Along with the global economic integration, the manufacturing industry is challenged heavily to make effort for: "How to shorten the life cycle time and to lower costs"? So responding to improve the developing speed and the flexibility of manufacture technique, rapid manufacturing becomes the best way adopted by industry. Rapid manufacturing is the general name for Reverse Engineering (RE), Rapid Prototyping (RP) and Rapid Tooling (RT). This research aimed at the optimal parameters of silicon rubber moulding process by using Taguchi method. Here the L9 orthogonal chart is adopted for three factors (mixture composition of silica gel, time to harden, backing temperature) and three level, and nominal-the-best. Finally, the research is illustrated by two examples.

Keywords: Rapid Tooling; Silicone Mold; Taguchi Method

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