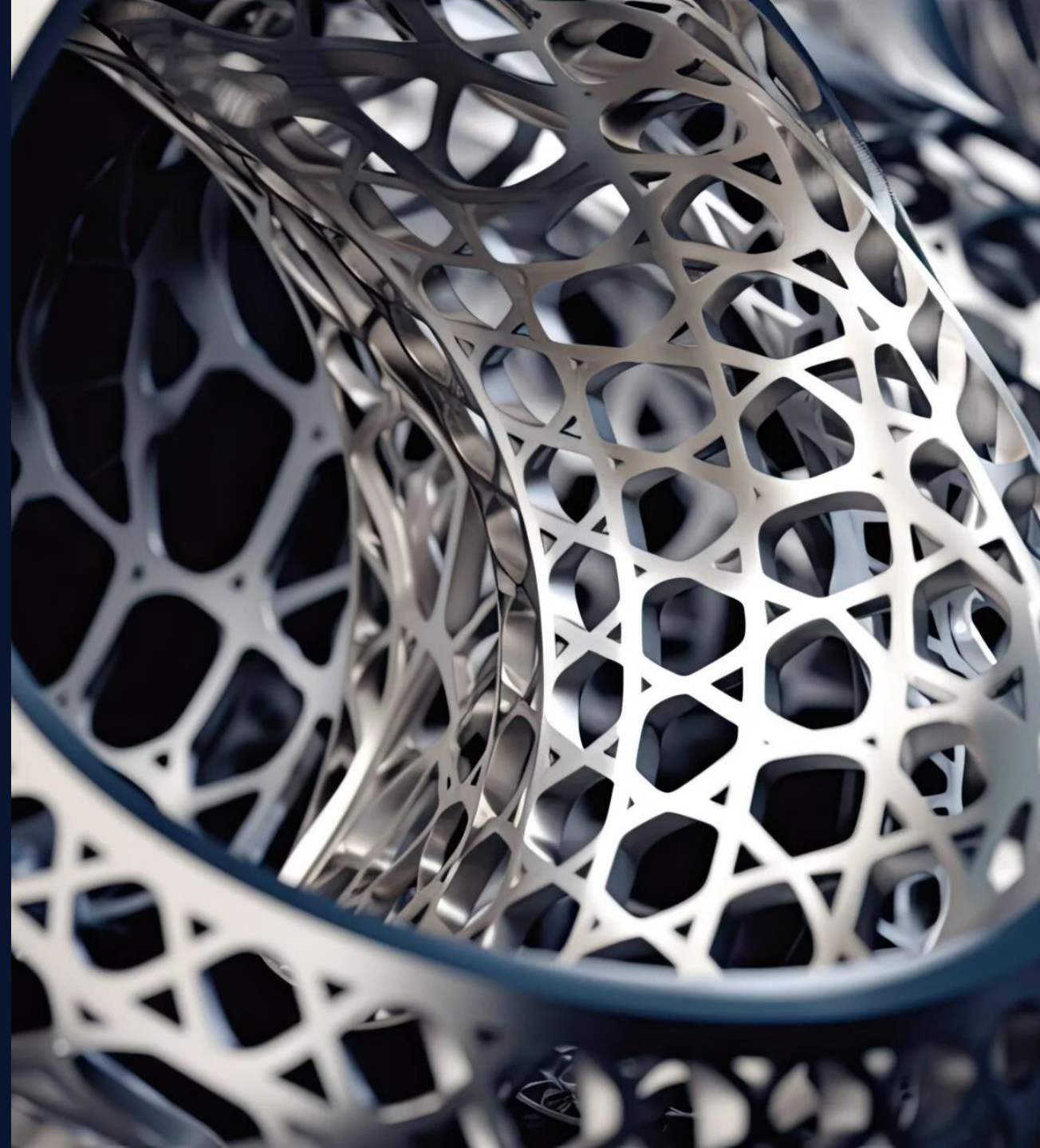




High-Performance Metals for Fusion & Space  
Applications

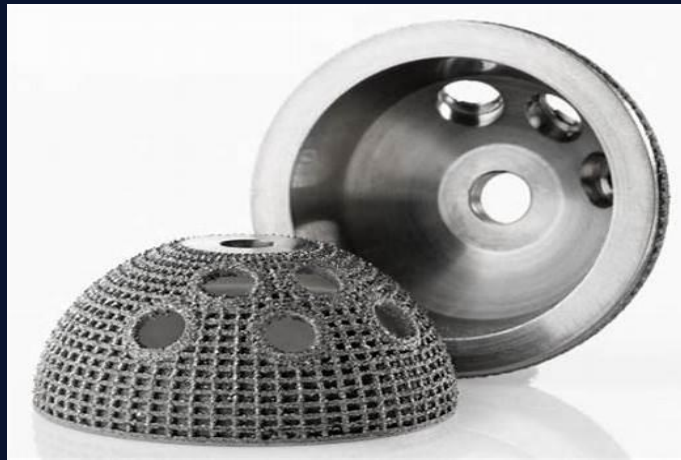
[info@bimotech.pl](mailto:info@bimotech.pl)



## Product Range



Refractory High-Entropy Alloys  
(RHEAs)



High Entropy Alloys



316LN-IG, Nickel & Titanium Alloys



Tungsten, Molybdenum, Niobium,  
Tantalum, Rhenium, Rhodium,  
Zirconium



Copper & Copper alloys



Other metals and alloys available upon  
request



## Machined Components

High-tolerance components made from titanium, nickel alloys, RHEA, HEA, tungsten, molybdenum, tantalum, niobium, rhenium, rhodium, copper and other metals.

Precision machining for aerospace-grade parts:



