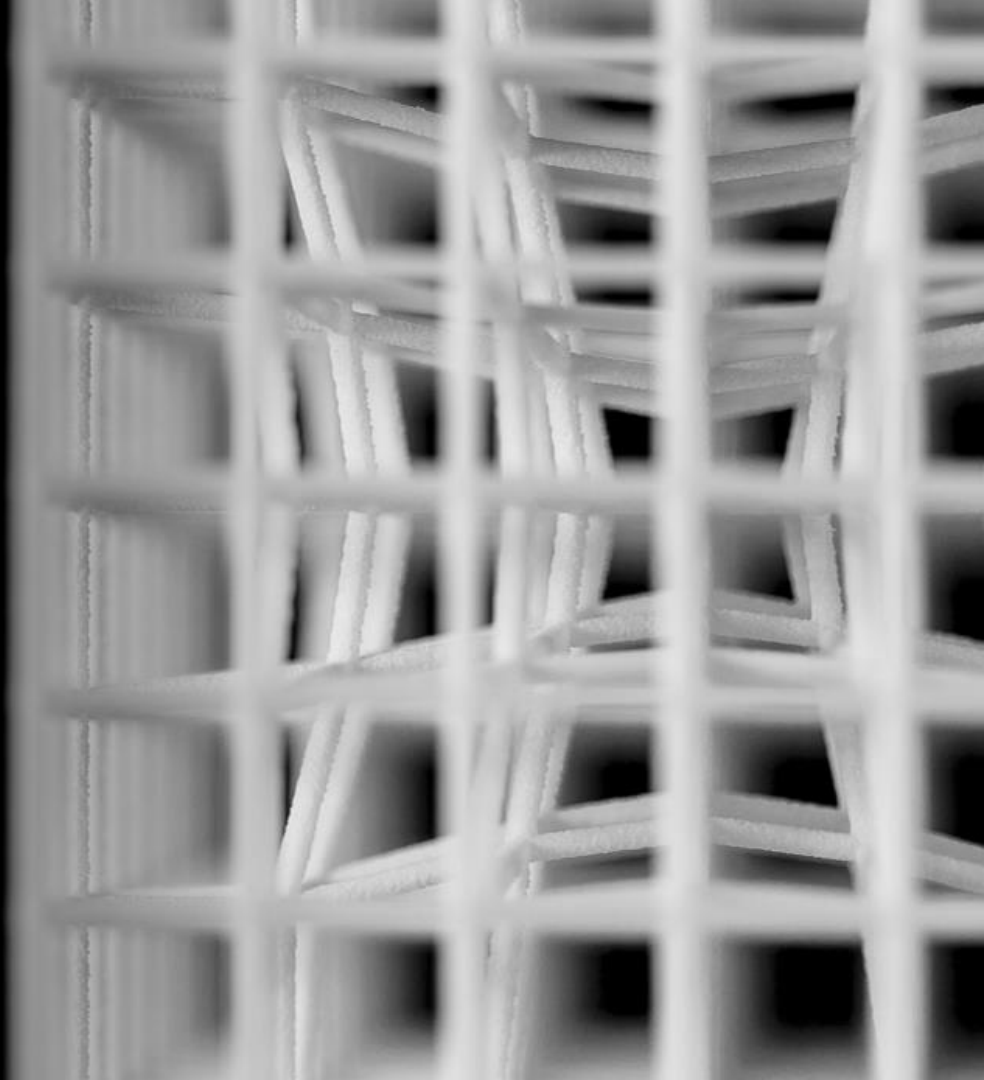


The (r-)evolution in Additive Manufacturing

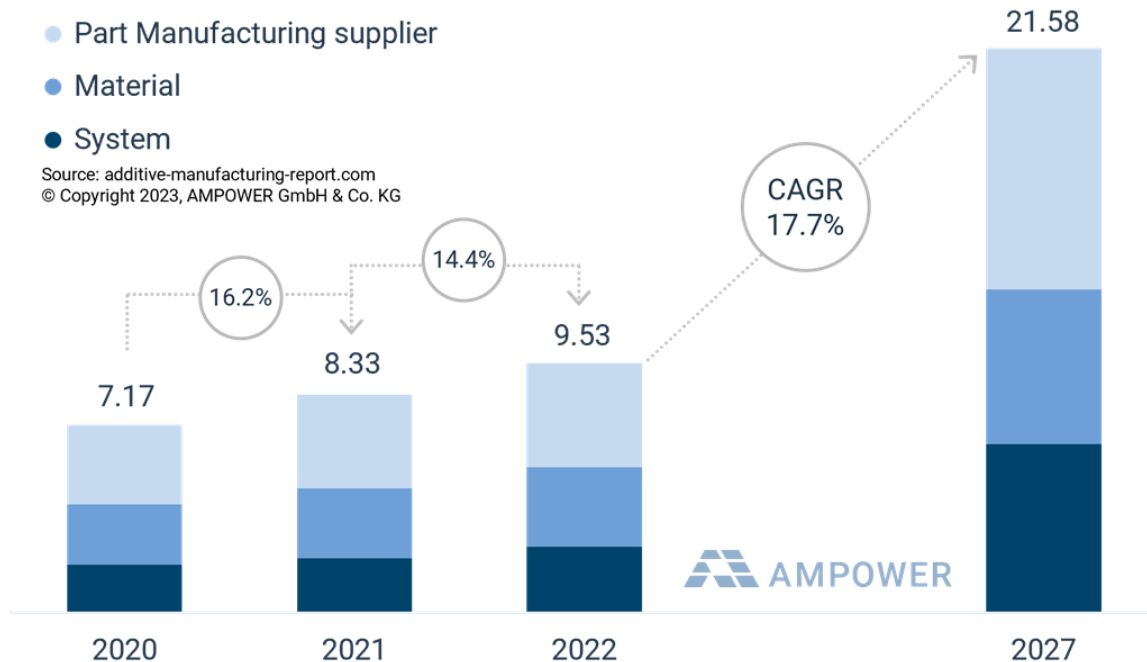
Daniel Hoogstraate
Account Manager for the Netherlands



