

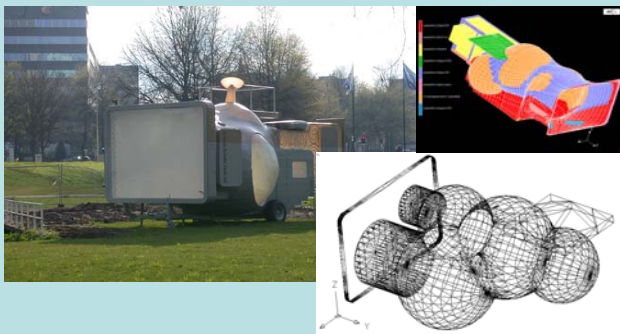
BLOB - Art Pavilion



Here we see the concept and design for an artpavilion on the campus of the Technical University in Eindhoven. Its shell is made of glass-fibred polyester composite. The mould of the structure is made of PVC coated polyester membrane. The pavilion is used for exhibitions, films on a screen, as street lighting and as a piece of art. The pavilion can be used in 2 positions, vertically and horizontally.



The design is achieved by means of an inflated membrane (inside) which supports the stressed shell (outside) This method is called the Blowing Structure Method. This methodology for the production of free form composite shells just obtained a patent



After designing the object, the order and position of the inflated elements was determined. Later the structural behavior of the scale was analyzed using computer programs as Marc Mentat and Conformer Alpha.



Voorbeeld:

Spuiten van beton op membranen

Modern innovative computer technologies make it possible to form double curved (freeform) architectural designs. Pneumatic and pre-stressed membranes / structures in combination with rigid elements play a major role in the development of these forms. Moreover, in this way also concrete and ice can be used as shell material