What is casting?

Goldsmithing Techniques · https://www.purejewels.com/faqs/goldsmithing-techniques/what-is-casting/

Every piece of fine jewellery begins as an idea, a vision shaped by emotion, tradition, and artistry. But how does that idea become a tangible object you can wear, hold, and treasure?

One of the most foundational techniques in the art of jewellery making is **casting**.

At **PureJewels**, where our designs are rooted in both heritage and innovation, casting is a technique that bridges the ancient with the modern, allowing us to bring each story to life in sculptural form.

Casting Defined: The Art of Pouring and Forming

Casting is a metalworking process in which **molten metal is poured into a mould** to form a desired shape. Once cooled and solidified, the mould is removed, revealing the raw shape of the jewellery piece.

This age-old technique enables jewellers to create **complex, detailed forms** that would be difficult or time-consuming to achieve by hand alone.

How Jewellery Casting Works

The most widely used method in fine jewellery today is called **lost-wax casting**. Here's a simplified overview of the process:

1. **Design**: The piece is first sculpted in wax — either by hand or via CAD (computer-aided design).
2. **Mould Creation**: The wax model is encased in a heat-resistant plaster (investment) to form a mould.
3. **Wax Burnout**: The mould is heated in a kiln, causing the wax to melt and leave a hollow cavity.
4. **Metal Pouring**: Molten gold, silver, or platinum is poured into the cavity.
5. **Cooling and Release**: Once cooled, the plaster mould is broken away to reveal the rough metal form.

6. **Finishing**: The cast piece is cleaned, filed, polished, and set with stones if required.

Why is Casting Important in Jewellery?

- **Consistency**: Ideal for reproducing the same design multiple times with precision.
- **Creativity**: Allows for intricate detailing and sculptural elements.
- **Efficiency**: Speeds up the production of complex forms.
- **Versatility**: Can be used across gold, silver, platinum, and even mixed-metal designs.

Casting and Gold Purity

At **PureJewels**, we primarily cast in **22ct and 18ct gold**, ensuring each piece maintains its purity, strength, and rich colour. Every item undergoes strict quality checks and is **hallmarked by the London Assay Office**, guaranteeing its authenticity and gold content.

Is Casting Traditional or Modern?

Both. **Casting has been used for thousands of years,** from ancient Indian goldsmiths to Renaissance artisans. Today, it is enhanced by technology like 3D printing and CAD design, offering jewellers **even greater precision and creative freedom**.

At PureJewels, we embrace both the **time-honoured traditions of craftsmanship** and the **innovative tools of today** to craft pieces that honour your past and celebrate your future.

Final Thoughts: From Wax to Wonder

Casting is where inspiration becomes form. It’s a delicate balance of science and artistry, transforming raw material into something precious, personal, and lasting.

Whether it’s a bespoke name necklace, a bridal pendant, or a commemorative bangle, casting allows our jewellers to create gold that tells your story with precision and heart.

FAQs

Q: Is cast jewellery durable?
Yes — when properly alloyed and finished, cast jewellery is strong, especially in 18ct or 22ct gold.

Q: Can I customise a cast jewellery piece?
Absolutely. At PureJewels, many of our bespoke creations begin with casting, tailored to your exact design preferences.

Q: Is cast gold jewellery hallmarked?

Yes, every gold piece we cast is **independently hallmarked** to confirm its purity and quality.