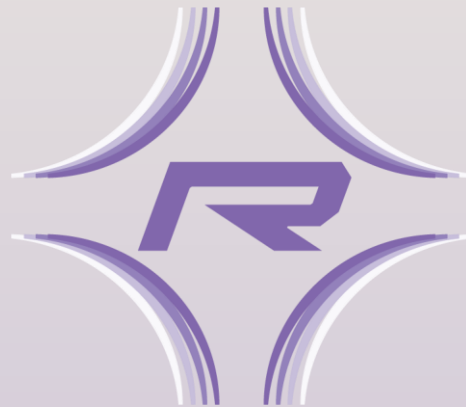




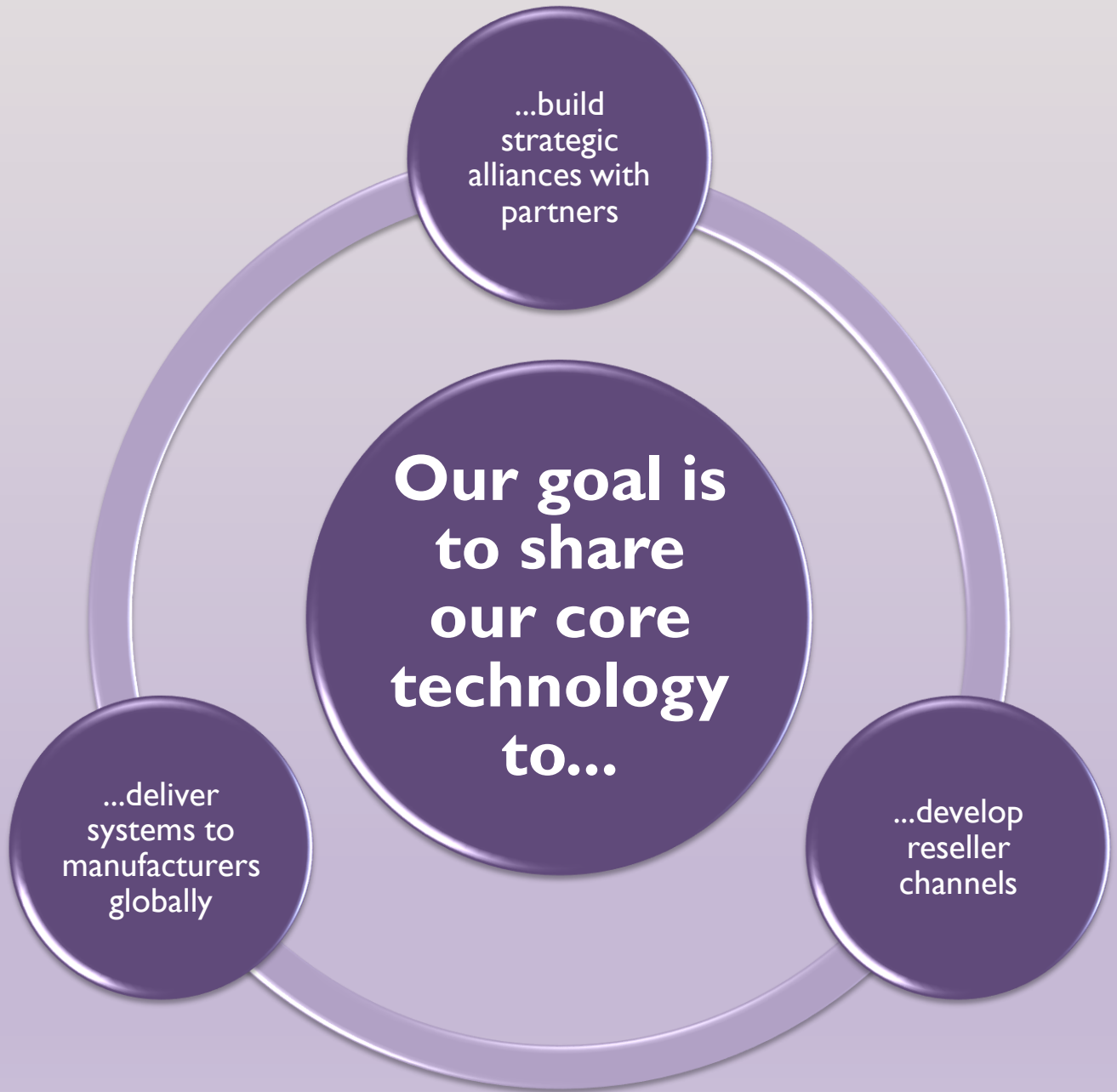
# RAPLAS

Production Additive Manufacturing



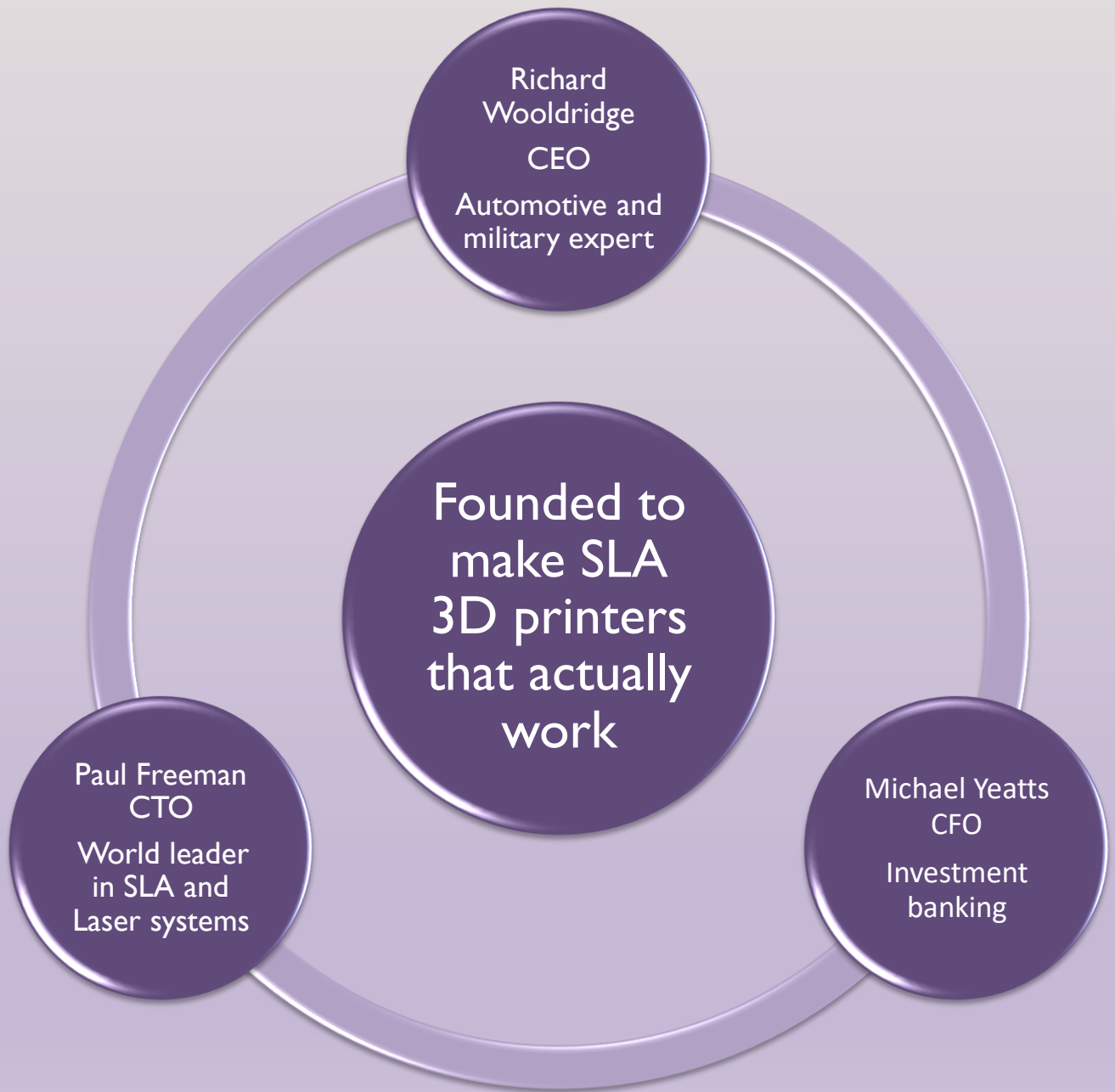


## **UK-European driven company with world leading technology partners**





## The Co-Founders and Management Team



## Service and Support



### **Four service centres**

Cardiff in the UK (Headquarters)

Jena in Germany

Schaumburg, Illinois in the USA

Mumbai in India

Installation, training and optimization carried out by our technicians and partners