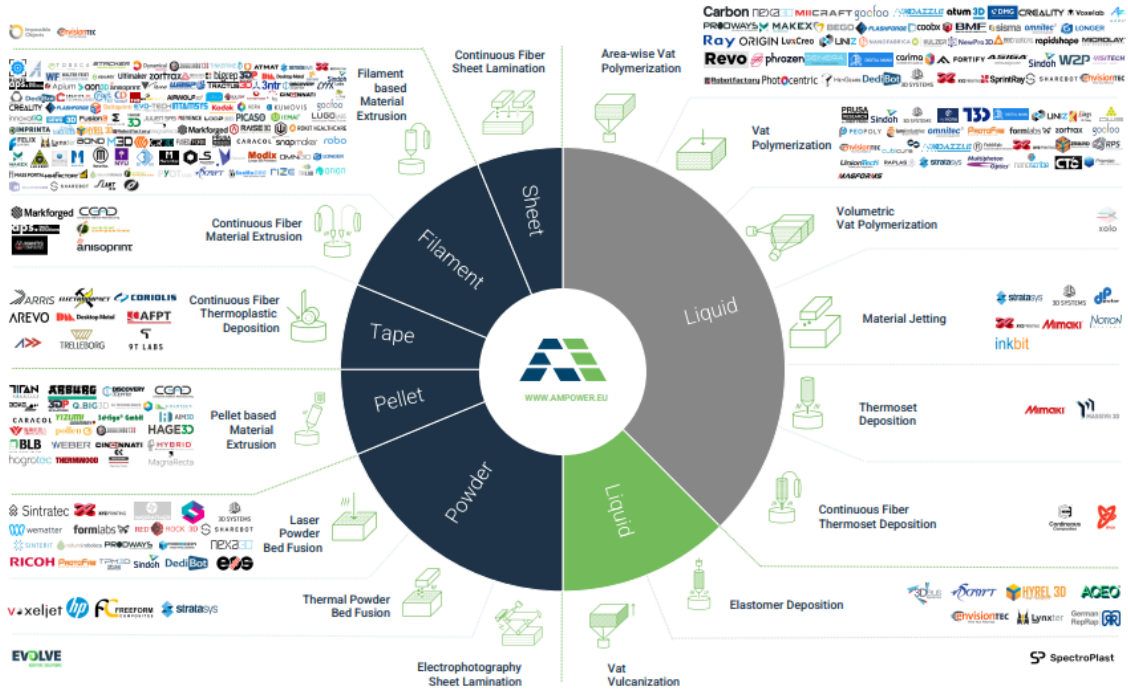
Global metal and polymer Additive Manufacturing market 2020 to 2022 and supplier forecast 2027 [EUR billion]

