GKN AEROSPACE

The View from Your Seat Starts in **Garden Grove**

When you look out a plane window, you're looking through something carefully engineered to withstand the demands of flight. Many of these windows are designed and made at GKN Aerospace's Garden Grove facility for aircraft around the world. Here's how our team does it.

01 **Creating the Acrylic Sheet**

Liquid methyl methacrylate, or MMA, is cast into sealed glass molds and cured under carefully controlled conditions to form aerospace-grade acrylic sheets.

02 **Strengthening the Acrylic**

The sheets are heated and stretched using a specialized process that makes the acrylic stronger while preserving its clarity and light weight. Garden Grove pioneered the process and patented the first machine designed for it. The sheets are then polished to the required thickness.

03 **Forming & Coating**

Skilled technicians work with precise machines to cut each flat sheet to size, reheat it, and form it into the curve required for a specific aircraft. The sheet is polished to remove marks or imperfections, then a proprietary protective coating is applied to improve abrasion and chemical resistance, repel water, and significantly extend the life of the window.

04 **Machining & Assembly**

Each passenger cabin window is made of an inner and outer acrylic pane. The two panes are cut and finished to the right size, then delivered separately or assembled together, depending on the aircraft.

05 **Final Inspection**

Each window is inspected throughout production and undergoes a final review to confirm its clarity, dimensions, and compliance with customer and regulatory requirements. Once approved, it is carefully packaged and shipped.

Ready for Takeoff

Every step in the manufacturing process reflects the precision and craftsmanship of our Garden Grove team. **More than 3.5 million passenger cabin windows** have been made at the Garden Grove facility.