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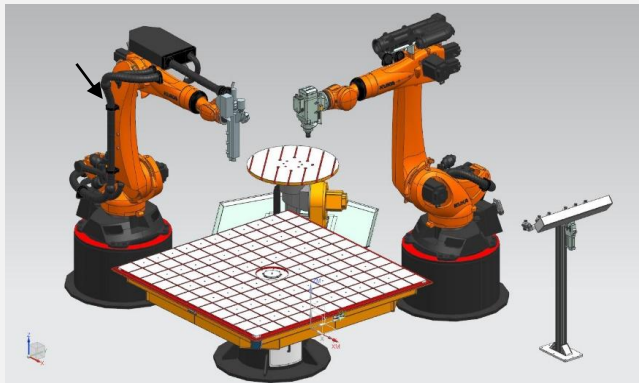
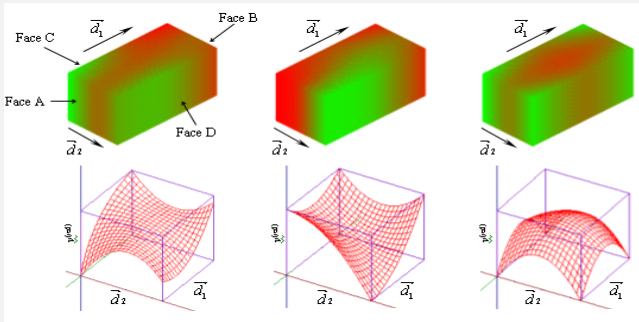
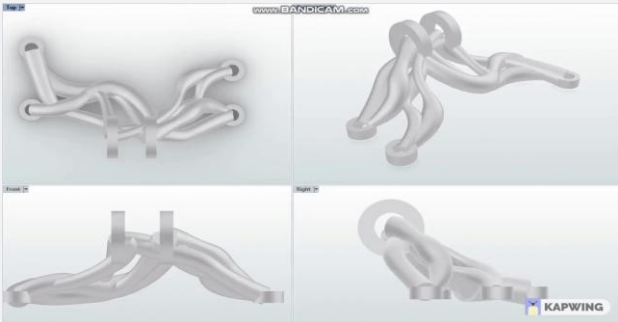
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Keywords:
Additive Manufacturing, Bioprinting, 3D Printing, Heterogeneous Object Modeling and Manufacturing, Nano/micro-scale Manufacturing

Additive Manufacturing of Functionally Complex Parts

Additive Manufacturing

- Design for additive manufacturing
- Generative topology optimization
- Path planning for scanning and deposition,
- Additive manufacturing of multi-functional structures
- Thermo-mechanical analysis for additive manufacturing
- Hybrid additive-subtractive processes
- 4D Printing of smart composite structures for load-bearing applications
- Robotic based additive manufacturing process
- Novel additive material development
- Secondary and surface improvement processes



Bioprinting for Tissue Organ Engineering

- Bio modeling and design for implants and medical devices
- 3D bioprinting
- Development of custom bioprinters
- Biomaterial and bioink development
- Vascular, skin and bone tissue engineering
- Skin substitutes with hair follicles
- Bioprinting of brain models

