



Innovative ceramic protective shell for highly stressed graphite spare parts

# The Project

Graphite spare parts with ceramic protection coatings are essential for companies like as Wacker, Centrotherm, Aixtron, Infineon, Bosch, STmicroelectronics, OnSemi, Osram or Intel to keep up the manufacturing and processing of semiconductor materials. Unreliability of available coating technologies and minor availability of these spare parts result in advanced maintenance effort and process down time.

The COATSiCs technology offers a low-cost and ecofriendly coating technology for improving the protection of graphite spare parts to increase their durability in harsh environments and to extend the maximum working time. The excellent COATSiCs applicability also allows high throughput manufacturing of coated graphite spare parts.

This helps our customers to optimize semiconductor production quantity and process stability.

### The Team

**Location:** Fraunhofer Institute for Integrated Systems and Device Technology (IISB)

Members: Christian Reimann (Marketing and Sales), Stanislaus Schwanke (IP-Management), Christina Ende (Quality Management), Matthias Trempa (Semiconductor Expert),

Felix Sturm (Research and Development)

AHEAD Infos Batch: 13/2023 Phase: 1 Track: Licensing

### **The Business Model**

**Unique Selling** 

Easy to apply and ecofriendly technology to decrease service

**Proposition:** 

time and increase material effectivity

**Unfair Advantage:** Extended network

Extended network to semiconductor companies

Patent-protected technology

**Revenue Model:** Licensing technology

#### **Venture Readiness Level**

VRL	Ideatio	on	Ind	Incubation		Traction			Growth		
Technology Readiness Level											
TRL	1	2	3	4			6	7	8	9	

## **The Side Facts**

**Customer Focus:** B2B

**Searching For:** (Pilot) customers and licensing partners

Industry Tags: Materials, semiconductor & semiconductor equipment

**Technology Tags:** New materials