Investment Casting

Accelerating the production of casting patterns for the investment casting and lost wax foundry industry. Allowing faster prototyping and production of metal castings.

3D Systems offers two types of technologies:

QuickCast is a build style for SLA machines which is preferred by the medical, aerospace and defense industries due to its accuracy, high-level of surface finish, larger part size capability and well-established processing parameters. When combined with 3D Systems' CastPro resin, this provides the ideal pattern for rapid production of cast components.

ProJet Wax patterns are preferred by foundries working for the jewelry, medical and aerospace industries. This process ensures a higher level of surface finish, part complexity and ease of processing.

In both technologies, 3D Systems has decades of experience providing patterns to the foundry industry.

- Patterns can be used directly without changing existing casting process
- Decades of experience
- Two proven technologies available
- No tooling

Dimensional Limitations

There is no limitation on pattern size as larger patterns can be built using multiple pieces and bonded together.

Applications

- Aerospace
- Electronics industry
- Medical
- Jewelry

Materials

CastPro and Cast Pro Free are available. Cast Pro Free is Antimony free, ideal for industries such as aerospace.

Finishing & Post Processing

3D Systems provide a range of finishing services for investment casting patterns depending on your requirements and project timelines. Parts can be provided with support intact or removed and we can also carry out further finishing operations to achieve the highest quality surface finish available.

General Properties

- Highest surface level finishes and complexity
- Quick lead times
- Created without tooling
- Accelerates the casting process
- No special finishing required
- Lower cost of initial development
- Capable of producing the finishes required by the aerospace and medical industries
- Easiest patterns to process

Contact our team to explore the options best suited to your project's requirements