

3D-Printing and Shotcrete



Celitement has been used to develop

- 3D-printing concrete for a classical extrusion process
- 3D-printing concrete for a material jetting process
- Shotcrete for an industrial tunnel construction

3D-printing concretes based on Celitement have already been developed for both extrusion and material jetting process. Each of this products has been produced and applicated in amounts of some tons and demonstrated immediately a good pumpability, a high green stability, an application-appropriate setting behavior and a sufficient strength. Tunnel shotcretes based on Celitement are also in the final phase of development. In this application, the greatest advantages can be seen in its resistance to sulfates and its greatly reduced tendency to sintering.



Celitement based 3D-printing concretes