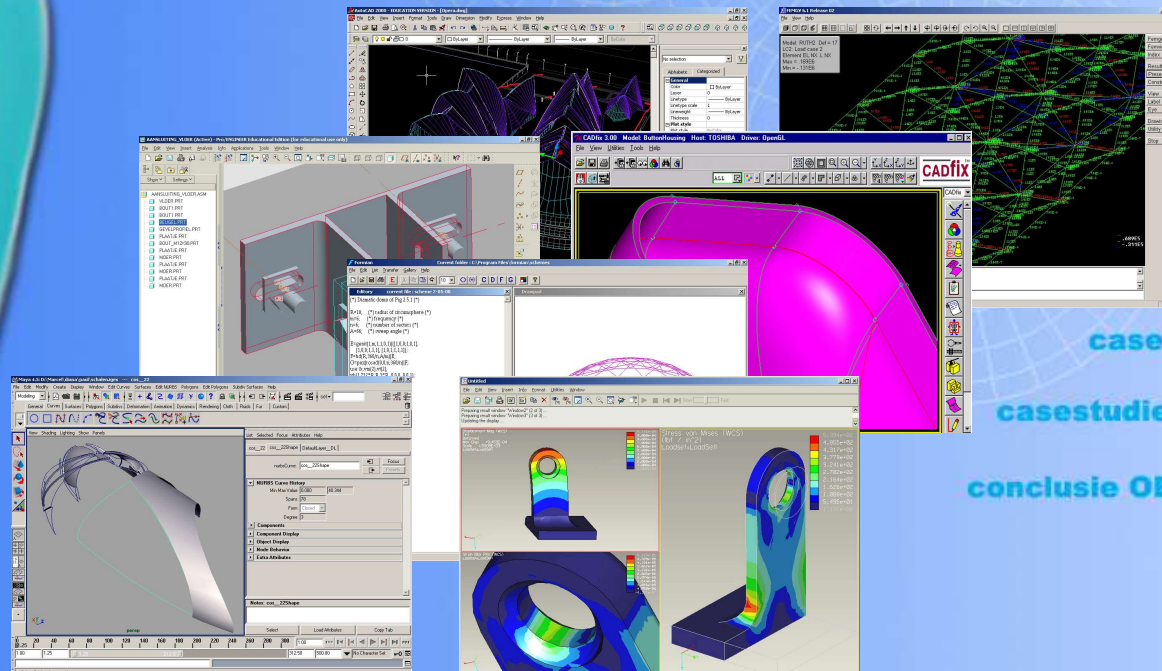


ICTO-project OBCP met ICT

**Ontwerpen, Berekenen, Construeren en Produceren
met behulp van Informatie- en Communicatie-Technologie**

- | | |
|-------------|---|
| CAD | - Computer Aided Design |
| FEM | - Finite Element Method |
| CAE | - Computer Aided Engineering |
| CAMP | - Computer Aided Modelling and Prototyping |



OBCP met ICT

casestudie Wichers

casestudie Hanselaar

conclusie OBCP ICT

ICTO-project OBCP met ICT

Doel van het project:

-Het verkrijgen van een bredere toepassing van ICT-werkvormen in het Bouwkunde-curriculum

Resultaat van het project:

-Studenten leren tijdens hun opleiding systematisch en geïntegreerd werken met digitale ontwerp, berekening, constructie, productie en presentatietechnieken

-Studenten werken gelijktijdig en integraal aan zo wel hun ontwerpvaardigheden als het toepassen van technisch-wetenschappelijke kennis

