



## 3D SCAN SERVICES

PRECISION MEASUREMENT

**DAMEN**

## APPLICATIONS

### As-built documentation

- Retrofitting
- Reverse engineering
- Shape analysis
- Site modeling and layout
- Quality control
- Quantity surveys  
(volume and piles studies)

## 3D SCANNING DEVICE

We use the latest 3D scanning technology; the FocusS 70 laser scanner, for short-range, precise measurement. It is ideal for engineering, construction and other precision applications, delivering realistic and true-to-detail scan results with a range of up to 70 metres.

- Distance accuracy up to  $\pm 1\text{mm}$
- Range from 0.6m up to 70m
- Measurement speed up to 976,000 points per second
- IP Class 54
- HD photo overlay up to 165 megapixel color

The security and confidentiality of our clients' data is paramount within our working practices.

3D PROJECT  
POINT CLOUD

### DAMEN SCAN TEAM

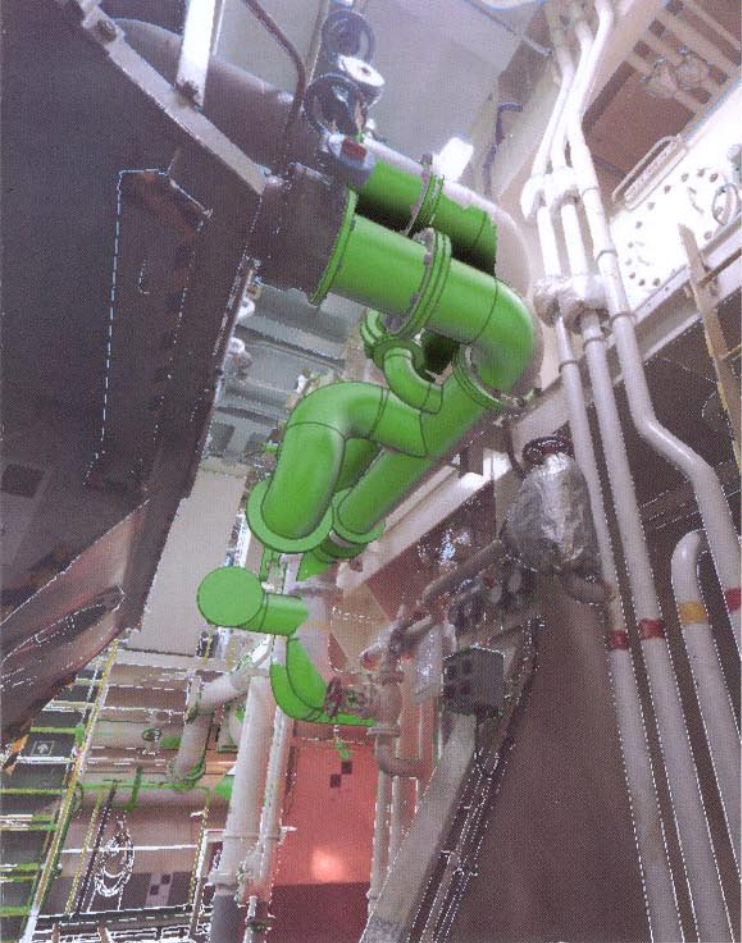
Based in the Netherlands and with offices in amongst others the United Arab Emirates and China, we operate worldwide with vast experience. We employ highly-skilled CAD engineers which allows us to process all our data in-house. The majority of our point cloud processing is completed utilising Autodesk Autocad, Revit, Inventor, Cadmatic Rhino & Blender.



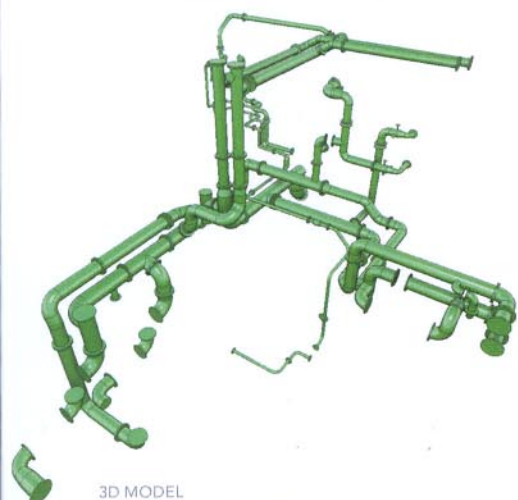
BLIND SPOTS INSPECTION



DAMEN SCAN TEAM



3D POINT CLOUD FOR PIPE REROUTING



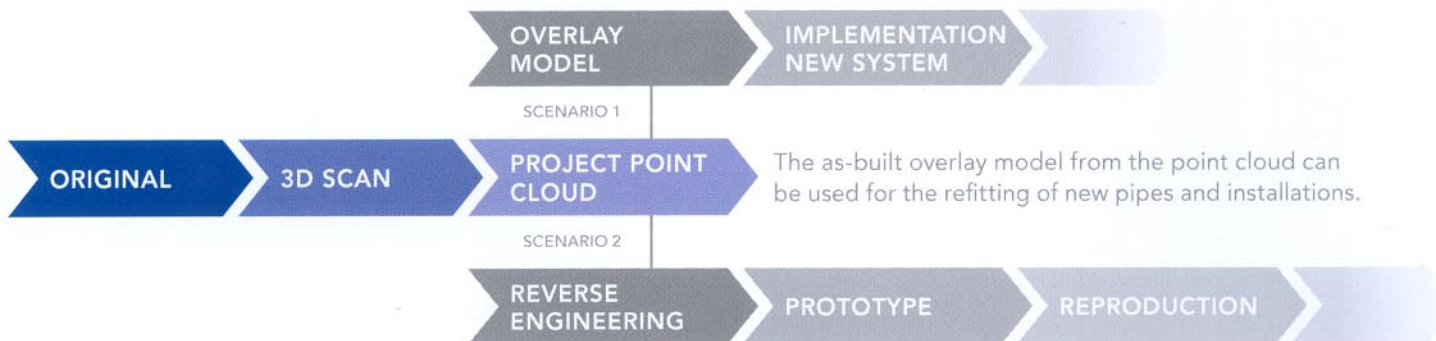
3D MODEL  
NEW PIPE INSTALLATION

Damen offers a wide a range of point cloud-related products such as 2D documentation, 3D models and Building Information Models (BIM).

