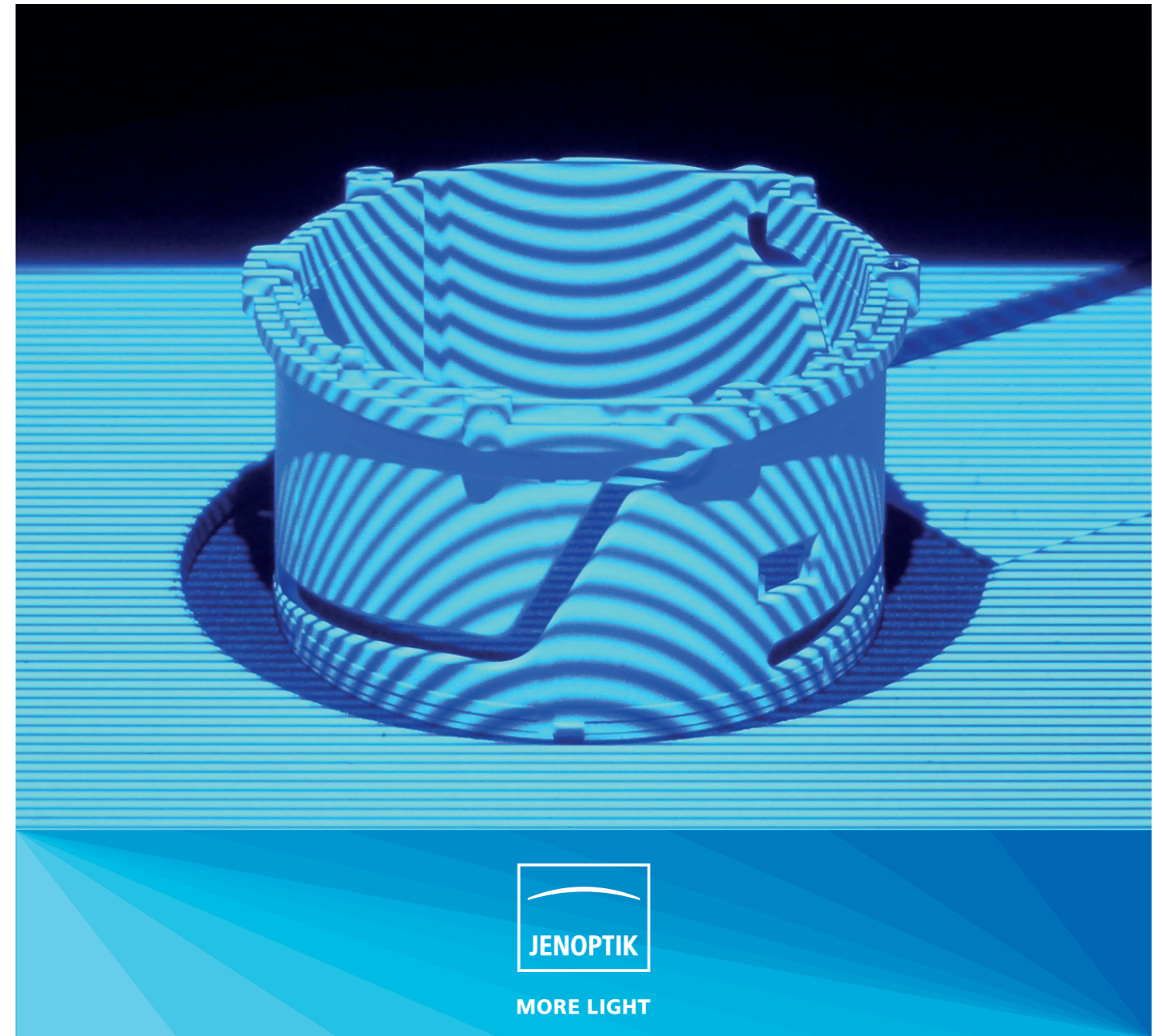


Technical parameters FLEX-3A



FLEX-3A with air-suspended table

	FLEX-3A
3D sensor	2x stereo camera, 5 or 12 MPix LED structured light projector, blue
Multi image calibration	3rd reference camera
Messvolumes [L x W x H]	20 x 15 x 5 mm to 230 x 172 x 100 mm
Smallest point spacing	down to 5 µm
Automatization	up to 4 motorized axes
PC	Desktop, XEON MultiCore, Windows 10, 64 Bit
Dimensions [L x W x H]	822 x 785 x 832 mm, height 1,600 mm with table
Weight	145 kg
Extra	Vibration isolation, ais suspension



