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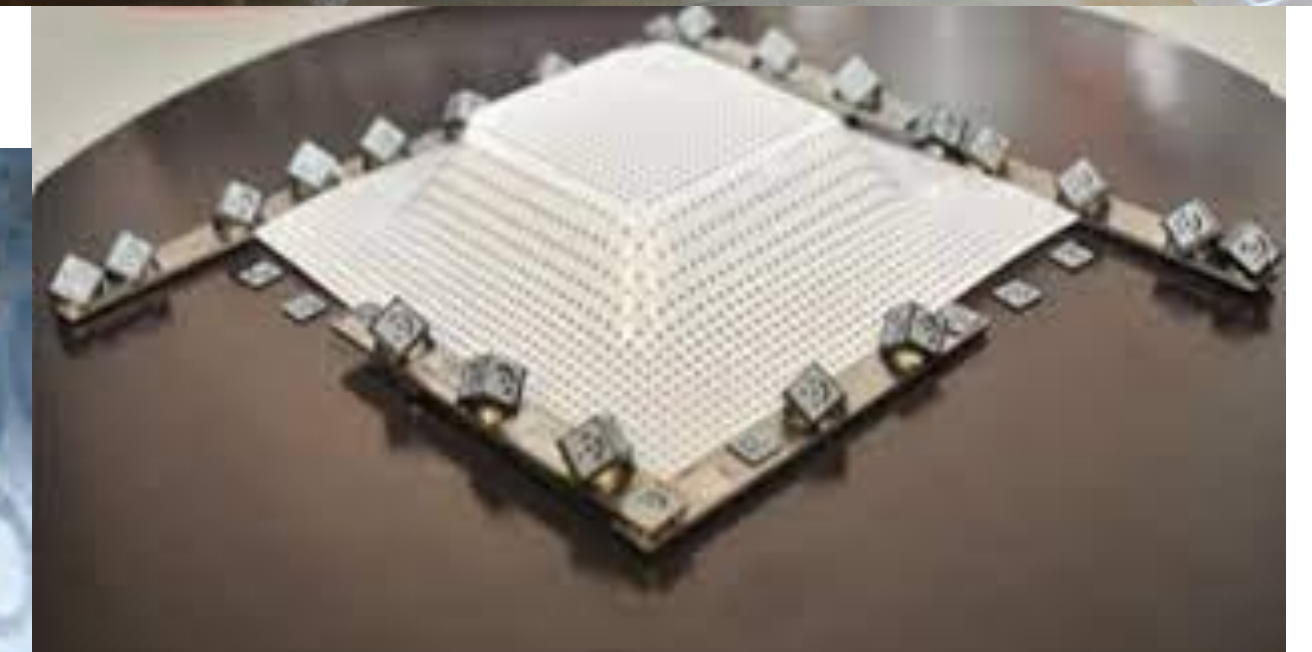
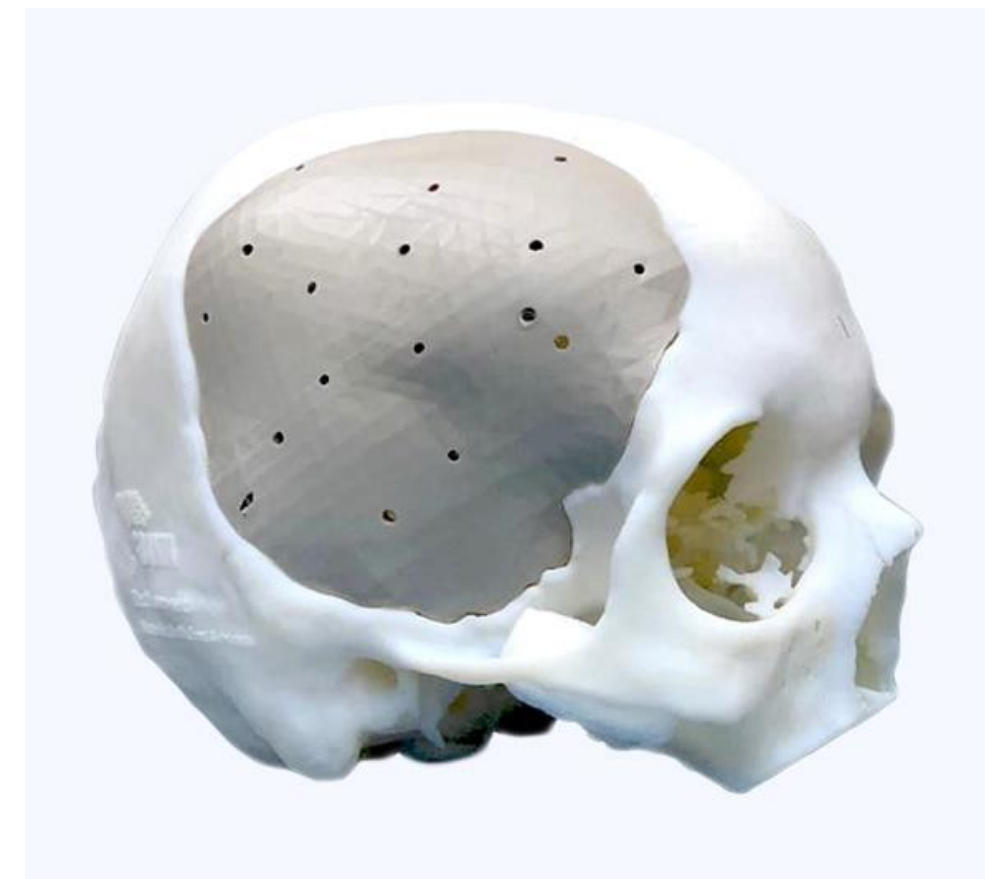
UNIVERSITY OF LISBON
INTERDISCIPLINARY STUDIES
ON SUSTAINABLE ENVIRONMENT AND SEAS



