TRIOPTICS

See the Difference.

At a Glance

OptiCentric® 100

Highly Precise Lens Centering Measurement, Alignment and Assembly Systems



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Advantages of OptiCentric® Systems

- Highest absolute accuracy of 0.1 µm and highest resolution of the measurement head
- Lens centering measurement of all types of optics, in UV, VIS and IR: spherical, aspherical and cylindrical lenses and lens assemblies
- Testing of complex lens assemblies with the MultiLens software module
- Fast and precise alignment processes, thanks to the OptiCentric® software module SmartAlign
- Exchangeable head lenses for virtually unlimited measurement range
- Measurement in reflection and transmission
- Modular and integrated OptiCentric® accessories
- Large diameter range from 0.5 mm to 800 mm: OptiCentric® systems are available in the sizes OptiCentric® 100, OptiCentric® 300 and OptiCentric® 300 & 600 UP



Overview of OptiCentric® 100 Systems



OptiCentric® 100

The industry standard for centering testing and manual lens alignment and assembly



OptiCentric® 100 IR

Assemble and test IR lens systems



OptiCentric® 3D 100

Centering testing and center thickness/air gap measurement in one system



OptiCentric® 100 Dual

Centering testing of lenses and complex optical systems



OptiCentric® Cementing

Significant increase in efficiency and accuracy when cementing

- to the optical axis
- on an arbor



MultiCentric® Cementing

For the shortest cycle times and very high accuracy when cementing with the optical axis as reference

The following combinations of the systems presented above are also available:



