



HeraPur® Emission Catalysts

Customized Solutions for a Wide Range of Applications

PRODUCT PORTFOLIO

Heraeus' customized solutions combine innovative substrate concepts, advanced washcoat technology, and tailored coating processes to meet application-specific performance and emission control requirements.



Small Engine Catalysts

2-Stroke small engines
4-Stroke small engines

Three Way Catalysts

Small Engines, Motorbikes & IAM,
System Integrators



Particle Filters

IAM, System Integrators,
Special Applications

Oxidation Catalysts

IAM, System Integrators,
Special Applications

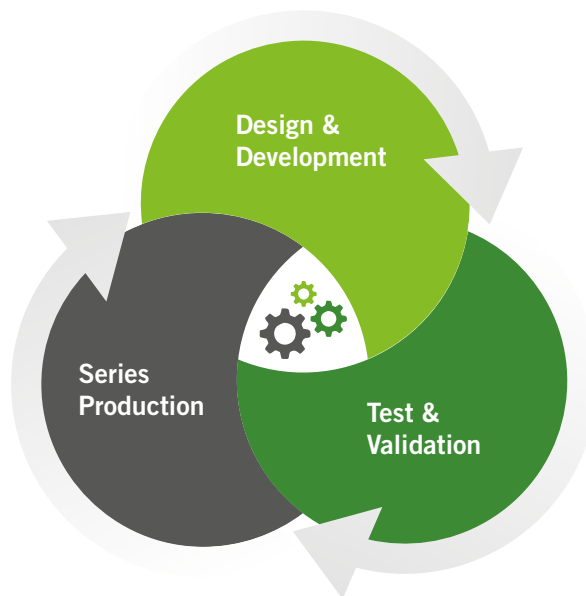


HERAPUR® CATALYSTS

Catalysts play a crucial role in exhaust-gas emission control and in meeting applicable emission requirements. Heraeus, as a fast and flexible development partner for emission catalysts, provides the perfect solution to bring your innovations to market swiftly.

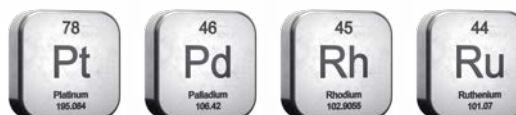
Customer-specific solutions that go beyond a standard product require individualized catalyst optimization. Work with our experts to identify the right catalyst for your application and process requirements. An intelligent combination of innovative substrate concepts, outstanding washcoat technology and sophisticated coating process leads to high-quality products with long-term stability.

It is our passion to select and put into effect the best combination for you



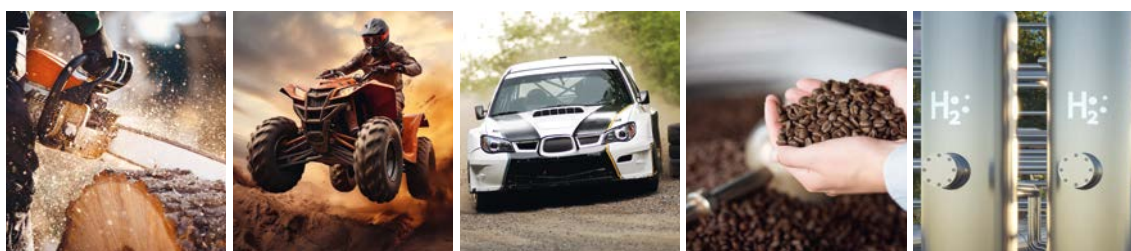
- ✓ to different formulation and coating technologies
- ✓ and various shaped substrates of different types and geometries (e.g. metal or ceramic honeycombs, knitted wire structures and bulk material)

- ✓ from a large range of our own precious metal compounds of platinum, palladium, rhodium and ruthenium



COATED CATALYSTS FOR A WIDE RANGE OF APPLICATIONS

Heraeus offers a diverse range of HeraPur® catalysts, featuring versatile applications across various industries.



SMALL ENGINES

- ✓ Chain saws
- ✓ Leaf blowers
- ✓ Brush cutters
- ✓ ...

