

Granulation

Granulation, in jewellery, type of decoration in which minute grains or tiny balls of precious metals that are applied to a surface in geometric or linear patterns or massed to fill in parts of a decoration. First used as early as the 3rd millennium BC, it was known in western Asia and Egypt.*

PREPARING YOUR METAL

To create similar sized granules you can either measure, mark and cut identical wire lengths or make a coil of jump rings around a small punch or something similar (not tapered) and use the scissor shears to cut into single rings. Both of these methods can produce the same sized ball. Another way is to weigh the metal, this works for larger granules.

Clean in safety pickle, rinse and place on block to heat.

WAYS TO CREATE GRANULES, SPHERES, BALLS, GRAINS OF METAL,

Here are ways to create the granules depending on the equipment available and your preferred method.

1. place clean lengths of wire onto a soldering block so that they are not touching. Gently heat one at a time to form spheres. Watch them spin before taking the heat away for the best results.
2. use a charcoal block and follow the method above, sometimes more likely to stay put. This will give you a tiny flat bottom ideal for joining.
3. prepare the charcoal block in a manner of ways; drill different sized holes/dips/grooves for the metal to balance in during heating, or carve a channel all around the edge of the charcoal block making sure not to go over the edge, this will stop the balls from rolling away. Carve a line ending in a dip to place lengths of wire in to melt and roll into the dip.
4. set up a soldering block, tip at a slight angle so that the molten granules roll down and land in the water pot placed under the block

CLEANING THE GRANULES

Leave to cool for a few minutes and place them in a plastic strainer or infuser to keep together when pickling. You can pop the granules in a tiny strainer, and put that inside a larger one - just in case. Rinse.

JOINING METHODS

Soldering - make sure the item you are soldering onto is prepared as usual, clean and fluxed. Place the clean spheres in place and allow everything to dry. Alternatively place slightly damp granules and use the surface tension to manoeuvre the granules. Touch the edge of the water with a brush with a little liquid flux. This will mix with the small amount of water around the granules. Leave this to dry completely. When heating make sure you can get to the underside of the metal, you do not want to over heat the tiny granules before reaching the correct temperature.

Fusing - the traditional method that needs specialist equipment and processes. This will have its own handout in the coming weeks.

TOP TIPS

You can make a chart of the size balls created with lengths of the same wire so that you know what to cut each time. For

example using

5mm x 1mm = 'x'

10mm x 1mm wire = 'x'

15mm x 1mm = 'x'

Store your 'not quite perfect' granules in a tiny jam pot for next time.

Melt several granules together to create bigger size.



FURTHER INFORMATION:

[HTTPS://WWW.BRITANNICA.COM/ART/GRANULATION](https://www.britannica.com/art/granulation)

[HTTPS://WWW.KERNOWCRAFT.COM/BLOG/MEET-THE-JEWELLER/MEET-THE-JEWELLER-SOPHIE-CUNLIFFE](https://www.kernowcraft.com/blog/meet-the-jeweller/meet-the-jeweller-sophie-cunliffe)