High-precision models for lost-wax casting

- Model measurements up to 1,000 x 600 x 500 mm
- Same handling as for conventional wax parts
- Tool-less and hence more cost-effective process
- Single items and small series can be produced within a few days
- High degree of accuracy: ±0.4% (min. +/- 100 µm)
- Wax infiltration creates closed smooth surface
- Suitable for autoclaves, even for thin-walled shells
- Can be burnt out in normal kiln with low emission formation
- Does not expand during burn-out process, hence no shell cracking (whether gypsum or ceramics)
- Residual ash contents <0.02% for polyprop binder type C
- All alloys can be used with lost-wax casting process

Investment casting process

1. CAD model
2. PMMA model
3. Preparation with wax rods
4. First ceramic layer
5. Shell building
6. Several ceramic layers
7. Burning out PMMA of ceramic
8. Preparation for casting
9. Aluminium casting
10. Hardened casting
11. Individual motors are separated
12. Finished castings