AKKODIS

Engineering a Smarter Future Together

3D Nesting

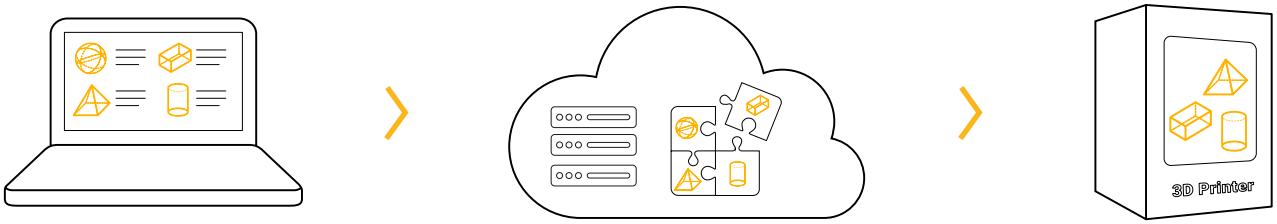
Efficient 3D nesting revolutionizes the printing process: material and time savings

3D nesting is a 3D printing technique that aims to save space and material as well as increase productivity without compromising the quality of the parts. Such tools for 3D nesting are usually integrated into complex and expensive CAD applications and often offer additional functions that are not required for pure nesting tasks. Akkodis concentrates on 3D nesting and offers tooling explicitly for this function.

Our Added Value

- No need for expensive CAD applications
- Low entry costs, no investment costs
- Focus and Performance
- Multiple nesting tasks possible in parallel

- **Space optimization**
  Increasing the number of objects for a printing process
- **Time saving**
  Optimum use of space - minimized time expenditure
- **Automated solutions**
  High volume utilization, low costs, reduced times, consistent quality
- **Applicability**
  Support of many printing technologies



Webshop-Frontend (Customer)

Cloud-Backend (AKKODIS)

Nesting-Algorithm (Customer)

Automotive and Transportation

Information and Communication Technology

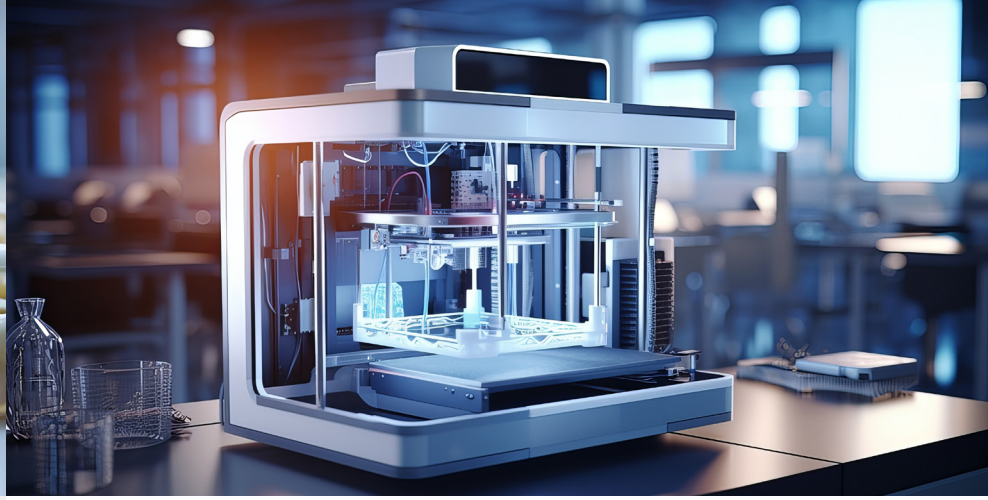
Aerospace and Defense

Manufacturing and Logistics

Banking and Financial Services

Life Science and Healthcare

Energy and Clean Technology



Areas of use for industrial 3D printing

- Automotive and commercial vehicle industry
- Medical Applications
- Railway vehicles
- Aerospace
- Metal processing

Operating models

- **On Demand**
  Depending on number and objects

Our scope of services

Space optimization

3D nesting, also known as interleaving, makes it possible to produce multiple parts simultaneously in a single printing process. The placement of the parts in the available production volume is optimized to increase the quantity of 3D printed products. The parts are nested at different angles to each other to make optimal use of the entire volume of the 3D printer.

Time saving

The nesting software works in a similar way to the video game Tetris: the aim is to place each block in a specific square in order to optimize the space on the playing field.

Automated solutions

Automated 3D nesting software offers benefits such as high volume utilization, low printing costs, reduced printing times and consistent quality. Powerful optimization algorithms based on decades of experience are used to deliver the best possible solution.

Applicability

Nesting works with almost all 3D printing technologies, but it is particularly advantageous for processes that work with powder and do not require support structures. This includes technologies such as DMLS, SLS or Multi Jet Fusion.

AKKODIS
Welfenstraße 17
70736 Fellbach | Germany
ITDigitalServices@akkodis.com
www.akkodis.com