MORE LIGHT



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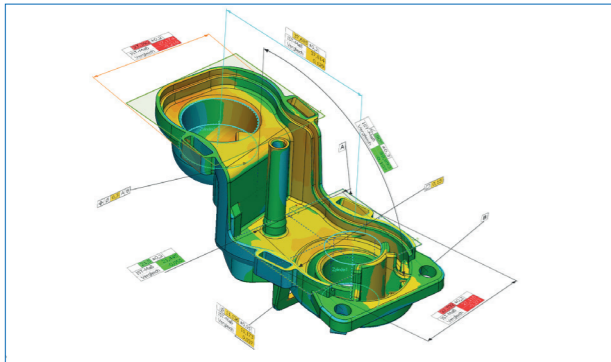
Visit us on YouTube.

It is our policy to constantly improve the design and specifications.
Accordingly, the details represented herein cannot be regarded as final and binding.
The items may be subject to the German and European Union Export Control Regulations/Laws.

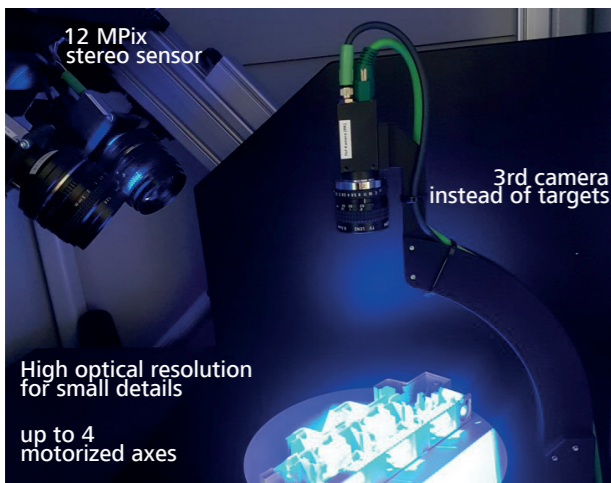
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Optical 3D metrology in plastic molding industry

Simplification and acceleration of first-article inspection, production monitoring and incoming goods control

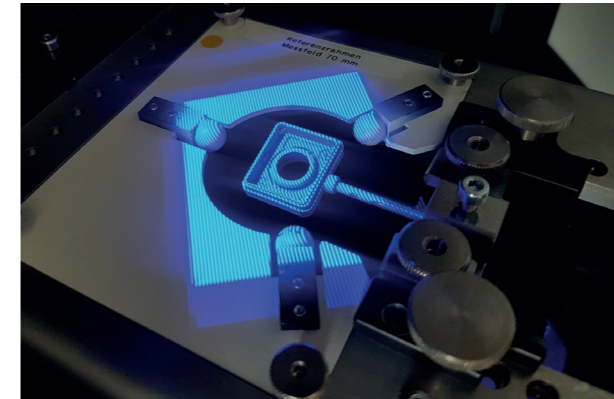


- Holistic quality control by 3D area scanning
- Direct variance analysis to CAD model
- Fast and easy geometrical dimensioning and tolerancing
- Fast localization of error sources like shrinkage, warpage, sink marks, etc.
- Acceleration of iterative tool optimization by first articles and prototypes
- Simplification of the inspection process by repeat measurements and requalifications



- Industrial 3D scanning
- Automated scan and inspection process - shop-floor ready
- High point density and measurement accuracy by unique combination of 3 high resolution cameras and small fields of view
- Patented, photogrammetric multi-image scanning technology
- No fixing of targets
- No complex part pre-alignment necessary

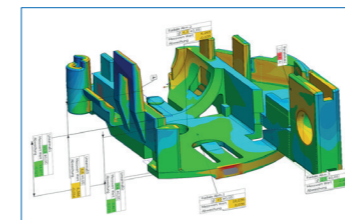
Easy automation of the inspection process with just a few clicks



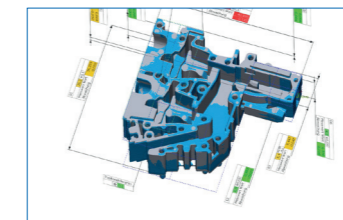
Motorized reference turning frame in FLEX-3A

- Up to 4 motorized axes for flexible control of all necessary viewing angles
- Fully automated scanning and inspection process
- All-round measurement without reclamping in motorized reference turning frame
- Modular clamping system for easy fixing of the measuring
- Automated evaluation of multiple parts incl. sequential inspection
- Integration of a linear axis for measuring volume expansion

