

Moulded Optics @ Leica Camera AG



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Leica Camera is well-known for products of optical excellence. Many of them use precision glass moulded optics (PGMO) today.

Product Portfolio - overview

Camera Systems



Other cameras (single lens)

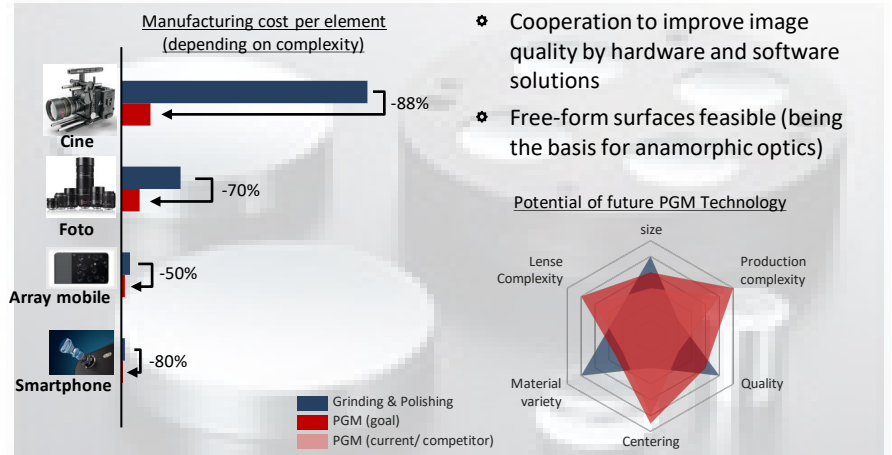
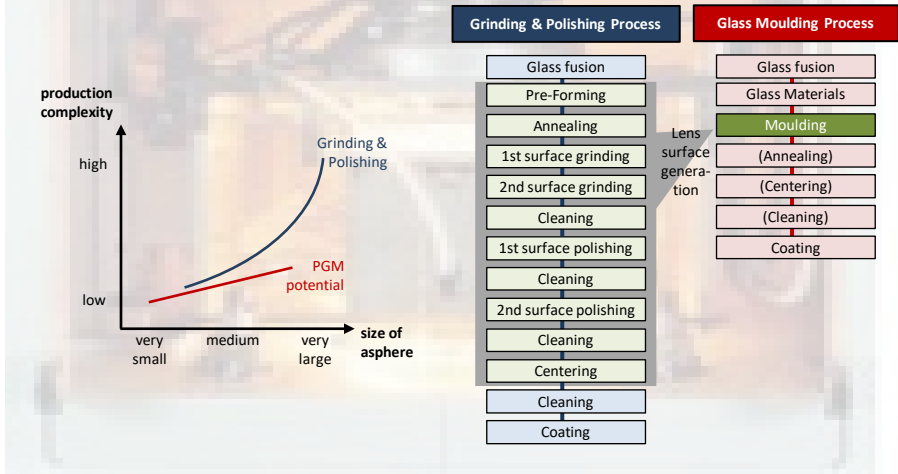
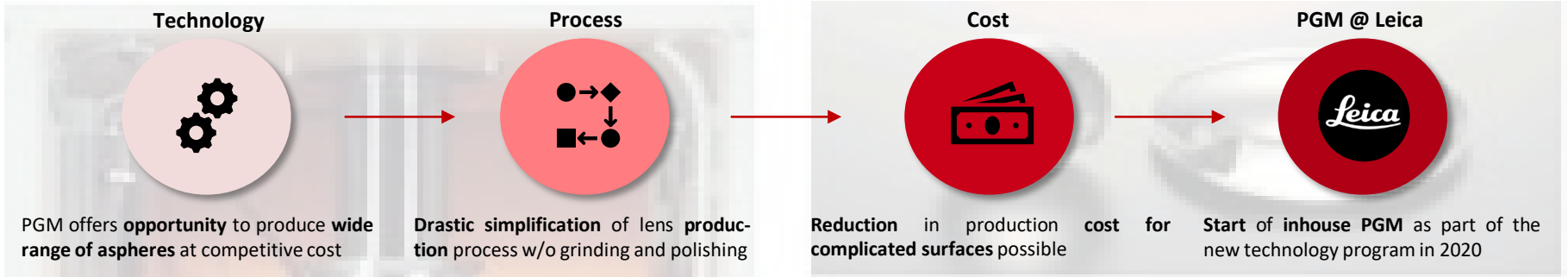


Sport Optics





Leica Precision Glass Moulding (PGM) was started for inhouse supply and is offered as part of our Image Quality Improvement Partnerships.



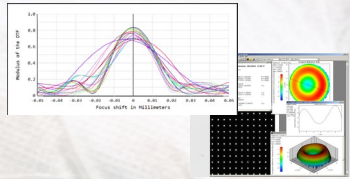


Technology partners are encouraged to support our Leica Integrated Optics Development Workflow in all four stages..

Leica continuously improves its high performance cameras and lenses with the newest technologies.

4. Lens Characterization

- ✦ MTF Measurement
- ✦ Wavefront Measurement
- ✦ Stereo Calibration



3. Lens Assembly

- ✦ Lens Alignment
- ✦ Center and Leveling
- ✦ Fixture and Mech Shock Reliability
- ✦ CTE Compensation & Temperature Shock Reliability



4. Lens Characterization

3. Lens Assembly

Integrated Optics Development Workflow

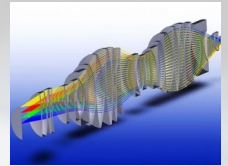
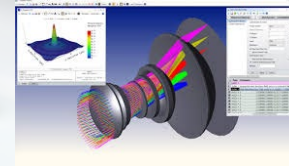
Improved camera version

1. Optical Design

2. Lens Manufacturing

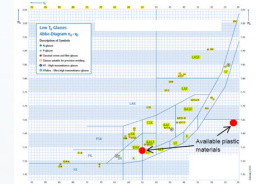
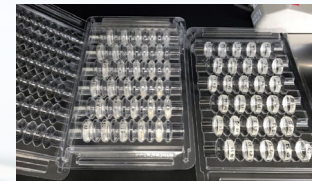
1. Optical Design

- ✦ ZEMAX/ CODE5 design
- ✦ Mechanical Design
- ✦ Tolerancing and Yield
- ✦ Reliability Simulation



2. Lens Manufacturing

- ✦ Polishing vs. Glass Moulding
- ✦ Molding vs. Diamond Turning
- ✦ Single lens vs, Wafer Level





Thank you



Thank you for your attention.

Your questions are welcome.

A large, red, circular logo with the word "Leica" written in white, cursive script, set against a dark, textured background.

Leica