

# Extreme Organic Surfaces in NX-Solid

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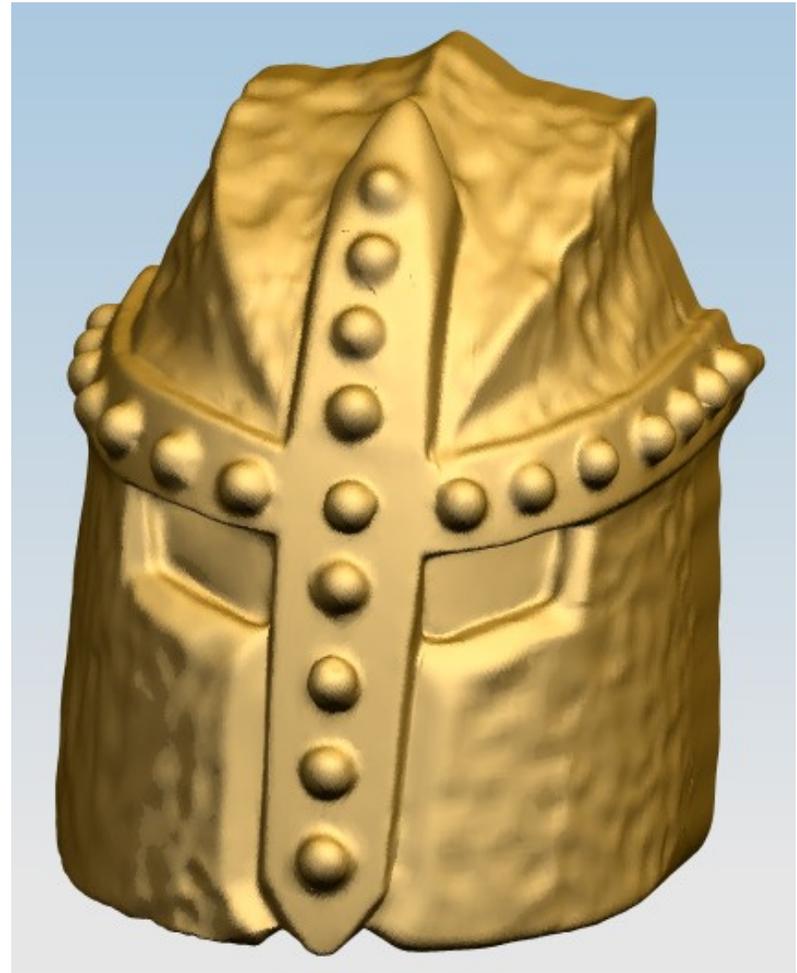
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# The Challenge !

- We need a new visor, that should look like this prototype, but how are we going to produce surfaces that looks like hammered copper ?

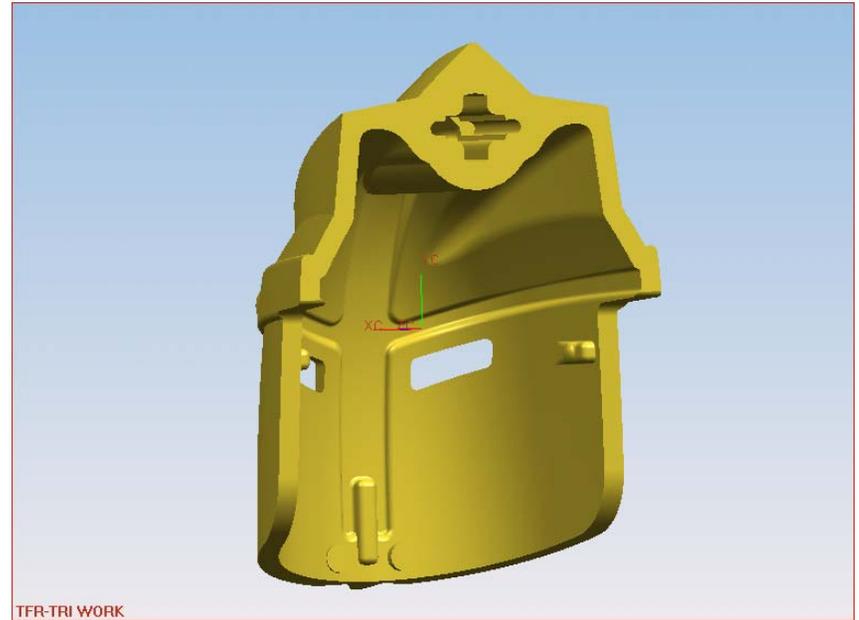
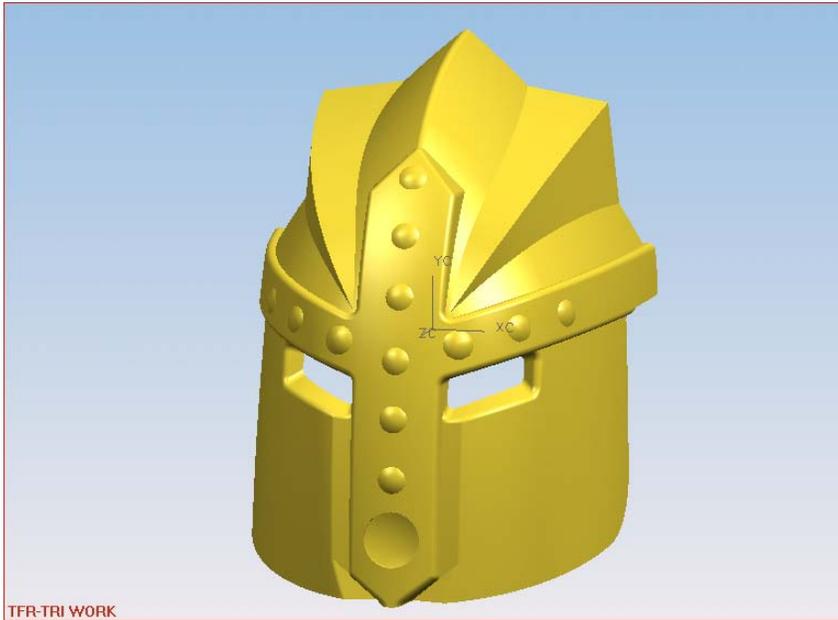


# Used Software / Method

- NX4 – shape the basic geometry.
- ArtCAM – create a “relief” of hammered copper.
- PowerSHAPE – wrap the relief on a freeform surface.
- NX4 – convert the wrapped relief to a single surface.
- NX4 – combine the extremely organic surfaces with the basic solid model.