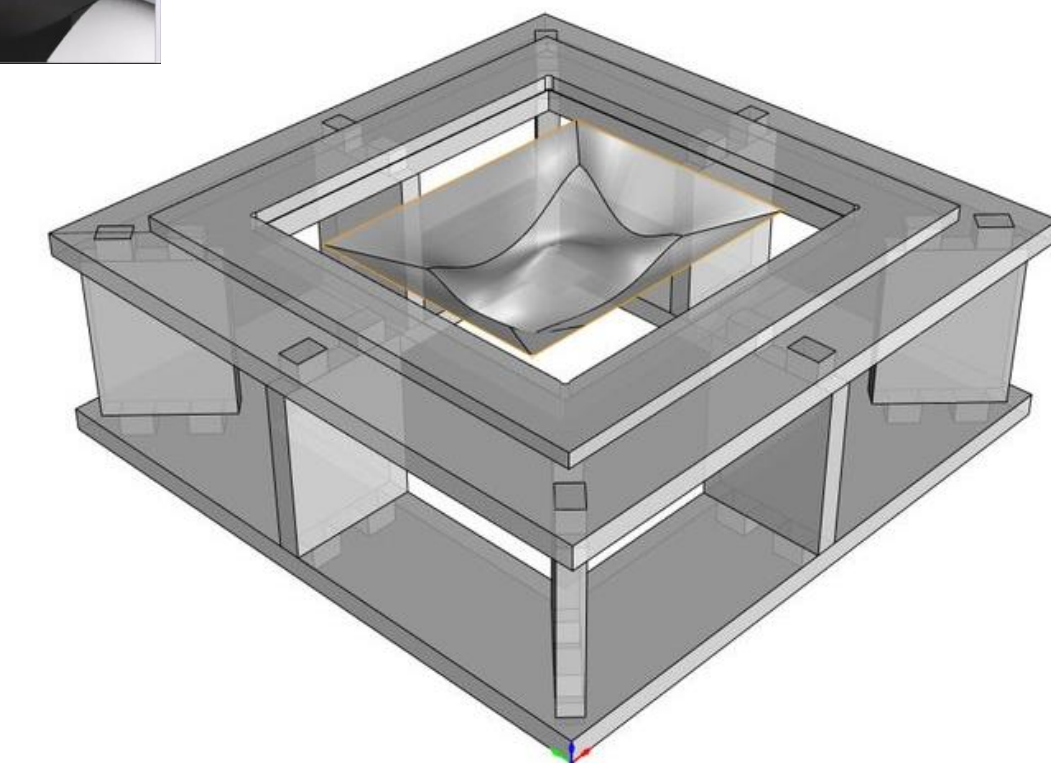
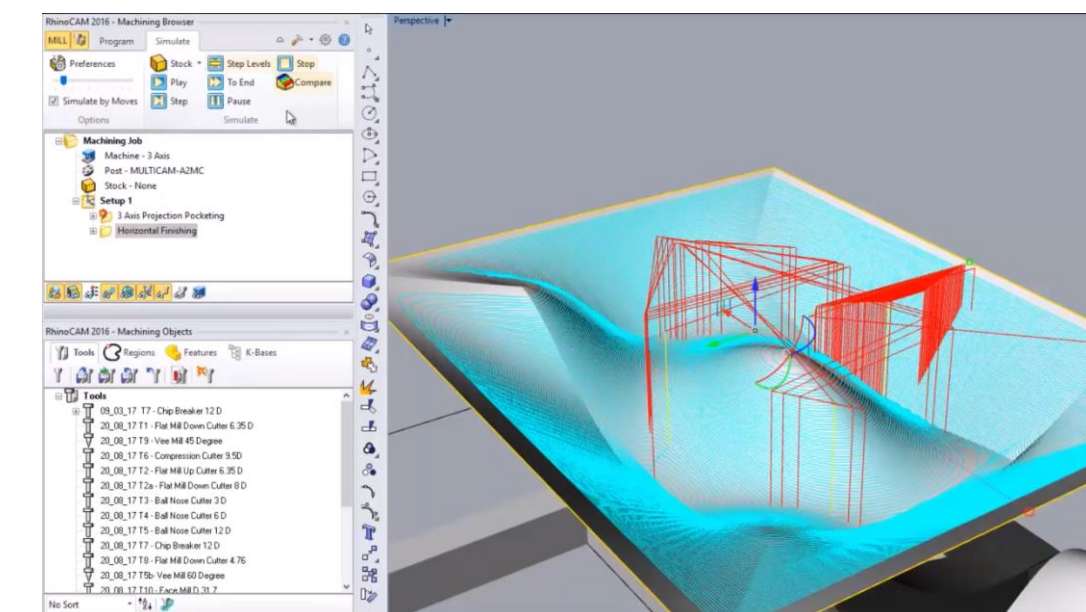
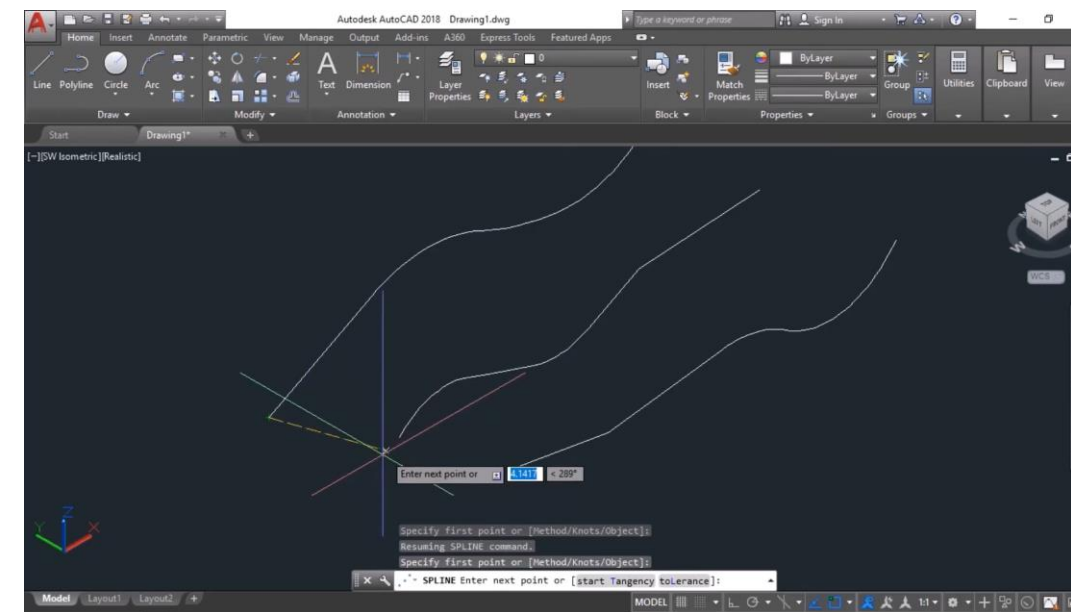