OBCP met ICT

casestudie Wichers

casestudie Hanselaar

conclusie OBCP ICT

Floating Fluid Pavilion Design

ir. Sieb S. Wichers

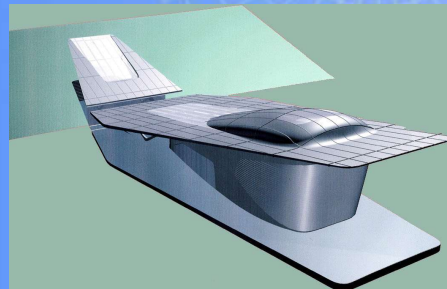
VOORONDERZOEK



Guggenheim Museum
Frank O. Gehry



D-tower
Lars Spuybroek



Haarlemmermeer Paviljoen
Asymptote Architecture



Xxx
xxx

OBCP met ICT

casestudie Wichers

casestudie Hanselaar

conclusie OBCP ICT



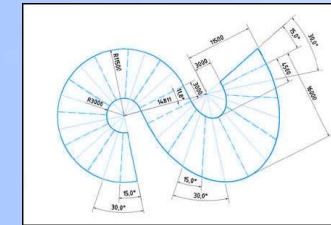
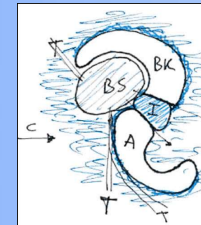
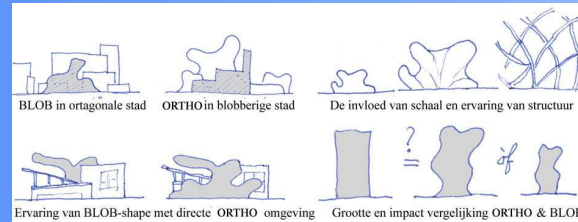
Noord-Holland Paviljoen
Oosterhuis



