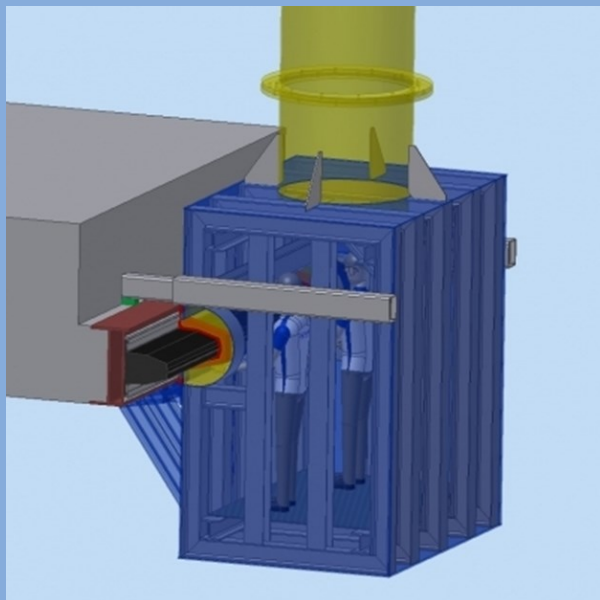


**Field of expertise:** Hydraulic Engineering

**Client:** Strukton Immersion Projects



## Habitat to repair a GINA profile, South Korea

### Project description

During the realization of an immersion tunnel in South Korea, a GINA profile got damaged. To guarantee a waterproof sealing of the tunnel elements, repair of the ruptured rubber was necessary. This repair had to be executed in a dry environment, however the damaged GINA profile was located 12 metres below the water surface. Because of that, MH Poly had designed a waterproof habitat. This habitat is a dry environment, large enough for two persons, that can be slide/shift around the GINA profile, so that the repair could be executed. For the design of the habitat.

MH Poly considered the following items:

- ◆ Optimum size of the habitat: large enough for two persons. A larger environment also results in more buoyancy;
- ◆ Prevent of new damages: during the installation and removal of the habitat no new damages may occur.

### Project activities

- ◆ FEM analysis of the ruptures in the GINA profile;
- ◆ Strength calculations of the habitat;
- ◆ Shop drawings of the habitat;
- ◆ Flowchart for the execution of the installation and removal of the habitat.