Key facts: Cultured pearls

Types of pearls

Varieties of cultured pearls

- Natural pearls are pearls accidentally formed in the interior of a mollusc without human intervention.
- Cultured pearls are formed within molluscs with human intervention. This intervention should only instigate the formation of the nacre – the substance normally produced by the various "pearl oysters" for the formation of both the shell and pearls.
- Imitation pearls are artificial products not formed in molluscs but manufactured by imitating the appearance, colour and other features of natural or cultured pearls. This is irrespective of whether physical or chemical properties are the same as natural and/or cultured pearls.



Akoya cultured pearls are cultured in Japan, China and Vietnam using Akoya oysters (*Pinctada fucata (martensii)*). Compared with other "pearl oysters", the Akoya oyster is rather small; hence the size of pearl produced is less than 10mm. The most popular sizes are 6 and 7mm.



Black-lipped cultured pearls are cultured mainly in French Polynesia using Black-lipped pearl oyster (*Pinctada margaritifera*). They appear in the markets under the trade term of "Tahiti cultured pearl". Common size is over 10mm, but recently smaller-sized pearls have been increasing. In addition to common natural grey or black colour, there is a wide variety of shades from purplish to greenish.



Silver/Gold-lipped cultured pearls are cultured in Australia, Indonesia and Philippines using Silver/Gold-lipped pearl oysters (*Pinctada maxima*). Australia produces large sized high quality pearls over 10mm while in Indonesia smaller sized pearls of below 10mm are also produced. The Philippines produce many golden pearls using Gold-lipped oyster.



Freshwater cultured pearls are cultured in China, Japan and United States. Most are non-beaded cultured pearl. Chinese pearls cultured with "Triangle mussel" (Hyriopsis cumingii) are dominant. By improving the culturing technique, large, round and smooth-surfaced cultured pearls are produced. There is a wide variety of colours the three usual being white, orange and purple.

Cultured pearl quality factors

Size

Sizes of cultured pearls are measured in millimeters (mm). Size range is dependent on pearl producing oyster species.

- Akoya cultured pearl: 2-10mm
- Silver/Gold-lipped and Black-lipped cultured pearl: 8-16mm
- Freshwater cultured pearl: 2-13mm.

Shape

Perfectly round is highly valued. Shapes are divided into: round, semi-round, oval, drop, button, and semi-baroque.

Lustre

Lustre is defined by the quality of the reflected light. A lustrous pearl has a strong bright and sharp reflection. A low lustre pearl is not bright and its reflection is dull. The lustre of a pearl may be closely related to the homogeneity, light transmittance and thickness of the nacre.



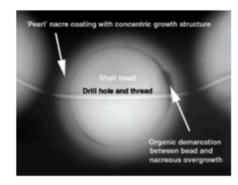
Pearl treatments

Any action by man that alters the appearance of a pearl or cultured pearl is considered to be a treatment.

- Treatments that do not need to be declared: drilling, polishing, buffing, peeling and cleaning.
- Treatments that must be declared: bleaching, coating, cutting, dyeing (tinting), filling, heating, irradiation, oiling, waxing and working.

Nacre thickness

Degree of nacre coating of the beaded cultured pearls. It has some impact of their colour, luster and durability. X-rays are used to measure nacre thickness and assist in observing nacre quality.



Surface condition

The surface of a cultured pearl is examined in terms of the number, size, kind and location of the imperfections. In evaluating the surface of cultured pearls, imperfections are taken into account – whether the pearl has a clean surface, one spot or many spots.

Colour

A pearl's colour contains three basic components, hue, tone and saturation. Colour characteristics differ according to the mollusc species.

- Akoya cultured pearl:
 Pink, green pink, silver pink, cream pink, white, green, cream, gold.
- Silver/Gold-lipped cultured pearl: Silver, silver pink, pink, grey, cream, yellow, golden, white.
- Black-lipped cultured pearl:
 Black, green, brown, blue,
 peacock, red.
- Freshwater cultured pearl:
 Three basic colours (orange, purple, white).



More information

For more information about CIBJO standards and rules regarding treatments, please download a free pdf copy of CIBJO's *Pearl Bluebook* here: www.cibjo.org