

metallix

PRECIOUS METALS RECYCLING

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As Metallix Refining grows and steps further forward as a leader in our industry, I find myself reflecting on the journey to this point. First and foremost, I ponder upon our phenomenal team of precious metal recycling professionals.

Our team brings a wealth of knowledge, initiative to achieve distinction and a true passion for precious metal recycling. We develop innovative proprietary technology, cultivate best industry practices and corporate methodologies to achieve the highest level of value and consistency to and for our customers. Metallix Refining has earned its distinguished reputation as a trusted partner to our growing and loyal customer base. Thank you for choosing Metallix Refining. We look forward to continuing our support of your precious metal recycling needs.

A handwritten signature in black ink, appearing to read "Maria Piastre".

Maria Piastre
President Metallix

Founded in 1968, Metallix is a precious metals recycling company with locations in the USA, Europe and Asia. Processors and buyers of Gold, Silver, Platinum, Palladium, Rhodium and Iridium.



Metallix Refining Inc. has business operations in Shrewsbury NJ, Greenville NC and Maxton NC.

Metallix Refining Europe Ltd is located in Rotherham, England and Metallix Refining Asia Ltd in Seoul, Republic of Korea, together Metallix Refining Inc. serve a global client base for the processing and buying of, Gold, Silver, Platinum, Palladium, Rhodium and Iridium. Metallix technical on site services provide plant cleaning for the recovery of precious metal catalyst from the Nitric Acid Industry.

Security



All employees must enter the facility using personal ID keycards. All visitors must be pre-approved and authorized by appointment only.

