

A Study on Molding Condition of Aspheric Glass Lenses Using Design of Experiments ; Slow Cooling Condition

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Abstract : This study investigated the slow cooling conditions in the molding of aspheric glass lens using the design of experiment (DOE). The optimization of the slow cooling conditions with respect to the form accuracy (PV) of the molded lens were ascertained by employing full factorial design. As a result of the analysis of variance (ANOVA) and P-value (significance level), it was verified that slow cooling rate represent the most significant operative variables that affect the corresponding response variable. In the optimum condition, the molded lens show 82% of transcription ratio.

Key Words : Glass Molding Press(GMP), Aspheric Glass Lens, Design of Experiment(DOE)