

Thailand's Gems and Jewelry Industry

In 2022, the gems and jewelry industry has played a significant role in bolstering the country's economy, securing the third position in terms of export value, trailing only behind automobiles & parts and computers & accessories. The industry generated approximately USD 15,100 million in export sales, an increase of 50.28%, compared with the same period in 2021. Exports of gems and jewelry, excluding unwrought gold, worth USD 8,036 million, an increase of 30.29%. Without unwrought gold, the exports of gems and jewelry ranked 9th in Thai exports.

In addition, the industry boasts an impressive number of entrepreneurs, totaling 12,892, and has created employment opportunities for more than 790,000 individuals throughout the supply chain, spanning from production to retail and export. Thailand's exceptional craftsmanship, deeply rooted in local knowledge and expertise, has propelled the nation to rank as the 16th largest jewelry exporter in the world.

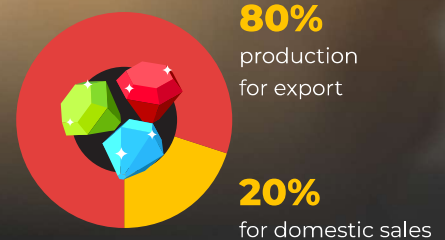
Recognizing the significance of this sector, the Thai Government has consistently demonstrated unwavering support for the industry. The government has included it as a crucial component of the country's national strategy, aiming to establish Thailand as a prominent global hub for gems and jewelry trading. This commitment further solidifies the industry's pivotal role in Thailand's



Structure of Thailand's Gem and Jewelry Industry

Thailand's gem and jewelry industry is a complete, vertically integrated sector, spanning from upstream to downstream. Approximately 80% of the production is dedicated to exports, while the remaining 20% caters to domestic sales.

For the structure of the Thai gem and jewelry industry, it is classified as



1. Gem Industry covers the cutting of diamond and gems

- 1.1 Diamond Cutting Industry – This industry mostly involves large corporates as due to its high capital requirements. The majority of entrepreneurs are foreign companies or joint ventures between Thai companies and reputable overseas firms specialized in diamond cutting such as Belgium, Israel, and the UK. Raw materials, equipment, machines, and technology are imported to utilize Thai skilled labor.
- 1.2 Gemstone Cutting Industry – This industry has a potential to manufacture quality products. Entrepreneurs use a heat treatment technique, which is the well known and widely accepted across the globe. The strengths include the delicate craftsmanship and the use of simple tools and machines, as high technology has not been widely adopted. Most premises are small and located in provinces that were once major sources of gemstones, such as Chanthaburi, Trat, and Kanchanaburi.

2. Jewelry Industry is divided into two groups, namely, Fine Jewelry and Imitation Jewelry.

- 2.1 Fine Jewelry includes jewelry made from silver, gold, and platinum.
- 2.2 Imitation jewelry includes jewelry that are made from materials that are not from nature.

Thailand is home to a large number of diamond and gemstone makers, with most of them being SMEs (Small and Medium-sized Enterprises). These businesses rely on skilled and experienced labor for designing, sorting, and assembling, tasks that require precision and delicacy. Entrepreneurs engaged in export-oriented production operate medium to large manufacturing plants, making substantial investments in tools, machines, and technology. Moreover, significant investment is also necessary to procure raw materials.

Source: The Office of SMEs Promotion (OSMEP)



Key Products Exported from Thailand in 2022:

1. Precious Stones



Overall exports of

2,988

million USD

(+50.76%)



Diamonds

1,780

million USD

(+41.27%)



Gemstones

1,181

million USD

(+69.15%)



Pearls

25

million USD

(+12.19%)

2. Fine Jewelry



Overall exports of

4,133

million USD

(+22.34%)



Gold Jewelry

2,089

million USD

(+46.07%)



Silver Jewelry

1,737

million USD

(+1.19%)



Other Precious
Metal Jewelry

304

million USD

(+32.48%)



3. Imitation
Jewelry

314

million USD

(+17.32%)



4. Synthetic
Stones

104

million USD

(+62.99%)



5. Precious
Metal and
Metal Coated
Items

498

million USD

(+4.45%)