## Trusted by a broad range of partners







## Production Resins Systems

**PR800 –**  
800 x 700  
x 600 mm  
Build area



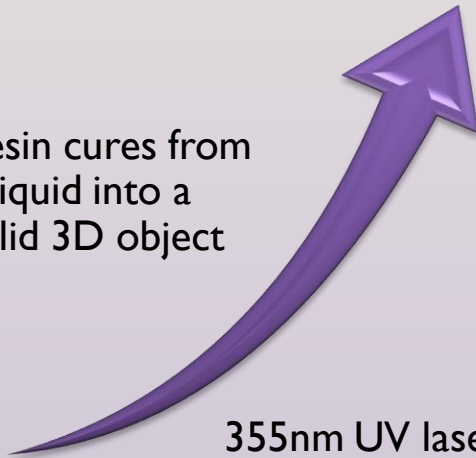
**PPR700 –**  
700 x 700  
x 500 mm  
Build area

**PR450 –**  
450 x 450  
x 400 mm  
Build area



## Production Resins Systems

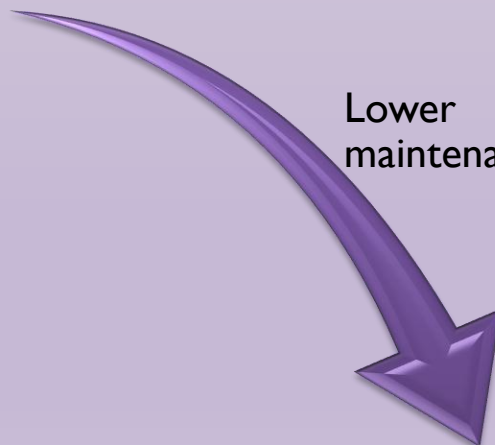
Resin cures from a liquid into a solid 3D object



