

***mairrec***

*Precious Metals Recycling*

[www.mairec.com](http://www.mairec.com)

# About MAIREC



Technology-driven and innovative solutions for the recycling of complex materials in the precious metals industry.

# About MAIREC



- > founded in 2003
- > diverse manufacturing and end-of-life clientele
- > excellence in separation, sampling, and value determination
- > flexibility of service with robust quality control
- > ISO-9001 and ISO-14001 certified

# Our People



- 150 employees
- Key management staff with extensive experience from the automotive and precious metals industries (Toyota, Ford, Aurubis, Umicore, Clariant)
- Multi-lingual staff (> 20 languages spoken)
- Winner of Bavaria's Top 50 companies in 2014

# Our Financial Figures



- Revenue of 250+ MIO EUR in 2014/2015 (not including approx. 50 MIO USD of transferred metals to customers)
- Growth of 40-50% YOY between 2011 and 2014
- Recycled volumes in 2014/2015:
  - Ceramic & Metallic Catalysts – 3800 tons
  - Electronic Scrap – 4000 tons
  - Industrial Residues From Manufacturers – 1500 tons
- Recycled Precious Metals in 2014/2015
  - Pt 115,000 toz
  - Pd 100,000 toz
  - Au 50,000 toz
  - Rh 20,000 toz

# Our Technology

- Ceramic Car Catalysts and Other Ceramic Based Materials
  - Dismantling
  - Crushing / Sampling
  - In-House Laboratory
- Metal Foil Catalysts / O<sub>2</sub> Sensors / Electronic Control Units
  - Dismantling / Crushing / Separation
  - Sampling / Sample Preparation
- Electronic Scrap (Producers and End-Of-Life)
  - Shredding / Sampling / Sample Preparation



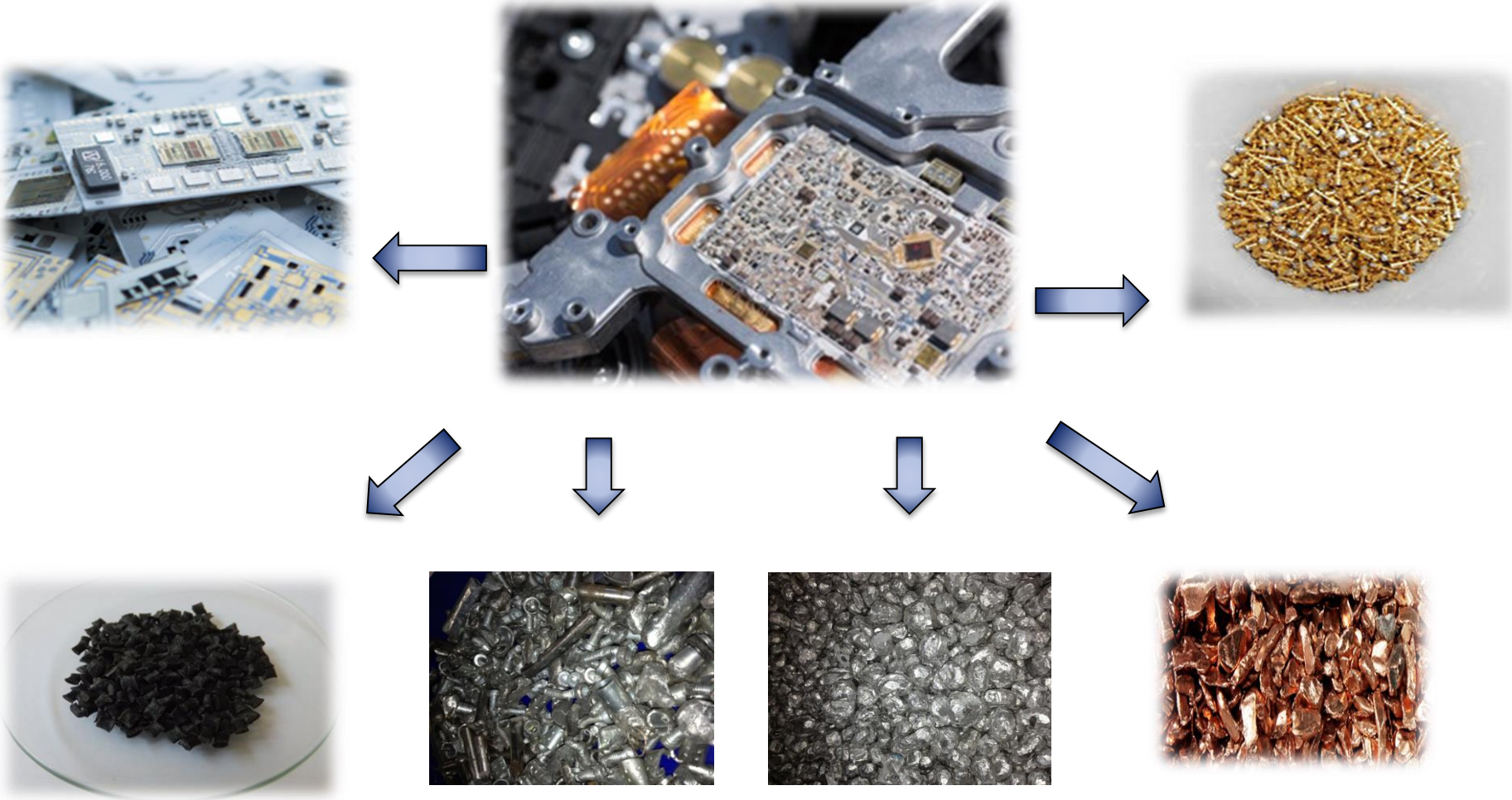
## Our Technology (continued)



