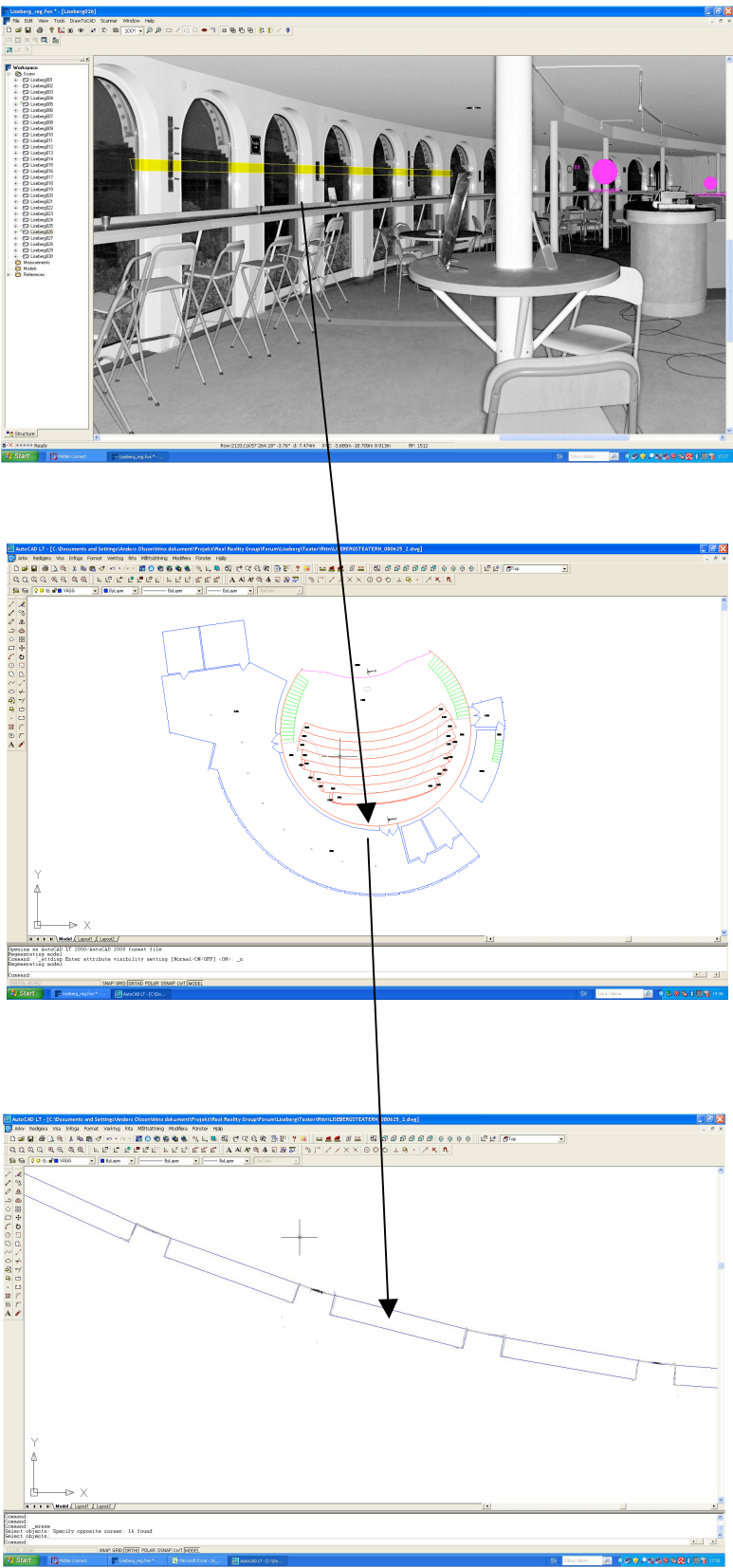
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Selected parts are exported to the cad drawing.



Some of our larger customers



Some reference objects

Paper mills:	Stora Enso	Kvarnsveden, Grycksbo, Karlsruhe	2004-2008
Volvo cars	Gothenburg Sweden, Born Holland		1998-2008
Ford	Köln, Detroit		2005-2008
BMW	Dingolfingen, Oxford		2005-2008
Daimler Chrysler	Rastadt, Stuttgart		2005-2007
Nuclear power stations:	Barsebäck, Oskarshamn, Ringhals		2000-2008
Kvaerner	Sweden, Spain, Portugal and Indonesia		2003-2007
Alstom	Wales, Elektrenai Lithuania		2005-2008
Audi	Heilbronn		2008
Various buildings for engineers and architects			2004-2008

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