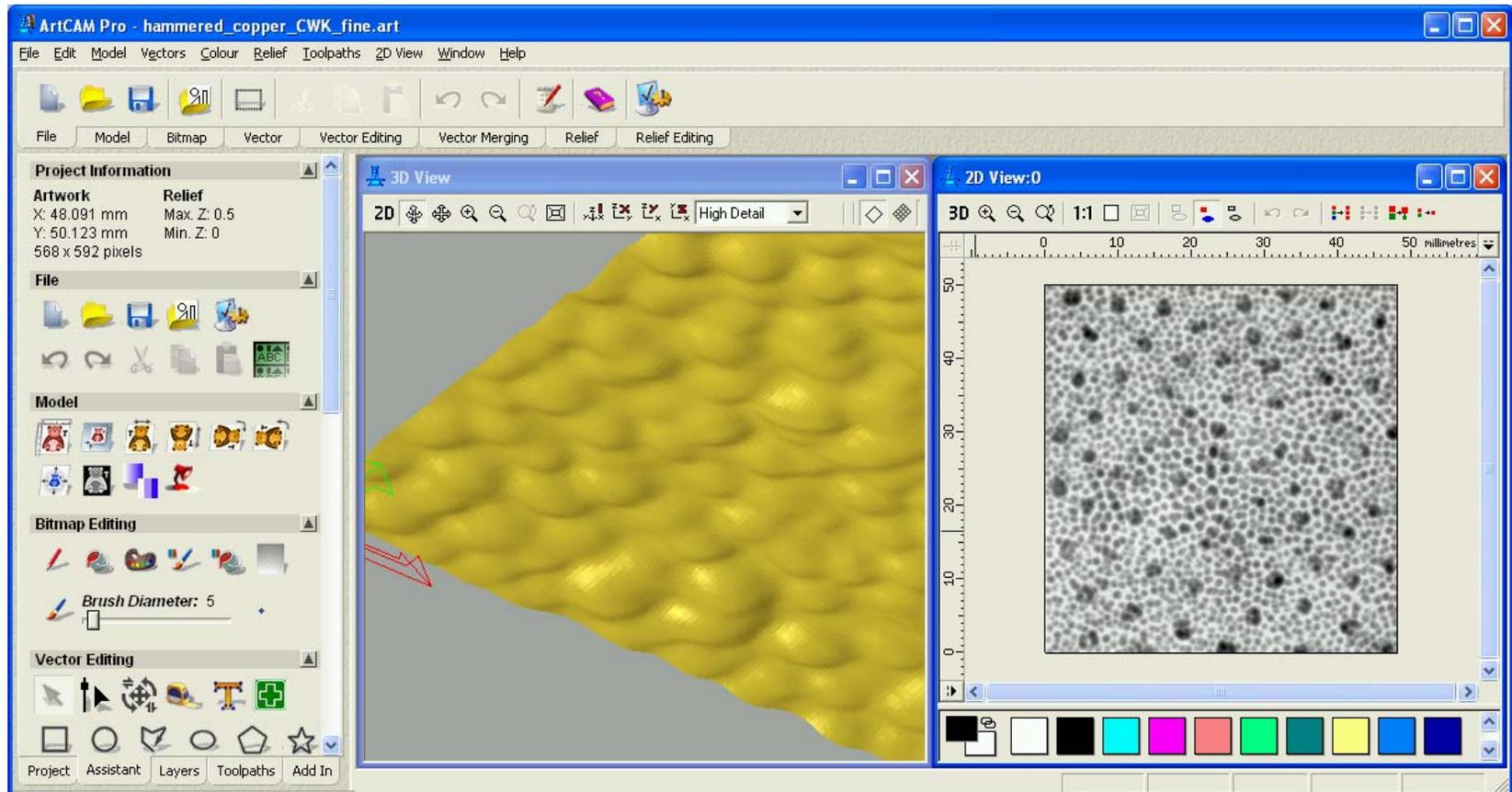
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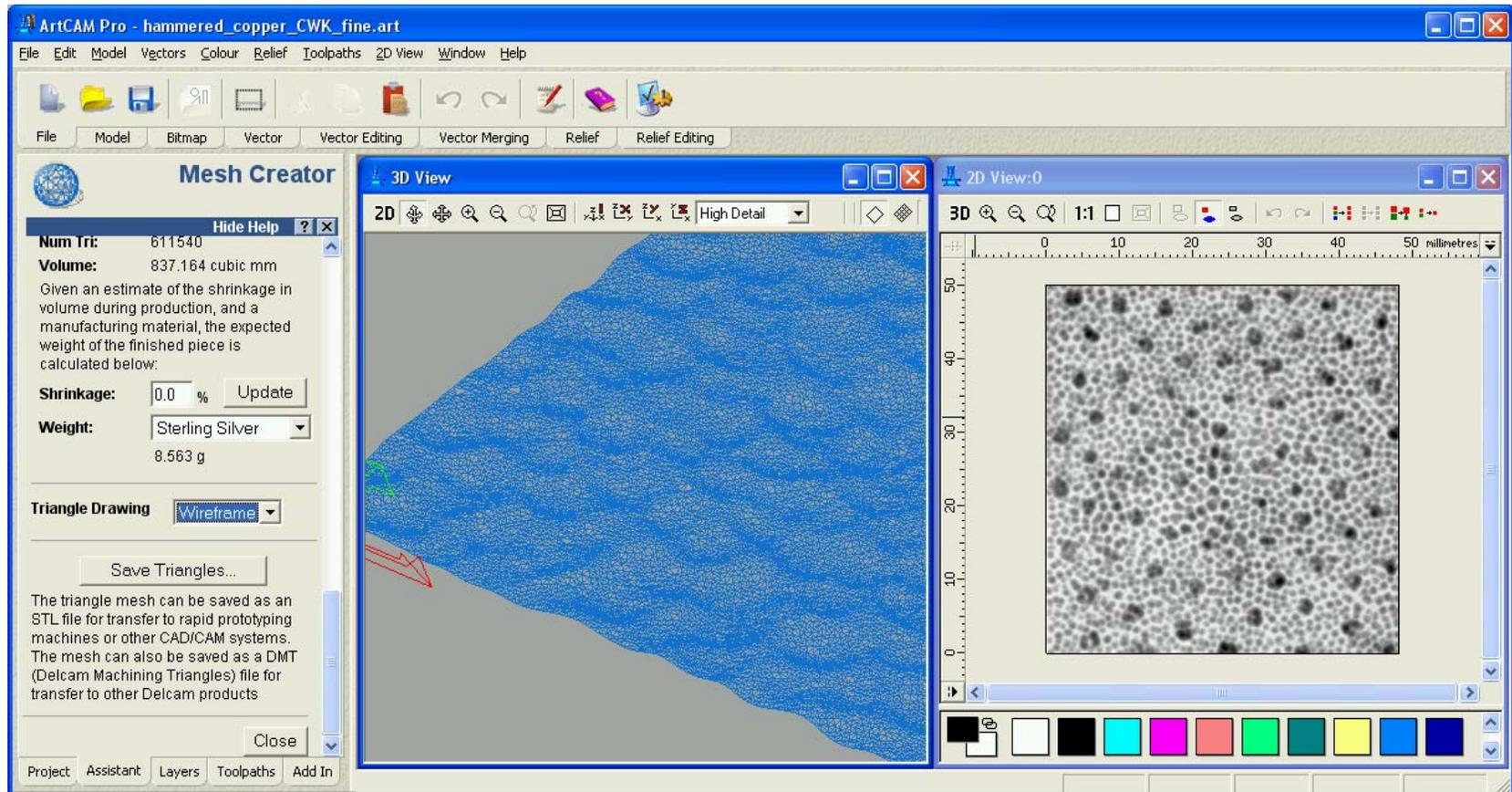
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- ArtCAM – create a “relief” of hammered copper.



