비대칭비구면 렌즈 사출 코어용 6:4 황동 초정밀 형상 가공

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Ultra Precision Machining of Injection Mold Core for Asymmetric Aspheric Lens using 6:4 Brass

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Abstract : The global applications of aspherics surfaces will expand rapidly on the electronics, optical components, communications, aerospace, defense, and medical optics devices etc. Especially, Asymmetric aspheric prism lens is one of the important parts in HMD(Head Mounted Display) because it affects dominantly on the optical performance of HMD. The mold core is the most important device to produce the plastic lenses by injection molding method. In this study, the mold cores for asymmetric aspheric prism lens were processed using fly-cutting method which is kind of the ultra precision processing and form accuracy and surface roughness of the cores were measured.

Key Words : Head Mounted Display(HMD), Asymmetric Aspheric Lens (비대칭 비구면 렌즈), Form Accuracy(형상정도), Surface Roughness(표면조도)