

Production Engineering



To improve quality and productivity, TOPCON focuses on strengthening the 5 core technology fields and deployment of the products.

TOPCON provides a wide range of products in the positioning business, eye care business, and the finetech business to the world. To continue providing high-quality and high-precision products faster than anyone else, TOPCON believes that development of new processing technologies, improvement of productivity, and optimization of production systems are extremely important issues. In the production technology area, TOPCON has positioned high-precision polishing process technology, ultra-high-precision processing technology, molding technology, optical thin film technology, and microchemical technology, as the five core technologies. The company is doing its utmost to strengthen these technologies and deploy products.



High-Precision Polishing Technology



TOPCON's polishing processes achieve an ultra-high precision of one in several tenths of a single wavelength for planar and spherical surfaces, and even aspherical surfaces. This technique is used in the optical parts that form the basis of optical equipments.

Ultra-High Precision Processing Technology



TOPCON engages in development of cutting and grinding processes for metal mirrors, metal molds, refractive crystalline lenses, and various other shapes, as well as for a wide range of other materials.

Molding Technology



TOPCON's molding technology, suitable for the production of glass, plastic aspherical lenses, and small-diameter lenses, is applied in the development of more compact, more lightweight, and higher precision products.

Optical Thin Film Technology



TOPCON uses the vacuum deposition method (ion application), plasma CVD, solution method, and other film technologies to develop optical thin films ranging from the deep ultraviolet to the infrared region.

Microchemical Technology



TOPCON engages in development of compound optical elements using microprocessing technology, adhesion technology, and high-performance materials, and is working to identify substitutes for volatile organic compounds (VOC) and taking other environmental initiatives.