Higher resolution  
fully dynamic fast  
and accurate

355nm UV laser scans 3D image  
data into liquid resin

Lower  
machine cost

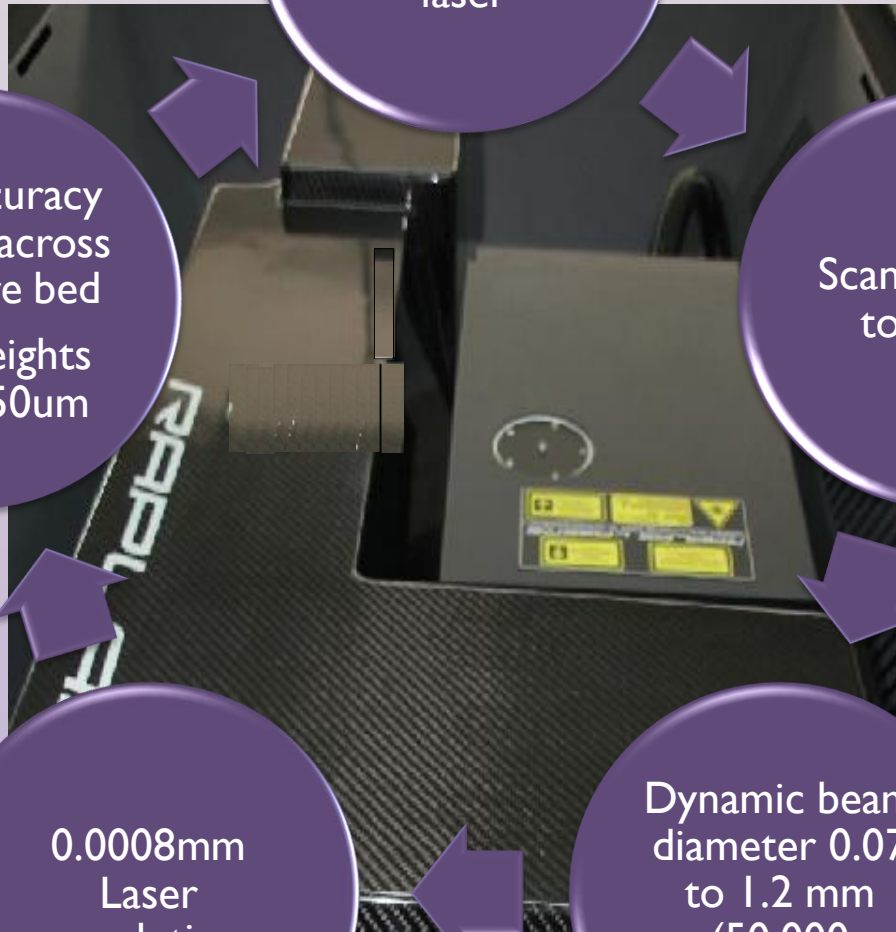


Lower  
maintenance cost

Lower resin cost



## Production Resins Systems



Dynamically  
controlled 2W  
Air-cooled UV  
laser

Build accuracy  
of 50um across  
the entire bed  
Layer heights  
of 50-250um

Scan speed up  
to 25 M/s

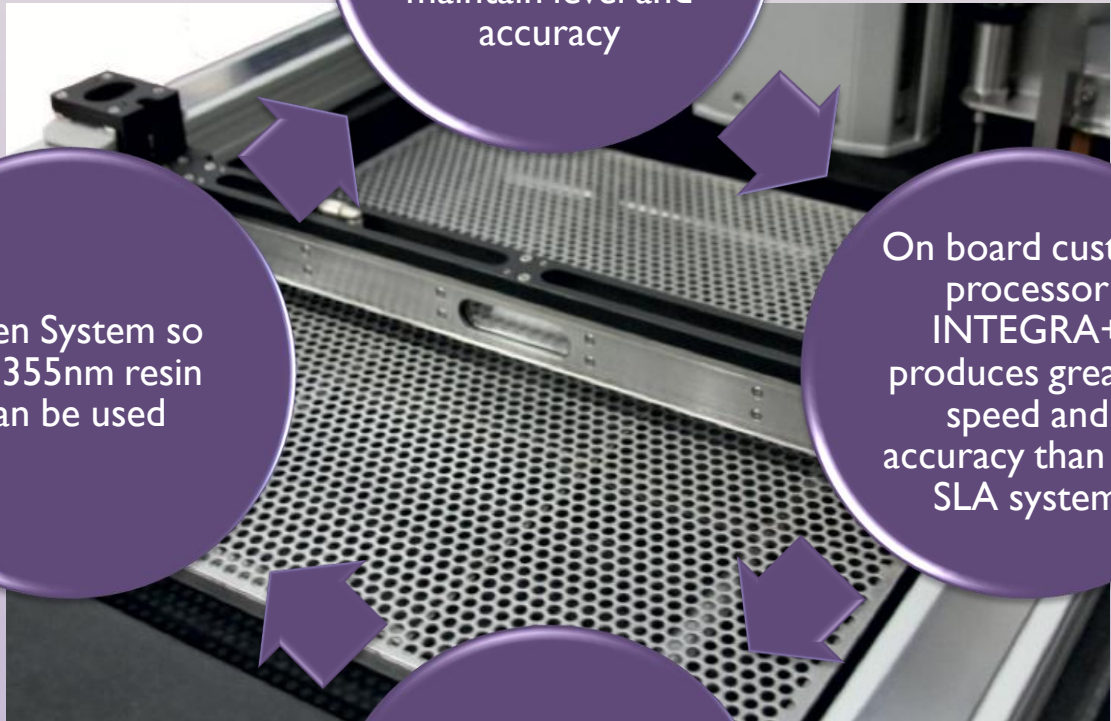
0.0008mm  
Laser  
resolution

Dynamic beam  
diameter 0.07  
to 1.2 mm  
(50,000  
settings)





## Production Resins Systems



Granite frame provides both physical and thermal stability to maintain level and accuracy

Open System so any 355nm resin can be used

On board custom processor INTEGRA+ produces greater speed and accuracy than any SLA system

Magics license and Integra+ software included



## Certifications

**ISO EN12100**- Safety of Machinery

**DIRECTIVE2006/42/EC**  
– CE Marking - Machinery

**IEC60825**- Safety of Laser products and Integration

**IEC(EN)1008**-Safety of Interlocks - Machinery

**TUV SUD** Compliance Tested



## Raplas Integra+ Build Server System integrates the world's leading sub-systems

**Raplas RPL  
Dynamic Laser and  
control System**

Proprietary on-the-fly  
laser power control

Integrated automatic  
laser power calibration  
for optimum laser  
performance and  
longevity

Air-cooled for low  
power consumption

Safety integrated into  
PR System

Economic operation  
and replacement

Dynamic 3D Scanner  
system for complete  
dynamic control of  
focus and beam  
diameter

HD+ resolutions as  
standard- c0.0008mm  
field accuracy

Dynamic beam  
diameter changes on-  
the fly at a vector level

Best in class scanner  
technology



## Raplas Integra+ Build Server System integrates the world's leading sub-systems

### Raplas modular build chamber system

- Accuracy, stability, cleanliness, reliability and ease of maintenance
- Granite based build system for ultimate stability

### Ophir

- Industry calibrated laser power meter; world's leading laser measurement technologies

### Panasonic

- Drive and measurement systems for reliability and accuracy

### Materialise Build Processor

- Fully customisable and flexible build styles for any part build requirement. Optimised and fully adjustable build protocols maintaining model accuracy

- Build styles and parameters can be selectively applied to individual or groups of parts