- Part Manufacturing supplier
- Material
- System

Source: additive-manufacturing-report.com
© Copyright 2023, AMPOWER GmbH & Co. KG



Polymer Additive Manufacturing technology landscape



Downloaded PDF at:
 www.ampower.eu
 Version: 01 October 2021
 Number of technologies: 16
 Number of companies: 222

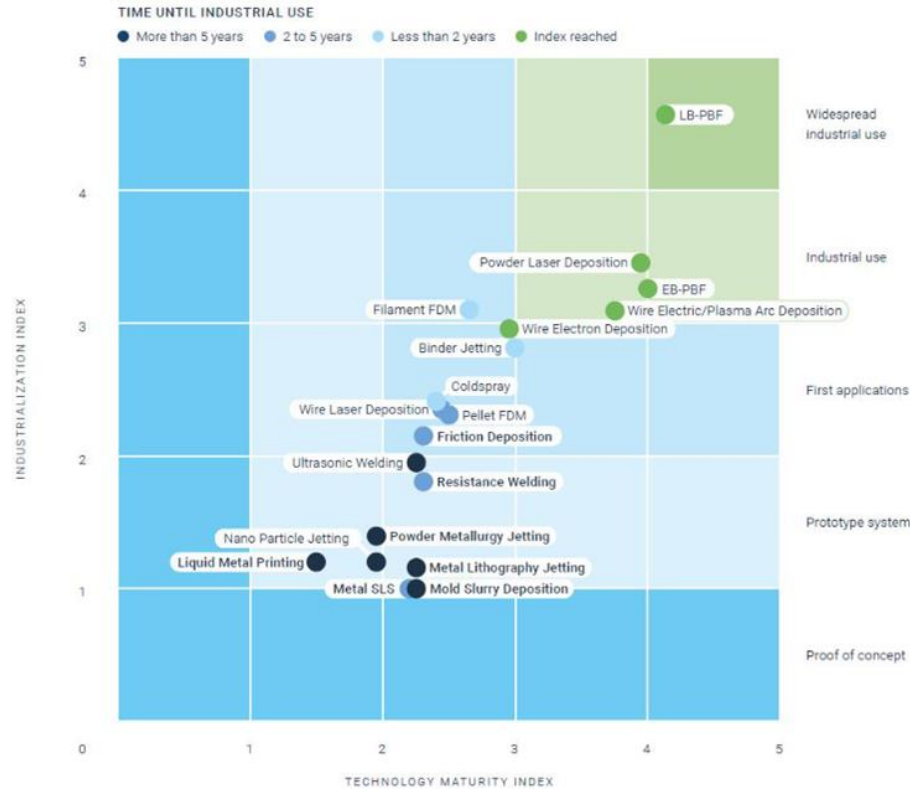
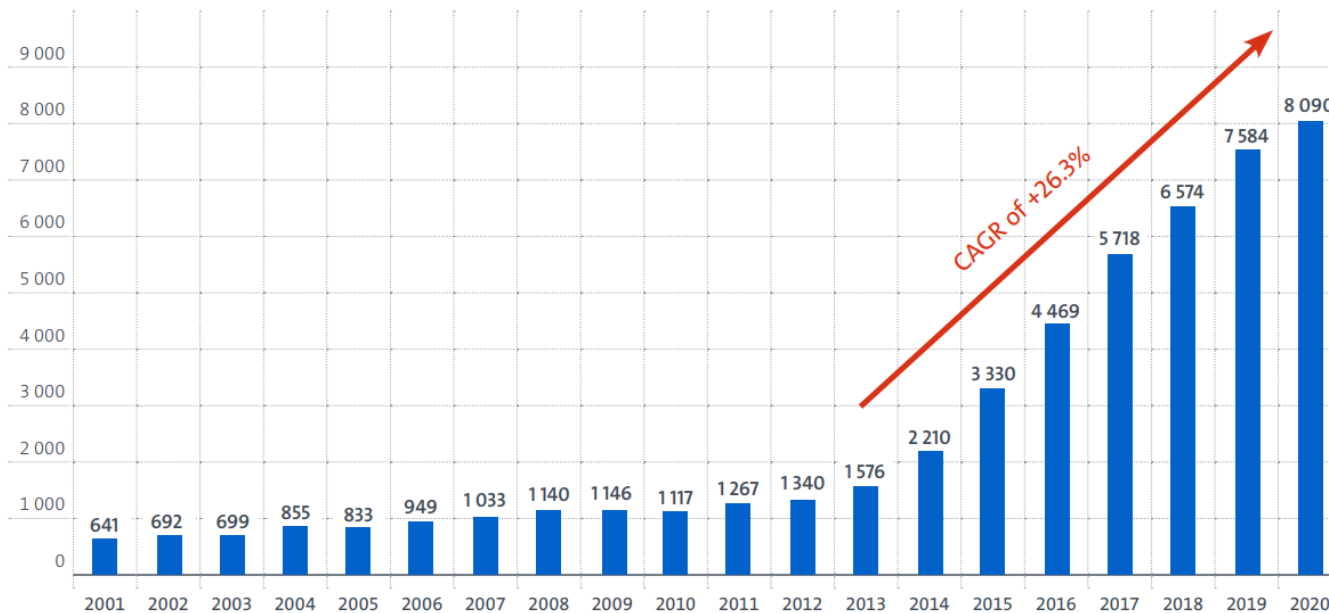