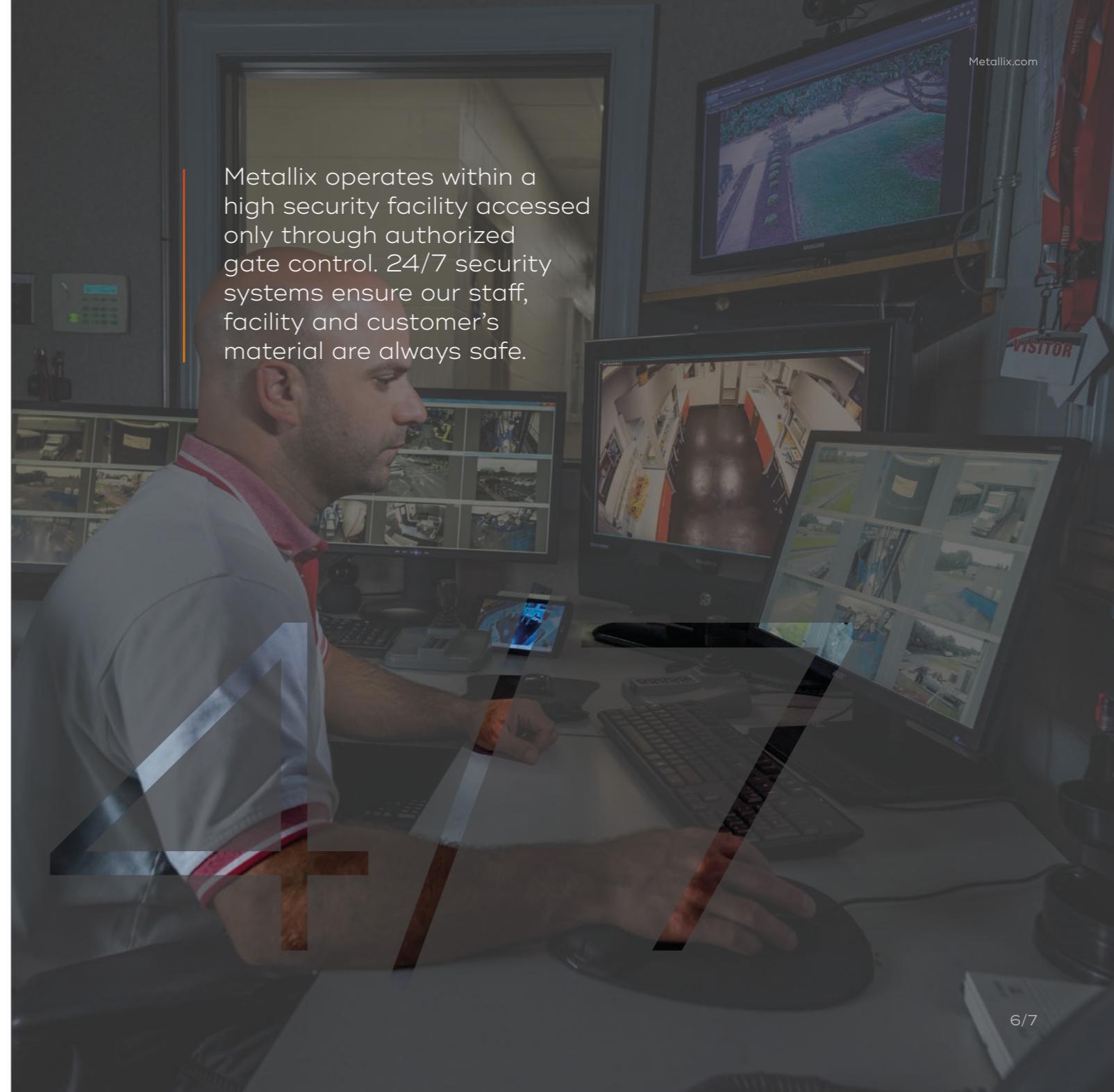
METAL FREE POLICY

Metallix operates a loss prevention X-ray system. All staff and visitors are required to be metal free upon entering and exiting the facility.



24/7

Metallix operates within a high security facility accessed only through authorized gate control. 24/7 security systems ensure our staff, facility and customer's material are always safe.



Metallix has invested in the latest technology and equipment, establishing an industry leading facility for precious metals analysis through fire assay, chemical analysis, XRF and ICP.

R&D

Analysis



Metallix Refining has a state-of-the-art precious metal analysis laboratory. The 4,000 square foot facility provides the industry with the most advanced equipment and analytic methodologies designed to enhance our value to our customers, suppliers and business partners. Our laboratory has been specifically designed to meet the most stringent demands allowing for continual growth.

Metallix R & D is an international team recruited from chemistry, technology and engineering backgrounds. Our team brings the most advanced and efficient process technology for precious metal recycling and recovery.

Technology



APR³ Thermal Reduction

Most precious metal bearing material need to go through a burning process to remove moisture – creating a dry substance for further processing.

The APR³ Furnace is exclusive to Metallix; It is the only furnace of its kind in our industry designed and commissioned to improve the processing of valuable “Burnable” precious metal bearing material, reducing losses and cross contamination.

The APR³ Furnace controls combustion of the treated materials. The APR³ creates a turbulent free environment inside the furnace to minimize precious metals losses.

Industries Served

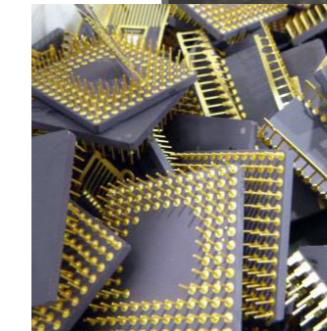
The advanced processing technology developed by Metallix significantly increases our recycling capabilities, providing an effective and expedient processing route for a number of precious metals.

METALLIX SERVES THE FOLLOWING INDUSTRIES:

- Aircraft / Aerospace
- Catalytic Converters
- Connectors
- Electroplating
- Glass
- Jewelry
- Medical
- Microelectronics
- Pharma / Specialty Chemicals
- Semiconductors
- Nitric

PRECIOUS METALS WE BUY

79 Au Gold 196.967	47 Ag Silver 107.868	78 Pt Platinum 195.085	46 Pd Palladium 106.42	45 Rh Rhodium 102.906	77 Ir Iridium 192.22
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The Metallix Team has a wealth of experience serving a variety of industries that use precious metals.

Our Process

Metallix Refining Inc. has all the necessary equipment to safely and efficiently process a diverse range of precious metal bearing materials.

MELT

Our thermal reduction furnaces range in capacity from just a few troy ounces up to 2,000 pounds to accommodate and process material lots varying in type, size and precious metals content.

THERMAL REDUCTION

Metallix's APR³ is the only thermal reduction furnace of its kind in our industry and was specifically designed to meet the challenge of improving the processing of valuable "Burnable" precious metal bearing materials.

MECHANICAL REDUCTION

Ball mills, sifters and blenders are used to convert the precious metal bearing materials to a homogeneous particle size to help evaluate the precious metal content.

WET CHEMICAL

Our wet chemical department has the capability to recover precious metals by electrolysis, dissolution, separation, and precipitation.

LAB

Samples from each treated and processed lot are tested for their precious metals type and content. We can detect gold, silver, platinum, palladium, and rhodium, as well as other elements, through methods that include fire assay, chemical analysis, X-ray, and ICP.

Precious Metals Catalyst Recovery

Downstream nitric acid plant cleaning, recovery and processing of precious metals catalyst.



