HUALLPA
joyeros

SILVER JEWELRY WITH NATURAL STONE INLAY

HUALLPA SALLO S.A.C

RUC: 20603537972 Phone: +51 968 355 505 Email: Huallpajewelry18@gmail.com · info@huallpajoyeros.com
Website: www.huallpajoyeros.com

MATERIA PRIMA

RAW MATERIALS

We use silver alloyed with copper and bronze to achieve 950 and 925 quality grades:

- 95.0% pure silver and 5.0% copper-bronze alloy to obtain **950 silver.**
- 92.5% pure silver and 7.5% copper-bronze alloy to obtain **925 silver.**

We also work with the following materials:

MINERAL STONS	SEA SHELLS
• Sodalite — Deep blue with white veining • Chrysocolla — Blue-green with turquoise tones and brown patches • Amazonite — Mint green with white veining • Turquoise — Sky blue with brown or black veining • Black onyx — Deep, uniform black	• Black onyx — Deep, uniform black • Spondylus orange — Vibrant orange with warm undertones • Spondylus purple — Dark purple to lilac with reddish hues • Yellow mother of pearl — Pale gold with iridescent shimmer • White mother of pearl — Creamy white with nacreous brilliance • Abalone — Iridescent green, blue, and purple — striking and unique

MANUFACTURING PROCESS

1. SMELTING & ROLLING

1.1 Smelting

A silver-copper alloy is prepared according to the desired purity grade.

68 grams of copper and 925 grams of pure silver are combined to form 1 kilogram of 925 silver. The remaining 7 grams are added together with a bronze alloy during the soldering process.

43 grams of copper and 950 grams of pure silver are combined to form 1 kilogram of 950 silver. The remaining 7 grams are added together with a bronze alloy during the soldering process.

Solder is also prepared by mixing silver with bronze in varying proportions depending on the desired quality. Standard solder contains 50% silver and 50% bronze. For higher quality grades, a greater proportion of silver is added to the alloy.

Once the material is mixed, it is melted inside a crucible vessel and formed into silver bars.

1.2 Rolling

Using rolling machines, silver bars are shaped into strips, wires, sheet metal, half-round profiles, and more. As the silver passes through the rotating rollers, it must be reheated — a process called annealing — to restore the material's flexibility and prevent cracking, until the desired width and thickness is achieved.

---

2. ASSEMBLY & SOLDERING

This stage marks the true beginning of the jewelry manufacturing process, as the molds and structural forms are built and designed here. This process is fundamental to all subsequent steps, as the molds must be assembled without flaws.

To begin, silver strips are cut to the measurements and shapes required by each design. The pieces are formed using a variety of tools including pliers, tweezers, scissors, and squares, among others.

For designs where the ends must join together, those joints are soldered first to prevent deformation when the full assembly is soldered onto the base sheet.

To solder the pieces, gas torches are used. Before applying heat, the pieces must be coated with borax dissolved in water, which allows the solder to flow and spread quickly. The assembled mold is then heated and submerged in a water-and-acid solution until it is fully whitened and clean.

3. STONE CUTTING & INLAY

Before the inlay process begins, each stone must first be cut into thin slices using a bench motor fitted with a diamond stone-cutting disc.

Once all stone cuts are ready, the inlay process begins. This step requires a workbench equipped with a motor and stone grinding wheel, which is used to shape each stone precisely according to the contours of the design. This is a critical step, as it determines the color combinations and the overall quality of the piece. Every single stone is inlaid by hand — a method closely related to the ancient Inca stone-carving tradition — because the fit between the stones and the silver frame must be absolutely precise.

This is perhaps one of the most symbolic and important processes that define the Inca style. It requires time, dedication, and deep concentration.

Stone inlaying — or *lapidado* — is an ancestral technique in which each stone is shaped to perfectly match the silver frame (*caja*) built by the assembler.

4. GLUING, SANDING & FINISHING

4.1 Gluing

This step is carried out once the inlaid piece is dry. The adhesive used is fiberglass resin mixed with monomer at a 50/50 ratio, plus 2% cobalt added to the combined mixture. This base mixture is normally prepared once a month in large batches. For daily use, a catalyst is added drop by drop

just before application. The mixture takes a minimum of 24 hours to fully cure, but must be applied within the first 5 minutes of preparation.

4.1 Face Sanding (Stone Sanding)

This step is no less important than the others. It involves leveling the stones flush with the silver frame and beveling the silver edges, with the goal of achieving a smooth, even base — which also directly determines the brilliance of the stones during the final polishing step. Using the same bench motor used for inlaying, the process begins with a stone grinding wheel, followed by wet sandpaper in grits 320, 600, and 1000. On the same motor, the sides of the pieces are also sanded using wet 220-grit sandpaper to correct or refine the cuts made during assembly.

4.2 Back Plate Sanding

This process is carried out using a bench motor fitted with wet 220-grit sandpaper to remove imperfections from the back of the pieces — the silver base plate — left by the previous processes.

5. FINISHING

5.1 Brushing

This step uses the previously mentioned motor fitted with a circular black-bristle brush and red polishing paste. The goal is to remove black stains and surface scratches from the silver. It is not

always possible to remove every stain — only those in areas the brush can reach. This process is applied to the back and sides of each piece.