Nozzles



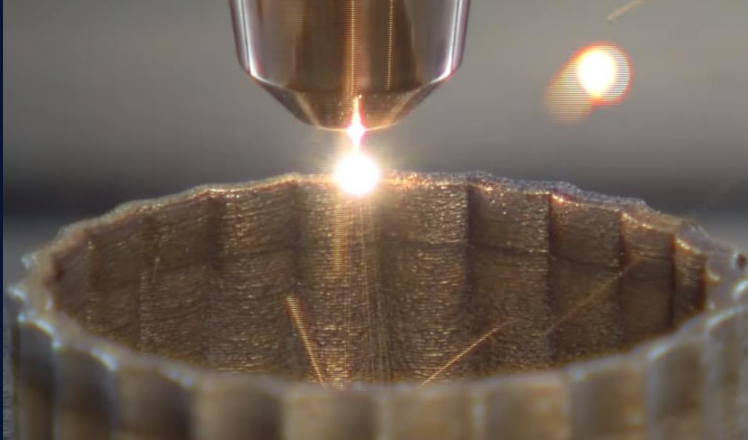
Combustion  
Chambers



Turbine  
Components

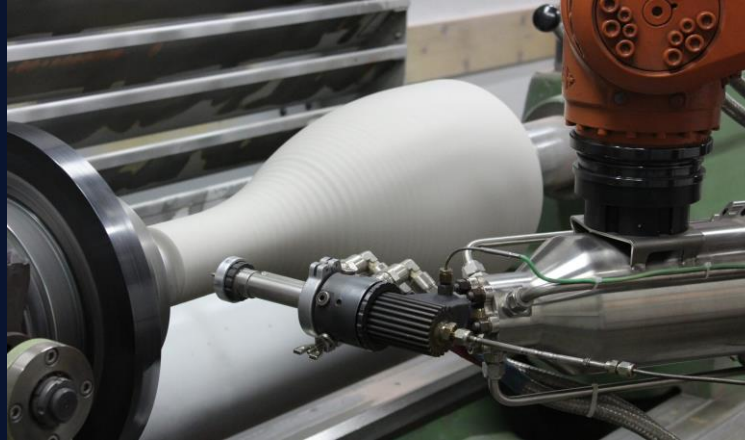


Other  
components



## Additive Manufacturing

Freedom in complex, lightweight designs ideal for space parts



## Cold Gas Spray (CGS)

High-quality coatings, AM, and component repairs without thermal distortion.



## Hot Isostatic Pressing (HIP)

Enhanced material properties through uniform high-pressure heat treatments.

### 3. Comprehensive Manufacturing Capabilities



## Precision Machining

High-accuracy fabrication for  
complex metal components



## Casting and Forgings

Robust and high-strength  
components with custom shapes  
and sizes.



