SAXONIA®

EDELMETALLE

RECOVERY. TRANSPARENT. FAIR.

The extraction and recovery of gold, silver, platinum, palladium, rhodium and iridium from precious metal concentrates, scrap and residues from different sources is a core competency of SAXONIA – and the basis for the trust of our customers. We specialise in refining your assets: with modern separation technology – quickly, transparently and with a maximum rate of yield.

SAXONIA, the oldest and still one of the top names in refining operations, offers all services relating to refining: from feasibility checks via waste management and logistics to advanced methods in sampling and analysis. The result: the refining of precious metals of the highest purity in a way which is economical and environmentally-friendly at the same time.

79	47	78	46	45	77
197.9665	107.8682	195.0849	106.421	102.9055	192.2173
Au	Ag	Pt	Pd	Rh	Ir
Gold	Silver	Platinum	Palladium	Rhodium	Iridium

EFFICIENT AND ENVIRONMENTALLY ORIENTED

The refining processes at SAXONIA, pyrometallurgical and wet chemical, are based on the latest technological standards in refining and environmental technology. We guarantee our customers highly efficient precious metal refining from scrap, sweeps or ashes – in ecologically protecting methods, in all relevant industries and sectors, up to tradable fine metals of the highest purity:

01

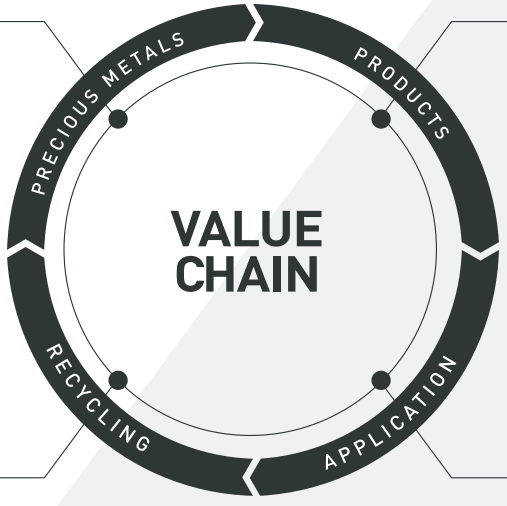
PRECIOUS METALS

SAXONIA ensures the fast availability of gold, silver, platinum, palladium, iridium and rhodium.

02

PRODUCTS

SAXONIA manufactures a large portfolio of industrial products made of precious metals for a variety of industries.



RECYCLING

SAXONIA processes your substances containing precious metals and recovers the raw materials with maximum yield.

04

APPLICATION

All precious metals and products offered by SAXONIA meet the requirements for top-quality processing.

03

RAW MATERIALS

The secondary extraction of precious metals is carried out from metal materials (scrap) and non-metal materials (residue, sweeps) including catalyst materials. The refining technology used by SAXONIA allows an extremely wide range of raw materials to be processed. This includes precious metal contents, material compositions and the condition/form of supplied raw materials.

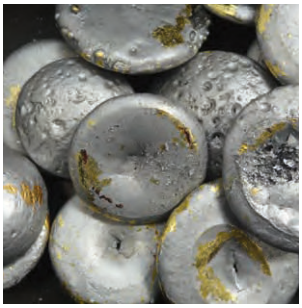
WASTE FROM THE WIDEST RANGE OF INDUSTRIES

- Precious metal processing industry
- Recyclers and refining establishments
- Precious metal buyers
- Jewellery making
- Electrical engineering / Electronics / Sensors
- Electrochemicals
- Catalyst manufacturers
- Dental industry
- Film and photography technology
- Chemical industry
- Pharmaceutical industry
- Mints and coining industry

SCRAP (FUSIBLE MATERIALS)

Scrap is high-quality raw materials that often have a high content of one or more precious metals.
This material is generally homogenised prior to sampling by melting before being sampled and analysed.

- Scrap gold and silver (bars/blocks/battens)
- Anodes and anode residue
- Jewellery materials, broken jewellery and scrap jewellery
- Electrolytic silver (industrial silver)
- Hollowware (silverware/silver utensils/silver cutlery)
- Silver battery plates/electrodes
- Dental scrap (gold teeth, Hg < 10ppm)
- Precious metal targets
- Pt/PtRh/PtPdRh equipment scrap from the glass industry
- Precious metal concentrates
- Production, cord, stamping and casting scrap
- Laboratory equipment / laboratory crucibles
- Coin and medal scrap
- PtPdRh catalyst networks
- Contacts and contact materials
- Metal residue (meltable)
- Solders and solder waste (metal)



SWEEPS / ASHES / RESIDUE (NON-MELTABLE MATERIALS)

The non-meltable material sector is extremely varied and covers sweeps, ashes and residue from a wide range of industries, manufacturing processes and waste treatment methods. The composition of the sweep material is often very heterogeneous and often requires relatively extensive homogenisation. This is usually carried out in multi-stage homogenisation, separation or fractioning operations (ashing, annealing, drying, milling, mixing, melting).

