

Waste polymer powder - now available for the circular economy by switching AM technology.

Background

SLS Production
(PA12/11/6)



Polyamides represent more than 80% of the powders commonly used in additive manufacturing (PBF). Refresh rates cause high amounts of waste/residual powder quantities (SLS).

Choice of material

Waste/Residual
SLS-Powder

Economics

Low cost reconditioning of wastepowders

Quality Aim

Comparable to fresh powder, possibly better mechanical part properties

Enabling technology

AM Process:
High Speed
Sintering (HSS)

Voxeljet AG



Powder
Reconditioning

Dressler Group

Process
Development

Fraunhofer IPA

Scope: Up-Cycling

Boost for
the circular
economy



Printing with 100% recycled powder,
without fresh powder addition.

Homogenous powder properties (up to tons)

“Fixed” process parameters