Post UV Curing, Finalize frontal UV curing process Removes semi finished

Deblocking; product from optical molds





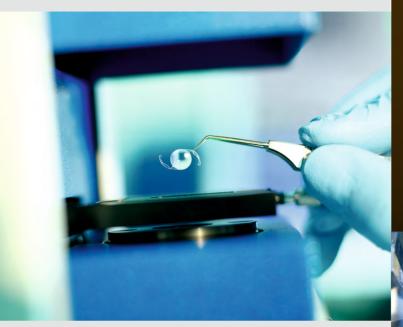
Soxhlet Extraction; Removes all chemical residues from product



Quality Control; Inspection of products according to related standards



Optical Measurement; Power measurement of product



Labeling; Barcode labeling for traceability. Sterile Packaging; Sterile packaging process for EO Sterilization; EO Sterilization cycle Secondary Packaging; Foldable box secondary packaging process.



MATERIALS AND TECHNOLOGIES



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Production Technology Built and Set-up Timeline

: Frontal UV Curing, Photopolymerization : Medical Implants; IOLs, Shunts, Meshes and etc.

Document

: One Year





Glistening Free²

Unique composition of IOLStar hydrophobic raw material allows uniform hydration of specific sites to have controlled water uptake and resistance to glistening formation.

Secure and Safety Products

- With Millions of Intraocular Lenses (IOLs) produced and sold out over all the world.
- Premium IOLs made from specific high quality IOLStar Hydrophobic raw
- Unique production technology and raw materials offers the superior level of safety, comfort and long-term reliability.

100 % Hydrophobic

- 100 % Biocompatible raw material is suitable for manufacturing of IOLs and different kind of polymer implants.
- 100 % Hydrophobic IOLs never accept water inside-in chemical structure.
- 100 % Hydrophobic IOLs are ready for packaged in dry state.
- $100\,\%$ Hydrophobic IOLs have a cross-link structure and do not dissolve in any solvent.
- 100 % Hydrophobic IOLStar IOLs refractive index is 1.51 and allows to the best optical design.
- UV Block under 379 nm (blue block raw material is also available).

Biocompatibility¹

Fully biocompatible IOLStar raw material is exhibit the following features;

- Elicits no foreign body reactions.
- Accepted by the surrounding tissues.
- Has good compatibility with the capsular bag.
- Provides satisfactory vision over the lifetime of the patient without any further intervention.

Advantages of Production Methodology

- Low raw material consumption.
- All in one process (from liquid raw material to finished product).
- 3x better surface quality against to lathing process.
- Scratch free IOL surface.
- No need any additional polishing process.
- Low reject rate.
- Allows "mixed power" production.
- Easy to increase production capacity.

Unique Production Equipments

- Hydrophobic IOL raw material
- Optical mold pairs
- Raw material dosimeter
- Photopolymerization system
- Ultracentrifuge system
- Post UV curing system
- Soxhlet extraction system

Recommended Minimum Capacity

230.000 units product (% 15 reject rate) in one shift with 14 qualified production people.3

- 1 set of raw material dosimeter
- 4 sets of photopolymerization system
- 2 sets of ultracentrifuge system
- 2 sets of post UV curing system
- 1 set of soxhlet extraction system

Production Flow Details

Optical Molds; Prepare optical molds for production cycle



Raw Material Dosimeter; Drops raw material inside optical mold pairs



Photopolymerization; Performs frontal UV curing process



Ultracentrifuge; Develops semi finished product