## PVD Coatings

Vapour Deposition of thin coats  
for hardness and resistance





# F4E Projects

- **Titanium Gr2 for blanket system**
- **316LN-IG tubes for cooling FWP**
- **316L(N)-IG for PoPola retroreflector**
- **Rhodium target for diagnostic mirrors**
- **Special S235J steel order**

Worked as Subcontractor

# Titanium Gr2

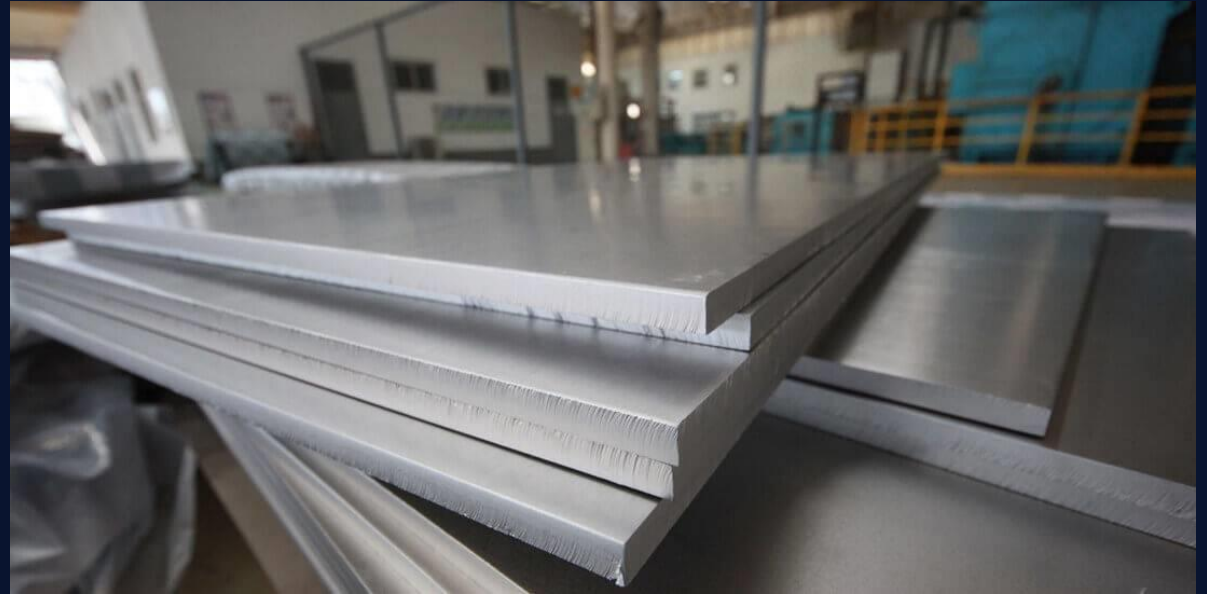
Plates for blanket system

2 management  
systems

Longer  
response time

Chance to get a first  
contract

Chance to get familiar  
with tender and approval  
procedures



Worked as Subcontractor

# 316LN-IG

Tubes for cooling FWP and for PoPola retroreflector

2 management systems

Longer response time

Cooperation opportunities

Entering niche market





Worked as Main Contractor

# Rhodium target

For diagnostic mirrors

1 management system

Short response time & help

Boosting R&D and cooperations

Exposure  
Development of technology

**FUSION  
FOR  
ENERGY**

TECHNOLOGY  
OFFER



## Manufacturing of large size Rhodium sputtering targets for Rhodium coated mirrors

*BIMO TECH has developed under F4E contract a production method of large size, non-segmented rhodium targets for rhodium coated mirrors deposited by magnetron sputtering. Rhodium coated mirrors provide significant advantage due to their high reflectivity, durability and ability to work in extreme environments and can find numerous applications in non-fusion environments such as aerospace, medical imaging, energy, big science and high energy physics.*

### The technology

The mirrors are one of the most critical elements of the ITER diagnostic systems. A mirror must survive in an extreme environment (intense UV and x-ray radiations as well as particle fluxes) and has to maintain the required optical performance. Due to its high reflectivity in the visible wavelength range 70%–80% and its low sputtering yield, rhodium was chosen as a good candidate for first mirrors in ITER. A production method of large size, non-segmented Rhodium target has been developed for production of Rhodium coated mirrors deposited by magnetron sputtering. Rhodium layers with thicknesses of 3.175 mm and size of 203.2 mm x 88.9 mm was produced.



