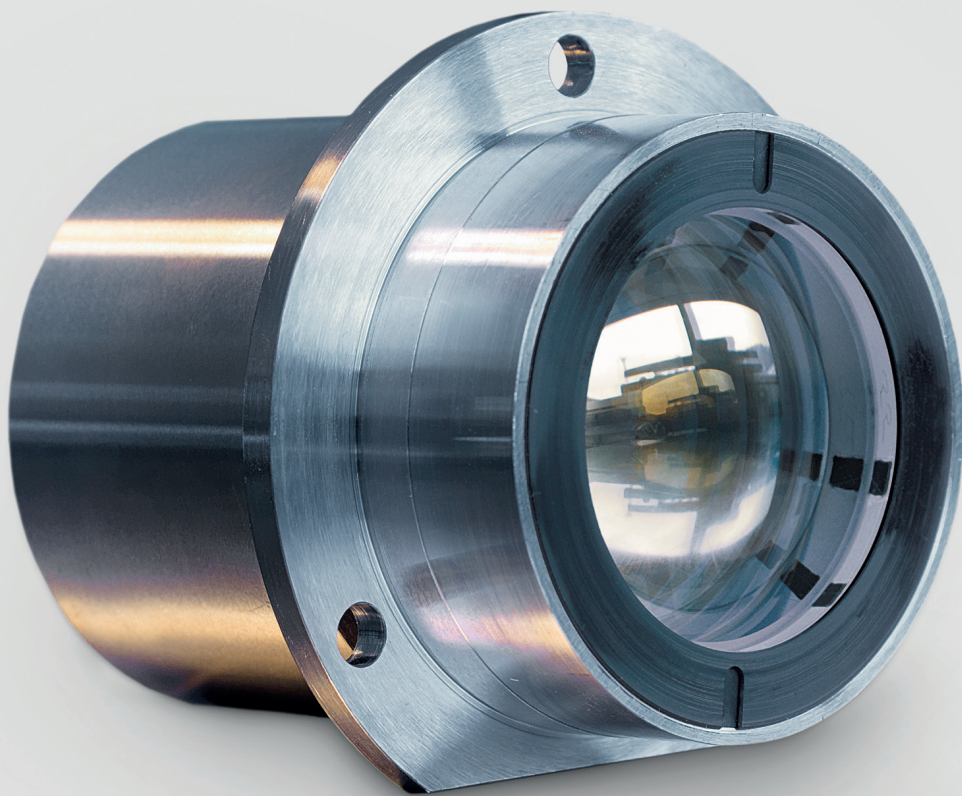


# **CUSTOMIZED LENSES**

## FOR HIGH-PERFORMANCE APPLICATIONS



# CUSTOMIZED LENSES

## APPLICATIONS

### Fields of application

- ▶ Illumination
- ▶ Focusing

### Measurement procedures e.g.

- ▶ Reticle inspection
- ▶ Wafer inspection
- ▶ Metrology
- ▶ Positioning
- ▶ Ablation

## SPECIFICATIONS

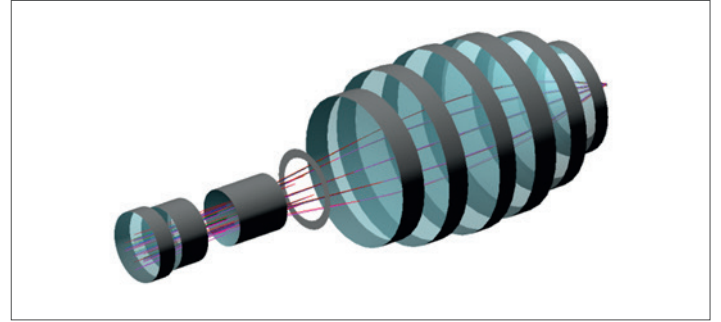
- ▶ Lens components  $\varnothing$  5–300 mm
- ▶ Lenses for wavelength range 193–1'300 nm
- ▶ Focal length 8–100 mm
- ▶ Wavefront accuracy 0.04  $\lambda$  RMS ( $\lambda$  working wavelength)
- ▶ Diffraction limited

## HOUSING

- ▶ According to customer specification
- ▶ Mechanic design inhouse
- ▶ Nitrogen or clean dry air flushed
- ▶ Lens built with compensation method

## TEST & QUALIFICATION

- ▶ Lens qualification with customized metrology
- ▶ Qualification in operating position
- ▶ Compensation alignment



## CUSTOMIZED METROLOGY

- ▶ Inhouse development
- ▶ Composition of measurement set-ups
- ▶ Measurement set-ups designed in function orientation
- ▶ Measurement of
  - ▶ Boresight errors
  - ▶ Distortion
  - ▶ Wavefront
  - ▶ Spectral reflection/transmission
  - ▶ Filed of curvature
  - ▶ Focal length for field angle
  - ▶ Objective & image position
- ▶ Metrology for alignment

## CLEAN ROOM PRODUCTION

- ▶ Assembly/Mounting
- ▶ Adjustment
- ▶ Measurement
- ▶ Clean room class ISO 5 with AMC\* (VOC\*\*)

\*airborne molecular contaminations

\*\*volatile organic compounds