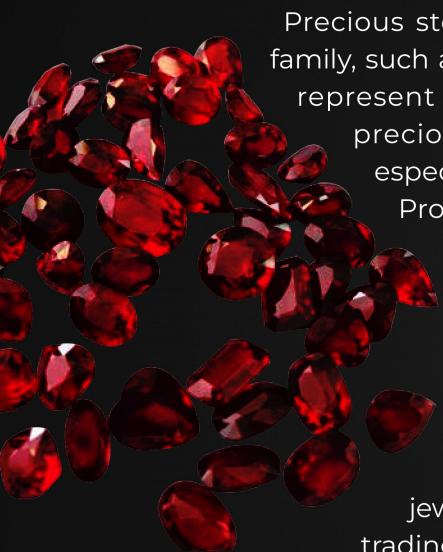
6. Unwrought Gold

7,070 million USD

(+82.03%)

Colored Gemstones

Since the late 19th century, Thailand has made a name for itself in precious stones manufacturing and trading, offering a wide range of colored gemstones to global buyers. In particular, Bangkok and Chanthaburi play a crucial role in the international gems and jewelry supply chain, featuring sparkling, value-added stones that enchant buyers with their vibrant hues and high clarity.



Precious stones in the corundum family, such as rubies and sapphires, represent the two most famous precious stones of Thailand, especially from Chanthaburi Province – and they enjoy immense popularity in the global market. Although local mining activities have subsided, the Kingdom remains among the world's leading gemstone and jewelry manufacturing and trading hubs.

Apparently, ruby is the main export product that generates an income of over a hundred million US dollars per year. The highly valuable, brilliant red stone hailed as the King of Gems, has been closely connected to various ways of life and spiritual beliefs, including the power to ward off evil, promote wealth, and alleviate some ailments. Sapphire commands just as much interest and demand, offering a variety of colors and beauty on a par with ruby.

As beautiful and natural gemstones with high clarity are exceptionally rare, various methods based on traditional practices are used in colored stones enhancement. These methods considered necessary processes to supply adequate quantities of high quality stones to the market, and they also play a key role in raising gemstone prices.

These days, all commercial rubies and sapphires in the market have undergone some sort of enhancement. Generally speaking, almost all premium rubies being traded in the global market must have once been circulated through Thailand.

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Heat treatment represents one of the most popular stone enhancing methods, using both low and very high temperatures under suitable conditions. Different kinds of furnaces, where temperature and other related factors can be controlled, are also employed. The heat enables physical transformation of the stones, resulting in more vivid colors and/or clarity, fissure healing and reducing of blemishes, which in turn, makes them more valuable.

Thailand's competitive edge lies in the value addition through heat treatment and polishing techniques. These well-honed processes are internationally recognized for ruby and sapphire enhancement and can even improve the appearance of low-quality materials, such as glass-filled ruby and sapphire, resulting in more beautiful gemstones. Thailand possesses an abundance of knowledge and expertise in the quality development of different aspects of colored stones, which has been continually developed and preserved in each local area. This strengthens Thailand's status as the world leader in polished gem manufacturing and trade.





Silver Lining

The Legacy of Silver Jewelry in Thailand

A type of white, precious metal, silver has been manufactured on a large scale around 500 BC by ancient civilizations of Asia Minor, who discovered how to extensively use this highly malleable mineral. As silver mineral resources in Thailand are limited, large amounts of silver have been imported to Thailand since the early times. Evidence of silver usage dates back to the 6th to 11th century AD, in the form of coins, silverware, and religious and royal offerings.

Silver jewelry has been made since the Sukhothai era and silverware reached the height of its popularity during the Ayutthaya period. Initially, the jewelry was mostly worn by the middle class, while silverware goods were reserved for the wealthy ruling class. However, the versatility of silver soon expanded to various arts and crafts, which became highly developed as a result of the vigorous flow of trade with European and Chinese merchants, as well as the influence of foreign silversmiths and goldsmiths traveling to Thailand.

Apart from the popular trends in each period, silver jewelry also reflects local traditions, methods, and aesthetic sensibilities. Today, silver jewelry making in Thailand remains a valuable handicraft showing exquisite craftsmanship. Small batches of jewelry are still meticulously made by hand, a process that has been preserved and passed on among artisans. On the other hand, most silver jewelry in Thailand is manufactured through an industrial system for large - scale export and domestic distribution.

These days, silver jewelry in ethnic designs is especially favored by consumers; they are largely created by two distinct groups from northern Thailand: Lanna Kingdom (Chiang Mai) and hill tribes

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In Chiang Mai, silversmithing likely stemmed from the craftsmen who settled in the province during the period of King Rama V, establishing their silver handicraft workshops along Wua Lai Road in the main city. They have since incorporated and adapted traditional indigenous motifs, from floral to geometrical and tribal designs, into a distinctive identity. As a result, they produce high-quality silver bracelets, necklaces, rings, earrings, pendants, amulets, and cloth adornments, among other items.

