

Técnicas Reunidas

Técnicas Reunidas is a leading international engineering and industrial plant construction company that, through its Proprietary Technology Development Division (PTDD), develops and commercializes technologies focused on **metal recovery, critical raw materials in a circular economy framework, and industrial decarbonization.**

Técnicas Reunidas acts as both technology licensor and engineering partner, supporting industrial projects from concept development to commissioning through an integrated technology and engineering approach



Unlocking the value of accompanying Gallium

Gallium is typically present as a **minor but highly valuable component** within complex industrial and metallurgical streams containing other base and critical elements (e.g. Aluminum, Germanium, Zinc). Without dedicated recovery routes, Gallium is often **diluted, lost, or ends up in residues**, despite its strategic relevance and growing demand.

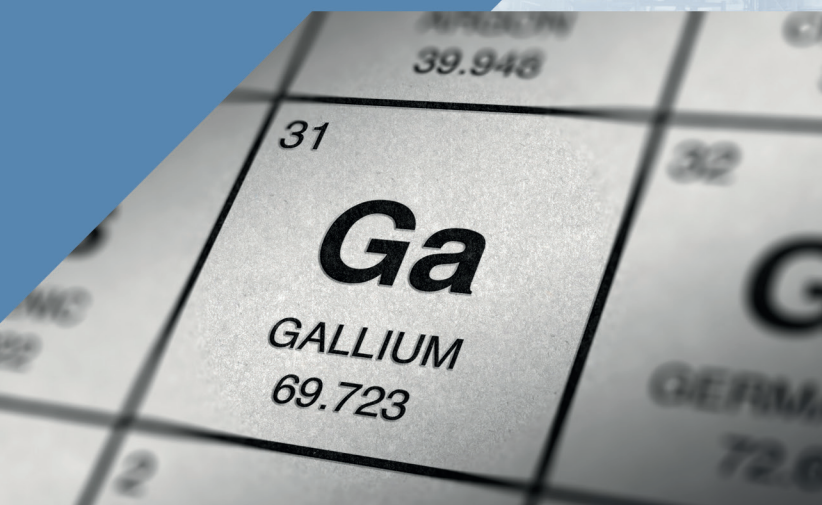
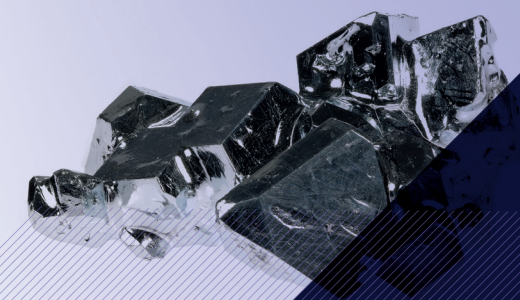
Key advantages of Gaxtract®

- 01 High selectivity driven by purpose-designed solvent extraction chemistry /
- 02 Production of high-purity gallium metal suitable for advanced applications /
- 03 Flexibility to treat different industrial streams and concentration ranges /
- 04 Robust hydrometallurgical process under controlled operating conditions



By enabling the selective recovery of accompanying Gallium, this approach allows:

- 01 **Maximization of raw material valorization**, recovering critical elements already embedded in existing industrial and metallurgical streams. /
- 02 **Improved project economics**, by converting Gallium from a secondary or overlooked component into an additional revenue stream. /
- 03 **Efficient integration into existing operations**, enabling Gallium recovery without altering the primary production focus.





TR / PROPRIETARY TECHNOLOGY DEVELOPMENT DIVISION

Cl. Sierra Nevada 16
Pol. Ind. San Fernando de Henares
28830 San Fernando de Henares,
Madrid - España

Email:

Javier Manzano: jmanzano@tecnicasreunidas.es

Ignacio Herraez: iherraez@tecnicasreunidas.es

Nicolas Grob: ngrob@tecnicasreunidas.es

ddtp.tecnicasreunidas.es



Gaxtract[®] Technology

Selective gallium recovery
from industrial by-products.

Gaxtract[®] is a hydrometallurgical technology developed to selectively recover gallium from industrial by-products and secondary process streams. Gallium is a strategic metal used in high-value applications such as LEDs, integrated circuits, NdFeB magnets and advanced photovoltaic technologies.

The technology enables the production of commercial-grade gallium metal from complex matrices, contributing to supply security and circular economy strategies for critical raw materials.