Figure E1

Trends in IPFs in all additive manufacturing technologies, by earliest publication year



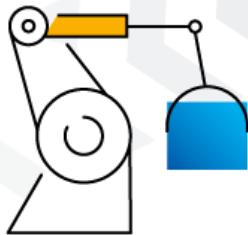
Source: EPO

What Is Trending?



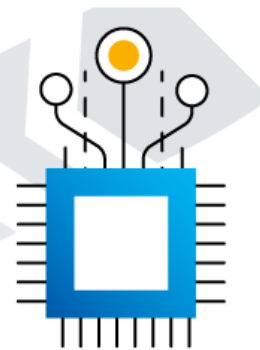
3D PRINTING (AM)

3



AI & ROBOTICS

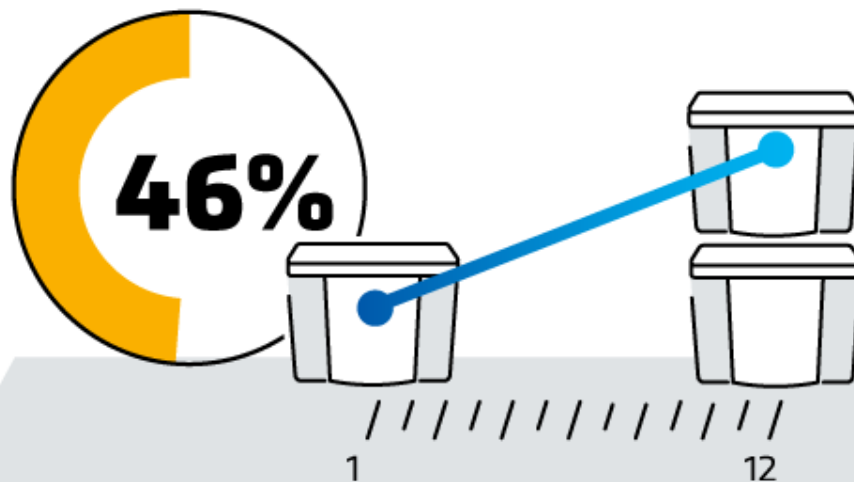
2



DIGITALIZATION

1

Looking Forward

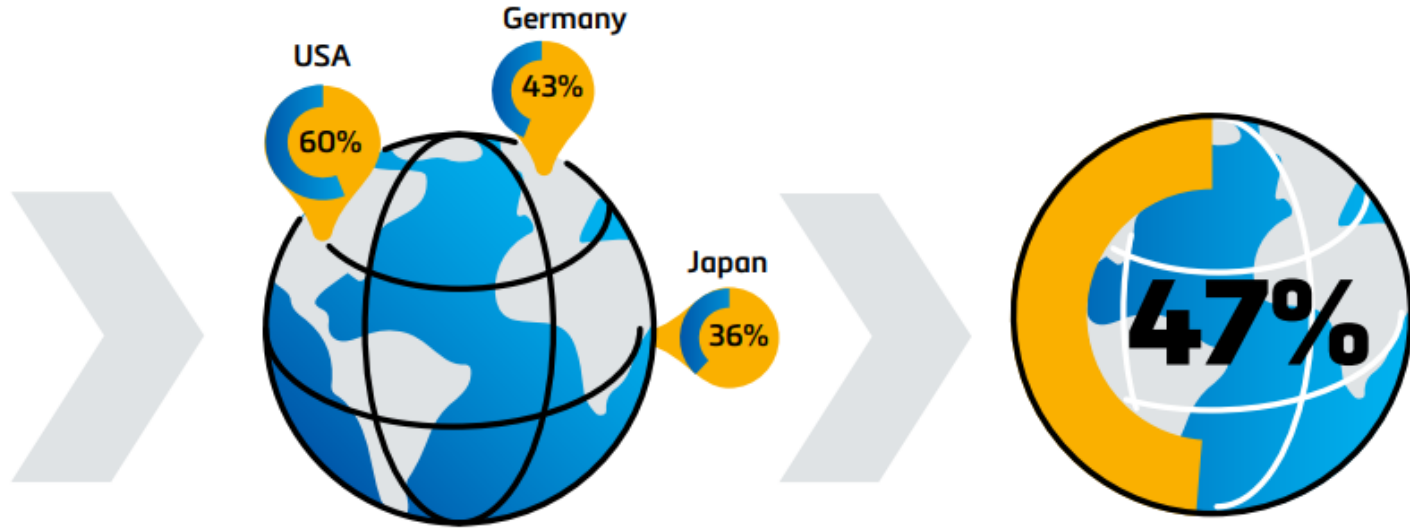


AN INCREASE IN USAGE

The future looks promising, with 94% of respondents planning to increase their use of AM over the next 12 months. 46% will at least double their use.

A Turning Point?

AM is primarily used as a prototyping technology, but we're reaching an inflection point where **end-use parts** are becoming more common



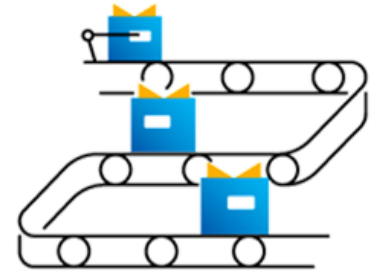
What Holds Companies Back?



KNOWLEDGE



COST



INTEGRATION

What Holds Companies Back?