- Different parts with differing build parameters can be built in same build

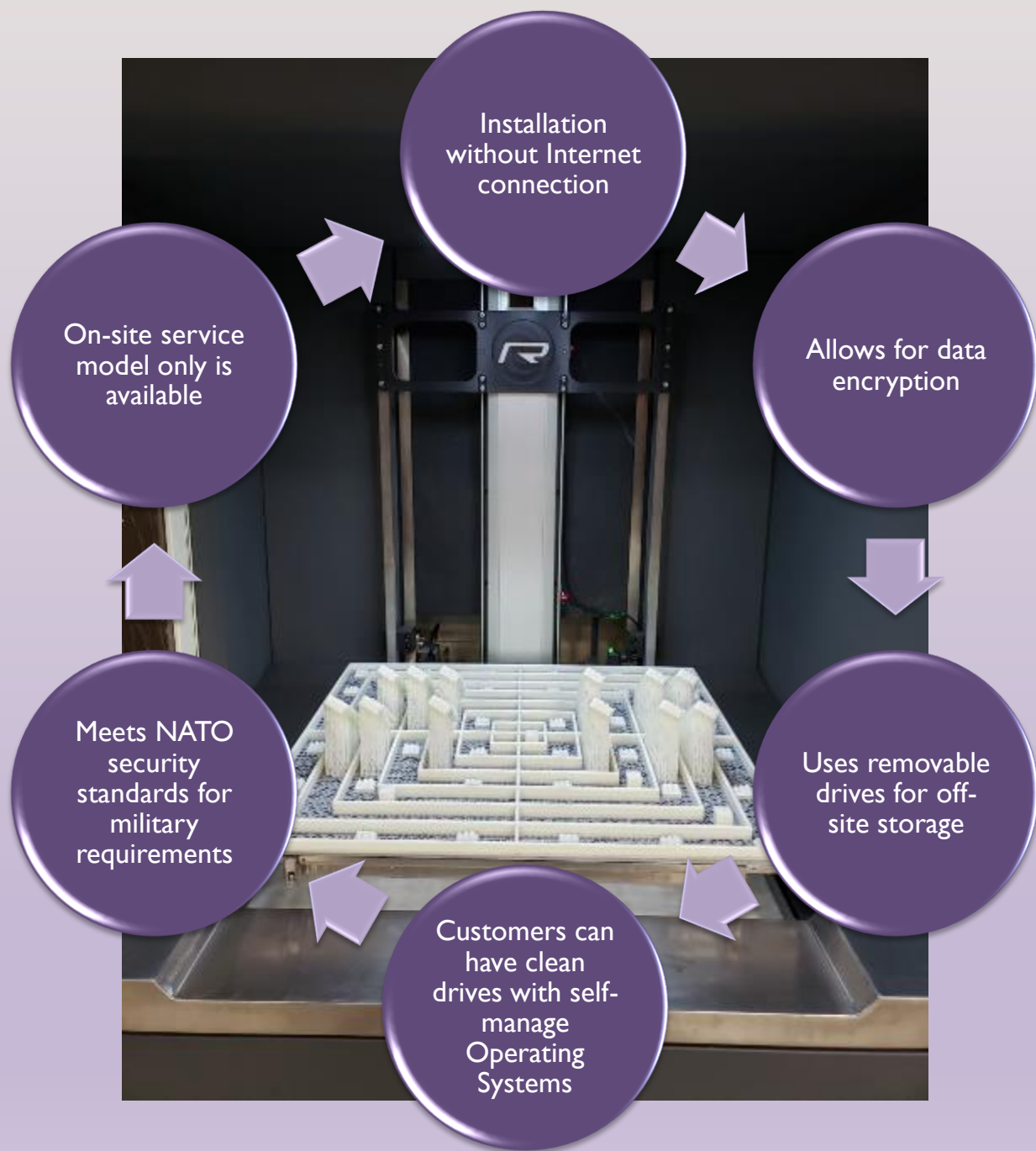




# RAPLAS

Production Additive Manufacturing

## Raplas 'Dark Site' options





## Raplas Material Development Kit (MDK)



Use for first phase testing of sample material

Allows for small batch testing of new materials

Enables users to develop 'own-resin' blends

MDK available on small or large frame systems





## Raplas Resins

General Purpose  
in clear, white and  
grey



Flexible and  
Elastic

Tough and  
Rigid

Casting resin

Biocompatible

High Temp  
(>250 deg c)



Ceramic filled



ESD safe

More resins  
being added...





**Raplas System is open – fully unlocked and compatible with all 355nm materials**