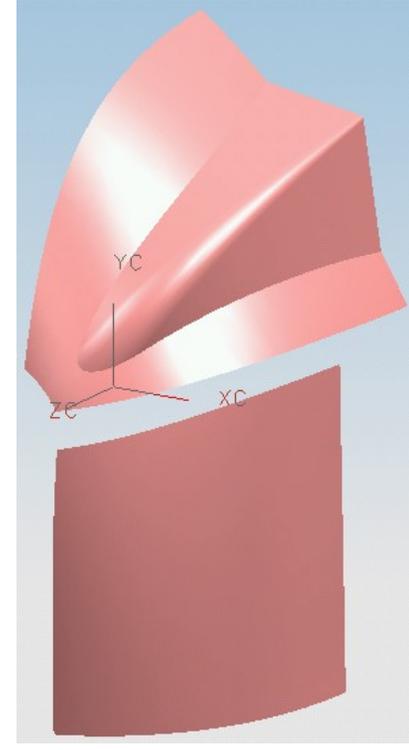
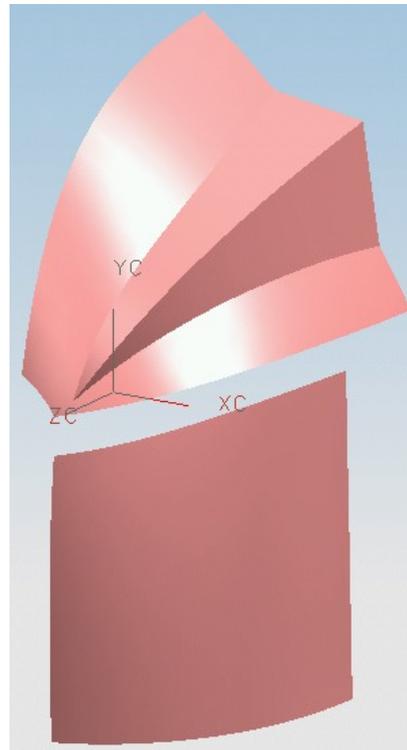
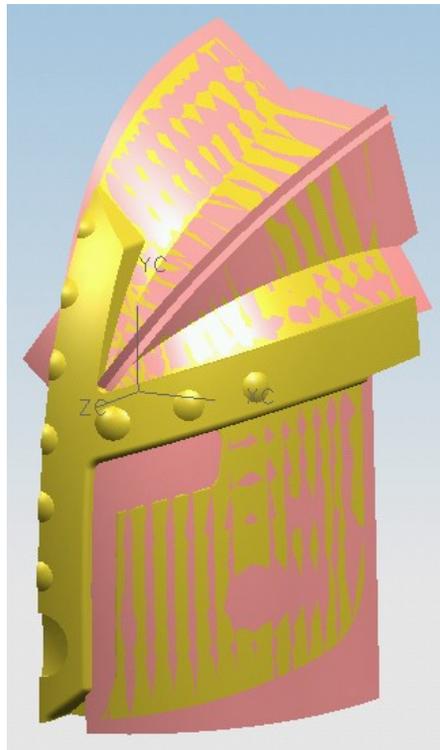
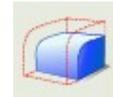
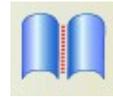
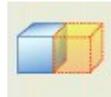
# Used Software / Method

- ArtCAM – export the “relief” as triangles.