**PERCEIVED
COMPLEXITY**



**MATERIAL
CHALLENGES**



**RESISTANCE
TO CHANGE**

Focus points for aerospace



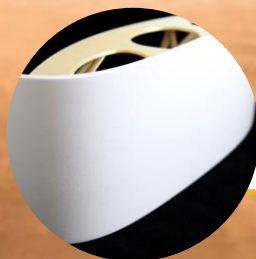
Luxury & VIP aircraft



Prototyping



Series of technical parts



Upgrades



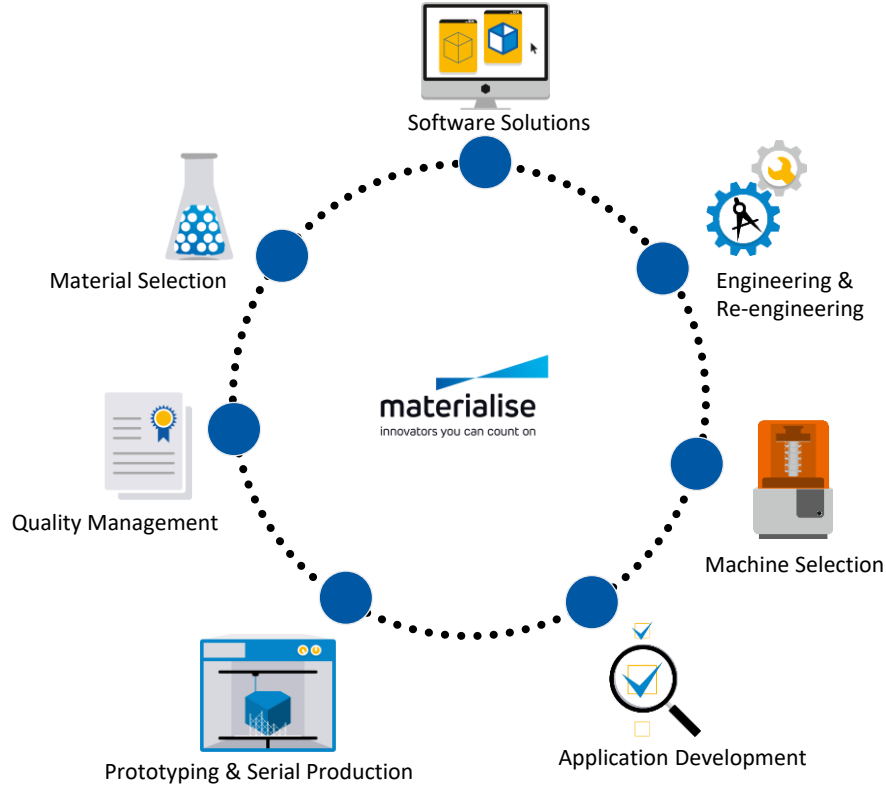
MRO supplies



Cabin interiors



Tooling



materialise
innovators you can count on

End-to-end approach



Our credentials for aerospace

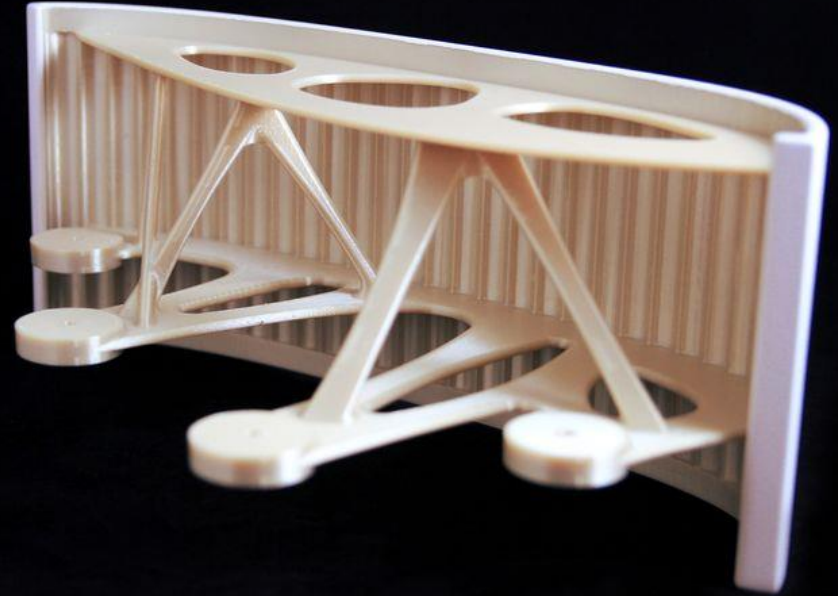
EN9100 quality management system

EASA Part 21G compliant POA

Materials for aerospace end-parts