During the course of the ammonia oxidation reaction, platinum group metal (PGMs) are lost from the catalyst. These losses travel downstream through the heat train, in the form of a PGM oxide. Over time, a build up of scale forms on exposed surfaces, reducing thermal efficiency.

As the vapor oxide cools, it becomes a particulate. This dense residue, rich in PGMs, settle throughout the heat train and acid storage tanks.

Recovery of PGM spent catalyst provides valuable revenue for a sustainable future, while respecting natural resources and the environment.



Rh Pd

PROJECT MANAGEMENT

- Project Technical Assessment
- Commercial Proposal
- Accredited Processing Facility
- Industry Experienced Personnel
- Global Logistics & Compliance
- Metal Return & Management
- Complete Project Management

Nitric Acid Producers

Metallix technical on site services for plant cleaning, recovery and processing of precious metal catalyst.

CHEMICAL CLEANING (non-aggressive)

Recognized internationally, nonaggressive mild chemical treatment is an industry approved methodology for the removal of surface PGM oxides. This treatment is an expedient and effective method to maximize PGM recoveries, while respecting safe working parameters.

DESTRUCTIVE PROCESSING

Destructive processing is performed on out of service PGM bearing components. This aggressive treatment ensures all PGM and non PGM values are achieved. Destructive processing is performed at Metallix own purpose built leaching facility located in Greenville, North Carolina – USA, where carefully controlled safety and security protocols are followed and maintained.

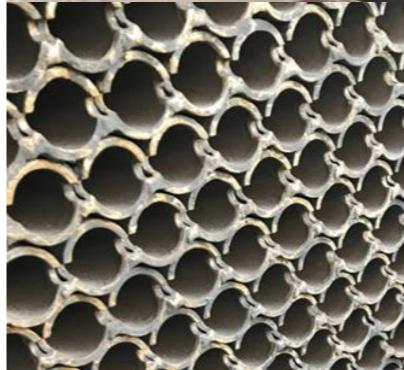
HYDROBLASTING

Hydroblasting provides plant operators with a non-aggressive, chemical free treatment for the removal and recovery of surface PGM oxide, both tube and shell side. Hydroblasting is proven to be a highly effective, non-invasive method, which can generate high PGM recoveries.

STORAGE TANK CLEANING

Nitric acid storage tanks can often be excluded from scheduled maintenance and recovery operations, especially when there is limited storage capacity and demand is high.

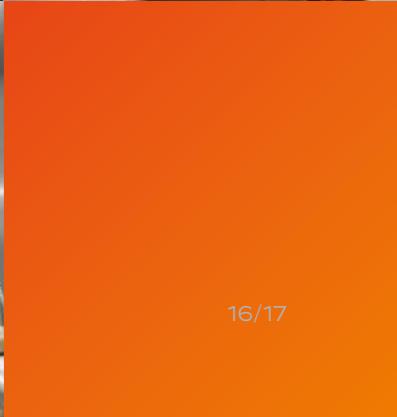
However, storage tanks can often produce high concentrations of spent precious metal catalyst (PGMs). This is the last point of recovery in the process stream and should be monitored vigilantly to avoid losing valuable PGMs with product.



metallix



PROCESSORS
AND BUYERS OF
PRECIOUS METAL
BEARING MATERIALS.



LOGISTICS & COMPLIANCE GLOBAL MANAGEMENT

Metallix have registered businesses in the USA, Europe and South Korea, operating within an established global logistical framework, compliant with transboundary legislations for the movement of precious metal bearing materials with varying waste classifications. Metallix multi-modal logistics management is tailored to meet the specific requirements of the customer, ensuring project timelines are upheld and valuable materials enter the processing system without delay.

Experts

Industry accomplished and respected. A team adding fresh direction focused on industry development and achievement, making the technically complex clear.

The technical site services teams hold internationally accredited certification for industrial site services, technical plant cleaning and the recovery of precious metals catalyst. Assigned Project Managers lead a skilled team that have worked extensively within the Nitric Acid Industry.

At Metallix, our Global Logistics and Precious Metals Management teams collaborate to ensure smooth execution of projects and metals availability.

ONSITE AND OFFSITE SERVICES

Chemical Cleaning
(non-aggressive)

Hydroblasting

Tank Cleaning

Destructive Processing

Purchase of Plants
and components



eam



ACCREDITATIONS



SAP Ariba



CHWMEG

sales@metallix.com



YOU'RE IN CONTROL

If at any time you are not satisfied with our performance, we will ship your materials back to you.

Start the partnership by contacting:
sales@metallix.com