- Jewellery sweeps
- Dental sweeps (mercury removed, Hg < 10ppm)
- Residue/sludge/ashes from film production / Film recycling
- Filter sweeps/filter cakes/filter materials
- Furnace linings/crucible materials/fireclay
- Galvanisation waste (ion-exchange resins/filter materials/ precious metal sludge)
- Ceramic production waste and scrap from electronics production (Construction elements/sensors/printed hybrids)
- Power and paste residue, cans and cartridges (Conductive pastes, solder pastes, conductive adhesives, conductive paints)
- Electronic scrap (separated - only high grade)
- Polishing residue/sludge from precious metal processing
- Slag, dross and dust from precious metal processing
- Abrasive/blasting sand
- Concentrates and distillates
- Solder waste and residues
- Cementate

CATALYST SCRAP

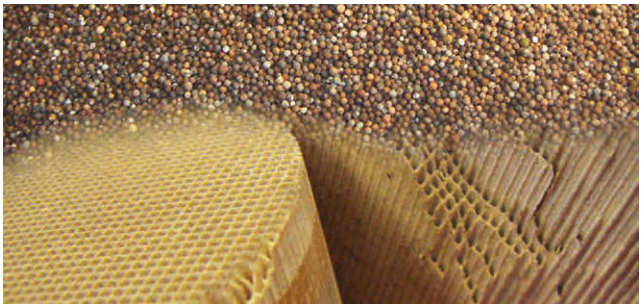
The processing of used car exhaust catalysts and industrial/environmental catalysts containing precious metals is one of SAXONIA's well-developed areas of expertise and a key aspect of our precious metal refining. Our focus is on industrial catalysts on various carriers (activated carbon, ceramic catalyst supports on an inorganic non-metal base) and in various forms. We also recover the precious metals from car exhaust catalysts. Monolith and diesel particulate materials and washcoat and production waste from catalyst production are typical raw materials at SAXONIA.

Industrial catalysts

- with Pt, Pd, Rh based on activated carbon
- with Au, Ag, Pt, Pd, Rh on ceramic catalyst carrier material (aluminium silicate, calcium carbonate, silicon dioxide, zeolites) or natural carriers (silica, kaolin, bentonite, pumice stone) in the form of powder, bricks, extrudates, balls, granulates, honeycombs.

Car and exhaust catalysts

- Ceramic catalysts (monolith, monolith fraction, milled monolith)
- Diesel particulate filter (SiC base)
- Washcoat



CARE AND CONFIDENCE FOR YOUR ASSETS

The refining of precious metals creates considerable value. Trust is an essential condition for successful cooperation. SAXONIA therefore guarantees maximum transparency in the separation process, total accuracy in analysis and absolute care in the environment-friendly recovery of your precious metals. This is of course added by the seamless, traceable documentation of the entire refining process.

SAMPLING

Obtaining a representative sample is the beginning of everything, whether in trust or accompanied by you.

- Preparation - Homogenisation
- **Scrap:** Melting into blocks, bars or granules / Sawing or drilling of the sample bars
- **Sweeps:** Drying, annealing, milling sieving, mixing, melting the coarse parts of the mixed samples
- Fine preparation - Taking lab samples

ANALYSIS

Often it is spoken of the chance of one in a million. It is our goal to find every single part of a million.

- Decomposition/fire assay
- **Physical/optical process:** XFA (X-ray fluorescence analysis), AAS (atomic absorption spectrometry), AES (atomic emission spectroscopy)
- **Wet-chemical process:** potentiometry, gravimetry

RECOVERY

We recover your metals in highest purity with the latest, certified and environmentally friendly processes.

- **Pyrometallurgical:** Thermal enrichment and refinement
- **Wet-chemical:** Silver and gold electroanalysis / PGM separation
- **Fine metal quality:**
  Au 99.99% (4N)
  Ag 99.999% (5N)
  Pt/Pd 99.99%
  Rh 99.95%

ACCOUNTING

All accounts and invoicesare transparent, traceable and without hidden costs.

- **Purchase of materials:** Remuneration of supplied precious metals less costs
- **Metal account:** Credit for supplied precious metals to a precious metal account and calculation of costs

Deliveries as agreed with SAXONIA - Offers based on the General Terms and Conditions of Business for the reworking and purchase of precious metal materials in conjunction with the SAXONIA acceptance catalogue for precious metal waste for refining in accordance with the Directive on the European List of Waste Materials (AVV)

PRECIOUS METAL MANAGEMENT / SERVICES

- Fixing of precious metal
- Holding and administration of metal accounts
- Procurement of precious metals
- Price information
- Collection/correct transport of hazardous waste by Saxonia
- Performance audit

LPM
LONDON PLATINUM & PALLADIUM MARKET

LBMA
GOOD DELIVERY REFINER

RESPONSIBLE MINERALS INITIATIVE
Formerly the Conflict-Free Sourcing Initiative
CONFORMANT SMELTER

ADDITIONAL BUSINESS FIELDS

CHEMICALS

SEMIFINISHED

BUSHINGS

CONTACTS PARTS

TRADING

FOUR COMPANIES - ONE STRONG PARTNER.

SAXONIA®
EDELMETALLE

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