

PLATINUM ALLOYS 101 - WHAT YOU NEED TO KNOW!

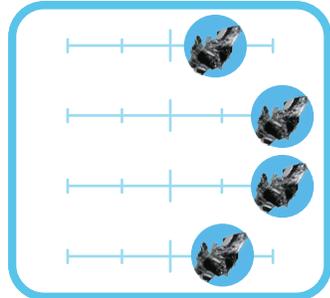
Platinum jewelry is typically 90-95% pure platinum, with the other 5-10% made up of another platinum group metal (PGM), or sometimes, a base metal like Cobalt. This mixture is known as an alloy. Here are the most common alloys in the U.S.



Ruthenium Pt950/Ru

- Most widely used alloy in the USA
- Natural white color

Pt950/Ru
poor satisfactory good excellent



CASTING

MACHINING

FABRICATION

DIE STRIKING

Best All-Purpose Alloy

for most manufacturing processes.

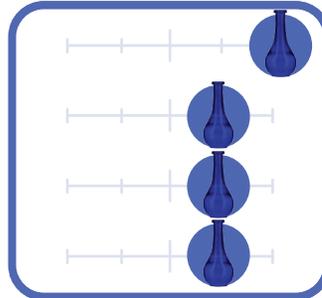


Cobalt Pt950/Co

Cobalt is Magnetic.

Consumers commonly mistake magnetic jewelry as non-precious.

Pt950/Co
poor satisfactory good excellent

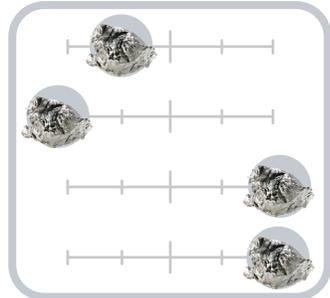


Oxidizes

when using a torch for repairs - so the surface of the jewelry may turn black. This is normal and easily removed by buffing.

Iridium Pt900/Ir

Pt900/Ir
poor satisfactory good excellent



CASTING

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Hand-Fabricated

Should only be used for hand-crafted jewelry.

Work-Hardening

Platinum jewelry work hardens during the fabrication process, which increases durability.

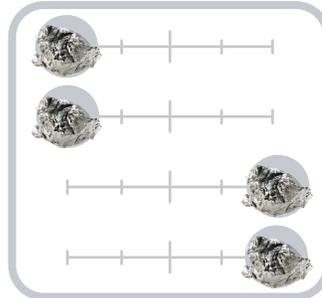
Be Cautious When Casting

The **5%** Difference Between Pt900/Ir & Pt950/Ir

Is A Matter Of Success Vs. Failure

Iridium Pt950/Ir

Pt950/Ir
poor satisfactory good excellent



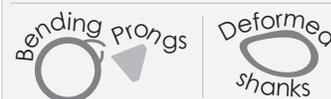
Unacceptable for Casting Jewelry

Too soft for jewelry making.

Not Secure

May be easier for jewelers to set, but stones won't be secure and ring shape may become distorted.

Wear Performance Issues:



Possible Loss Of Diamonds/Gemstones

(esp. pavé designs)