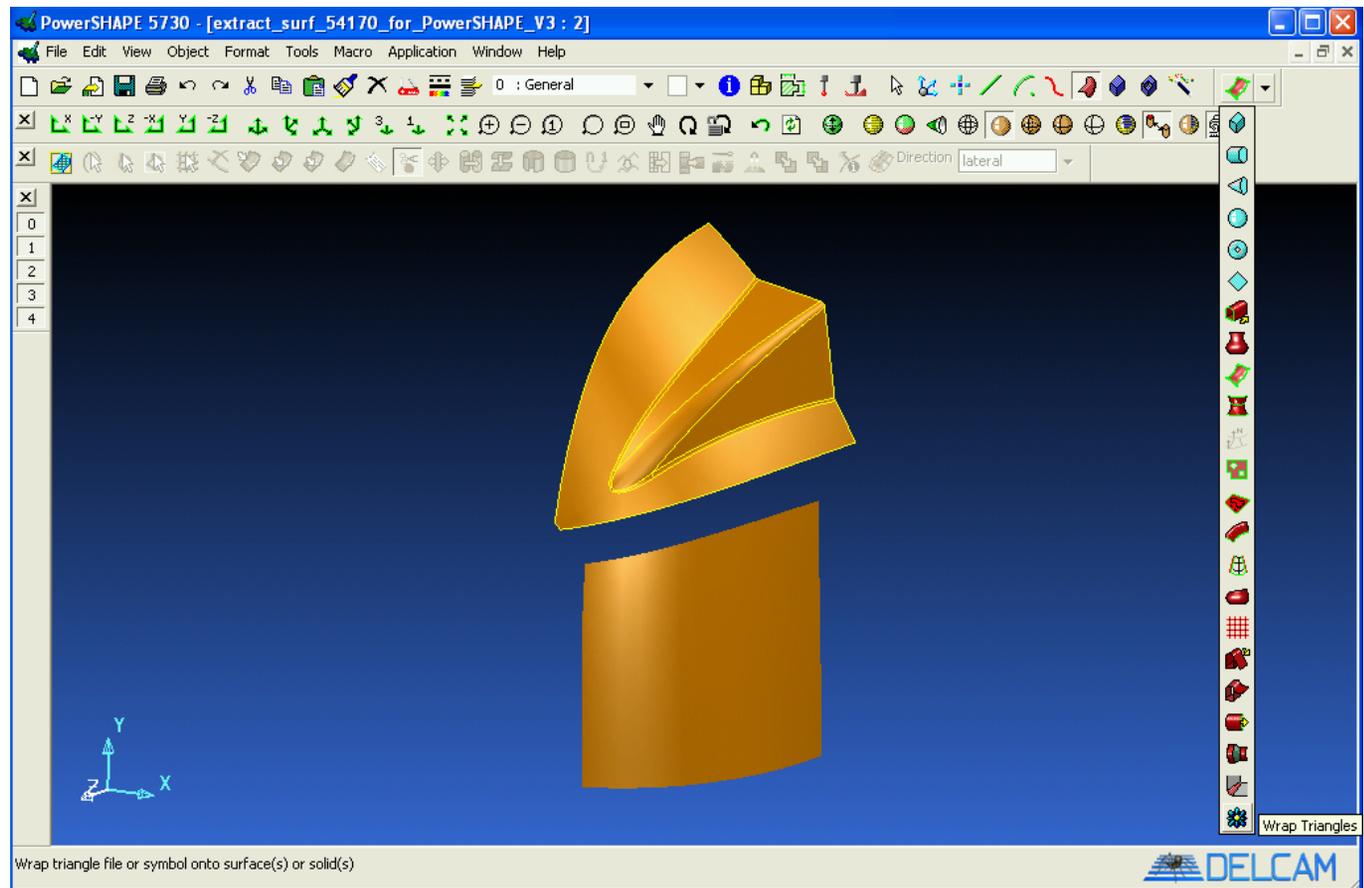
# Used Software / Method

- NX4 – extract the faces, that needs to be changed, using enlarge face, trim, sew, blend and offset face.