Nan Province houses outstanding silverware manufacturing centers where techniques and know-how have been passed on from generation to generation. In 1995, a group of craftsmen founded “Nan’s Chompu Phuka Silver and Handicraft Center”, aiming to promote local silverware made by Mien and Hmong hill tribes, who have developed expertise in silverware since ancient times. Boasting unique nature-inspired patterns and unparalleled craftsmanship, Chompu Phuka jewelry, including necklaces, bangles, earrings, rings, hairpins and belts, is famous within and beyond Thailand.

With highly skilled craftsmen, creative designers and manufacturers who prioritize product quality and excellent service, Thai silver jewelry is internationally recognized as second to none. This recognition reinforces the fact that Thailand has long established itself as the world’s largest manufacturer of silver jewelry.



Gold Jewelry

Thai traditional gold jewelry products are unique and distinct from mainstream gold jewelry products because of their difference in gold purity, which can be as high as 99.9%. Gold jewelry from Sukhothai Province and Phetchaburi Province are considered superior art deeply rooted in the authentic Thai arts with a cognitive foundation in production and pattern design. These designs often draw inspiration from religion, historic sites, and the lifestyles of Thai people in the past. Due to the different environments in each region, gold jewelry pieces from the areas bear diverse details in patterns and production techniques, making them even more unique with distinctive local identities.

Patterns of Sukhothai gold jewelry are influenced by the ancient Sukhothai cultures, utilizing weaving and enameling techniques to add colors – red, green, blue, and, white – onto jewelry pieces. In Phetchaburi gold jewelry production, special techniques are applied to create a filing ring, or a ring set with polki gemstones, with both sides of its setting filed into cavities to create the Luk Son (pinecone) pattern. Additionally, gold wires are curled into a shape similar to a Chinese lantern to form the Pawalam pattern.

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Source: <https://www.bkkgems.com/>

Key Strengths: Creative Design

We are not only a trading hub for the international gems and jewelry industry, but also a country that has highly skilled artisans capable of creating exquisite works of jewelry. These skills are rooted in our rich heritage of art and crafts.

Global jewelry brands have long recognized the skills of Thai artisans and some have made Thailand their manufacturing base for decades. More recently, our industry has incorporated modern western practices and knowledge. This combined with the unique skills of Thai crafts-persons and their creative designs, provides Thailand with a unique comparative advantage globally.

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In the past, Thailand was regarded as a source of materials and a manufacturing base. Nowadays, it has become one of the leading countries in value creation for the global gems and jewelry industry. Thailand boasts a significant and growing number of internationally recognized jewelry brands, highly skilled artisans and designers. Because of these skills and strengths, I have absolute confidence that Thailand will become the gems and jewelry hub of the world.





Key Strengths:

The Wisdom of Gemstones Heat Treatment

Chanthaburi became a world leader in the improvement of quality of colored gemstones through heating processes

In 2008, a big fire broke out in Chanthaburi market, an area mostly consisting of gemstone shops and gemstone cutting places. When the fire was finally extinguished, many gemstones were found to be even more beautiful. The incident motivated many individuals to develop methods of heating gemstones, which turned out to be a huge success. As a result, Chanthaburi became a world leader in the improvement of the quality of colored gemstones through heating processes, and its quality is second to none. It is estimated that around 90% of gemstones that have undergone the process of quality improvement in the world market are from Chanthaburi Province.

The heat treatment of sapphire was pioneered by Mr. Sammueng Kaewwaen, who used a 200-liter oil tank with its inner lining made from fireproof bricks. The tank had a hole at the bottom of the tank to allow the pressured wind from a fan in. A mold that is normally used for brass casting becomes the holder of heated gemstones on a coal stove. Later, the stove was replaced with into one that uses solar oil with an inner lining made from alumina fire proof bricks.

In terms of ruby heat treatment, it began with the gemstone being heated in a clay firepot or brazier using charcoals made from mangroves. Later on, the process was developed, and the ruby was wrapped in clays, dried, and heated. Subsequently, an electric stove of 1,450 degrees Celsius, imported from Sweden, was used, but only for a short period. Eventually, this stove was replaced by an electric stove of 1,600 degrees Celsius, imported from Germany.

The outcome of gemstones heat treatment depends not only on the heating technique alone, but it is also hinged on the quality and type of the stove. Among the most popular stoves at present are electric stoves, oil stoves, gas stoves, and charcoal stoves. The temperature for heating a gemstone depends on its size, type, preferred color, and source of the gemstone. Normally, gemstones are heated at the temperature between 1,600 and 1,900 degrees Celsius.