5.2 Polishing

This step fulfills the same objectives as brushing but aims for a much higher level of quality and smoothness, using a denim disc and red polishing paste. This process is applied to the entire piece without exception.

5.3 First Wash

The wash is performed immediately after polishing using a mixture of hot water and dish soap. A toothbrush is used to scrub away the residue left by the polishing process. The pieces are then rinsed in cold water and dried with a hair dryer.

5.4 Lustring

This is the step where the jewelry achieves its final high-gloss shine, using the same motor fitted with a white flannel disc and DIALUX sky-blue polishing compound. It is important to note that this step will not produce the expected results unless the face sanding, back plate sanding, brushing, and polishing have all been performed correctly.

5.5 Second Wash

The same washing process as above is repeated, with the additional requirement that the rinse must be carried out with extra care.

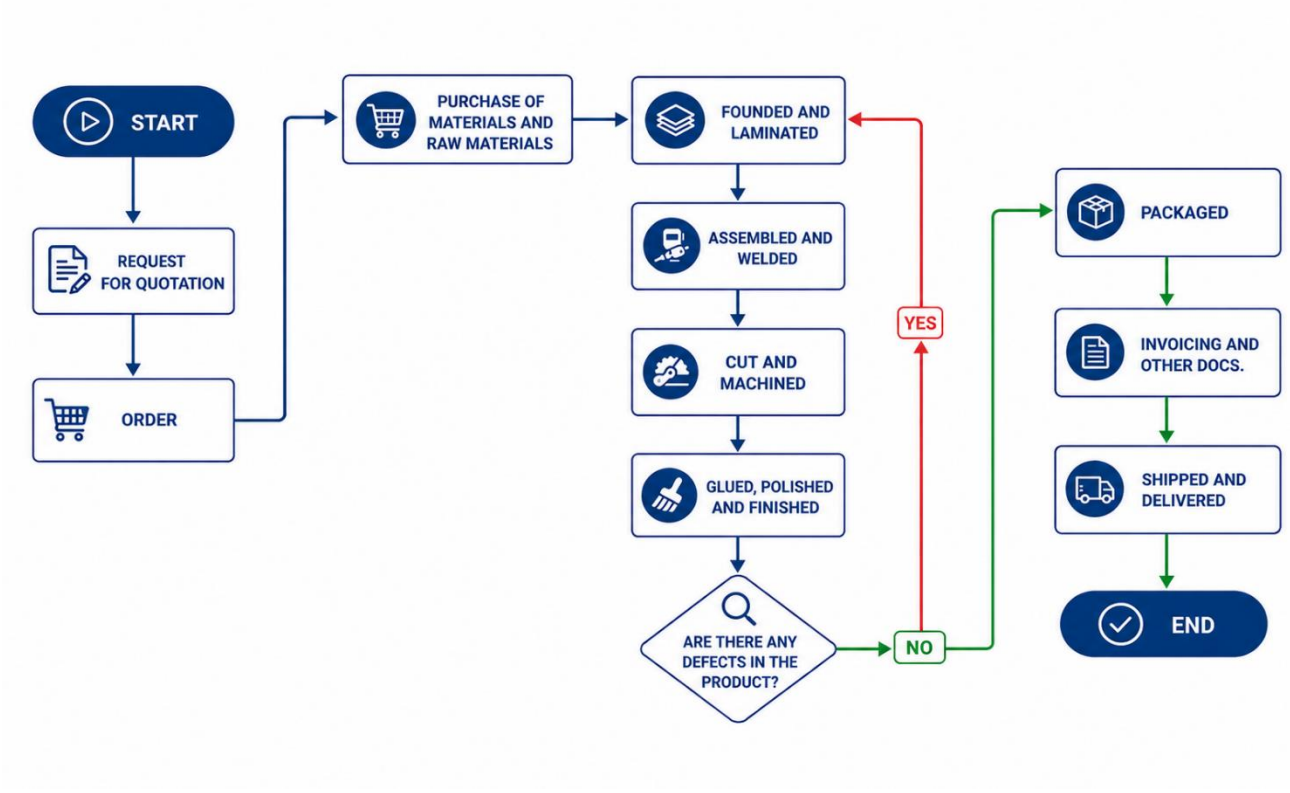
5.6 Drying

Several drying techniques can be used — flannel cloth, tissue paper, or a hair dryer. At our workshop, we use a specialized technique: the rinsed pieces are placed inside a large container filled with very fine sawdust and left for approximately 2 hours. The contents are stirred and left for 1 additional hour. The pieces are then removed and placed on clean paper.

5.7 Final Cleaning

A hair dryer is first used to ensure the pieces are completely dry and to remove any remaining sawdust from the previous step. The pieces are then carefully wiped with tissue paper in a very precise manner to ensure they are completely dry and clean.

PRODUCTION PROCESS FLOWCHART



Source: Own elaboration

HUALLPA
joyeros

FINAL PRODUCT

Considered a luxury artisan product, our jewelry is characterized by Inca-inspired designs — though it can be produced in any design imaginable. Another defining characteristic is the combination of natural colors, ranging from pieces featuring a single mineral stone or sea shell color, to pieces combining every available color in a single work.

+51 968 355 505

Huallpajewelry18@gmail.com
info@huallpajoyeros.com

www.huallpajoyeros.com