Lost foam casting process

Lost foam process is the process to coated foam model with refractory coating and put into sand box, filling around with dry sand and vibrate with micro vibration. Under vacuum pressure make the sand tight, then pouring under the situation without any cores. Maintain the vacuum during pouring and cooling, then get the castings after shaking out.
1. Pre-foaming.

To preset the polystyrene beads (EPS) to the appropriate density, which is usually carried out by steam rapid heating.
2. Foaming

The pre-foamed beads should under stabilizing treatment first, and then sent to the hopper of molding machine. After mold cavity full of pre-foamed beads, pass into the steam to let the beads soften, expansion, packed with all the gaps and glue as a body.
3. Foam assembling

For complex castings usually use different foams assembled together.
4. Dip-Coating
5. Coating drying
6. Sand filling
7. Pouring
8. Shaking out