Digital Learning Environment for Design - www.dsource.in

Design Resource

# Gold Ornaments – Belgaum Gold represents Royalty, Purity and Wealth

by

Prof. Bibhudutta Baral, Divyadarshan C. S. and Shruti K.

NID Campus, Bengaluru

#### Source:

http://www.dsource.in/resource/gold-ornaments-belgaum

- 1. Introduction
- 2. Tools and Raw Materials
- 3. Making Process
- 4. Products
- 5. Video
- 6. Contact Details



Digital Learning Environment for Design - www.dsource.in

Design Resource

### **Gold Ornaments - Belgaum**

Gold represents Royalty, Purity and Wealth by

Prof. Bibhudutta Baral, Divyadarshan C. S. and Shruti K.

NID Campus, Bengaluru

#### Source:

http://www.dsource.in/resource/gold-ornaments-belgaum/introduction

#### 1. Introduction

- 2. Tools and Raw Materials
- 3. Making Process
- 4. Products
- 5. Video
- 6. Contact Details

### Introduction

Gold is precious, which is a yellow metal, Applications of gold is found in textile, medical, information technology, space technology etc. Gold represents royalty, purity and wealth. Every ancient civilization has adopted gold as important and sacred element to their culture and community. 24 carat gold is the purest and softest form of gold, generally gold is alloyed with base metals when used in jewelry, which helps in altering in melting point, ductility and other properties, gold with 22k, 18k, 14k and 10 k contains higher percentages of other alloys like silver or palladium. Copper is most commonly used base metal which helps in producing redder color. Gold is available in different shape and size like bars, coins, wire and foil.

India is the world's largest consumer of gold and Indian jewelry comprises a vast and complex assortment of marvels. Traditional ornaments have a distinct cultural identity that plays a significant and fascinating role in characterizing Indian civilization.

Jewelers are part of the iconography of physical appeal. Worn by men jewelers symbolizes power and wealth, with the attendant attractions they convey. Women in Indian art and in life pursue adornment as a form of devotion to men, and with fervency that parallels religious conviction.

Belgaum is one of the oldest towns situated in the north-west part of Karnataka. The tradition of making the gold and silver jewelry is practiced from long generation in Karnataka. Jewelry is a decorative item which is worn for personal adornment. The ancient gold mines were existed in Mysore, Kolar, Hyderabad, Chota-Nagpur and Dharwad as well as other places in South India. The south Indian jewelry identity is inspired from the sculptured ornaments of Hoysala period. Marriage and religion are inseparable in Indian culture and together provide motivation for the use of traditional ornaments. Gemstones and diamonds are used in making of gold ornaments to enhance the beauty and is also considered as a prestigious and security form against many financial crises in the country. The gold ornaments designs made in India are versatile which differs from state to state. In Belgaum beautiful traditional and contemporary jewels are made both in gold and silver.

Digital Learning Environment for Design - www.dsource.in

Design Resource

# Gold Ornaments – Belgaum Gold represents Royalty, Purity and Wealth

by

Prof. Bibhudutta Baral, Divyadarshan C. S. and Shruti K.

NID Campus, Bengaluru

#### Source:

http://www.dsource.in/resource/gold-ornaments-belgaum/introduction

#### 1. Introduction

- 2. Tools and Raw Materials
- 3. Making Process
- 4. Products
- 5. Video
- 6. Contact Details



Flattened gold sheet is inserted into die machine to give required design and shape.



Pieces of gold are dipped in soldering solution to join the parts.

Digital Learning Environment for Design - www.dsource.in

Design Resource

# Gold Ornaments – Belgaum Gold represents Royalty, Purity and Wealth

Prof. Bibhudutta Baral, Divyadarshan C. S. and Shruti K.

NID Campus, Bengaluru

#### Source:

http://www.dsource.in/resource/gold-ornaments-belgaum/introduction

#### 1. Introduction

- 2. Tools and Raw Materials
- 3. Making Process
- 4. Products
- 5. Video
- 6. Contact Details



Work environment of the craftsmen involved in gold ornaments making.



