

# Company profile



Innovation in Recovery



Member of CISQ Federation



CERTIFIED MANAGEMENT SYSTEM

ISO 9001 - ISO 14001  
ISO 45001

# About us... Serving the Environment since 1982

- Founded in 1982
- Surface 18.800 m<sup>2</sup>
- Industrial waste management
- Recovery Operations:
  - R4, R8, R12, R13 (45.000 t/y)
- Disposal Operations:
  - D9, D13, D14, D15 (30.000 t/y)
- Internal Laboratory



## ***Founder's Vision:***

A company must play an important role in society, which is not just "business".

*Alfredo Mancini, founder*



# Main Permits of Operation

- *Environmental integrated permit – 12-years validity (D.D. n. 375 dated 21/10/2014, expiration 20/10/2026)*
- *National Register for Environmental Operators n. AN/212 for the following categories:*
  - *1 class E (collection and transport of municipal waste and similar);*
  - *4 class D (collection and transport of non-hazardous waste);*
  - *5 E-Class (collection and transport of hazardous waste);*
  - *10B class E (decontamination of goods containing asbestos);*
  - *9 Class E (site reclamation);*
  - *8 class C (intermediation and trade of waste without its collection)*
- *Precious metals trading licence n. 14.E/1992-3a.*
- *Precious metals production: mark n.74/MC* 
- *Central Italian Bank Precious Metal registry n. 5000633*

# Technical and legal requirements in possession

**ORIM S.p.A owns technical and legal requisites to carry out the following operations:**

**.Drug Traceability** (univocal logistics site code in accordance with Ministerial Decree 15/07/04 and s.m.i. n ° 001141);

**.Fiscal deposit of waste similar to heavy fuel oil BTZ and / or diesel oil used as heating fuel** (fiscal year license in accordance with Legislative Decree 504/95 and s.m.i. n ° MCY00345S);

**.Registration to the WEEE Coordination Center (CdC) n. 14/2054 dated 31/10/2014** (Registration Code No. I00000462, Company number: Orim P083371).



# Certified service

## Integrated Management System Certificates:



Quality: ISO 9001:2015



Environment: ISO 14001:2015



Health & Safety: ISO 45001:2018



# Associations and Conferences

Orim is a Board member of many leading associations, such as:



**ASSOMET** - Non Ferrous Metals Association, part of  
Confindustria Italia

**Alfredo Mancini**, member of the executive board since 1998



**FISE ASSOAMBIENTE** – Environmental Services  
Association, part of Confindustria Italia

**Alfredo Mancini**, member of the executive board since 2005.

Orim takes part in conferences held by International bodies:



**International Sustainable Energy Organisation**  
**United Nations - ECOSOC accredited**

**Geneva**, 10-12 January 2012

**Geneva**, 01-04 November 2016



**ECOMONDO** - International Exhibition of Recovery of  
Matter and Energy and Sustainable Development

**Rimini**, since 1997 (first edition of «Ricicla»)



# Main Recovery Operations

## **R4 – METAL RECYCLING/RECLAMATION:**

➔ Precious, Non-Ferrous, Strategic Metals, catalysts

## **R8 – RECOVERY OF COMPONENTS FROM CATALYSTS:**

➔ Catalysts regeneration, catalyst components.

## **R12 & R 13 – EXCHANGE OF WASTES AND STORAGE:**

➔ Sorting, Mixing, Storage, etc.



# Orim's Recovery Milestones

Orim's core business went through the following activities:

1. Recovery of **PRECIOUS METALS**, whose main stages include:
  - Physico Chemical treatment
  - Electrolysis/Electrowinning
  - Production of Alloys, Fe-alloys, salts and products
2. Silver semi-manufactured (later created Orim Metalli, a spin-off for this specific sector ([www.orimmetalli.com](http://www.orimmetalli.com)))
3. Recovery of strategic metals: Mo, V, Ni, Co, Cu



# Precious Metals

Recovery by means of components separation, support incineration, smelting, leaching, electrolysis.

## **FOTOGRAFIC INDUSTRY**

Fixing solutions, X-ray films, other films

## **WEEE, E-SCRAP, JEWELRY**

PCBs, connectors, contacts, PM scrap, solutions

## **GALVANIC INDUSTRY**

Solutions, sludges, frame-scrap, salts

Gold, Silver, Palladium, Platinum, Copper



Further development: Semi-manufactured

(e.g. tubes, sheets, pens, rings) today part of Orim Metalli



# Recovery of Catalysts

## Catalysts treatment stages:

Pre-treatment to reduce Hazardous characteristics

Sieving and separation

Roasting to eliminate Sulphur/Carbon

Grinding and Reagent addition

Hydrometallurgy

Smelting and alloy/Fe-alloy production

## Products:



Alloys for steel

Metal Salts Production

## Objectives:

Lower treatment cost

Environmental Targets



# Catalysts Types

PROCESS	METALS EXAMPLES
Desulphurisation, Hydrotreating, Hydrocracking	Ni - Mo - Co - (V)
Hydrogenation	Ni - Mo - Pt - Pd - Rh
De-hydrogenation	Ni - Pt - Mo - Cu - Zn
Reforming	Ni - Pt - Re - Ir
Polimerization	V, Mo, Co, Ni;
Isomerization	Pt
Exhaust gas catalytic converter	Pt - Pd - Rh
Alcohols Production	Cu - Co
Fatty Nickel and Nickel Raney	Ni
Methanol steam reforming	Cu - Zn
Hydrogenation of Acetylene, Olefins	Pd
Production of ethylene oxide, Hg removal	Ag

# Main Disposal Operations

## **D9 – PHYSICO CHEMICAL TREATMENT:**

- Neutralisation, precipitation, immobilisation
- ➔ Disposal in Landfills  
Incineration

## **D13 & D14 – Grouping and reconditioning:**

- ➔ Preliminary operations pending any of D1-D13

## **D15 – STORAGE:**

- ➔ Storage pending any of the operations D1-D14

# Thank you for your attention!



Innovation in Recovery

The highly qualified company structure and its know-how, developed year after year, allows Orim to give a “full-service” and to have a relationship of trust with its customers, thanks to great teamwork.

