# ADDITIVE MANUFACTURING

INTRODUCTION

Additive manufacturing a.k.a 3D printing is a computer controlled process that creates 3D objects by depositing materials, typically in layers.

https://www.twi-global.com/technical-knowledge/faqs/what-is-additive-manufacturing#WhereisAMused

DESCRIPTION

- Uses 3D object scanners or computer aided design (CAD)
- Built layer by layer

Advantages
- Lower production cost
- Produce little waste
- Produce precise and complex shapes
- Improve strength and durability
- Faster production
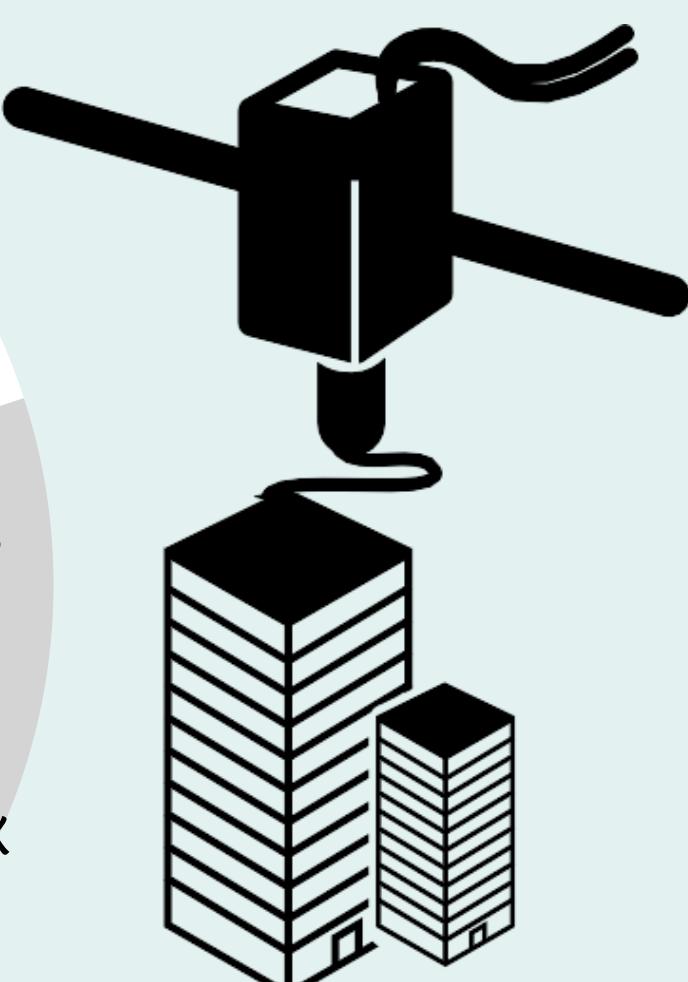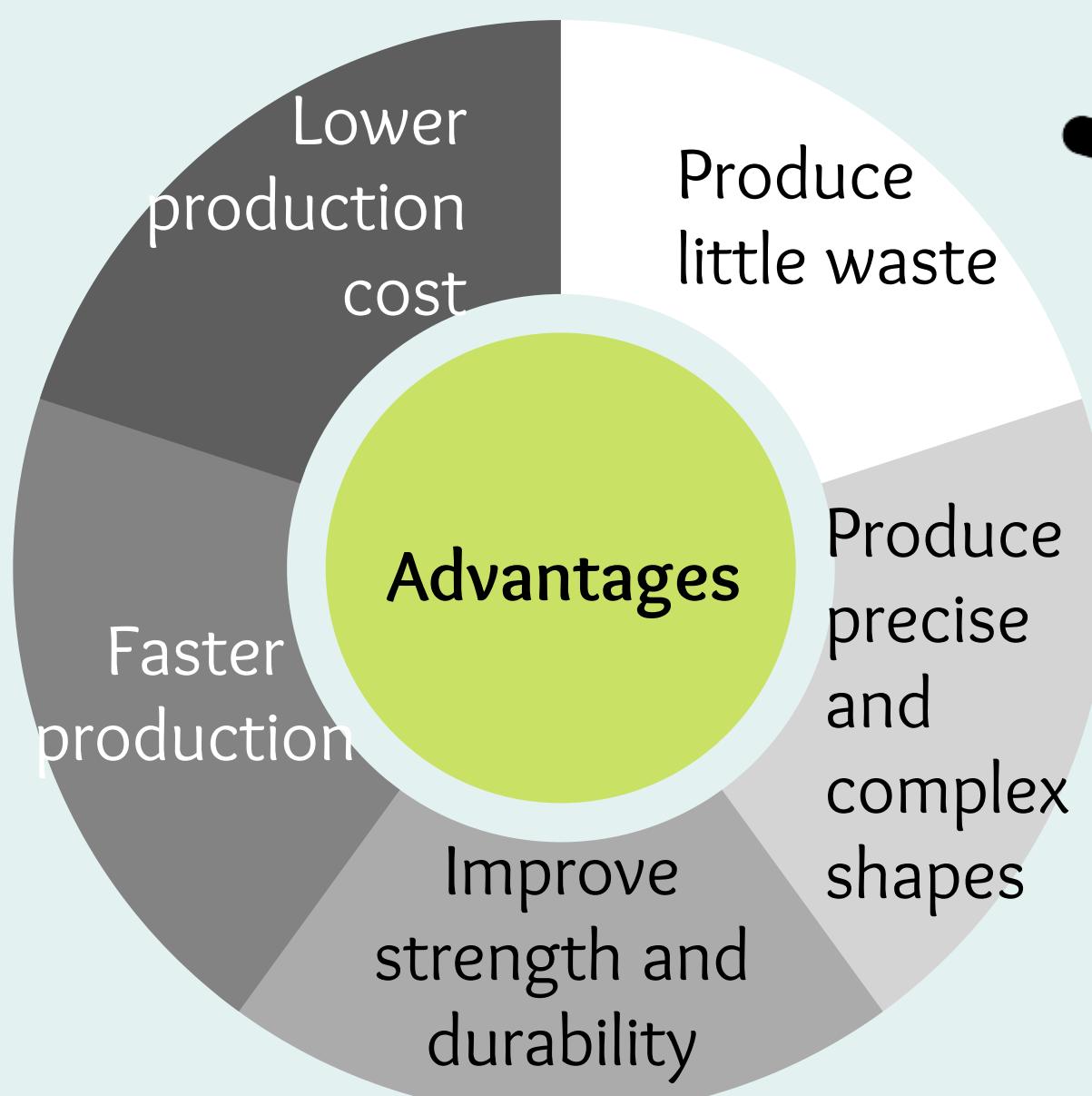
https://www.flaticon.com/free-icon/3d-printer-printing_44252

