

Technical Information

Rapid Injection Molding

Cast kirksite cavities from SLA models can provide excellent Rapid Tools for prototype and bridge to production injection molded parts. Parts can be molded in 2-3 weeks in the correct thermoplastic production material.

Benefits of Rapid Injection Molding

- Prototypes in production material in 2 -3 weeks
- Allows for full fit and function testing.
- Discover design flaws early on. Low cost tooling allows for ease of geometry modification and design refinement
- Bridge to production process- molds can run thousands of parts

SIZE

Best suited for 2" to 20", complex shapes with compound curves and angular geometry.

TOLERANCES

General as molded tolerances.

0 - 2" +/- .010"	6 - 12" +/- .020"
2 - 3" +/- .012"	12 - 18" +/- .030"
3 - 6" +/- .015"	

Tolerances in molded parts can be improved in critical to function areas by: machining local areas in the mold and secondary CNC machining of parts

WHAT IS CAST KIRKSITE TOOLING

Kirksite is an aluminum/zinc alloy (4% Al, 3%Cu, 92%Zn). This technology is not new and in fact, has been around for many years but with the advent of CAD and RP it has reemerged and proven very complimentary to these computer aided tools.

Cavities are poured using the RPM process then fit into standard DME mold bases with standard injector and runner systems. Heating and cooling lines may be added as needed.