POWERSPORTS

- ✓ Motorbikes
- ✓ ATVs
- ✓ UTVs
- ✓ Marine Applications

IAM & TUNING

- ✓ Automotive
- ✓ Motorsports
- ✓ Independent Aftermarket (IAM)

STATIONARY EMISSION & SYSTEM INTEGRATORS

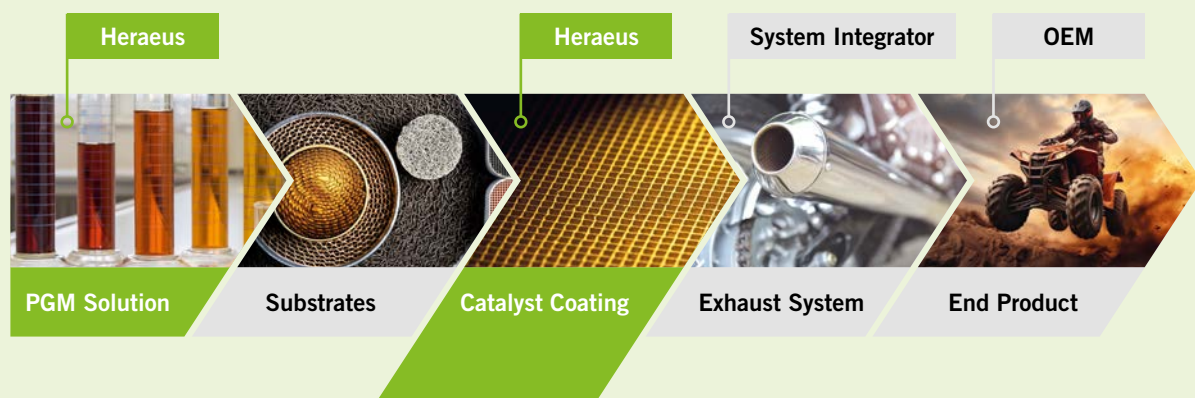
- ✓ Roasters
- ✓ Smokehouses
- ✓ VOC reduction

HYDROGEN

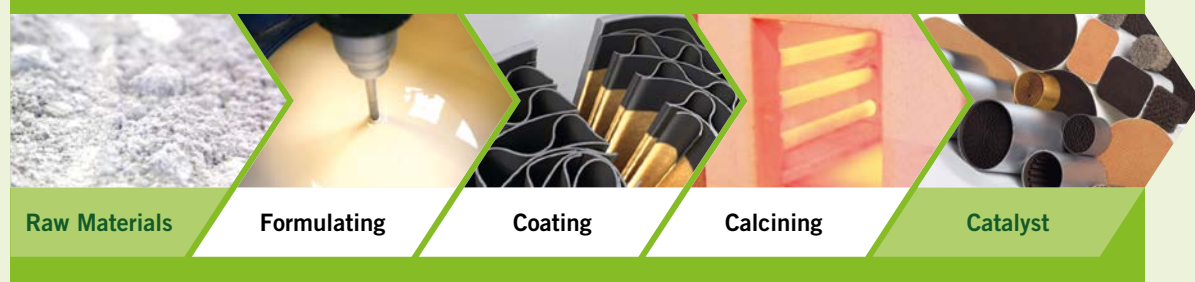
- ✓ Reforming
- ✓ H₂ Tail-gas burners
- ✓ H₂ Boil-off catalysts



COATED CATALYSTS: HERAEUS ROLE IN THE VALUE CHAIN

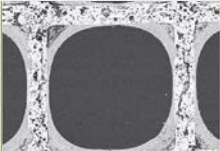
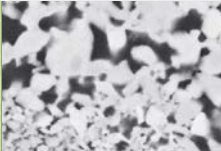
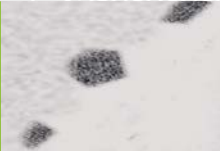


HERAEUS EXPERTISE IS IN COATING FROM RAW MATERIALS TO FINISHED CATALYST



HONEYCOMB CATALYSTS: CATALYST COATING

Honeycomb catalysts play a crucial role in the catalytic conversion of pollutants such as CO, hydrocarbons and NOx. They are a key component in emission control systems, providing a large surface area for efficient catalytic reactions. However, designing effective honeycomb catalysts poses several challenges that require careful consideration and innovative solutions.

				
[cm] Primary Substrate	[mm] Cell Geometry	[mm-μm] Washcoat Layers	[μm] Secondary Substrate/Support	[nm] Active Sites
Ceramic & Metallic Honeycombs, Foams, Wire Meshes, etc.			Base & Transition Metals, Oxides & Dopants	PGM, Oxidic Centres, ...

JOINT PROCESS, ACTIVE PARTNERSHIP

We develop customized solutions through active partnership, contributing our applications expertise, experience and continuity.