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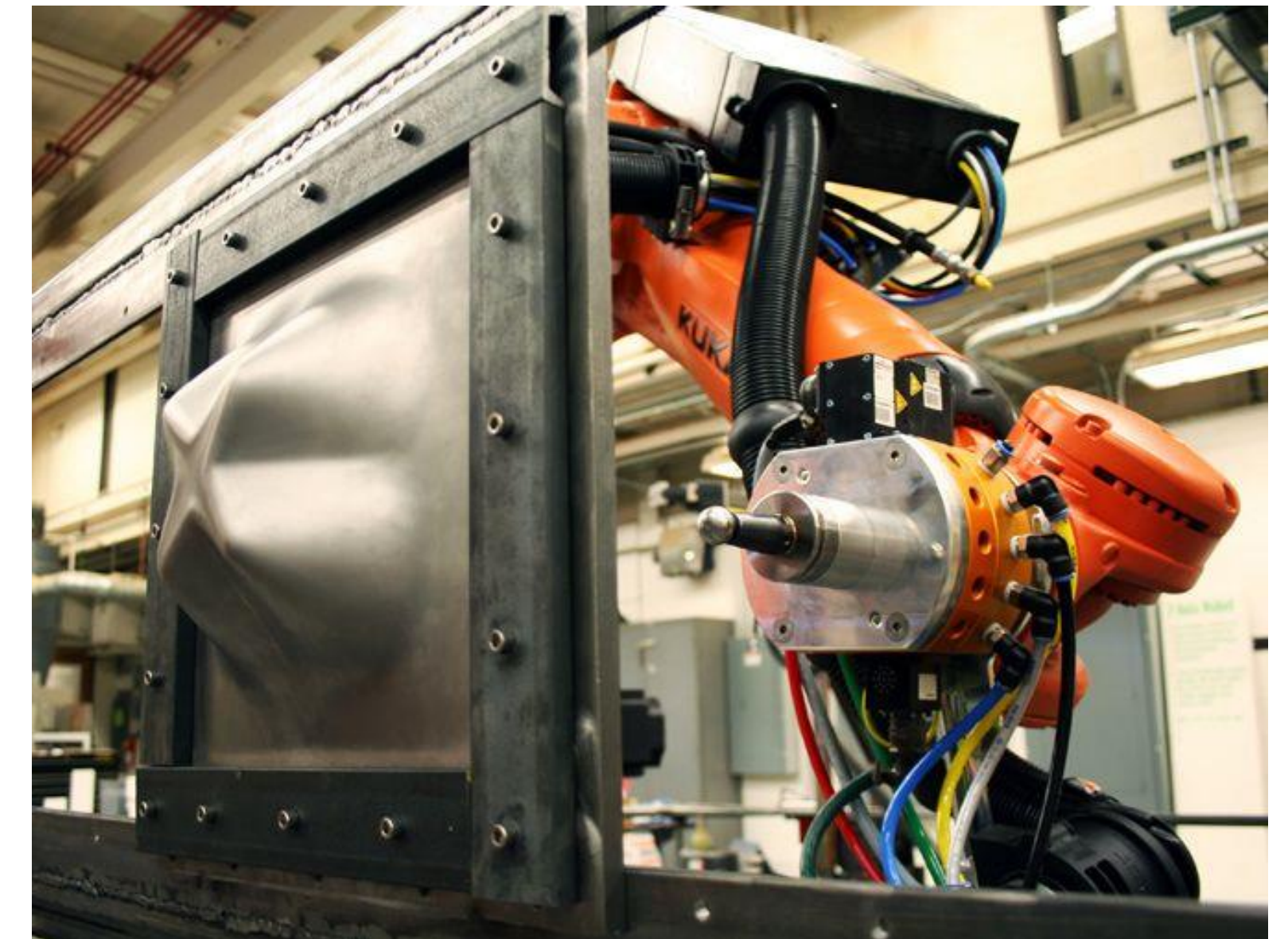