Direct sample order

# S235J steel

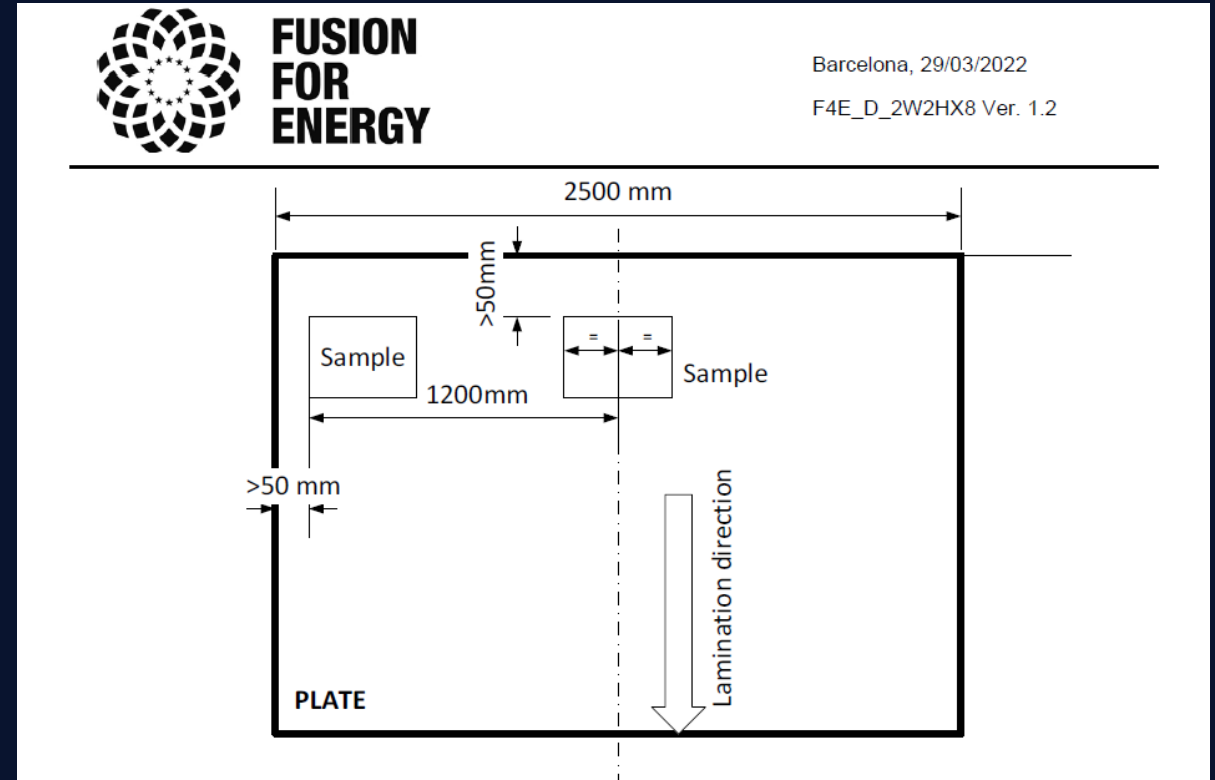
For material testing

1 management  
system

Quick PO

Future prospects

Fast-track access



# Key lessons your company has learned from your experience with F4E



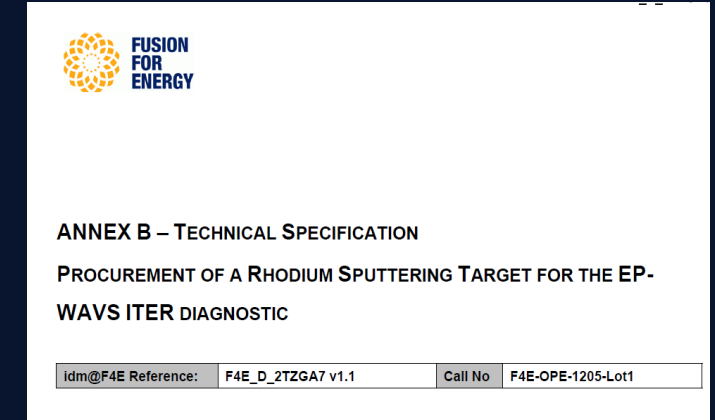
## Working on BigScience Projects

Great R&D and business network  
booster



## Working with big companies and academia

Hiring bigger companies as  
subcontractors. Working with  
scientists.



## Meeting Technical Requirements

Working on very specific and  
demanding requirements.  
Preparing Manufacturing Dossiers





BIMO TECH Sp. z o.o.  
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[bimotech.pl](http://bimotech.pl)

# Let's Power the Future with Fusion Together!

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