OptiCentric® 3D 100 Dual



OptiCentric® 3D 100 IR



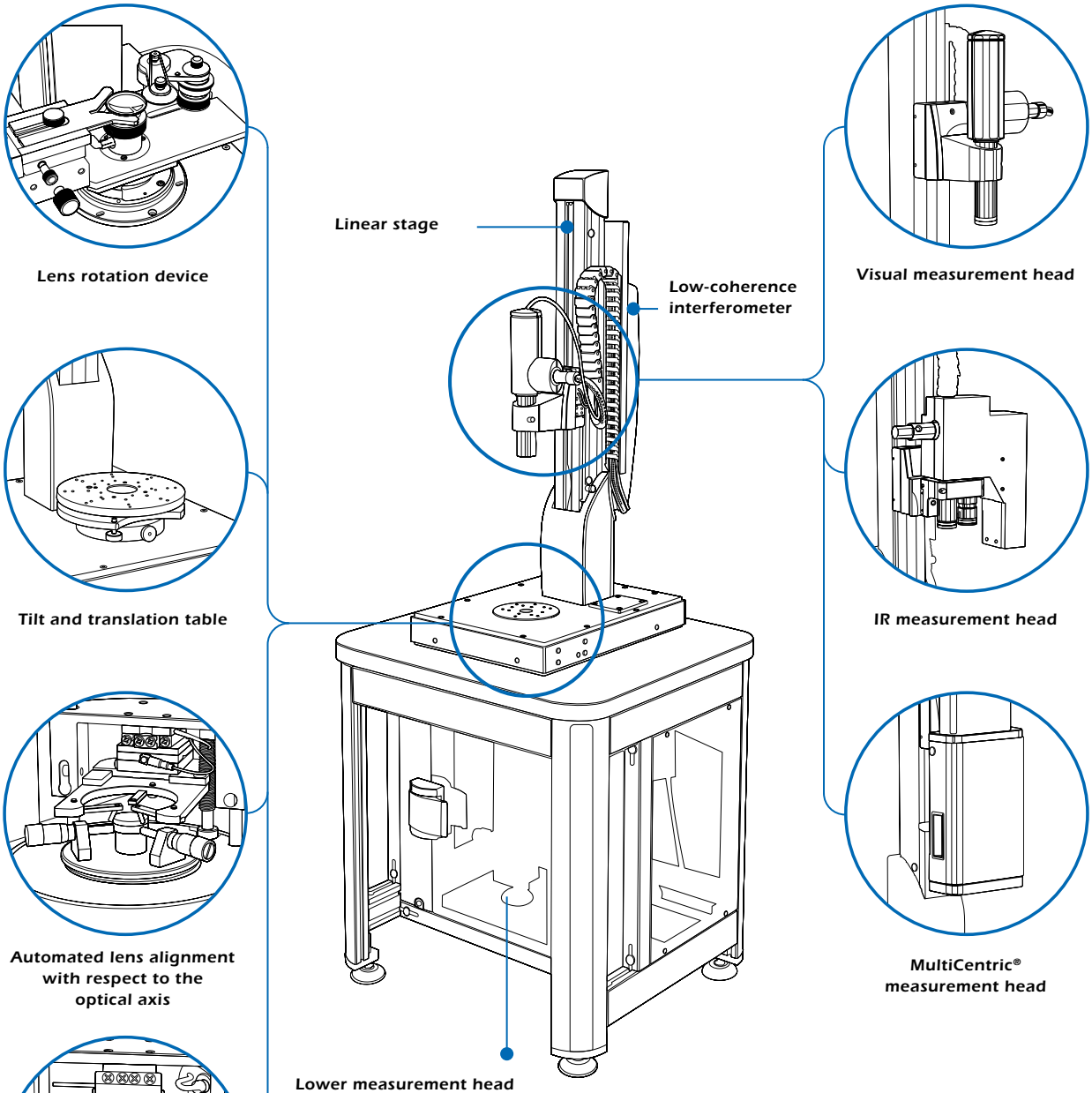
OptiCentric® 100 Dual IR



OptiCentric® 3D 100 Dual IR

System Overview

Modular Structure of the OptiCentric® Systems



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Technical Data

OptiCentric® 100

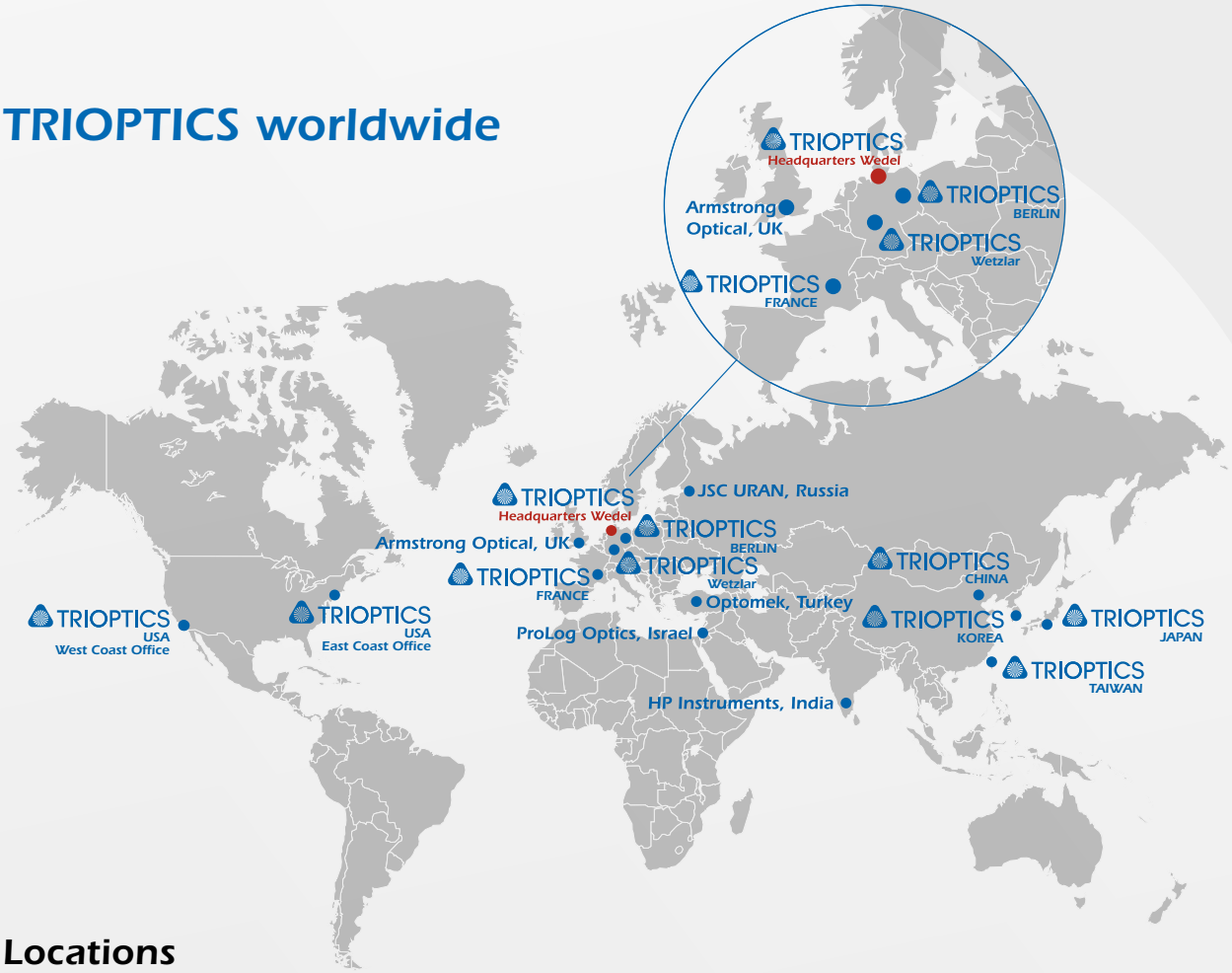
Legend: ☑ Standard configuration ○ Optional configuration

	OptiCentric® 100	OptiCentric® 100 IR	OptiCentric® 3D 100	OptiCentric® 100 Dual	OptiCentric® MultiCentric® Cementing
Measurement accuracy[1]	0.1 µm	1 – 2 µm	0.1 µm	0.1 µm	0.1 µm
Maximum sample weight	Air bearing 20 kg | Lens rotation device 2 kg				
Maximum sample diameter	Air bearing 0.5 – 225 mm | Lens rotation device 0.5 – 200 mm				
Optimal sample diameter	0.5 – 120 mm				
Lens rotation					
Air bearing	○	☑	☑	☑	☑
Lens rotation device	○	○	○	○	○
Motorized stages[2]					
450 mm	☑	☑	☑	☑	☑
250 mm, 550 mm oder 990 mm	○	○	○	○	
Reflection | Transmission					
Measurement in reflection	☑	☑	☑	☑	☑
Measurement in transmission	☑	○	○	☑	○
Measurement head					
Visual measurement head	☑		☑	☑	☑
IR measurement head (VIS-MWIR or VIS-LWIR)	○	☑	○	○	○
MultiCentric® measurement head					○
Additional upgrades					
Center thickness and air gap measurement	○	○	☑	○	
Dual upgrade (2nd measurement head)	○	○	○	☑	
Effective focal length, flange focal length, radius, on-axis MTF (OptiSpheric® upgrade)	○		○	○	
Asphere axis measurement, AspheroCheck	○			○	
Cylinder lens measurement, CylinderCheck	○	○	○	○	
Angle measurement, OptiAngle	○		○	○	
Workstation	○	○	○		○
Upgrade for lens alignment and cementing - on mandrel or with respect to the optical axis	○	○	○	○	☑

[1] Under stable environmental conditions at 100 mm height above the surface of the air bearing

[2] Manual stages upon request

TRIOPTICS worldwide



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