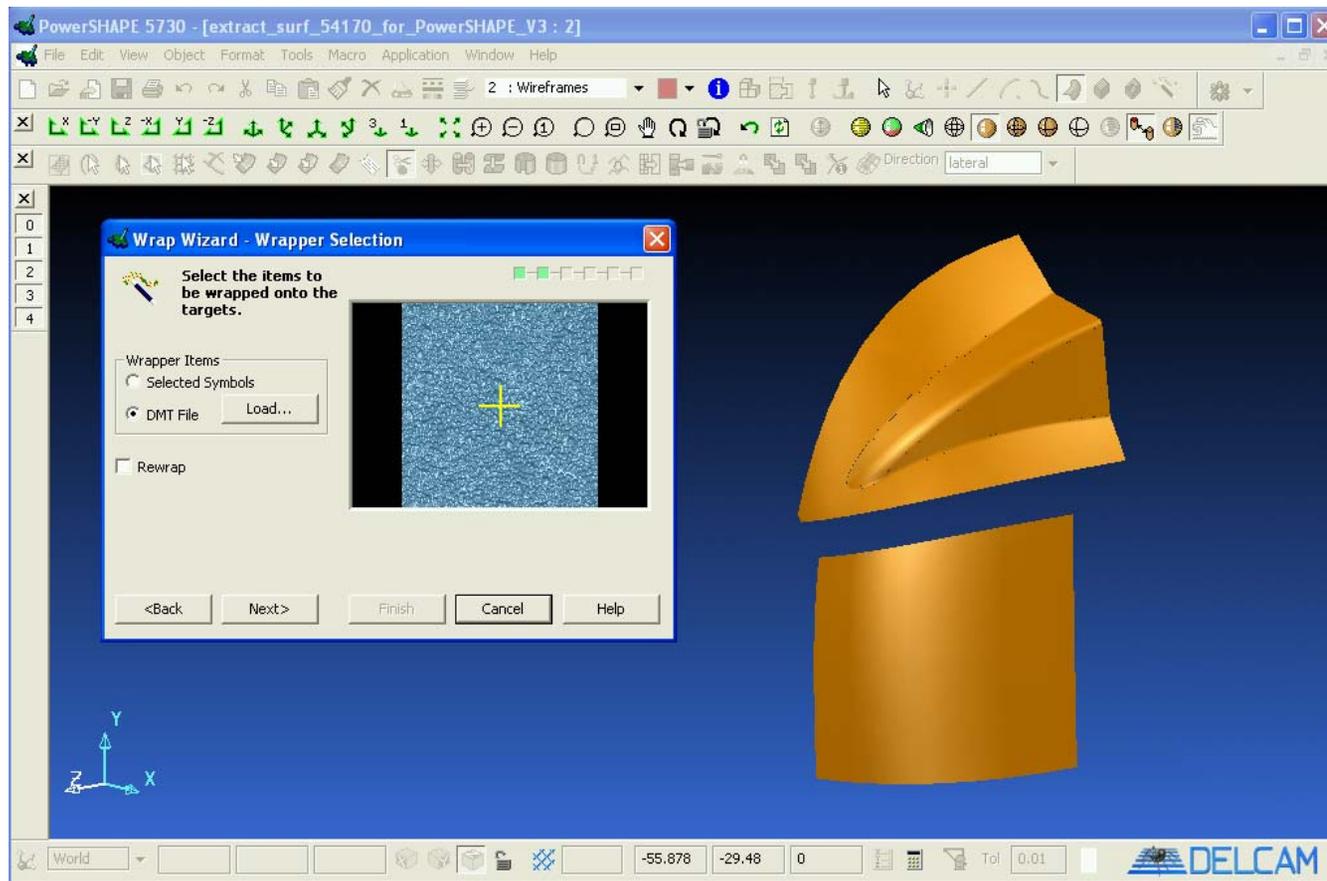
# Used Software / Method

- PowerSHAPE – wrap the relief on a freeform surface.



