breuckmann
precision in 3D

stereo*SCAN* 3D

THE MEASURING SYSTEM FOR HIGHEST DEMANDS




Maximum Flexibility and Accuracy:
The **stereo*SCAN*** 3D system was developed to meet the increasing demands of our customers.
stereo*SCAN* 3D consists of a fully integrated combination of our patented **MPT projection** unit and 2 high resolution digital cameras which are asymmetrically positioned at either side of the projector. This configuration enables maximum performance with regard to **flexibility** and **precision**.

Flexibility:
Due to the asymmetrical camera set-up, three different triangulation angles (**10°**, **20°** and **30°**) are implemented. By this way, even areas which are otherwise difficult to capture, can be reliably assessed. Easily exchangeable objectives ensure fast switching between different measurement areas.

Camera modules may be mounted fast and easily in various positions on the sensor base. With such flexibility, even small measurement areas can be realised without substituting the sensor base.

Precision:
Two digital cameras featuring **1.4 million pixels** each (optionally: **6.6 mega pixels**) guarantee highest resolution and accuracy. The carbon fibre base structure ensures optimum mechanical and thermal stability of the sensor. The software provides intelligent data management procedures based on quality criteria, resulting in a high degree of data certainty. Due to the fast acquisition time of approx. 1 second, the occurrence of negative external influences is minimized. Calibration may be performed by the user within minutes and with a high degree of accuracy. The system is certified VDI/VDE 2634.

breuckmann
precision in 3D

stereoSCAN 3D

THE MEASURING SYSTEM FOR HIGHEST DEMANDS

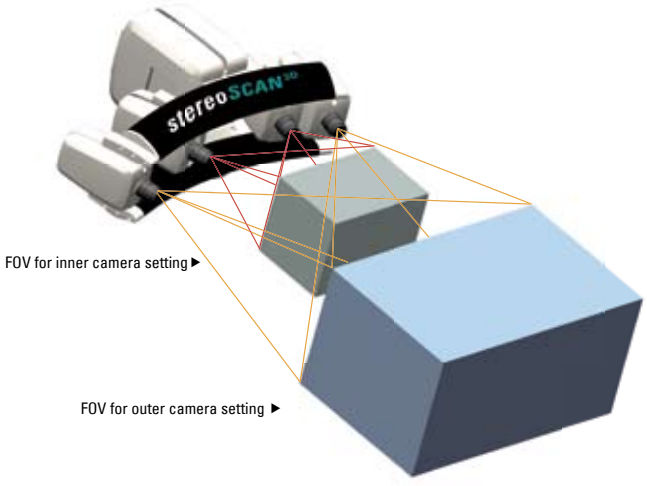
TECHNICAL DATA

Image Processing	
Host computer	Core™2 Duo, ≥ 2 GHz, ≥ 4 GB RAM, ≥ 60 GB HD, Open-GL-Grafikkarte, DVD-Wirter
Image data interface	IEEE 1394 (FireWire®)
Operating system	Windows XP
Measurement software	OPTOCAT *for Windows*, 3D-Alignment unterstützt alle wichtigen Navigationsstrategien 3D-PostProcessing zum Erzeugen von polygonisierten Datennetzen
Data interface	ASCII, BRE, STL*, PLY*, VRML*
* detailed specification on request	

Sensor	
Principle of operation	Miniaturized Projection Technique
Light source	100 W halogen
Sensor weight	6 kg
Imaging	2 high resolution digital cameras
Digitization	1384 x 1036 pixels per camera
Operating distance	380 mm / 880 mm
Resolution limit (Z)	2 µm (dependent from measurement areas)
Acquisition time	< 1 s

Options	
High resolution cameras	2 cameras with 6.6 Mpixels (3000 x 2208 pixels)
Host computer	Laptop
Software options	3D-EdgeDetection, 3D-Inspect

The measurement ranges: 60 mm to 725 mm
For the **stereo*SCAN*** 3D system we offer an extreme large range of fields of view, from **60 mm** up to **725 mm**
This is possible due to the exchange of the lenses and an easy repositioning of the camera modules to an inner or outer position. An easy calibration procedure as well as laser pointers facilitate the alteration. Now 6 standard fields of view can be realized on one basis. Detailed information about all fields of view can be found in the corresponding data sheet.



Breuckmann GmbH
Industrial 3D Image Processing and Automation
Torenstraße 14 • D-88709 Meersburg
Tel.: +49 (0) 75 32 • 43 46 - 0
Fax: +49 (0) 75 32 • 43 46 - 50
Email: info@breuckmann.com
Web: www.breuckmann.com