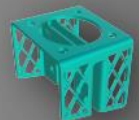
Ultem and PA 2241 FR

Airbus-approved Tier 1 supplier





AIRBUS



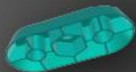
1 MOTOR PYLONS



5 SEATBELT JOINT



2 BEAM ROOT CONSOLES



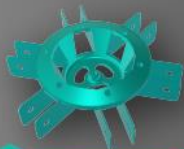
6 CENTROPLANE ANCHOR



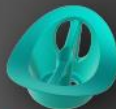
3 CROWN BOLT CONES



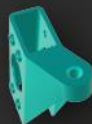
7 CABIN JOINTS



4 UNDERCARRIAGE HUB



8 CHUTE ANCHOR



9 UNDERCARRIAGE JOINTS



HEXA TITANIUM AM PARTS



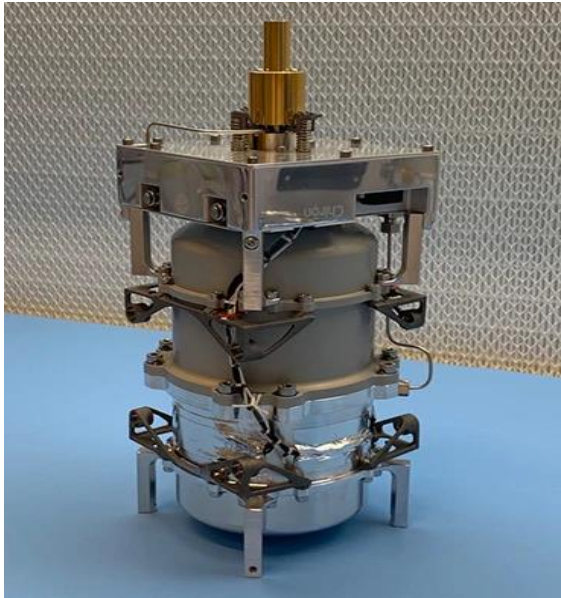
40% weight savings

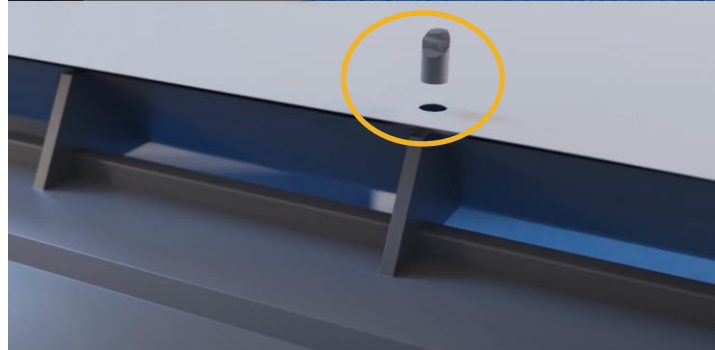