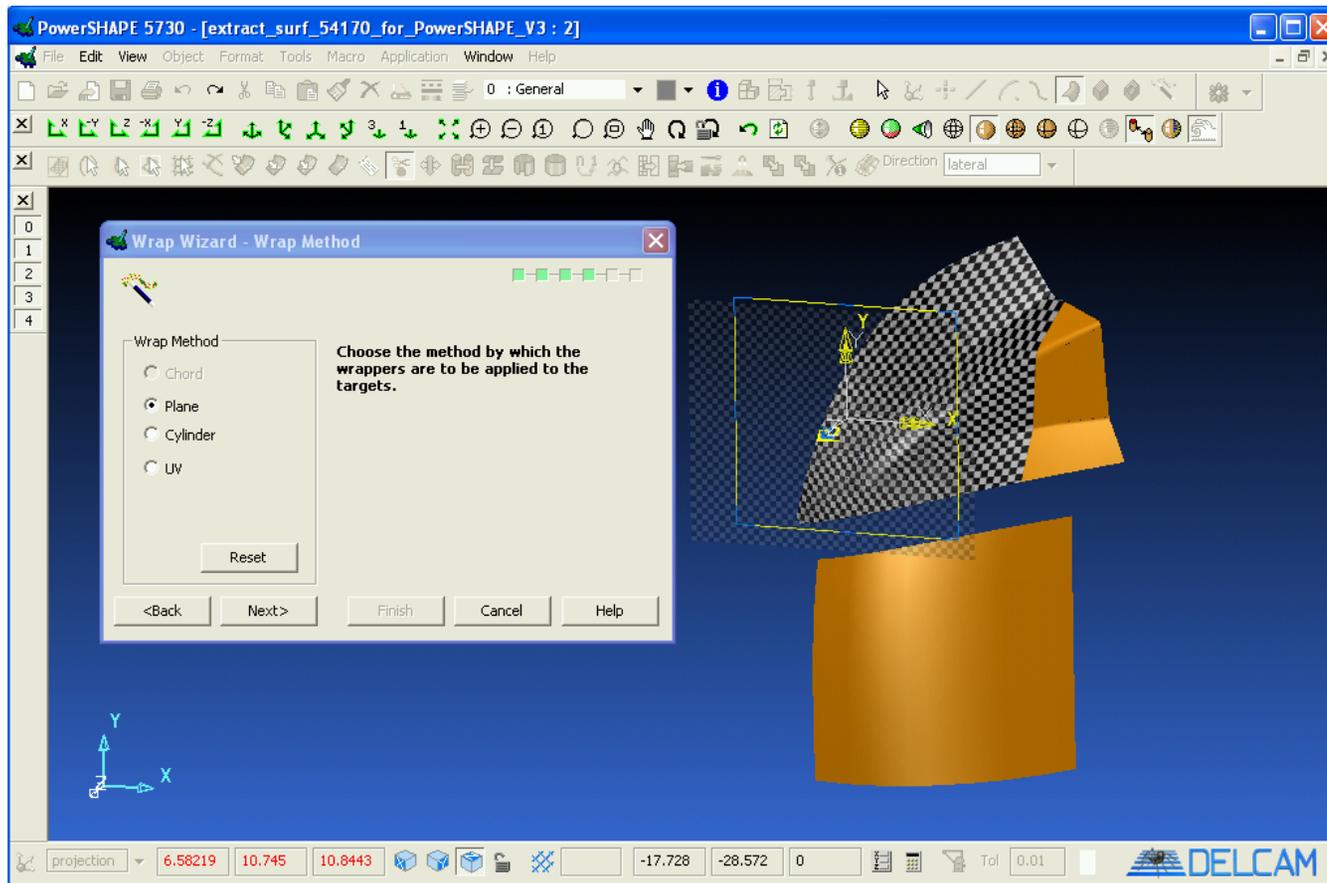
# Used Software / Method

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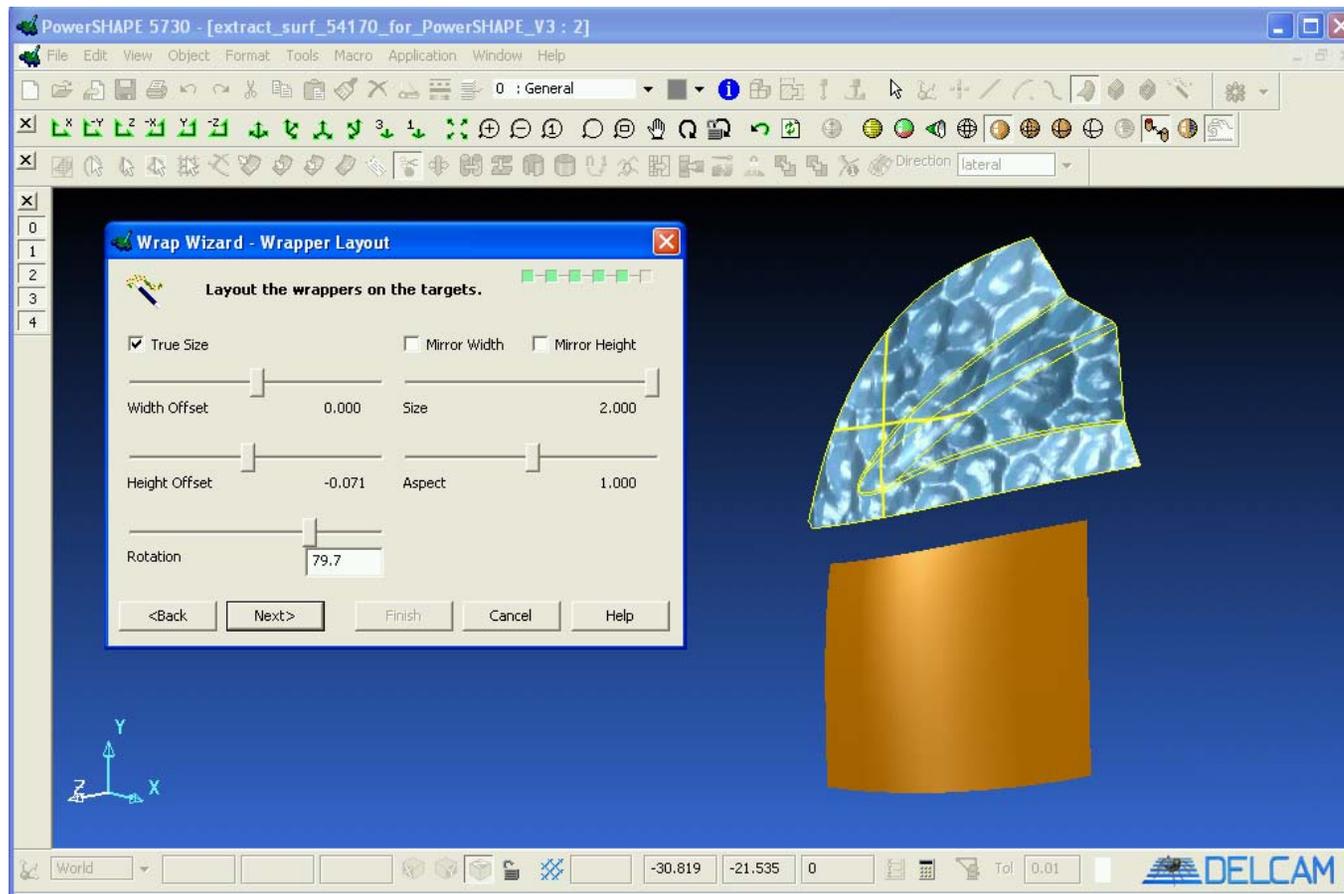
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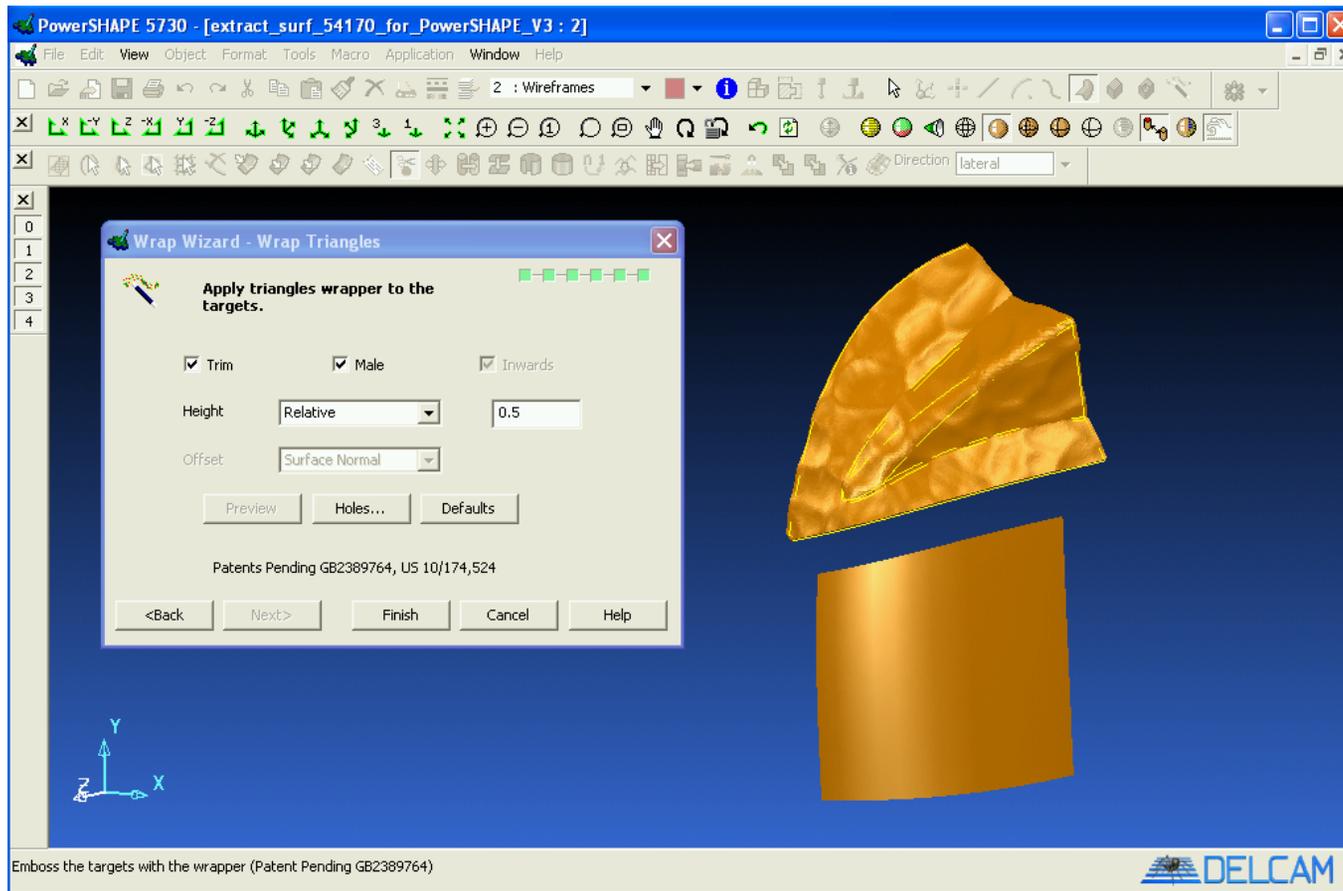