- Burnables / Residues
  - Thermal Reduction
  - Induction Melting
  - Crushing / Blending
  - Sampling



# Separation





# Materials We Handle

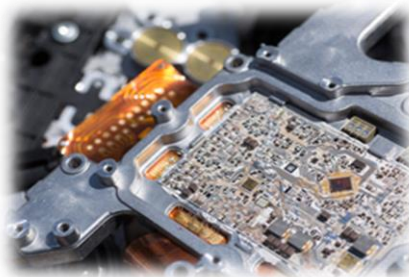


- Car Catalysts (Whole, Dismantled, Ceramic, DPF, Metallic)
- O2 Sensors and Production Scrap (Pastes, Tissues, etc.)
- Electronic Control Modules and Production Scrap (Pastes, Tissues, Ceramics, etc.)
- Sensors and Production Scrap (Ceramics or Wires, Pastes, Tissues, etc.)
- Pins, Connectors, Contacts (with Au, Ag, PGMs)
- Plating Industry Residues (Cyanide Baths, Ion Exchange Resins, etc.)
- Other Types of Burnable Materials

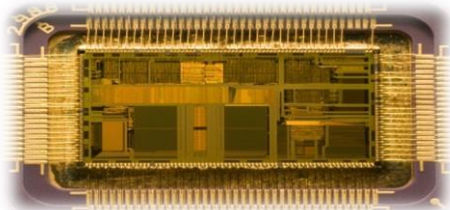
# Materials Management – One-Stop Shop



Wiping Tissues & Paste Jars



Ceramics



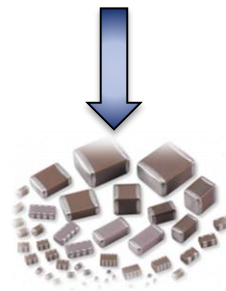
Bonding Wire



Flexible Circuit Boards



Precious Metals Plating



Capacitors



Printed Circuit Boards

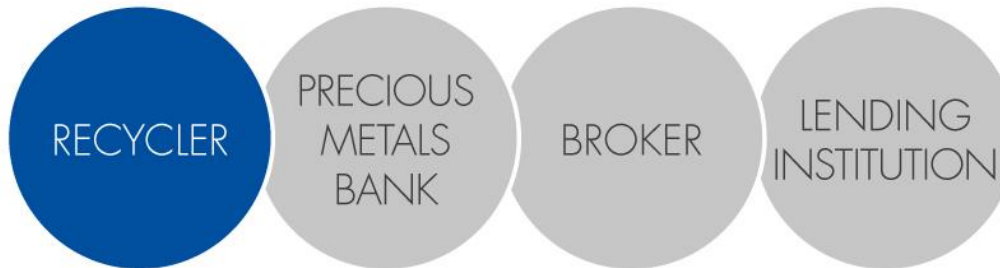
## Our Service to the Industry



- Strict quality and process controls – continuous improvement through technological innovations, failure mode analyses, in-house engineering staff and SHEQ
- State-of-the-art machine park suitable for sampling multiple materials with speed, efficiency and accuracy
- Experienced sales staff with deep understanding of the markets, major players, market developments and trends
- Commercially aggressive and flexible with tailor-made solutions for each business model
- One-Stop-Shop approach. We replace multiple refiners, pre-processors, banks and brokers, logistics companies. One face – one high quality standard.

# Financial and logistics requirements

Nowhere is the complexity of precious metals materials seen more than in the financial transactions surrounding their purchase and sale.



And logistics.



# Responsibility ...



... this is what it looks like:



One Team. One Mission.



Experience. Passion. Excellence.