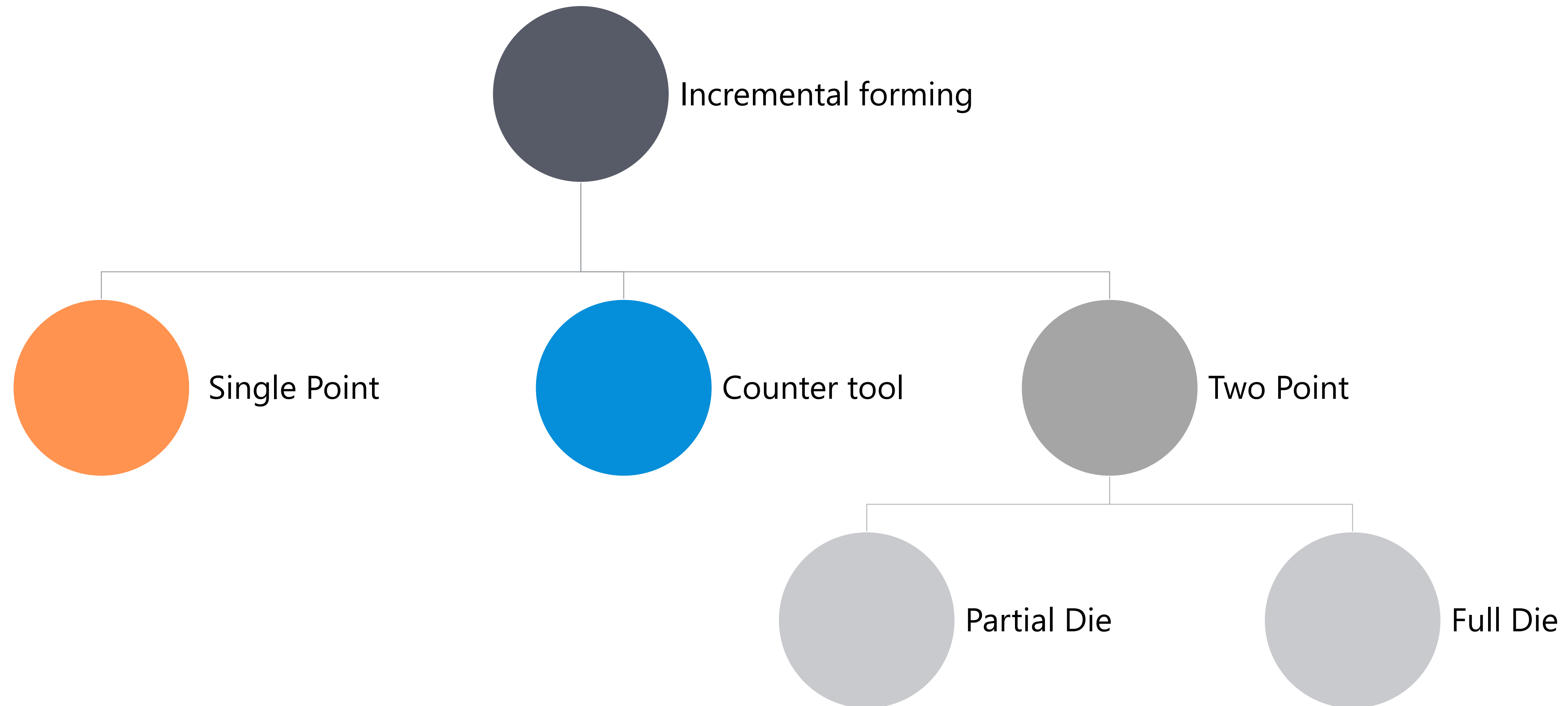
Incremental sheet-forming processes are characterized by progressively applying plastic deformation to materials, where the sheet is clamped rigidly around its edges but is unsupported underneath and formed by a round-ended forming tool, which describes the contour of the desired geometry.

