



**ATOS Q**

Quality starts  
with a Q.

An ATOS Q.





# ATOS Q – a real ATOS sensor

## **ATOS Performance**

High-speed fringe projection

Fast data processing

High data throughput

## **ATOS Technology**

Triple Scan Principle

Blue Light Equalizer

Self-monitoring system

## **ATOS Design**

Simple operation

Protected optics

For industrial use

## ATOS Performance

High-speed fringe projection

Fast data processing

High data throughput

Comprehensive quality information in reduced measuring time

Fast identification of optimal corrective measures

Cost efficiency



# ATOS Technology

Triple Scan Principle

Blue Light Equalizer

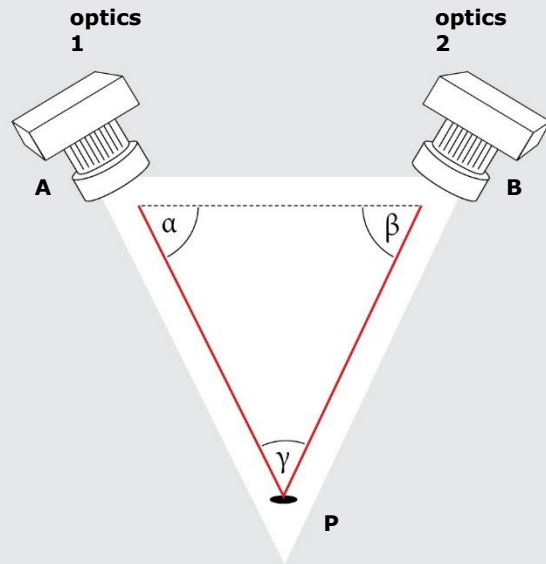
Self-monitoring system

- Precise, full-field  
3D coordinates (digital twin)
- Detailed information in 3D for  
comprehensive quality analysis
- Improved product quality

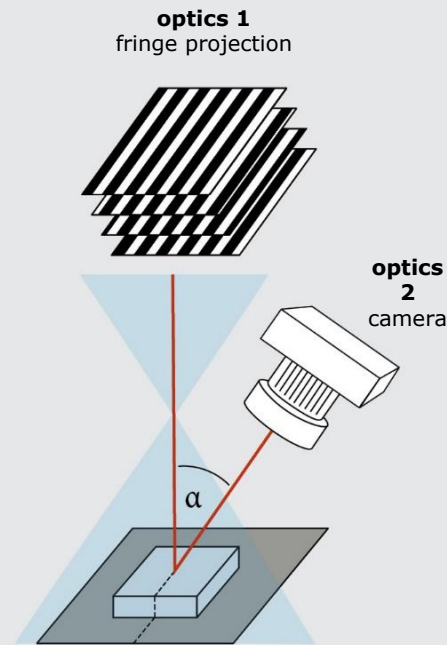


# Stereo Camera System

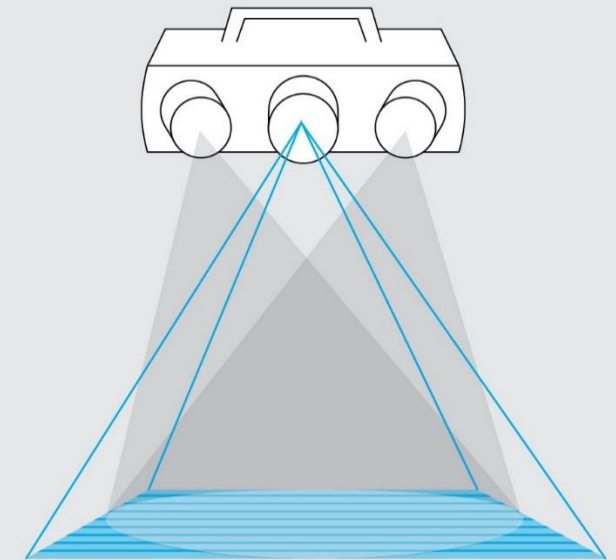
Using the triangulation principle in conjunction with the fringe projection technique, precise 3D coordinates are captured by the stereo camera system.