Gemstone Heat Treatment is now accepted worldwide. It is a process of adding heat to induce chemical changes within gemstones without any additional substance, making it not considered an artificial process. Once the color from the heating changes, it will not return to its previous color. The exact technique of heating gemstones is considered confidential since it yields high returns. However, the risk of damage or discoloration is also high, which can result in a significant price reduction or render the gemstone unsellable altogether. Therefore, those who decide to heat gemstones must be quite determined and brave.

Source: <https://infocenter.git.or.th/>

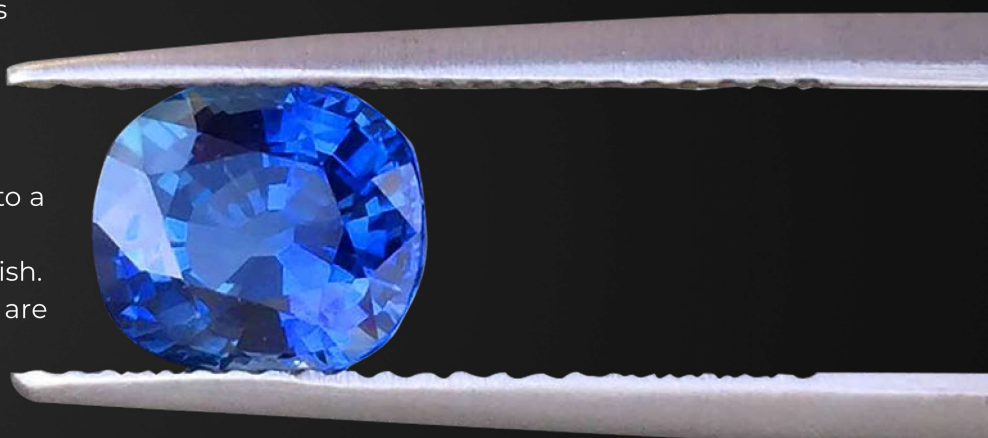


Key Strengths: Cutting Colored Gemstones

There is an anecdote that the cutting of gemstones in Chanthaburi began in the community of Tai Yai ethnic group, which was called Kula group. They emigrated from the present-day Myanmar and settled in Chanthaburi river bank and Sri Chan road. Brought with them was the skill of gemstone cutting. Over time, this occupation has spread to other communities within Chanthaburi. Thus, there are a lot of good gemstone craftsmen in the province.

In the past, the cutting of gemstones was done simply by shifting away some of the rough edges into a cabochon shape. Simple machines operated by feet were also introduced. The aim was still to cut gemstones into a cabochon shape. Back then, each gemstone would take one day to finish. Nowadays, more modern machines are used to cut gemstones into several shapes. Yet, skilled labor is still very much needed. The industry remains at the family or community level. Cutting experts scattered in various villages all around the province. In addition to these, Chanthaburi cutting experts are accepted internationally as they use their handiwork to cut gemstones into equal sizes, beautiful, and of the desired weight. Chanthaburi is thus the

Chanthaburi cutting experts are internationally recognized for their handiwork in cutting gemstones into equal sizes, creating beautiful pieces of the desired weight.



destination of raw gemstones from other places in the world. Chanthaburi is actually the place where gemstones are sent for cutting before reselling to other countries around the world.



The Thai gem and jewelry industry is placing great importance on ensuring sustainable business operations.

Many Thai companies have implemented the significance of upholding social and environmental responsibility throughout the entire supply chain, from mining to retail. They have chosen to become members of the Responsible Jewellery Council (RJC), an international non-profit organization dedicated to standardizing gem and jewelry production. These companies adhere to four practical principles: business ethics, human rights and social work, environmental performance, and management systems.

Currently, approximately 50 Thai companies have joined the RJC, including Pranda Jewelry Public Company Limited, a leading jewelry production, distribution, and retail company. Additionally, there are small and medium-sized enterprises (SMEs) that are RJC members. For example, Intramane Co., Ltd. is a jewelry manufacturer and distributor, while MEO Jewelry Co., Ltd. specializes in manufacturing and exporting silver and gold jewelry.



Bangkok Gems and Jewelry Fair

Bangkok Gems and Jewelry Fair is a long-standing famous gems and jewelry fair. It is held twice a year in February and September to be a platform for entrepreneurs and importers of gems and jewelry from around the world to meet and conduct business negotiations. More information can be found at www.bkkgems.com