”

The first thing I started thinking about was how we can use new enabling technologies, new manufacturing technologies, to evolve designs really quickly. We got the Materialise team involved really early on for that reason.”

- Balazs Kerulo, Chief Engineer at LIFT.



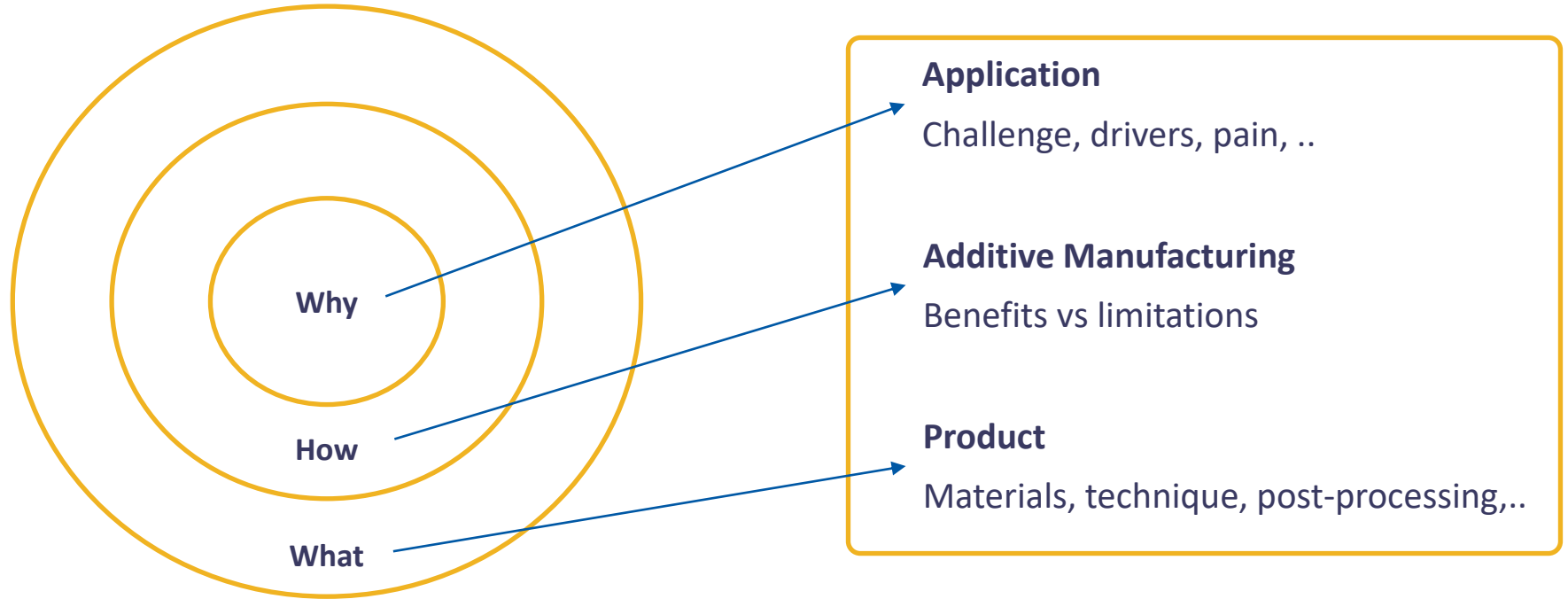




(expleo)



Moving on..



‘Don’t ask what a printer can do,
Ask what printer can do for you’

daniel.hoogstraate@materialise.be



@materialisenv



/materialisenv



/company/materialise

materialise

innovators you can count on