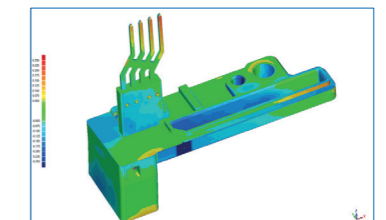
Flexible inspection of 3D scan data



Comparison scan data to CAD



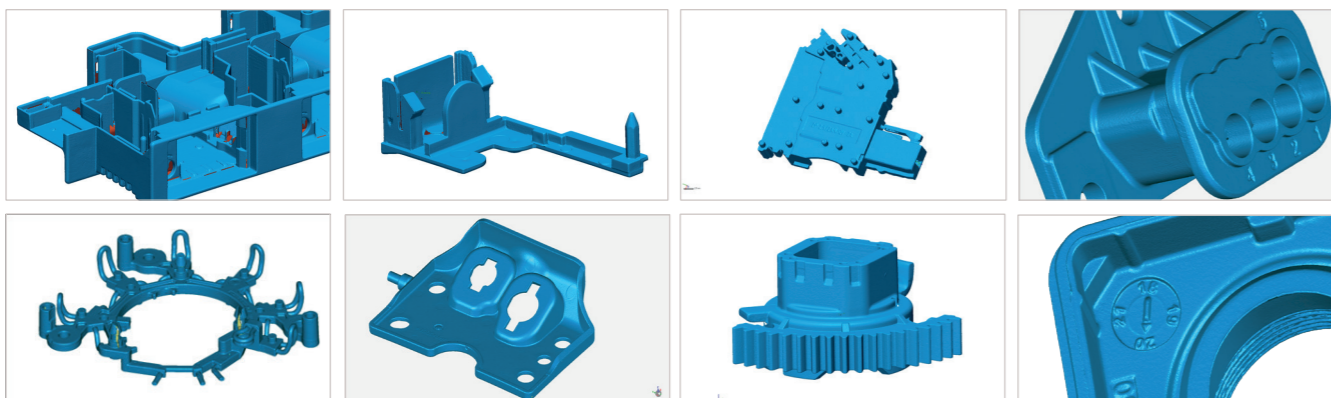
3D dimensioning



Deviation analysis of hybrid part

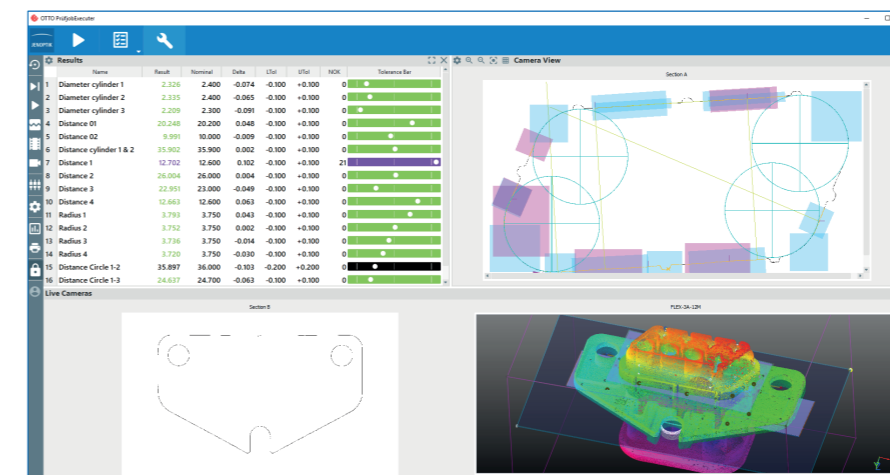
High-precision 3D scanning of complex plastic and hybrid components

- Robust fringe projection method with stereo cameras
- Use with different, optimized measuring field sizes by simply exchanging the lens set
- Object point resolution down to 5 µm for detection and inspection of smallest details
- Fast localization of error sources like shrinkage, warpage, sink marks, etc.
- Repeatability up to 1 µm
- Traceable measuring accuracy according to VDI 2634, sheet 3
- Simple, long-term stable calibration



Scan data of various plastic molding parts

- Evaluation of 3D point clouds and polygon models (STL)
- Direct comparison of scan data to CAD models or reference scans
- Dimensioning of all typical features on the solid model as well as in cross sections
- Determination of dimensions, shape and position tolerances (GPS, DIN ISO/ASME)
- Statistical process control (SPC)
- Flexible alignment (bestfit to master/CAD, 3-2-1, RPS, feature-based, hierarchical)
- Reporting as well as individual result output with information on batch, tool no. etc.
- Integration of external 3D software (Geomagic CONTROL X, Polyworks|Inspector™, ect.) into the automation process
- Reverse engineering



Inspection with OVIS Inspect software for fast evaluation of scan data