triangulation principle



fringe projection technique

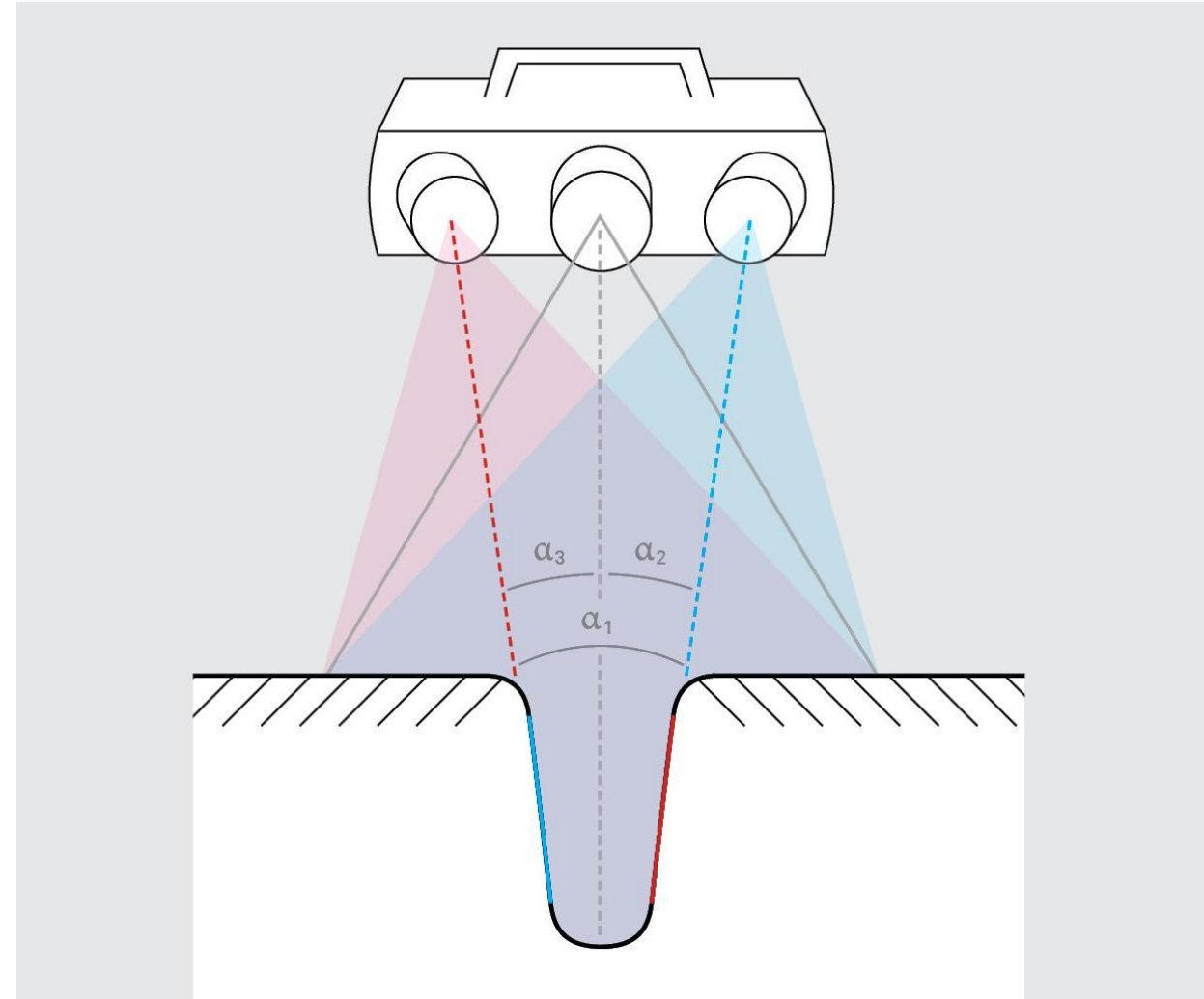


stereo camera system

# Triple Scan Principle

## 3-in-1 sensor concept

- Right and left camera, each combined with the projector
- Three different views of the object in one measurement



