



İSTANBUL PROJECT ACADEMY



MARMARA ÜNİVERSİTESİ
İNNOVASYON VE TEKNOLOJİ
TRANSFER UYGULAMA VE
ARAŞTIRMA MERKEZİ





Health Care
Doctor
Hospital
Pharmacist
Nurse
Dentist
First Aid
Surgeon
Emergency



MEDICAL



MEDICAL



MEDICAL

Horizon Europe Cluster 1: Health Brokerage Event



Project Idea / Field of Expertise :

SHAPE MEMORY ALLOYS BY ADDITIVE
MANUFACTURING FOR STENTS APPLICATIONS

Organisation Name:

OPTIMUS3D

Addressed Topic(s) & Call(s):

DESTINATION 6. MAINTAINING AN
INNOVATIVE, SUSTAINABLE AND GLOBALLY
COMPETITIVE HEALTH INDUSTRY.



OPTIMUS 3D

ADVANTAGES:

- ✓ Material savings
 - ✓ Weight reduction
 - ✓ Cost reductions
- ✓ Non Recurrent costs savings
- ✓ Saving in assembling line
- ✓ Extremely Short Lead times
- ✓ Stock material disappears

Additive Manufacturing specialists at your entire disposal.
Years of expertise at your service



PRODUCTION MEANS

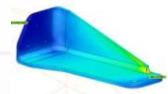
TECH.	MACHINE	MATERIALS	SIZE (mm)
INGENIERÍA	Additive Design/Re-diseñ, Topological Analysis, FEM, Material guidance		
SLM	RENAM 500S -Renishaw-	Ti6Al4V	250x250x330
	SAMYLAB	Steel 1,404 (316) 1,709, 1,542 INCO718	160x160x160
WAAM	ADDILAN WAAM VO.1	Ti64Al4V, Steels, Inconel 718	1300X900X500
MJF	HP FUSION 5200 -Hewlett-Packard-	PA12, PA11, TPU	380x285x380
	HP FUSION 4200 -Hewlett-Packard-	PA12, PA11, TPU	380x285x380
FDM	FORTUS 450 -Stratasys-	ULTEM, ASA, PC, FLEX (TPU) Nylon12, Nylon Cf	406x355x406
POLYJET	POLYJET -Stratasys-	Thermos/Durus/RiguDental Vero/VeroClear	293x191x148
ESCANEADO	ARTEC SPIDER		
ACABADOS	HEAT TREATMENT / BLASTING / PAINTING		
CERTIFIC.	EN9001, EN9100, ISO13485		



OSTEOMODEL



Machining design



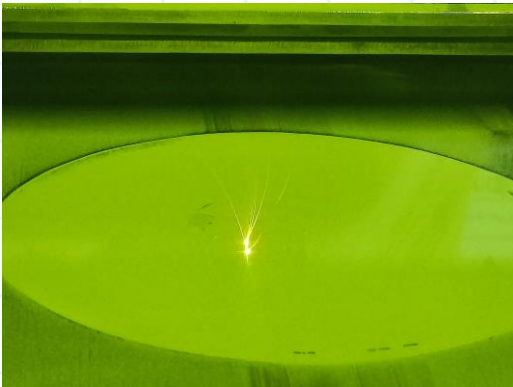
Generative design



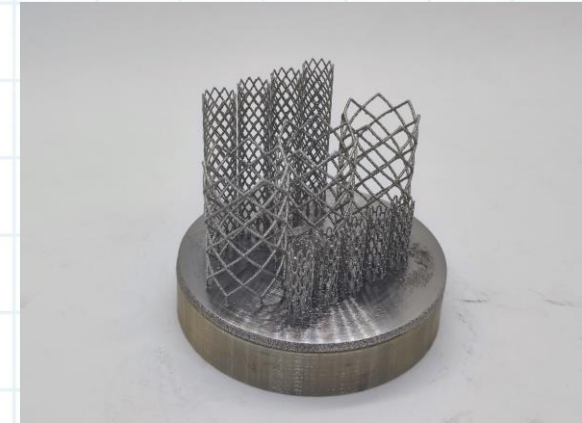
optimus3D

Our project idea / expertise

- RPK S. Coop. And Optimus 3D approach this project with the aim of developing new products from **“intelligent” materials such as Shape-Memory-Alloys (SMA)**. The shape memory effect consists of generating reversible changes by thermal cycling. This effect is produced by non-diffusive phase transformations. These same materials also have a property called super elasticity, consisting of the recovery of the shape after being subjected to deformations greater than 6%.
- Taking this into account, the project proposes an exhaustive study of the material to proceed with the design and development of **bone implants, catheters and stents obtained by 3D printing**.



SLM Additive manufacturing



- We are looking for industrial, medical and or technological centers which are interested into join our project. We will provide technical side and we may need to increase number of **real applications** can be used for this project.



Contact details



Contact person

Organisation

Optimus 3D SL

Address

C/ Leonardo Da Vinci 9, Edif. E5

Phone

0034 697 628 296

E-mail

Estibaliz.Azaceta@optimus3d.es

B2Match profile

LinkedIn/Twitter

https://www.linkedin.com/public-profile/settings?lipi=urn%3Ali%3Apage%3Ad_flagship3_profile_self_edit_contact-info%3B7lUyqu4iTEC%2BSADLXRNDiA%3D%3D



THANKYOU



MARMARA ÜNİVERSİTESİ
İNNOVASYON VE TEKNOLOJİ
TRANSFER UYGULAMA VE
ARAŞTIRMA MERKEZİ

