

INTRODUCTION OF KIMM AND NANO/MICRO MANUFACTURING TECHNOLOGY

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Keywords: Nano/Micro Manufacturing, precision machining, Injection Molding, Continuous Forming, Korea Institute of Machinery & Materials

Introduction of Korea Institute of Machinery & Materials(KIMM)

The Korea Institute of Machinery & Materials(KIMM) founded in 1976 and is a government-funded research institute under the Ministry of Science, ICT and Future Planning. KIMM mission is to contribute to economic growth of the nation by performing research & development on key technologies in the area of mechanical engineering. To achieve this, KIMM conducts reliability tests, evaluates machine components/materials, and commercializes the developed products or machineries through technology transfer and support. KIMM's research interests cover five research division; Advanced Manufacturing Systems, Nano-Convergence Mechanical Systems, Environment and Energy Systems, Extreme Mechanical Systems Engineering, and Mechanical Systems Safety.

Nano/Micro Manufacturing Technology in KIMM

The division for Nano-Convergence mechanical System is research cover three departments; Nano-Manufacturing Technology, Nano-Mechanics and nature-Inspired Nano Convergence Systems. The research department of Nano Manufacturing Technology is carrying out research to develop original and/or core technologies in the field of large-surface machining technology for high-precision nano/micro patterns, Laser Micro Machining, Nano/micro molding technologies and Large-surface nano imprinting process and equipment. Current research includes technology or equipment development for commercialization of the high functional optical device, flexible optical films and nano/micro bio devices. Also the department is research to next generation nano/micro manufacturing process and economic systems.

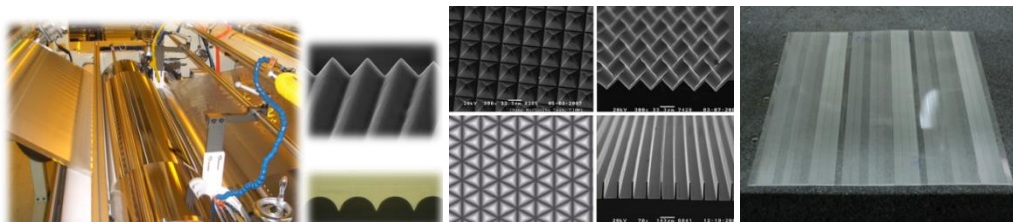


Figure 1: Nano/Micro pattern on Flat and Roll Mold and Replicated Products

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