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EXAMPLES

- Lightweight engine
- Aircraft parts
- International Space Station (ISS) spare parts

Aerospace

https://www.cleanpng.com/png-airplane-icon-a5-computer-icons-flight-airplane-1186462/

- Prototypes
- Preproduction sample and tools
- Customized parts
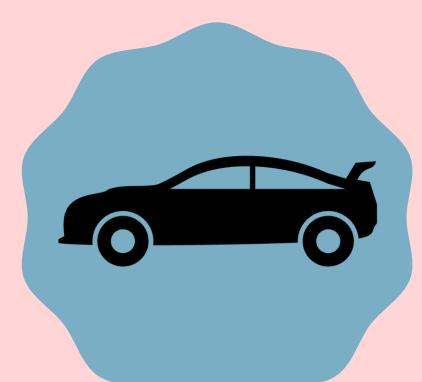
Automotive

https://pngtree.com/freepng/vector-car-icon_3989845.html

- Tissue and organs bioprinting
- Prosthetics
- Implants
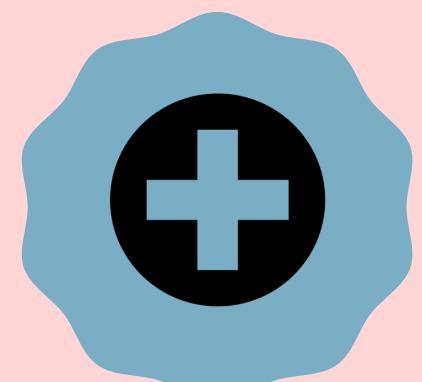
Medical

https://pngtree.com/freepng/vector-medical-icon_3989751.html

- Produce house parts
- House in Russia built in 24 hours

Housing

https://www.flaticon.com/free-icon/home_25694

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Additive manufacturing is on its way to become the main and preferred method dominating most of the industries which will benefit humankind from the perspective of time, cost and durability all the while reducing the industrial waste which may help to reduce the impact of pollution to the environment.

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