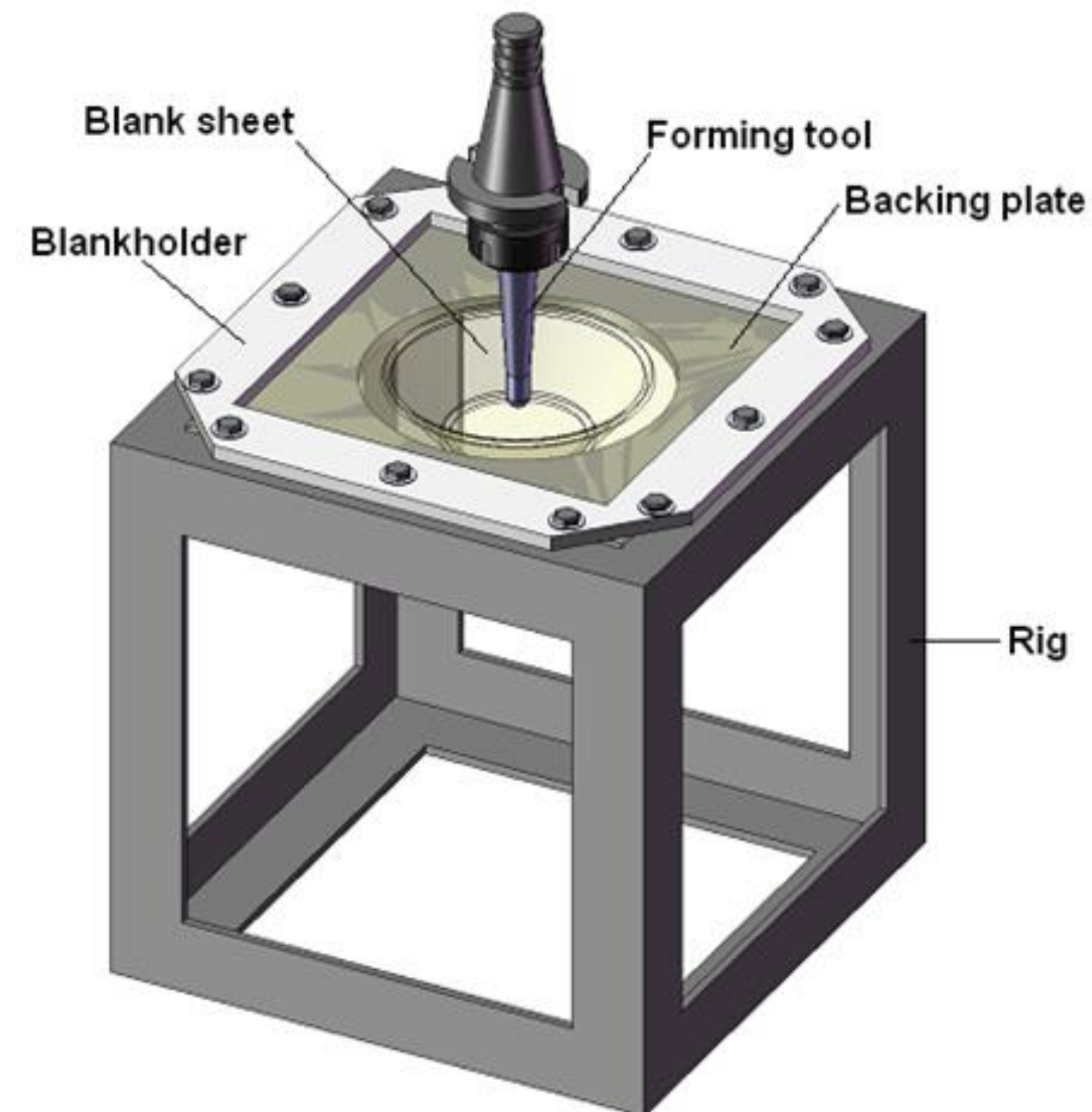


1. CAD model
2. CAM tool trajectories
3. Clamping
4. Forming
5. Final object





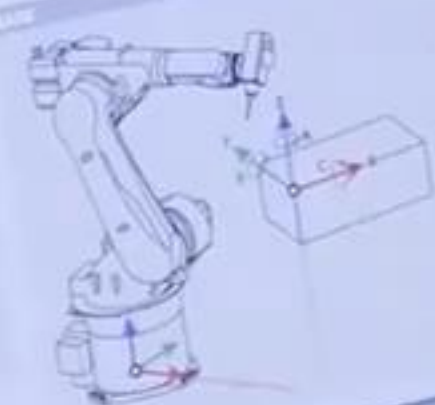




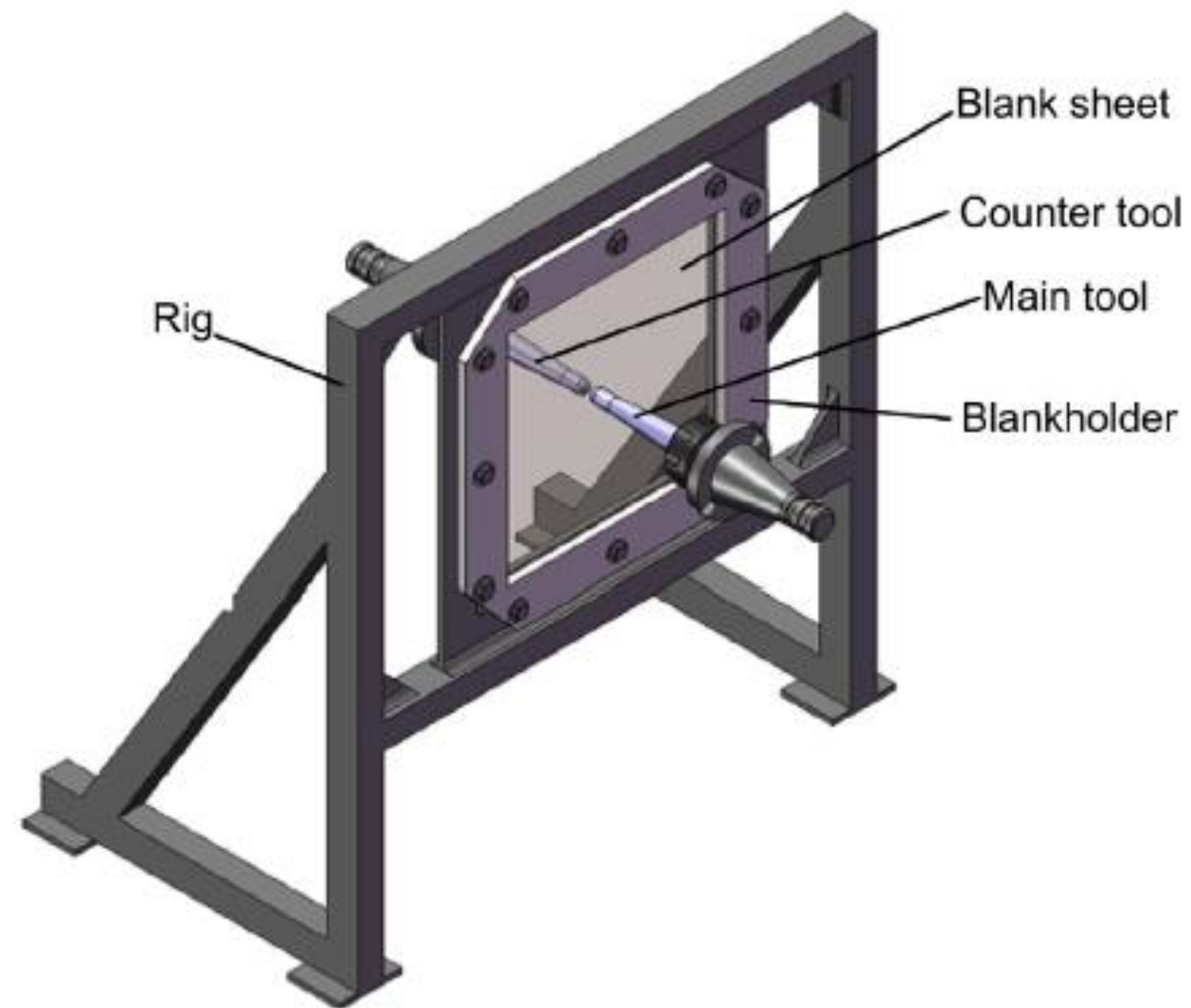