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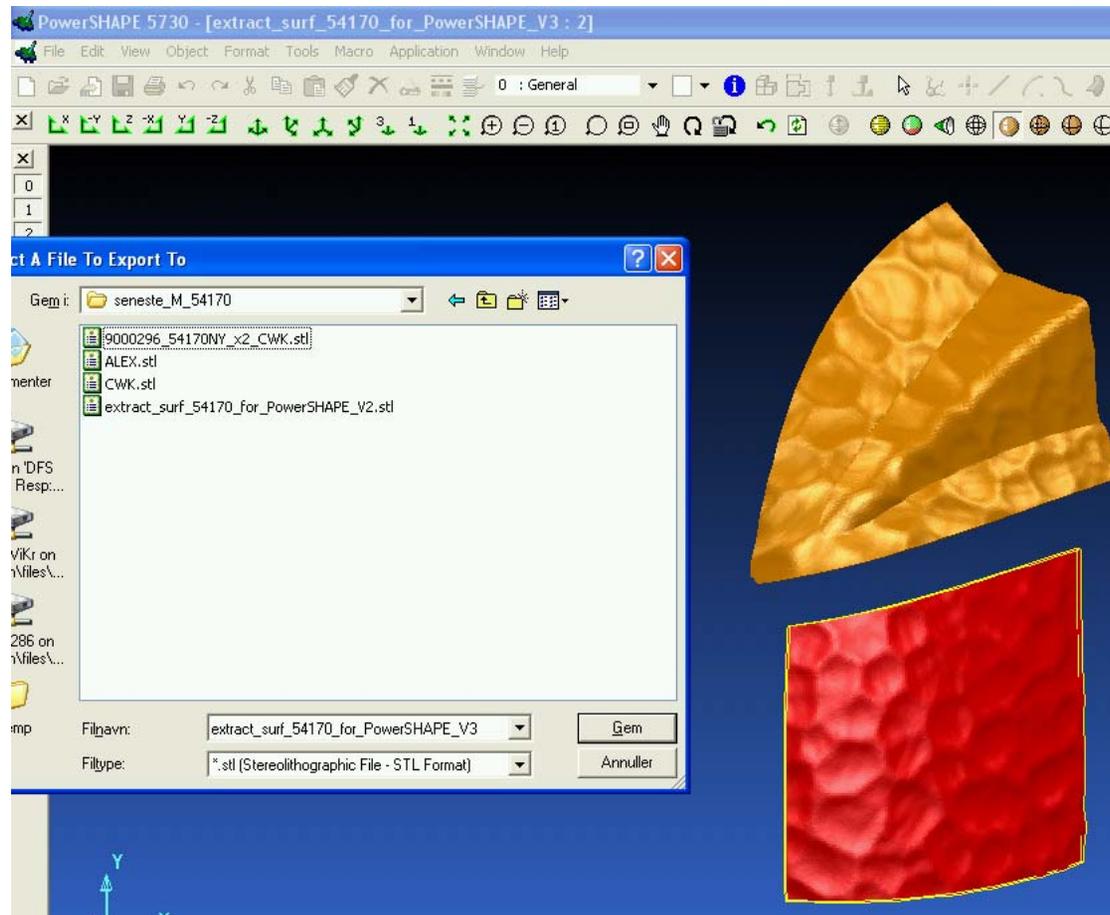
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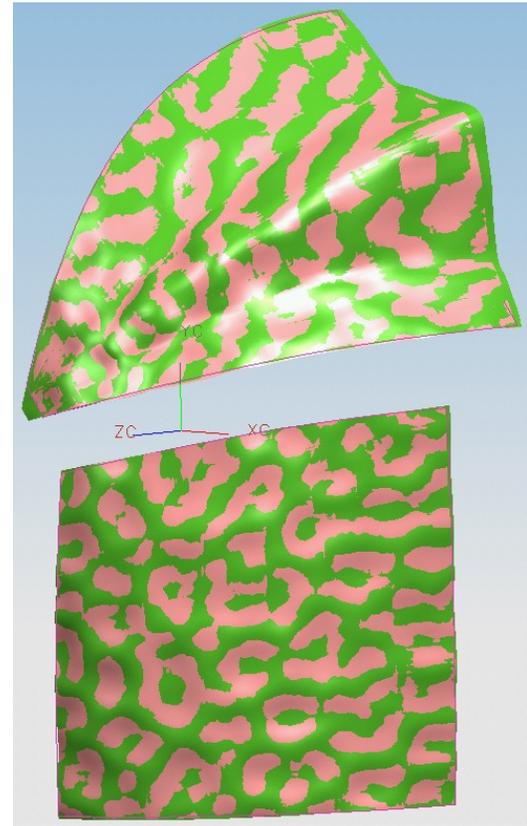
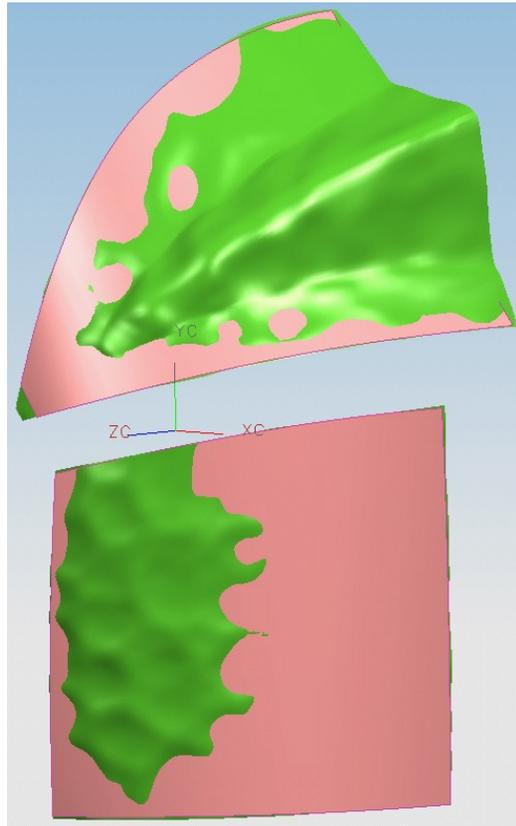
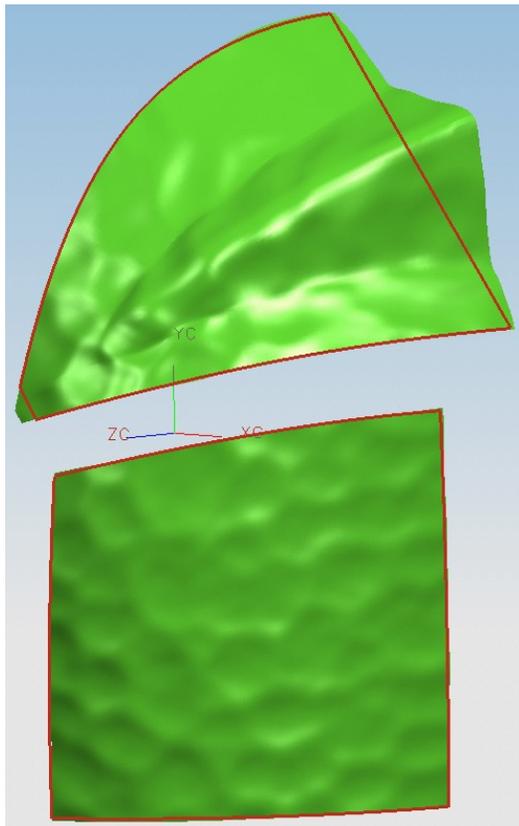
# Used Software / Method

