

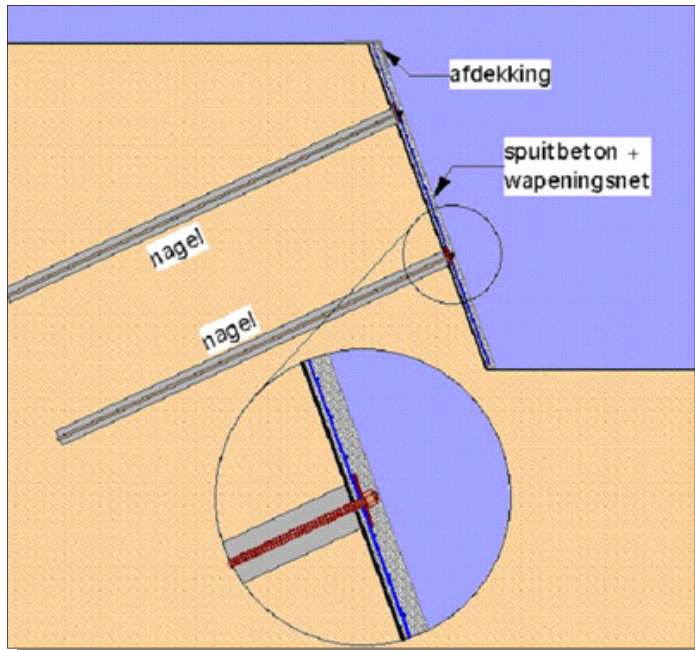


Execution

With the dry method, water and cement are injected separately to the spray nozzle and mixing only occurs when the shotcrete adheres to the surface. With the wet method, cement and water are mixed upfront and the mixture is injected to the spray nozzle, with only high-pressure air being added. The wet method has the advantage of less dust contamination and faster adhesion to the treated surface. Shotcrete is well suited for applications on previously fitted reinforcement, which allows it to achieve the same properties as reinforced concrete.



Shotcrete (gunniting) is a method by which concrete is sprayed on surfaces. Two methods are available: the dry method and the wet method.



This concrete technology differs from conventional concrete technology such that no shuttering is required. The mechanical impact of the shotcrete and the specially adapted mixture of sand, cement and gravel assure adhesion of the successive layers of the material to vertical substrates and ceiling surfaces.

The mechanical characteristics of shotcrete are 25% to 50% better than those of conventional concrete. This is in part due to the fact that the amount of water in the mixture is limited to that what is required to cure the concrete. Therefore no excess water is needed, compared to concrete that in the latter case would be necessary to fill shuttering cavities.

