

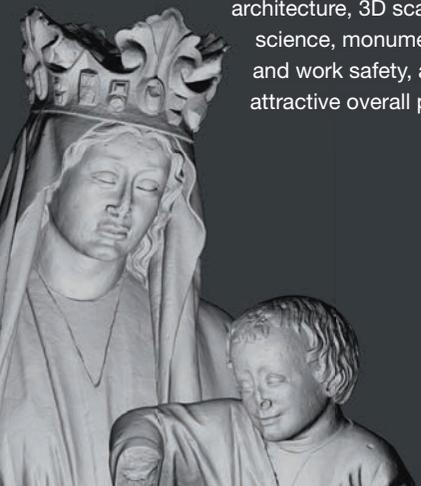


As well as high-resolution 3D measuring techniques, we also provide efficient solutions for documenting objects at heights that are difficult to access.

With a GF-16 crane system made by Grip Factory Munich, feature investigations can be quickly and easily carried out at heights of up to 10 metres, for example, or surface documentation / analyses carried out using structured light scanning, photography and thermography at heights of up to 16 metres.

Objects at higher elevations can be documented photographically with high resolution using a camera multi-copter.

Our interdisciplinary networking in research and economy allows us to fall back on many years of experience in the areas of architecture, 3D scanning, restoration science, monument preservation and work safety, and offer you attractive overall packages!



Format4plus GmbH
Schlemmerwiesen 9
D-96123 Litzendorf
Phone +49 (0) 9505 806178810
Fax +49 (0) 9505 8061789
info@format4plus.de
www.format4plus.de

Format4plus GmbH collaborates with the Otto-Friedrich-University in Bamberg



Illustrations from research projects by the University of Bamberg, preservation sciences:

sponsored by the Bayerische Forschungsstiftung und Oberfrankenstiftung (Bavarian Research Foundation and Upper Franconia Foundation)



Digital Measuring Techniques

FORMAT **4** PLUS



Range of Services

We are an innovative office and provider of 3D documentation and 3D scanning in the areas of archaeology, monument preservation, architecture, industry, engineering structures and infrastructure.

On the basis of state-of-the-art mapping techniques, we can provide you with numerous different services:

.....
Production of high-resolution, photo-like textured 3D models as the basis for CAD plans, presentations in the museum sector, copy production etc.

.....
Distortion-related measurement at all levels of accuracy on the basis of 3D scanning, tacheometry and photogrammetry.

.....
3D surface comparisons of small and large objects as monitoring for basic recording for structural investigations, deformation analyses or documenting restoration measures.

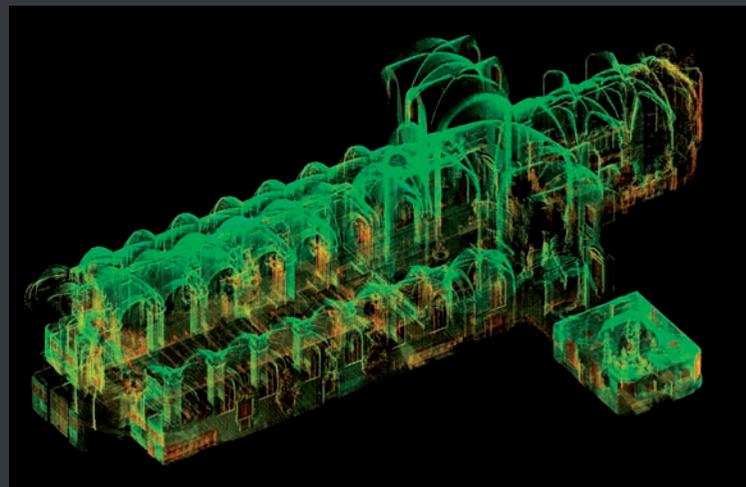
.....
Building age plans, as-completed drawings and room books

.....
Feature and damage mapping

Measurement techniques

Terrestrial Laser Scanning

Outstanding recordings of large and complex building structures can be made using terrestrial laser scanners. We can quickly document all visible areas over 360° and with a radial distance of up to 300 metres and a resolution of up to 2 millimetres. Large objects can be documented in their entirety and in their actual condition with high resolution within a short time by simply interconnecting different measuring locations. This information can be used to generate views, cross-sections, longitudinal sections and footprints from any viewpoint.



Object Scanning

Depending on the problem, we can provide you with an outstanding measuring system for digitalising your subject for creating 3D documentation of individual items such as sculptures and archaeological finds. Manually guided structured light and laser scanners provide quick and cost-effective measurement of complex objects such as sculptures and architectural ornaments with a resolution of up to 0.5 millimetres. This data is ideal for 2D or 3D feature investigations, damage mapping and the production of detailed copies using 3D printing and milling techniques. When models with higher resolution are required in order to document the minute details of the surface of your exhibition items, high-precision structured light scanners with measuring resolution of up to 30 µm are the ideal tool.

Detailed orthographic views can be produced to any scale by transferring the scanned information into a photo-realistic textured 3D model, or you can use your model as the basis for 3D animation.