# Blue Light Equalizer

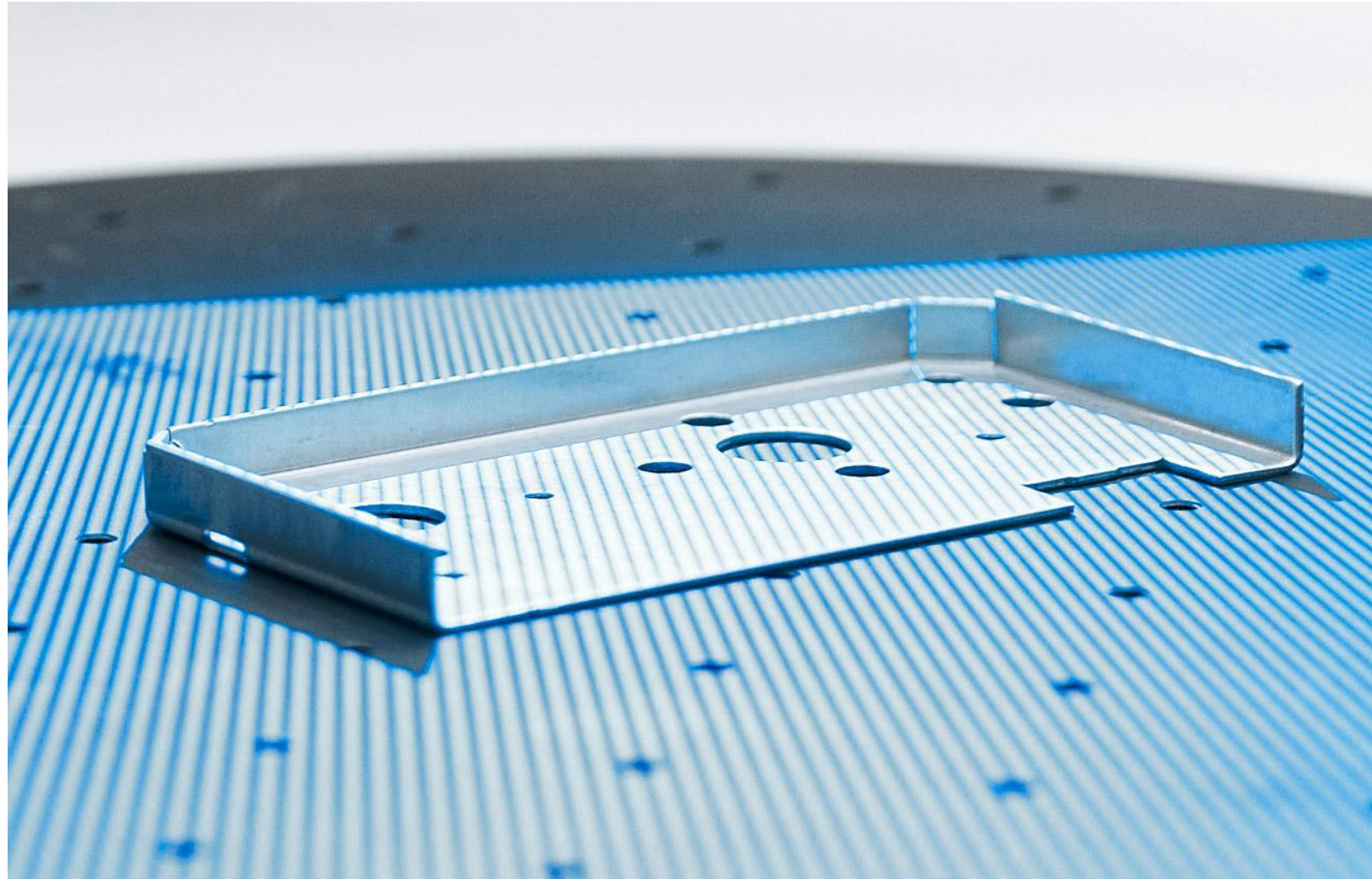
Bright LED light source

Projection of very small fringes per unit area

- High detail resolution
- Precise coverage of complex geometries

Uniform, non-coherent, speckle-free light

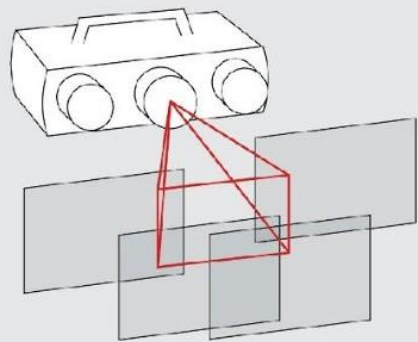
- Low noise level
- Precise coverage of complex geometries
- Highest data quality





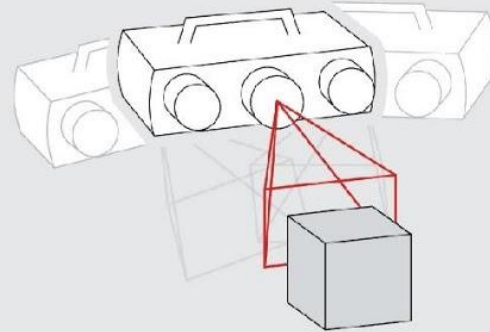
# Self-Monitoring System

Combining all checks during the measurement leads to process reliability during the measuring operation and ensures the accuracy of each single measurement.



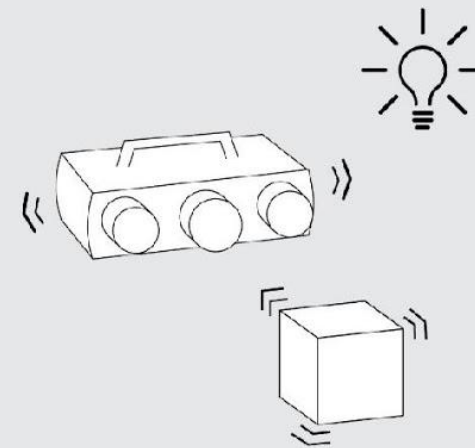
Clear transformation of individual measurements

Measurement data acquisition without user intervention



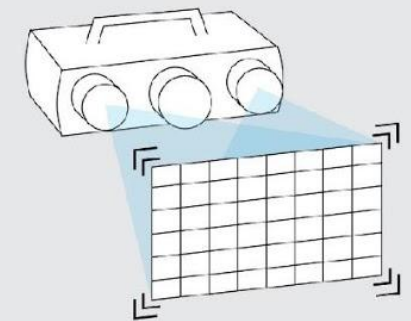
Tracking of sensor position

Free positioning of part towards sensor



Online monitoring of sensor/object movement and ambient light

Prevention of measurement errors



Online monitoring of sensor calibration

Verifiable measuring accuracy

## ATOS Design

Simple operation

Protected optics

For industrial use

- Robust, compact sensor
- Traceable results even under harsh conditions
- Use close to production possible



## Module: Technical Data

Small, mobile  
and versatile

compact

low weight ( < 4 kg)



## Exchangeable measuring volumes

MV100, MV170, MV270,  
MV350, MV500



## Operation modes

stationary

semiautomated





## One series, two versions

ATOS Q 8M

ATOS Q 12M

	ATOS Q 8M	ATOS Q 12M
Light source	LED	LED
Points per scan	8 million	12 million
Measuring area [mm <sup>2</sup> ]	100 × 70 – 500 × 370	100 × 70 – 500 × 370
Point distance [mm]	0.04 – 0.15	0.03 – 0.12
Working distance [mm]	490	
Weight	approx. 4 kg	
Dimensions	approx. 340 mm x 240 mm x 83 mm	
Cable length	10 m fiber optic cable	
Operating system	Windows 10	
Measuring volumes	100, 170, 270, 350, 500	

