

SWISS  MADE

LENS QUALITY INSPECTION

Optical inspection of artificial lenses from ocular/intra-ocular lenses to industrial micro-lenses.

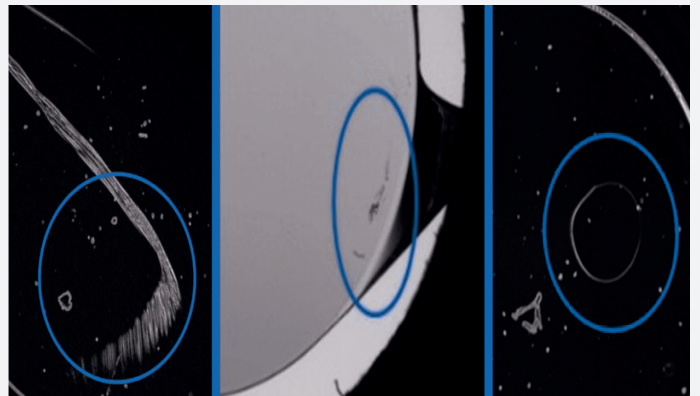
21 CFR PART 11 COMPLIANT

Includes audit trail, comfortable user administration and product management.



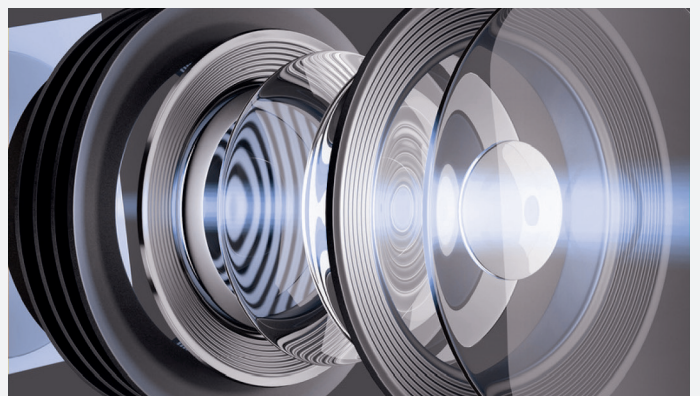
VALIDATION GUARANTEED

Project processing according to GAMP guidelines and validation support on site.



FLEXIBILITY / FREEDOM

Multiple camera solutions, optical fault detection from combinations of different procedures and specific lighting techniques.

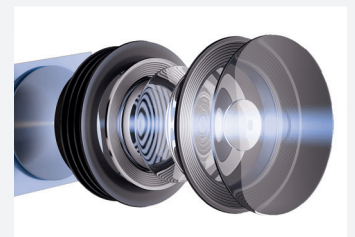


Optical inspection of artificial lenses from ocular/intra-ocular lenses to industrial micro-lenses.

Over the past two decades, Compar has developed multiple complete solutions for optical quality inspection of contact lenses.

Our custom built systems are used in almost all production steps: from lens mould inspection, mould completeness check, lens inspection (dry and hydrated), package integrity, and label verification on primary and secondary packaging components.

Optical inspection tasks are distinguished into geometrical measurement (ADI) and cosmetic defect detection (AOI). Quality features are geometry, shape, scratches, cracks, particles, discoloring, etc ..



Criteria / models	Inspection of contact lenses	Inspection of intra-ocular lenses (IOL)	Inspection of industrial micro-lenses
Part size	application specific		
Resolution	from 10 um	from 5 um	from 2 um
Cycle time	from 0.1 sec / part		
Vision system	VISIONexpert® PC based machine vision software		
Machine vision highlights	Teach-in mode for new products, integrated product management, production statistics, GAMP project procedures, 21 CFR Part 11 compliance, audit trail, user access control, multiple languages, validation support, etc.		
Inspection tasks	<ul style="list-style-type: none"> » Mould orientation detection, monomer bubble detection in moulds » Tray inspection for misaligned moulds, missing mould caps and turned moulds, foreign materials, mould batch inspection, unsealed mould detection » Cosmetic inspection with regard to scratches, edge defects, surface defects, broken and torn lenses » Lens inspection in open and sealed blisters, detection of duplicates and empties, foreign material, blister film sealing » Detection of sealing defects, dirt and sealing spots, film overpressure test, film alignment control, OCR / OCV, 1D and 2D code verification 		
Options	<ul style="list-style-type: none"> » Multi camera solutions » Special designs are also possible on request 		

(1) Cycle time strongly dependent on test criteria.

REALIZED APPLICATIONS / EXAMPLES / MARKETS

contact lens

ocular lens

mobile lens

industrial lens

micro lens

other lenses