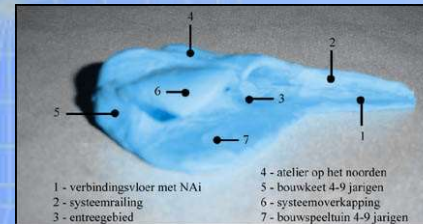
Floating Fluid Pavilion Design

ir. Sieb S. Wichers

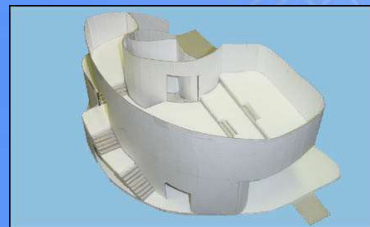
ONTWERPEN



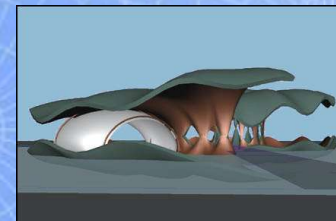
ontwerpschetsen



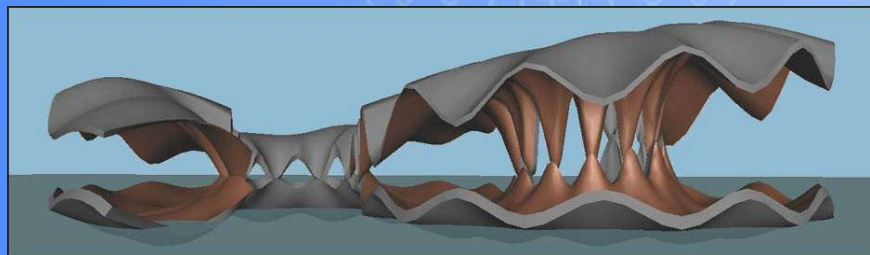
kleimodellen



interieur karton maquette



maya ontwerp



OBCP met ICT

casestudie Wichers

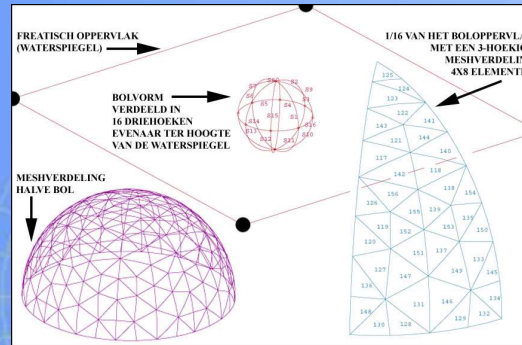
casestudie Hanselaar

conclusie OBCP ICT

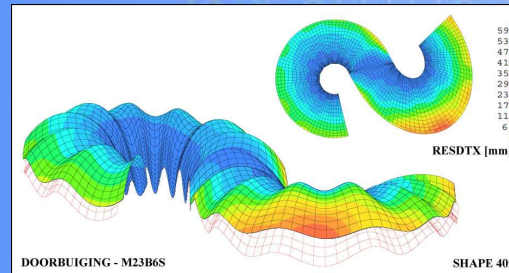
Floating Fluid Pavilion Design

ir. Sieb S. Wichers

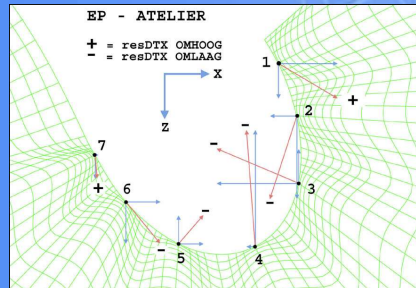
BEREKENEN



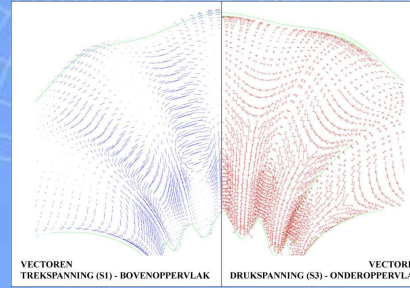
oefenen met de mesh