Gold is casted in the mini crucible cup.



Tweezer is used to hold the gold pieces.

Digital Learning Environment for Design - www.dsource.in

Design Resource

# Gold Ornaments – Belgaum Gold represents Royalty, Purity and Wealth

Prof. Bibhudutta Baral, Divyadarshan C. S. and Shruti K.

NID Campus, Bengaluru

#### Source:

http://www.dsource.in/resource/gold-ornaments-belgaum/introduction

#### 1. Introduction

- 2. Tools and Raw Materials
- 3. Making Process
- 4. Products
- 5. Video
- 6. Contact Details



Articles are soldered using flame torch.

Digital Learning Environment for Design - www.dsource.in

Design Resource

### Gold Ornaments - Belgaum

Gold represents Royalty, Purity and Wealth by

Prof. Bibhudutta Baral, Divyadarshan C. S. and Shruti K.

NID Campus, Bengaluru

#### Source:

http://www.dsource.in/resource/gold-ornaments-belgaum/tools-and-raw-materials

- 1. Introduction
- 2. Tools and Raw Materials
- 3. Making Process
- 4. Products
- 5. Video
- 6. Contact Details

### **Tools and Raw Materials**

Following are some of the tools and raw materials used for the production:

- Agstatige (Lamp): It is used for soldering the gold articles.
- Tweezers: These are used to hold the gold articles.
- Pinagi Plates (gauge plates): It is used to measure the thickness of the gold strip.
- Die Machine: Use to give shape to the required designs from gold strips.
- Drum Polishing Machine: Its used to polish the gold ornaments.
- Mushi (crucible): Mushi are used to melt the gold.
- Nitric Acid: It is used for washing the gold articles.
- Soldering: It is done to join the gold pieces.



Gold is melted in Crucible and poured in an iron mold to obtain gold rods.

Digital Learning Environment for Design - www.dsource.in

Design Resource

### Gold Ornaments – Belgaum

Gold represents Royalty, Purity and Wealth by

Prof. Bibhudutta Baral, Divyadarshan C. S. and Shruti K.

NID Campus, Bengaluru

#### Source:

http://www.dsource.in/resource/gold-ornaments-belgaum/tools-and-raw-materials

- 1. Introduction
- 2. Tools and Raw Materials
- 3. Making Process
- 4. Products
- 5. Video
- 6. Contact Details



The gold wire is turned into thin sheets by using rolling machine.



Die machine is used to cut the gold sheet to required shape and form.

Digital Learning Environment for Design - www.dsource.in

Design Resource

# Gold Ornaments – Belgaum Gold represents Royalty, Purity and Wealth

Prof. Bibhudutta Baral, Divyadarshan C. S. and Shruti K.

NID Campus, Bengaluru

#### Source:

http://www.dsource.in/resource/gold-ornaments-belgaum/tools-and-raw-materials

- 1. Introduction
- 2. Tools and Raw Materials
- 3. Making Process
- 4. Products
- 5. Video
- 6. Contact Details



Polishing machine is used to polish the gold to give more luster and shine which consists of small metal pins.



Gold is casted in the mini crucible cup.



Different types of tools used in making gold ornaments.

Digital Learning Environment for Design - www.dsource.in

Design Resource

# Gold Ornaments – Belgaum Gold represents Royalty, Purity and Wealth

Prof. Bibhudutta Baral, Divyadarshan C. S. and Shruti K.

NID Campus, Bengaluru

#### Source:

http://www.dsource.in/resource/gold-ornaments-belgaum/tools-and-raw-materials

- 1. Introduction
- 2. Tools and Raw Materials
- 3. Making Process
- 4. Products
- 5. Video
- 6. Contact Details



Readily available Soldering solution is used to assemble gold pieces.

Digital Learning Environment for Design - www.dsource.in

Design Resource

# Gold Ornaments – Belgaum Gold represents Royalty, Purity and Wealth

by

Prof. Bibhudutta Baral, Divyadarshan C. S. and Shruti K.

