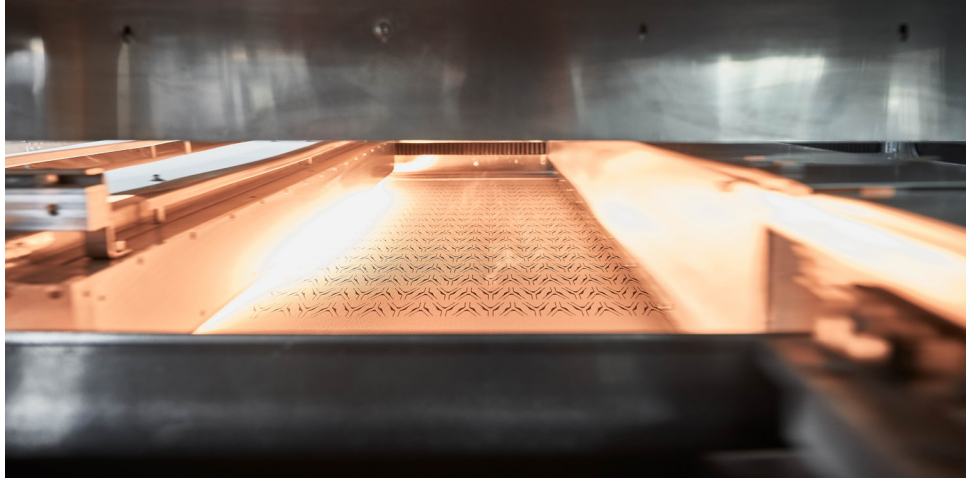


# High Speed Sintering

Fast, scalable and cost-effective polymer 3D printing

High-Speed Sintering, one of the most productive powder bed fusion processes on the market, fuses polymer powder layers using industrial inkjet printheads and infrared light with unique productivity, reducing cost per part while offering broad flexibility.



## Strengths & Differentiators of HSS



### Industrial

High End industrial components, such as the print head ensure long durability, high scalability and efficient repeatability.



### Speed

Unmatched printing speed through high end printhead technology and consistent layer times, independent of part size or volume.



### Cost Efficiency

Highest productivity, reliable repeatability and powder recycling ensure low costs per part for prototypes and series production.



### Material Diversity

Standard material for HSS is PA12. However, after testing and qualification, various polymer materials can also be processed.



### Design Freedom

Make the best products possible. HSS allows for complex geometries, large and accurate parts as well as high quantities.

## 3D printers for HSS



### VX200 HSS (290 x 140 x 180 mm)

- › Optimized for R&D applications
- › Open system for maximum adaptability
- › Compact design for laboratory use



### VX1000 HSS (1,000 x 540 x 180/400\* mm)

- › Largest build area and productivity for low part costs
- › Unique homogeneity of part properties
- › Low maintenance and powder refresh requirements

\*depending on material

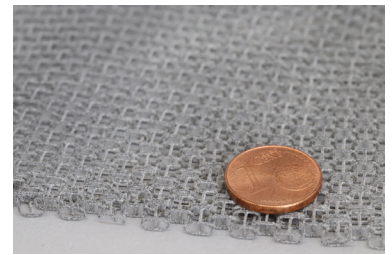
## Material data (referring to a powder refresh rate of 20 % on a VX200 HSS)

	PA12	TPU*
Test Standard	ISO 527 - 2:93 - 1A	DIN 53504 (S2)
Young's Modulus (XY)	1716 ± 89 MPa	33 ± 5 MPa
Young's Modulus (Z)	1725 ± 59 MPa	17 ± 5 MPa
Tensile Strength (XY)	52 ± 1 MPa	8 ± 1 MPa
Tensile Strength (Z)	46 ± 2 MPa	3 ± 0.50 MPa
Elongation At Break (XY)	10 ± 1 %	190 ± 15 %
Elongation At Break (Z)	5 ± 1 %	60 ± 6 %

\* Available on request

## Industries and Applications of HSS

- › Functional parts
- › Automotive
- › Aerospace
- › Sports & leisure
- › Interior design
- › Packaging
- › Electronics



## Our HSS Polymer network

Meet our HSS polymer network. An easy and risk-free way to find your HSS solution. Whether it's developing your own material, optimizing the HSS technology for your material, or getting parts or a 3D printer of your own.

