

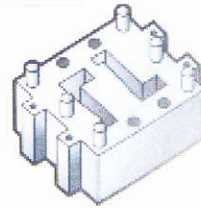
“What is Lost-Wax Investment Casting Process?”

This is one of the traditional casting methods, using a wax pattern of the part shape. This method gives a part great dimensional accuracy and fine surface while the large-scale production is still possible. There are many advantages of this method:

1. It is appropriate for manufacturing parts with thin wall and complex figure.
2. This method makes it possible to unify several parts into one part.
3. The beautiful surface finish can be used in many industrial fields.
4. The mold for a wax pattern will last almost indefinitely.

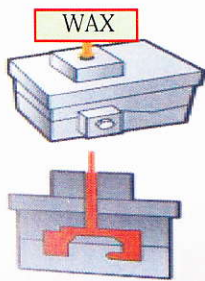


1. Part Drawing



2. Metal Mold Making

Make the metal mold for the wax pattern, considering the parting line and the liner.

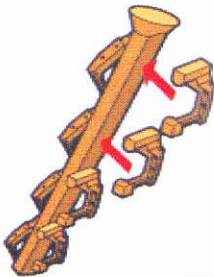


3. Wax injection

Inject molten wax into the metal mold in order to form wax patterns. These wax patterns become the shapes of the part.

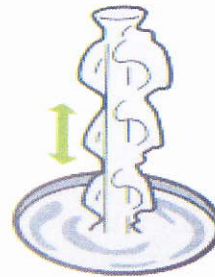


Wax injection



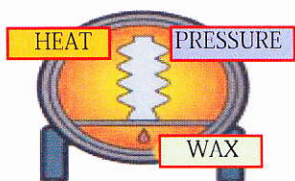
4. Wax Tree Forming

Assemble the wax patterns into the sprue runner like a “tree.” It makes possible to produce plural shapes at once.



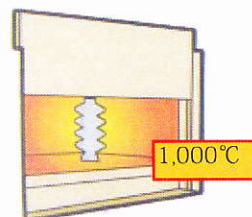
5. Ceramic Coating

Put the ceramic and the stucco on the tree, and then dry it. By repeating this process, the real mold is formed with appropriate thickness.



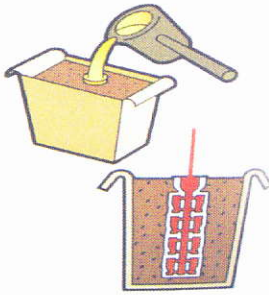
6. De-waxing

Heat the mold with high-pressure steam to melt out the inside wax. The cavities work as mold cavities.

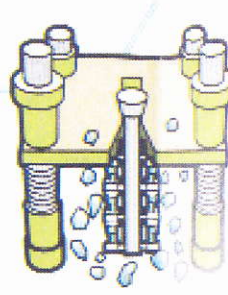


7. Firing

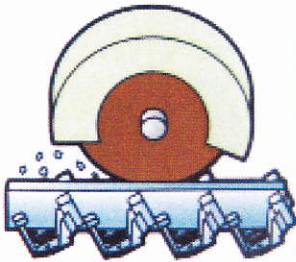
Fire the mold in order to improve the strength and to remove the impurities in the mold.



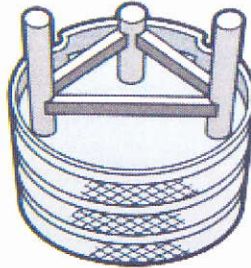
8. Casting
Pour the molten metal into the mold.



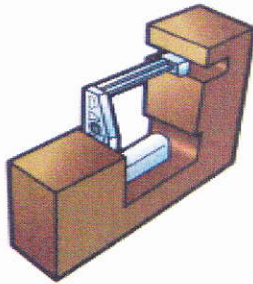
9. Shake-Out
Remove the sprue runner and the parts from the mold.



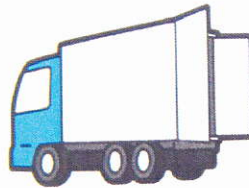
10. De-gating
Cut off the parts from the sprue runner.



11. Heat-treatment
Heat the parts to control the organization of the material.



12. Inspection
Check the appearance, shape, measure and casting failure.
If necessary, machining and surface treatment can be done.



13. Shipping