

Precious Metals Contrast and Analysis



What is Precious Metals Testing and Analysis?

Precious Metals Testing and Analysis is an essential process for verifying the purity and content of metals such as gold, silver and platinum in jewellery and other valuable items. This service enables manufacturers, importers and distributors to guarantee the quality and authenticity of their products, while complying with <u>legal regulations for</u> <u>marketing</u> in different markets. Applus+ Laboratories is an authorised laboratory for this type of testing and analysis, offering highly accurate and reliable services for the national and international market.

What Precious Metals Testing and Analysis Services Do We Provide?

We offer a wide range of contrast and analysis services to ensure the quality and purity of precious metals, providing confidence and compliance to our Clients.

Precious Metal Testing

In Spain, legislation establishes that any object made of precious metals (gold, silver or platinum) must undergo a contrast test before being marketed to guarantee its degree of purity, known as the 'Metal Law'. This requirement is mandatory for both domestically produced and imported pieces, and it is the importer's responsibility to ensure the contrast when the goods enter our borders.

Our key precious metal hallmarking services are as follows:



- **Purity certification:** Verification and classification of purity levels for platinum (Grades 950 and 900), gold (Grades 999, 750, 585 and 375), and silver (Grades 999, 925 and 800).
- **Quality marking:** Official stamping on the piece, using a stamp certified by the Mint or by means of a specific label, so that the degree of purity is visible and assured for the consumer.
- **Complete documentation:** Issuance of a detailed report that endorses the contrast carried out, in compliance with current regulations.

The precious metal testing process is as follows:

- 1. **Sample selection:** Request of the piece or a representative sample in case of large batches of identical pieces.
- 2. **Chemical or X-ray analysis:** Precise determination of the purity of the metal based on the most advanced techniques.
- 3. **Purity marking:** Application of the mark or label on the object according to the degree of purity tested.
- 4. **Provision of documentation:** Provision of an official certificate accompanying the product, indicating the results of the test and complying with marketing requirements.

Precious Metal Analysis

Our precious metal analysis service ensures the purity and composition of items made of gold, silver and platinum. We use advanced methods and state-of-the-art equipment to meet international standards of accuracy and reliability.

Our key precious metal analysis services are as follows:

- **Gold assay:** Performed by co-elation testing, a highly accurate method that requires a minimum sample size.
- **Silver analysis:** Potentiometric testing to accurately determine the purity of silver articles.
- **Platinum analysis:** Using X-ray fluorescence spectrometry to measure the platinum composition of jewellery and other products.

The process of precious metal analysis is as follows:

- 1. **Sample selection:** A representative sample is chosen according to the quantity of products to be analysed.
- 2. **Chemical analysis:** Specific techniques are applied according to the type of metal to determine the purity.
- 3. **Detailed report:** Delivery of a report with the results of the analysis, indicating the composition and degree of purity.



Benefits of Precious Metals Testing and Analysis

Applus+ Laboratories' Precious Metals Contrast and Analysis service offers a number of key benefits to the jewellery industry, manufacturers of valuable products and distributors in national and international markets. Our analysis and testing process ensures regulatory compliance, providing confidence and assurance to all stakeholders.

- **Regulatory compliance:** Ensures that products comply with marketing regulations in Spain and other markets.
- **Purity accuracy:** Accurate determination of the purity level of gold, silver and platinum, ensuring the authenticity of each piece.
- **Consumer protection:** The official marking allows the end consumer to identify and trust the quality and purity of the product.
- **Quality control:** Allows the consistency and reliability of pieces sourced from external suppliers to be assessed, minimising the risk of fraud.
- Added value: Provides an official endorsement that increases the value of the products in the market.

Why Choose Applus+ Laboratories for Precious Metals Testing and Analysis?

Applus+ Laboratories stands out for its expertise, accreditation and state-of-the-art equipment in the field of precious metals testing and analysis. Our team of specialists and our technical capabilities enable us to offer the highest quality services globally.

- Accreditation and recognition: Laboratories accredited by ENAC and authorised to carry out precious metal testing and analysis in accordance with the UNE-EN/IEC 17025 standard.
- **Proximity:** Applus+ Laboratories has two laboratories, located in Madrid and Barcelona.
- **State-of-the-art equipment:** We use advanced technology such as X-ray fluorescence spectrometry and testing by copellation to guarantee accurate and reliable results.
- **Expert professionals:** We have a team of technicians specialised in precious metals analysis and regulatory compliance.
- Service flexibility: We offer customised solutions, with on-site and laboratory services.
- **Global coverage:** We are authorised to perform precious metals testing in multiple countries, ensuring legal compliance in key markets.

Trust Applus+ Laboratories to ensure the quality and authenticity of your precious metals products, backed by the experience and excellence of an industry leader.