

# MATSUNAMI's Technology (12 times in total)

Episode 4 :

## Glass surface polishing technology



Matsunami has various types of glass cutting technology.

In this episode, we would like to introduce our surface polishing technology.

By polishing to the thickness specified by our customers, the surface of our final products will become a high-quality mirror form.

In addition, ultra-precision polishing processing, high precision quality which optical glasses requested is also available.

### Features

- Polishing high quality glasses such as optical glass, colored glass and cover glass for high-pixel camera modules (appearance defects quality control start from 3 $\mu$ m level).
- High precision (flatness, parallelism, surface roughness).
- High quality US cleaning
- Available with various thickness
- Small lot prototype processing is welcomed
- Quality assurance by various types of measurement such as Laser-Microscopic, Laser interferometer, Haze measuring machine, Spectrophotometer.
- As an outsourcer to support your glass processing (from prototype to mass production).

### Technology & Equipment



Generator is used in the 1st step to make the thickness uniform by rough polishing.



Wrapping machine for the 2nd step; making the thickness uniform and polishing with higher accuracy.



Polisher for the last step; polish into the thickness specified by customer and be transparent. High quality polishing needed for optical glass is available in this step.

### Application

- Cover glass with extremely no scratches or appearance defects

Cover glass for image sensors (CMOS, CCD, etc.), optical glass filter (IR / UV, etc.), cover glass for camera modules (Digital cameras, In-vehicle cameras, industrial cameras, surveillance cameras, distance measurement/image recognition cameras), and other optical equipment, optical communication devices, etc.

- High flatness and high definition glass

In-vehicle cover glass, optical communication devices, optical substrate, projector, projection mapping, small and medium-sized flat display, LED cover glass, cover glass for semiconductor's laser beam, glass substrates, and the other cover glasses.

- 0.1mm Ultra-thin polished glass

### Size

	Surface polishing machine		
	Generator	Wrapping machine	Polisher
Minimum size	Φ10	Φ10	Φ5
Maximum size	Φ700	Φ335	Φ335
Thickness range	2mm~140mm	0.2mm~5mm	0.1mm~5mm
Available shapes (Shapes, Holes etc)	Circle, Square Free-drawn	Circle, Square Free-drawn	Circle, Square Free-drawn