# 3D SCAN SERVICES

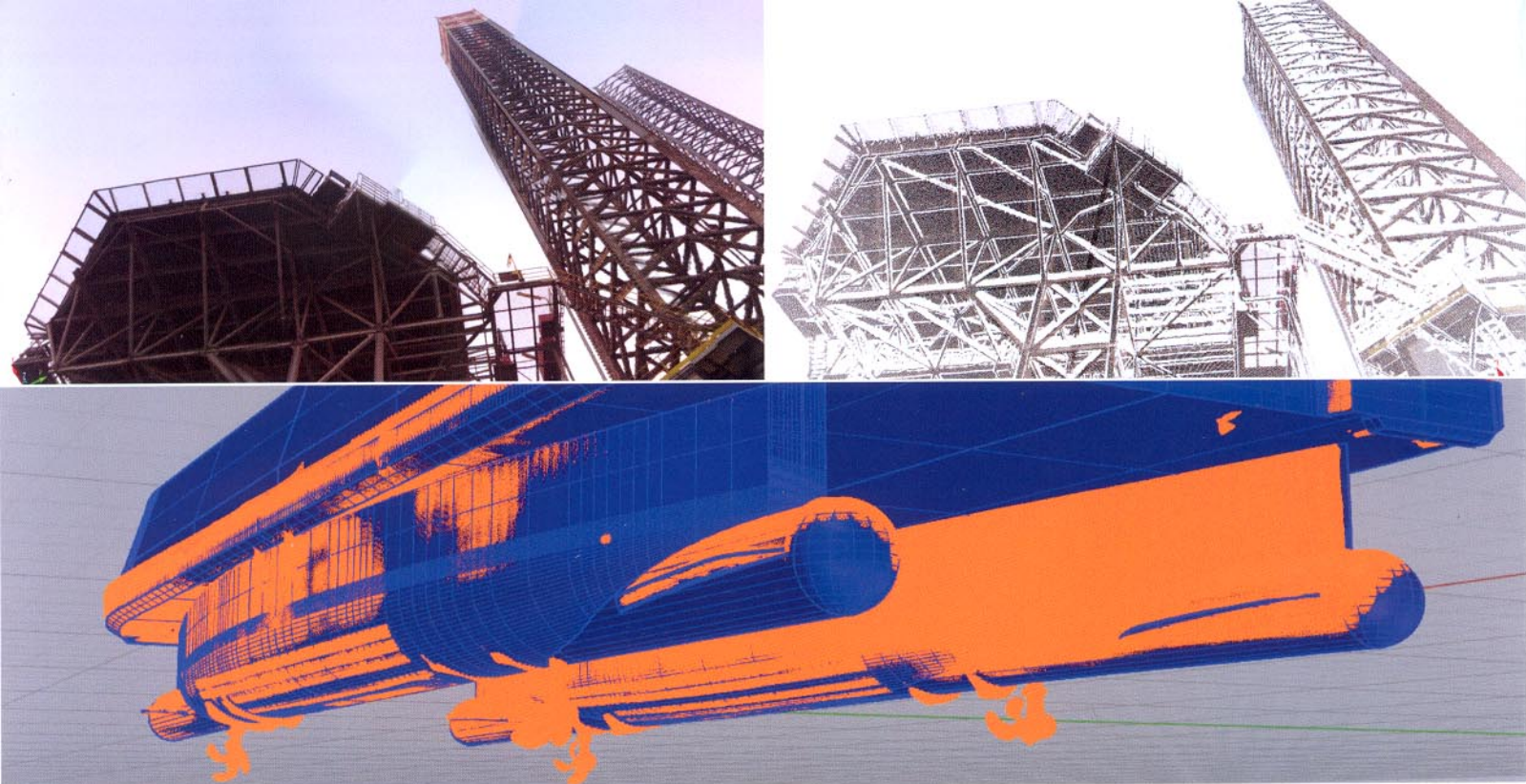
## HIGHLY PRECISE ENGINEERING

Our products and services are suitable for industrial sites, offshore installations, vessels, architecture, heritage and large-scale urban regeneration projects.



The as-built overlay model from the point cloud can be used for the refitting of new pipes and installations.

Highly accurate surface reconstructions can be generated from the project point cloud.



#### PRODUCTS

- Registered point cloud
- 3D CAD modelling
- 3D mesh modelling
- BIM modelling
- Plant design modelling
- 2D/3D as-built documentation
- 3D virtual reality
- Quality control
- Clash detection
- Volume survey
- 3D topographical surveys

#### BENEFITS OF 3D LASER SCANNING

- Quickly capture all of the physical measurements of any physical object (e.g. ships, offshore installations (oil rigs))
- Save time in design work
- Ensure parts will fit together on the first try
- Capture engineering optimizations inherent in manufactured parts
- Utilize modern manufacturing methods for parts that were originally made before CAD
- Compare 'as-designed' models to the 'as-built' condition of manufactured parts

## 3D LASER SCANNING APPLICATIONS

# DAMEN

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