

# Technique of Recycling Gold

Almost 80% of existing gold is in form of gold jewelry, bars and nuggets along with a minuscule quantity in electronic parts and dental fillings. However, most of the people hesitate to part with their personal gold jewelry or antique family heirlooms. So the only option left open is to recycle gold used in electronic gadgets. However, with increasing use of miniature electronic technologies, the amount of gold per electronic gadgets happens to be very low. Moreover, it is in an alloy form making gold recycling a very tedious job. Now let us understand the stepwise procedure for smelting and recycling gold.

## *Accumulating Unwanted Gold*

The first and foremost step is to accumulate unwanted gold items like jewelry, old gold watches, gold wires and electronic fittings etc. Make sure to weigh these items before you go ahead with procedure

## *Assess Gold Content*

It is possible for experts to judge the purity of gold that they are assessing. Pure 24 carat gold is extremely soft. Often, gold is mixed with other metals like nickel, silver or copper to harden it so that it can be molded to a perfect shape. However, it is possible to segregate these minerals from pure gold during the smelting process.

## *Smelting Process*

All the accumulated gold items are now deposited into a well heated smelting furnace. The melting point of gold is usually 1064.43 °C or 1337.5801 K or 1947.9741 °F. At this time, it is possible for the smelters to separate the other metals used for hardening purposes from the pure gold by using nitric acid. The metals thus separated from pure gold are gathered in a sludge. As the gold liquefies, the smelter will start setting up molds for making gold bricks or gold chips. Gold is highly ductile in nature. Therefore, it can also be converted into a wire form. The smelter now pours the melted gold into the molds and sets them to cool off. He may also make nuggets of other metals used for making alloys.

## *Gold Bars and Chips*

The gold that hardens in the mold is 24 carat pure gold. These bars and chips are now weighed so that they can be accurately priced. These gold bars and chips are now stamped with certain code numbers. The gold bars thus obtained can either be stored away safely or they can be supplied to jewelry makers for reuse.

exist (v)    OBSTAJATI  
to be, or to be real

jewellery (n)    *NAKIT*

decorative objects worn on your clothes or body which are usually made from valuable metals

nugget (n)    *KEPA*

a small roughly shaped piece, especially of gold

minuscule (adj)    *MAJCEN*

extremely small

dental (adj)    *ZOBEN*

relating to the teeth

hesitate (v)    *OKLEVATI*

to pause before you do or say something, often because you are uncertain or nervous about it

heirloom (n)    *DEDIŠČINA*

a valuable object that has been given by older members of a family to younger members

gadget (n)    *NAPRAVICA*

a small device or machine with a particular purpose

alloy (n)    *ZLITINA*

a metal that is made by mixing two or more metals, or a metal and another substance

tedious (adj)    *DOLGOČASEN*

*boring*

smelt (v)    *TALITI*

to get a metal from rock by heating it to a very high temperature

purity (n)    *ČISTOST*

the state of not being mixed with anything else

assess (v)    *VREDNOTITI*

to judge or decide the amount, value, quality or importance of something

segregate (v)    *IZOLIRATI*

to keep one thing separate from another

deposit (v)    *PUSTITI KAJ*

to leave something somewhere

furnace (n)    *PLAVŽ*

a container which is heated to a very high temperature, so that substances that are put inside it, such as metal, will melt or burn

liquefy (v)     *UTEKOČINJATI*

to (cause a gas or a solid to) change into a liquid form

moUld (n)     *KALUP*

a hollow container into which you pour a soft or liquid substance so that it will cool or harden into the shape of the containe

procedure (n)     *POSTOPEK*

a set of actions which is the official or accepted way of doing something

separate (v)     *LOČITI*

to (cause to) divide into parts

## WORD FORMATION

exist (v) – *existence* (n) – *existing* (adj)

*dental* (adj) – *dentist* (n) – *dentistry* (n)

*hesitate* (v) – *hesitation* (n) – *hesitant* (adj)

heirloom (n) – *heir* (n)

*tedious* (adj) – *tedium* (n) – *tediously* (adv)

*smelt* (v) – *smelter* (n)

purity (n) – *pure* (adj) – *purify* (v)

assess (v) – *assessment* (n)

segregate (v) – *segregation* (n) – *segregated* (adj)

liquefy (v) – *liquid* (n) – *liquid* (adj)