

Large-format sand molds for metal casting

- Mold measurements up to 4 x 2 x 1 m
- Does away with elaborate and expensive mold set-ups
- Short throughput time (a few days)
- Sand molds correspond 1:1 with CAD model
- Structures can be designed in accordance with requirements, without having to watch for draft angles or undercuts
- Special sands prevent casting problems
- Surface quality can be adjusted through use of different sands
- Coarse-grained sands for high gas permeability
- Considerable flexibility with changes in geometry, without additional expenses
- No storage or maintenance of patterns
- Cost savings particularly for complex molds and batch sizes of 1 to several hundred pieces

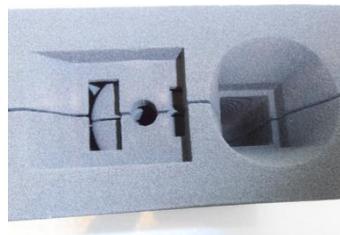
Sand casting process



1. CAD model



2. Sand mold



3. Integrated gating system



4. Embedding of sand mold



5. Aluminum pouring



6. Demolding



7. Demolding



8. Cooling



9. Lost sand mold



10. Casting including gating system



11. Finished casting



12. Casting with sand mold