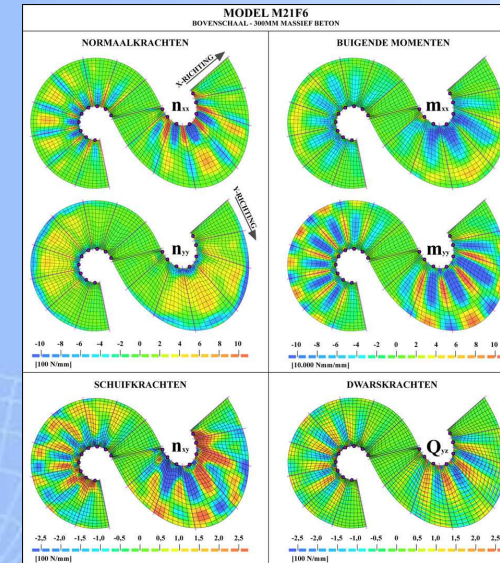
doorbuiging



oplegreacties



spanningstrajectoriën



snede krachten

OBCP met ICT

casestudie Wichers

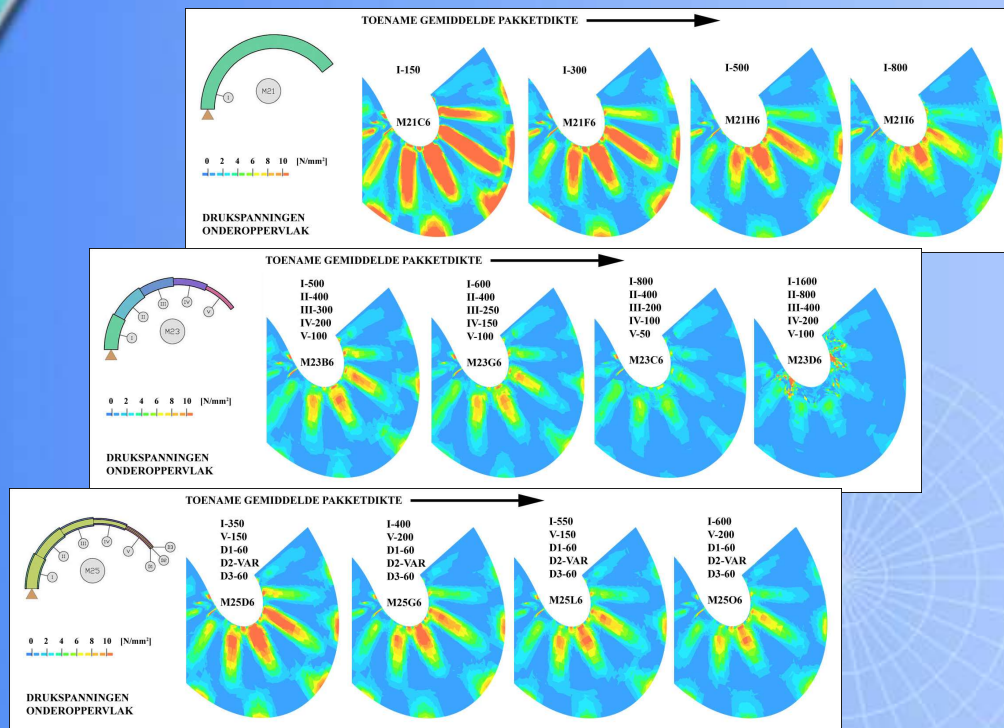
casestudie Hanselaar

conclusie OBCP ICT

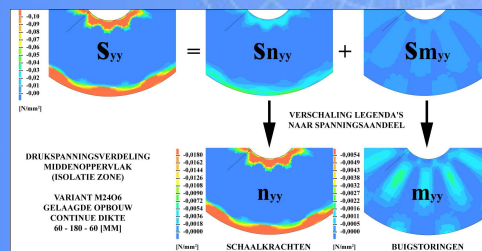
Floating Fluid Pavilion Design

ir. Sieb S. Wichers

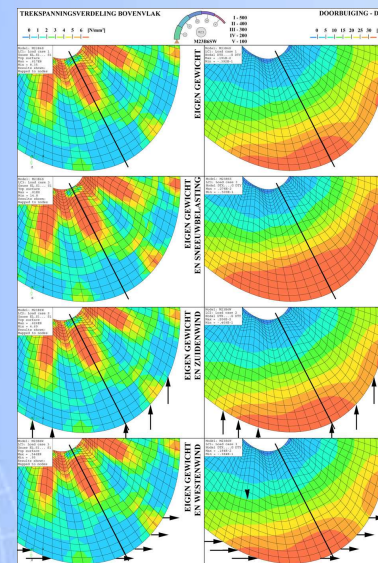
BEREKENEN



spanningen bij pakketverandering



spanningsverdeling



belastingsgevallen

OBCP met ICT

casestudie Wichers

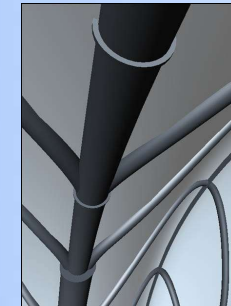
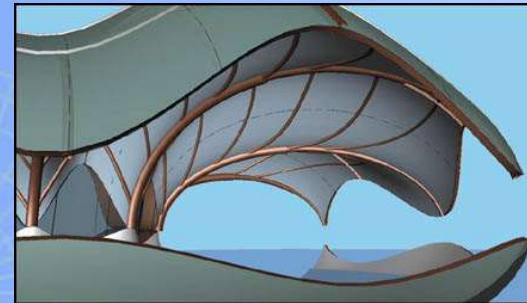
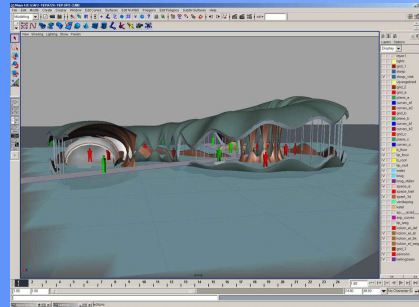
casestudie Hanselaar