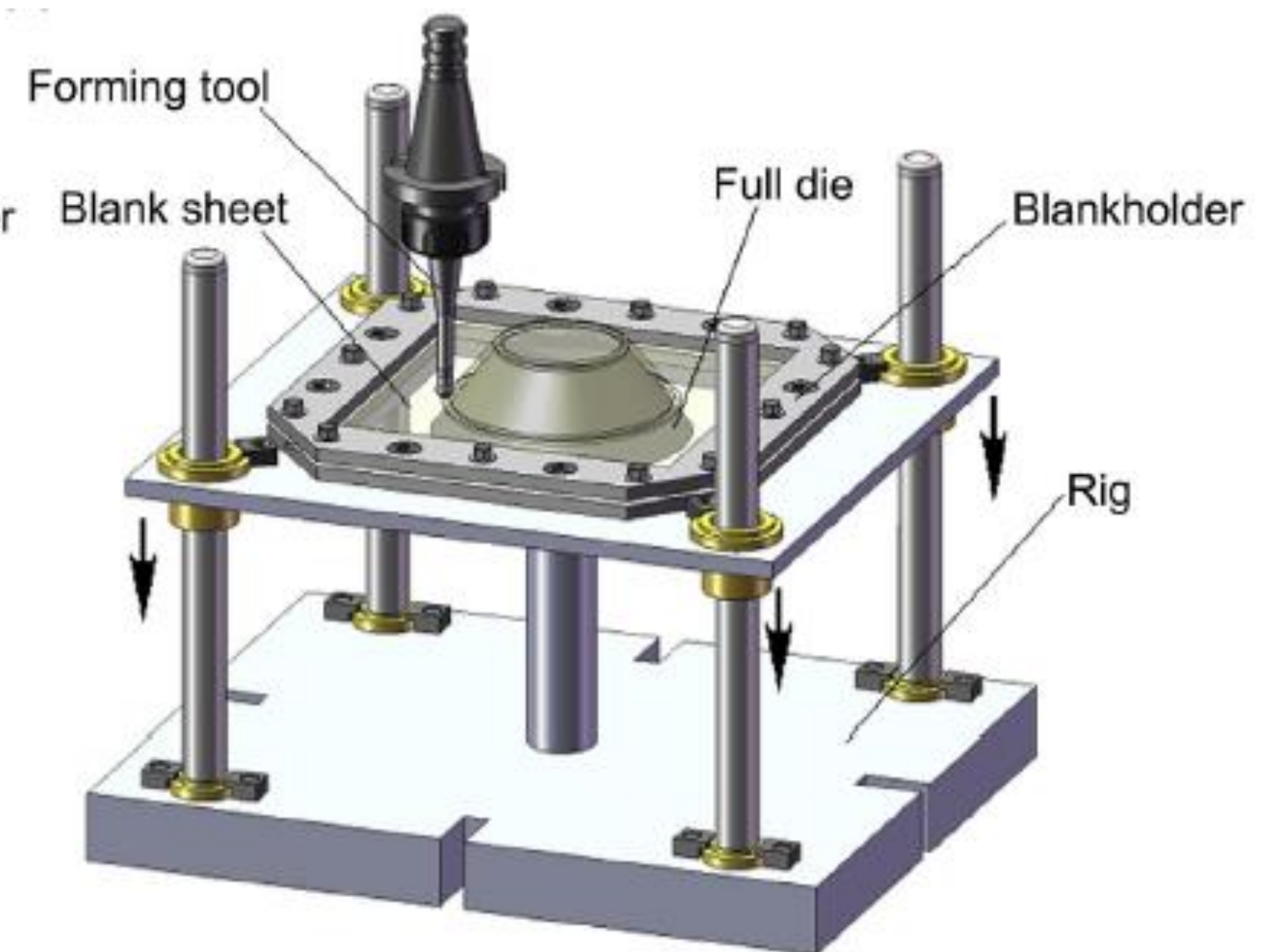
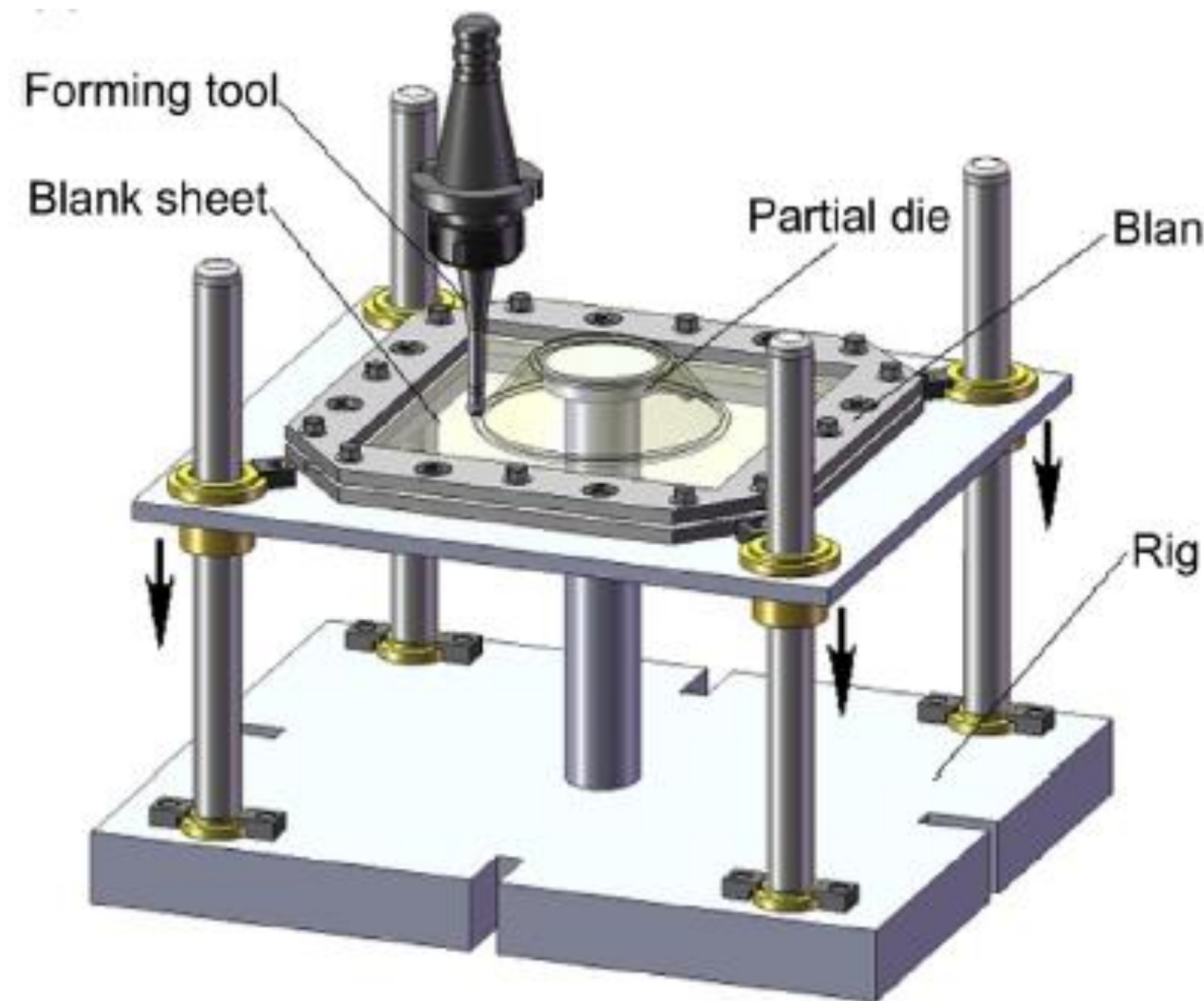
ADVANCE ANALYSIS

APPLY EXIT



KUKA|prc





Advantages

- Low cost (tool and part)
- Dieless process
- Universal tool
- High Flexibility
- High customization

Disadvantages

- Springback
- Low precision
- Low productivity
- Limited to thin sheets

An underwater scene with a sea turtle swimming towards the left. The water is filled with various types of plastic pollution, including bags, bottles, and debris. The scene is dimly lit, with a blueish tint. The sea turtle is in the foreground, and the pollution is scattered throughout the water.

Ulisses

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