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## METHODS OF PRODUCING SILVER 925

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**Abstract.** In the field of precious metals, there is a metal that is both accessible and popular, and has become a symbol of timeless elegance and extremely charming charm - Sterling Silver. It not only has a history of thousands of years, but also deeply attracts the hearts of different civilizations, artists, and jewelry lovers. Additionally, sterling silver has a long history in jewelry making that dates back centuries, making it a highly prized material choice. In today's article, let's dive into all aspects of sterling silver—from its history, what “925” means, and why this ancient material remains so important in the jewelry world today.

**Keywords:** Sterling silver, silver plated, silver 925, metal, durability.

**Introduction.** The term “sterling silver” may be misleading literally, because it does not refer to pure silver, but a mixture of 92.5% pure silver and 7.5% other metals, of which copper is the most common added metal. The reason for adding other metals to sterling silver is to give it stronger and more durable properties. Since silver itself is too soft to be used in actual items, copper (or other metals) is added to harden the metal, making it suitable for everyday use and wear. This special alloy gives sterling silver its unique qualities, making it a valuable material for a variety of exquisite creations. While some may view oxidation as a drawback of sterling silver, many people actually enjoy the vintage look that this oxidation gives to sterling silver items (such as jewelry and ornaments), bringing signs of age which they believe adds to the Character and a sense of history[1].



Figure 1. Coins

**The historical origin of sterling silver.** Sterling silver has a long and fascinating history that spans thousands of years. Although the exact time and place of origin is difficult to verify, the origins of sterling silver can be traced back to ancient civilizations. In addition, the first silver mines discovered were in Anatolia (now Turkey) and Greece. The



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locals discovered the natural form of this metal and called it “natural silver.” Ancient civilizations were amazed by silver's luster and malleability, making it an ideal material for making jewelry and ceremonial items. Civilizations such as the Sumerians, Egyptians, and Phoenicians all made jewelry and ornaments from silver and considered it a form of currency in trade.

Coins were struck from pure silver for centuries until the 20th century, when legal tender and the base metal became more common. Today, while some countries still mint silver coins, they typically use a different silver alloy than the traditional pure silver blend. As trade routes expanded, sterling silver’s allure spread across the world, attracting people from different cultures and regions[2]. This mark of quality represents the purity of the metal; specifically, it is composed of 92.5% pure silver and 7.5% another metal (usually copper); this combination is widely known as “sterling silver.” This is why sterling silver and “925” always seem to go hand in hand, with this mark symbolizing superior quality and authenticity.



Figure 2. Jewelry

Over time, the quality mark “925” became popular as a reliable symbol of quality, indicating that it was genuine sterling silver. As trade routes expanded and demand for silver jewelry increased, the “925” quality mark became an internationally recognized and accepted mark of quality and authenticity. It provides buyers with assurance that they are purchasing genuine sterling silver items and not lower-grade alloyed or silver-plated items[3].

### Conclusion

Today, 925 sterling silver remains a popular choice among artists and craftsmen. This rare precious metal is beloved in fashion, jewelry, and home décor. Over the years, 925 sterling silver has adapted to different art and design trends, from the Art Deco styles of the 1920s to the minimalist designs of the mid-20th century, reflecting its timeless and versatile character. Whether it's a simple, stylish design or a bold, eye-catching piece, 925 sterling silver jewelry caters to a wide range of tastes and styles[5]. Furthermore, the



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popularity of 925 sterling silver comes not only from its aesthetics but also from its environmentally friendly properties. With the growing awareness of sustainable practices, many people are choosing 925 sterling silver jewelry as a more environmentally friendly option compared to other precious metals. With its recyclability and durability, 925 sterling silver is an ideal choice for jewelry that seeks elegance and timelessness. It also reduces the impact on the environment, reflecting a sustainable and environmentally friendly wearing choice.

#### REFERENCES:

1. Prohaska, Thomas; Irrgeher, Johanna; Benefield, Jacqueline; Böhlke, John K.; Chesson, Lesley A.; Coplen, Tyler B.; Ding, Tiping; Dunn, Philip J. H.; Gröning, Manfred; Holden, Norman E.; Meijer, Harro A. J. Standard atomic weights of the elements 2021 (IUPAC Technical Report). Pure and Applied Chemistry. 2022-05-04. ISSN 1365-3075. doi:10.1515/pac-2019-0603 (英語) .
2. Bullion vs. Numismatic Coins: Difference between Bullion and Numismatic Coins. www.providentmetals.com. [2017-12-17]. (原始內容存檔於2018-11-19) (英語) .
3. 'World has 5 times more gold than silver' | Latest News & Updates at Daily News & Analysis. dna. 2009-03-03 [2023-12-25]. (原始內容存檔於2018-02-14) (美國英語) .
4. Masuda, Hideki. Combined Transmission Electron Microscopy – In situ Observation of the Formation Process and Measurement of Physical Properties for Single Atomic-Sized Metallic Wires. Janecek, Milos; Kral, Robert (編). Modern Electron Microscopy in Physical and Life Sciences. InTech. 2016. ISBN 978-953-51-2252-4. doi:10.5772/62288 (英語) .
5. ^ 移至 : <sup>5.0</sup> <sup>5.1</sup> <sup>5.2</sup> Hammond, C. R. The Elements, in Handbook of Chemistry and Physics 81st. CRC press. 2004. ISBN 978-0-8493-0485-9 (英語) .