conclusie OBCP ICT

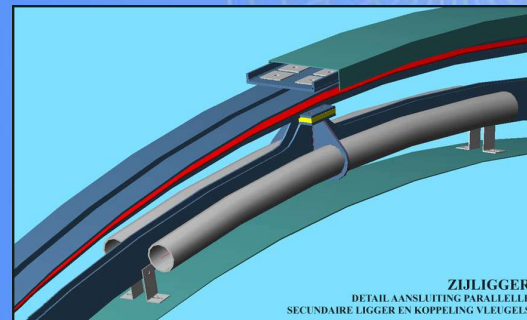
Floating Fluid Pavilion Design

ir. Sieb S. Wichers

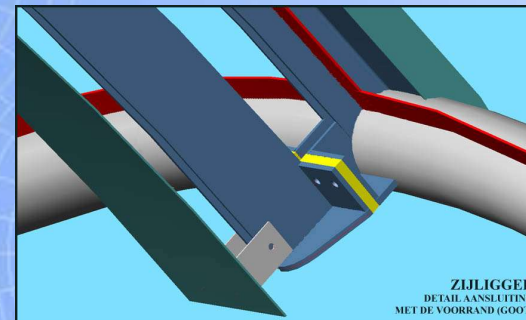
CONSTRUEREN



construeren in maya

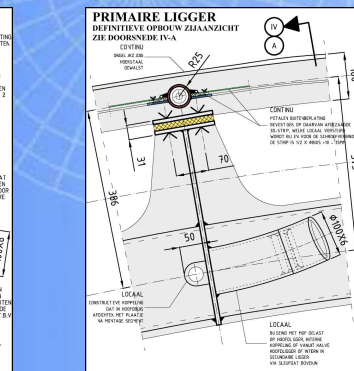
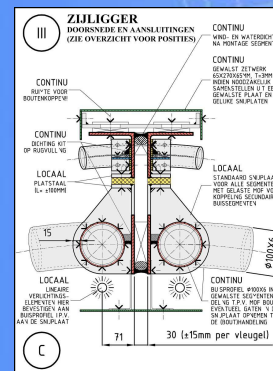


ZIJLIGGER
DETAIL AANSLUITING PARALLELE
SECUNDAIRE LIGGER EN KOPPELING VLEUGELS



ZIJLIGGER
DETAIL AANSLUITING
MET DE VOORRAND (GOOT)

detaillering maya



detaillering autocad

OBCP met ICT

casestudie Wichers

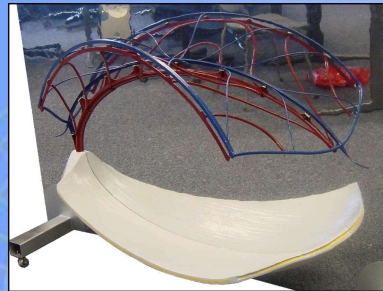
casestudie Hanselaar

conclusie OBCP ICT

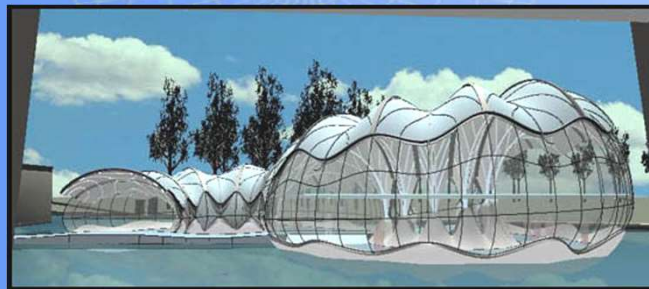
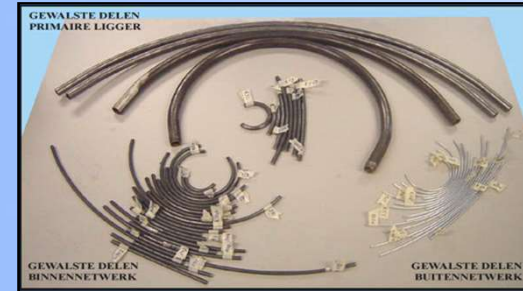
Floating Fluid Pavilion Design