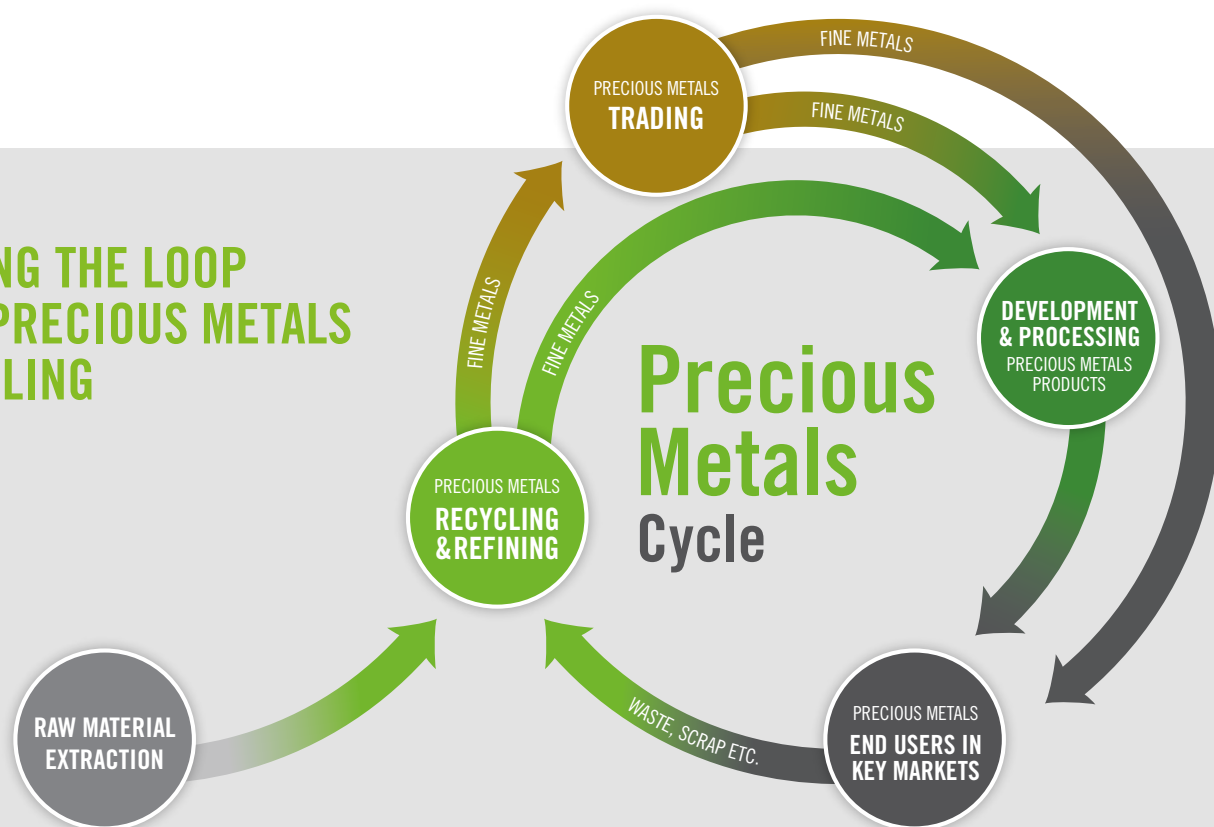
- ✓ Efficient, tailor-made solutions – fully adapted to your project
 - Expert catalyst design and system design support
 - Rapid prototyping and pre-production sampling
 - Test evaluation support and physicochemical catalyst analysis
- ✓ Long-term experience and strong expertise in precious metals and its applications
 - Broad precious metals know-how and expertise in precious metals trading and handling
 - Offering the full precious metals cycle in-house – from sourcing to recycling
 - Customer trainings

- ✓ Further development and optimization with our experienced R&D

Partner with Heraeus and experience the excellence of our catalyst solutions, tailored specifically to your needs.



CLOSING THE LOOP WITH PRECIOUS METALS RECYCLING



As a specialist in the handling of spent precious metal catalysts, Heraeus uses state-of-the-art technologies to pretreat, sample, and refine your valuable materials and ensure high return rates. The reclaimed precious metal can be used again for the manufacture of new catalysts, reducing the demand for primary precious metals.

ABOUT HERAEUS PRECIOUS METALS

Heraeus Precious Metals is one of the world's leading players in the precious metals industry. As part of the Heraeus Group, the company covers the value chain from trading to precious metals products to refining and recycling. It has extensive expertise in all platinum group metals as well as gold and

silver. With about 2,500 employees at 11 sites worldwide, Heraeus Precious Metals offers a broad portfolio of products that are essential for many industries such as the automotive, chemicals, semiconductor, aerospace, pharmaceutical and hydrogen industry.

Heraeus Precious Metals

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