

应用灵感

施华洛世奇人造宝石使您能够从竞争对手中脱颖而出，并为您的产品创造显著的附加值。我们为您提供这份关于人造宝石镶嵌的实用介绍，作为识别与您的业务最相关的应用方法的工具，同时配以插图，激发您用施华洛世奇人造宝石来装点您的产品。

原位铸造/失蜡铸造

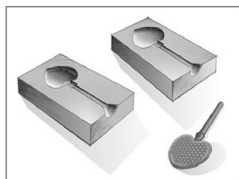
这种技术是珠宝行业镶嵌宝石的标准方法。它特别适用于需要大量宝石的设计和如黄铜、银、金等低熔点金属，以及其他低熔点金属。但不锈钢的铸造是不可能的。大多数情况下，最多3毫米的宝石可以进行原位铸造，并且与异形宝石相比，圆形宝石的效果最好，因为异形宝石难以正确镶嵌。

推荐用于：

- 需要大量宝石的设计
- 类似珠宝的组件
- 黄铜、银、金和其他低至中等熔点的金属

优势：

- 高品质
- 多种设计可能性



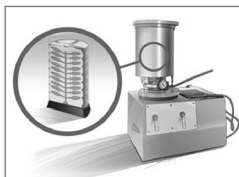
1 Liquid wax is injected into a rubber mold to create a wax model. Duplicates of the wax model are made from the same mold.



2 A vacuum needle is then used to mount stones by hand onto each of the wax models.



3 All the wax models are soldered on the so-called wax tree.



- 4 The wax tree is placed in a crucible. A machine is then used to inject investment, usually plaster, into the space surrounding the wax tree.



- 5 The crucible is heated in an oven, the burn out furnace, to melt and 'burn out' the wax. There is now empty space where the wax tree used to be. Only the investment remains.

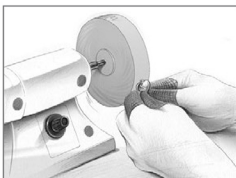


- 6 A casting machine next fills the investment with a choice of liquid metal (gold, silver, brass or alloys). By using pressure from above and vacuum from below, the casting machine not only ensures that the metal quickly fills the empty space but also that no air bubbles remain within the newly cast jewelry pieces.



- 7 After casting, four hours are needed for the crucible to cool down to room temperature. The crucible is then quenched in water, also at room temperature, to dissolve the investment. The remaining metal tree is then jet cleaned with water before it is acid cleaned, for example with a 20% phosphoric acid solution.

- 8 The casting process is now complete and the individual jewelry pieces can be cut off the metal tree.



- 9 The individual jewelry pieces can now be finished and polished.



CNC

CNC镶嵌技术是由制表业在80年代末发明的，是最先进的宝石镶嵌方法之一。同样的设计可以很容易地以极高的精度大量复制。

推荐用于：

- 需要大量宝石的设计
- 不锈钢
- 铝
- 黄铜和铬
- 大量生产

优势：

- 高质量的镶嵌，珠宝般的外观
- 非常精确的尺寸
- 多种设计可能性
- 也可在曲面上进行镶嵌



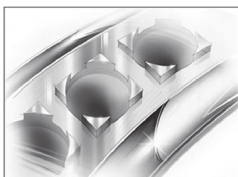
1 A CAD/CAM technical drawing of the stone-set part must be created first.



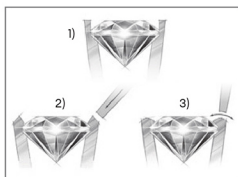
2 The CAD/CAM drawing is used to program the CNC machine.



3 The CNC machine first mills the cavities into the metal part.



4 Next, the prongs are milled out of the metal part.



5 The stone setting is usually done manually in 3 steps:
1) The stone is placed into the cavity.
2) The prongs are bent over the edge of the stone.
3) The prongs are rounded and polished.



6 The manual beading and polishing of the prongs is often done under a microscope.



7 The CNC set metal part is now finished.



包边镶嵌

包边镶嵌是最早已知的将宝石镶嵌在珠宝上的技术。包边镶嵌牢固地固定住宝石，并且它形成的低矮、保护性的轮廓，使其成为活跃生活方式人士的好选择。包边镶嵌为宝石提供更好的保护，非常适合弧面切割或刻面宝石。

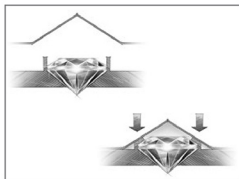
推荐用于：

- 单颗宝石，大颗宝石
- 不锈钢、黄铜
- 薄金属，低厚度

优势：

- 重量轻
- 成本低

03



1 In preparation, a strip of metal is bent into the exact shape and size of the selected stone. After the stone has been inserted into the cavity, a setting tool is used to press the metal strip onto the stone. The metal strip is now bend over the edge of the stone.



2 In the above illustration, you can see exactly how the stone sits in the bezel setting.



熔接镶嵌

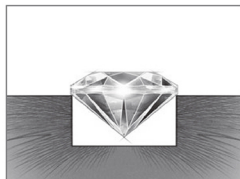
熔接镶嵌是一种简单而干净的将宝石镶嵌在热塑性材料如聚氨酯、聚丙烯、PVC、ABS和醋酸纤维中的方法。这种技术需要一个比宝石外径稍小的宝石座。在应用时，将宝石放在宝石座上，并对宝石的台面施加加热和轻微的压力。过一段时间后，宝石座的边缘区域熔化，宝石沉入热塑性材料中，最终形成类似于包边镶嵌的互锁结构。

推荐用于：

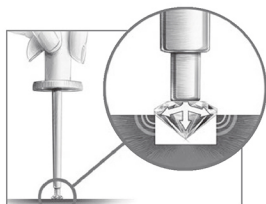
- 可熔塑料，如聚氨酯、聚丙烯、PVC、ABS、醋酸纤维
- 小型或大型生产量

优势：

- 成本低
- 易于应用
- 环保（仅需要热来进行应用）



2 The stone must be placed parallel to the hole. In this example, the hole has been drilled through the material.



3 Place the heating unit on the stone table. ensure that the heating unit (e.g. heating pen) is only touching the stone surface and table.



4 As the heated stone begins to melt the plastic material, the heating unit is used to push the stone gently down into that material.



5 The heating unit is removed, and the stone and setting left to cool. The plastic now firmly holds the stone, just like a bezel.

夹层镶嵌

夹层镶嵌如其名字所示，非常简单。所选的宝石被夹在两个塑料层之间，形成一个三明治结构。或者，其中一层——有时甚至是两层——可以由金属制成。基础件具有容纳宝石所需的空腔，而顶件则用于固定宝石。

推荐用于：

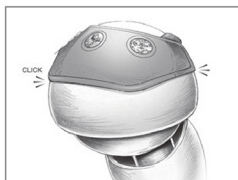
- 塑料部件
- 塑料和金属的组合

优势：

- 成本低
- 易于应用



1 Here is an illustration of an earphone with three stones being put into place between the two layers of plastic.



2 The two plastic layers can be fastened together either with glue or with a snapping mechanism.

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D. Swarovski Distribution GmbH, Swarovskistrasse 30, 6112 Wattens, Austria

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