ir. Sieb S. Wichers

PRODUCEREN



maquette met de hand uit computer 3d-gegevens



maya rendering voor presentatie



gips maquette uit 3d-printer met kleur

OBCP met ICT

casestudie Wichers

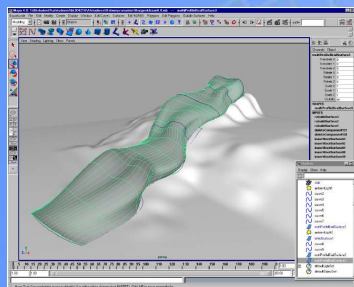
casestudie Hanselaar

conclusie OBCP ICT

SnowPalace

ir. Henno Hanselaar

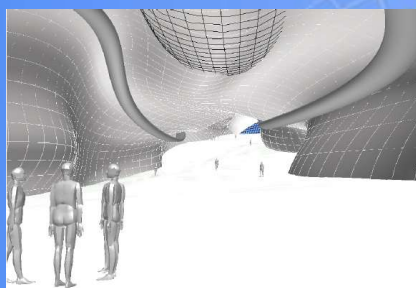
ONTWERPEN



model geheel ontworpen in maya



impressies



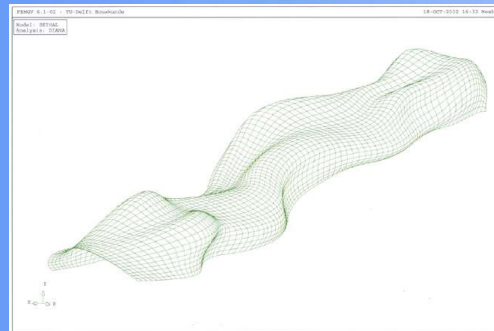
OBCP met ICT

casestudie Wichers

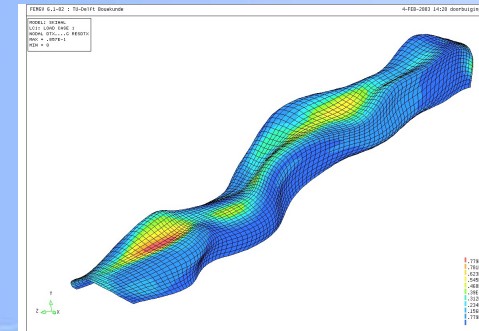
casestudie Hanselaar

conclusie OBCP ICT

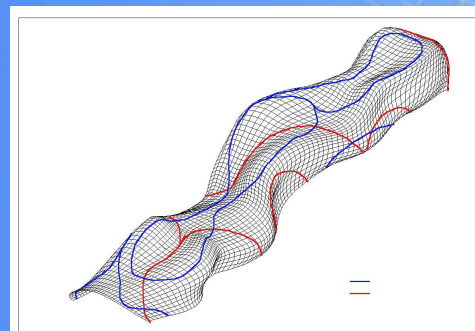
BEREKENEN



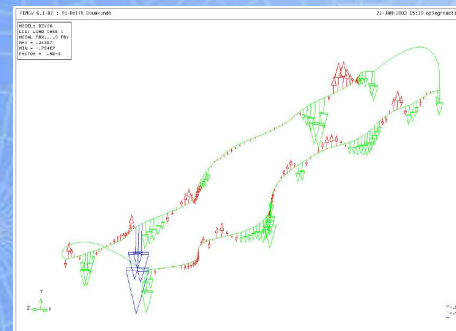
meshverdeling



doorbuiging



trek- en druklijnen



oplegreacties

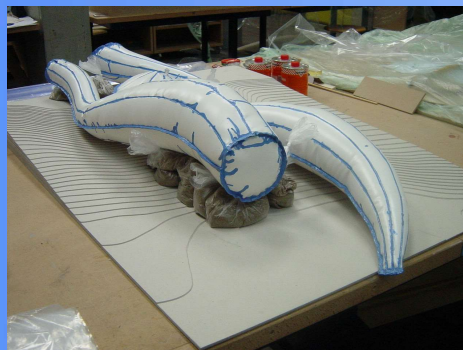
OBCP met ICT

casestudie Wichers

casestudie Hanselaar

conclusie OBCP ICT

PRODUCEREN / CONSTRUEREN



pneus op kartonnen berg



lycra over pneus gespannen



pneus zijn verwijderd



gespoten met spuitplamuur

OBCP met ICT

casestudie Wichers

casestudie Hanselaar

conclusie OBCP ICT

Conclusie ICTO-project OBCP

ir. Andrew Borgart

Voordelen van koppeling:

- besparing op tekenwerk
- grote interactie tussen verschillende ontwerpdisciplines
- integrale aanpak van ontwerpproces

Voorwaarde:

- goede softwarematige koppeling programma's