- PowerSHAPE – export the wrapped triangles as STL-data.



# Used Software / Method

- NX4 – convert the wrapped relief to a “single” surfaces (Refit Face  ).



# Used Software / Method

- NX4 – combine the extremely organic surfaces with the basic solid model (Replace Face ).



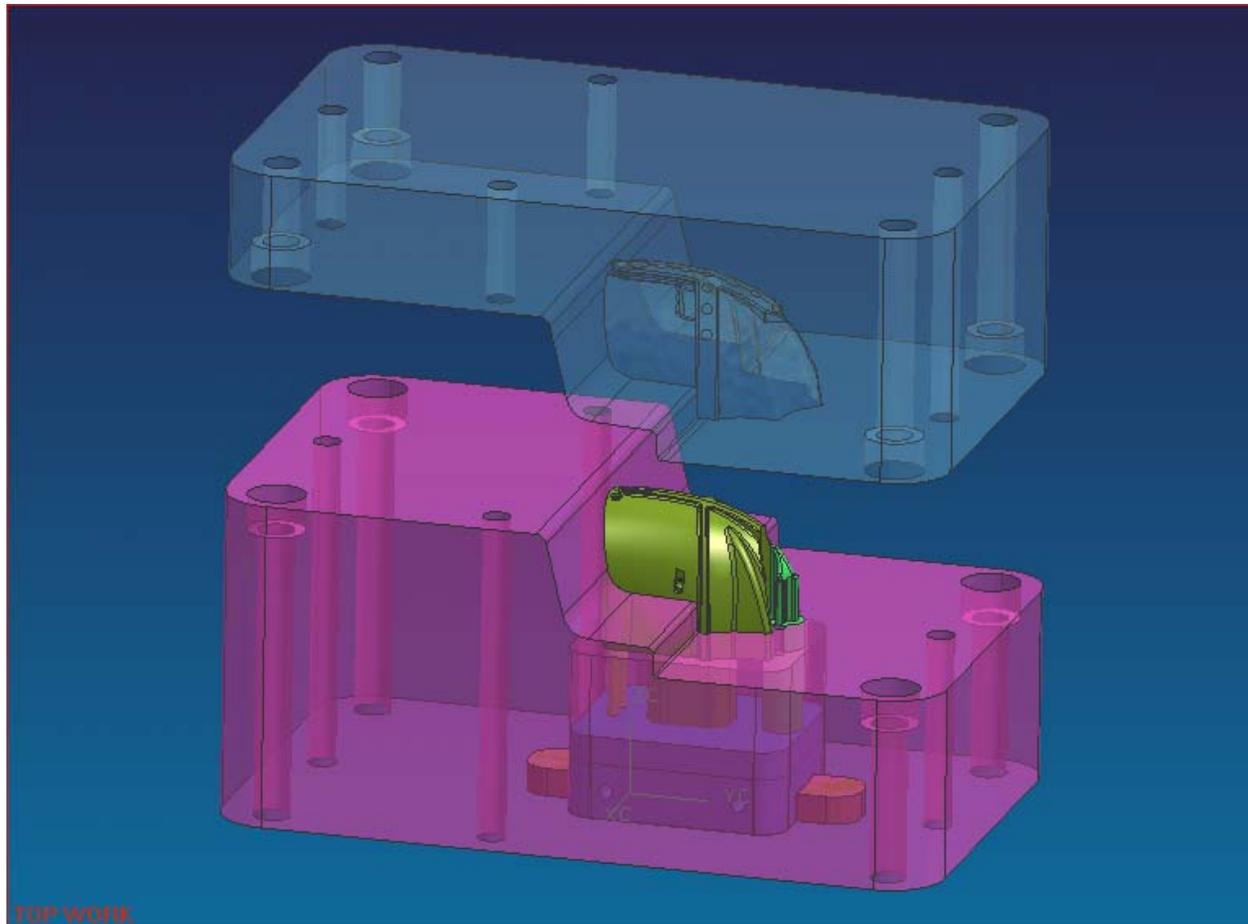
# Comparing the result with the prototype

- The Designer was happy !



# Comparing the result with the prototype

- ...And the Tool designer was happy !





The Final result

Live demonstration of the method !

# The Final result

- We chose to modify a couple of bricks in the Knights Kingdom series for 2006.