NID Campus, Bengaluru

#### Source:

http://www.dsource.in/resource/gold-ornaments-belgaum/tools-and-raw-materials

- 1. Introduction
- 2. Tools and Raw Materials
- 3. Making Process
- 4. Products
- 5. Video
- 6. Contact Details



Pieces of silver and bronze are soaked in soldering solution for soldering process.

Digital Learning Environment for Design - www.dsource.in

Design Resource

### Gold Ornaments - Belgaum

Gold represents Royalty, Purity and Wealth by

Prof. Bibhudutta Baral, Divyadarshan C. S. and Shruti K.

NID Campus, Bengaluru

#### Source:

http://www.dsource.in/resource/gold-ornaments-belgaum/making-process

- 1. Introduction
- 2. Tools and Raw Materials
- 3. Making Process
- 4. Products
- 5. Video
- 6. Contact Details

### **Making Process**

Traditionally, Jewelry making is a time taking and very intricate detail oriented process. Demand for well-crafted jewelry are always high in the market, by using advance technologies' some steps of jewelry making has been simplified, which has saved lot of time.

The designer prepares the sketch of a product which is converted into a blue print. Gold biscuits are melted in a crucible at 1000 degree Celsius and poured in a mold converting them into gold rods and run through a rolling miller to turn them into thin gold strips. The width of strips is measured using a gauge plate. The gold strips are fixed to the die machine where the machine gives form to gold strips/pieces of the required pattern and shape. These pieces are assembled together to form one piece of product. The pieces are soldered using sliver pieces dipped in soldering solution available in the market.

Gold articles are checked for alterations required after soldering process. Rough edges are filed and the surface is smoothened. Completed articles are washed in nitric acid and polished using machine, locally known as drum polishing machine which consists of small metal pins and polishing shampoo which runs for 20 to 25 minutes. The polished articles are weighed and packed for delivery.



Gold biscuits are placed in a crucible for melting.

Digital Learning Environment for Design - www.dsource.in

Design Resource

# Gold Ornaments – Belgaum Gold represents Royalty, Purity and Wealth

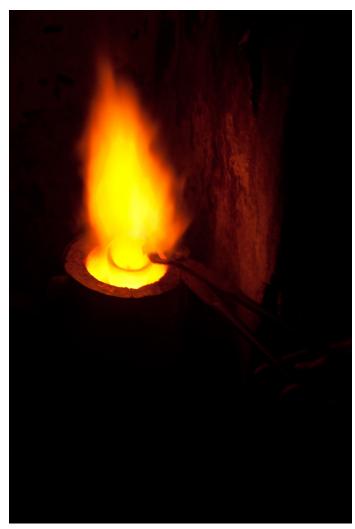
by

Prof. Bibhudutta Baral, Divyadarshan C. S. and Shruti K.

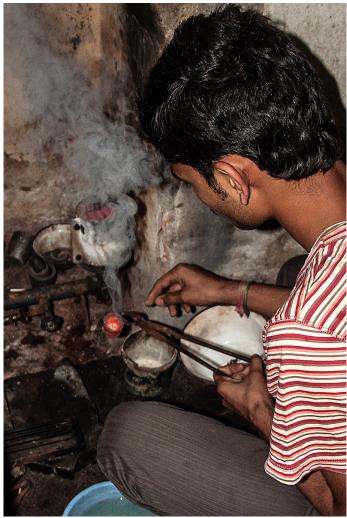
NID Campus, Bengaluru

#### Source:

- 1. Introduction
- 2. Tools and Raw Materials
- 3. Making Process
- 4. Products
- 5. Video
- 6. Contact Details



Gold biscuits are heated at high temperature in a crucible.



Molten gold is poured in a mould for converting them into thick gold rods.

Digital Learning Environment for Design - www.dsource.in

Design Resource

# Gold Ornaments – Belgaum Gold represents Royalty, Purity and Wealth

by

Prof. Bibhudutta Baral, Divyadarshan C. S. and Shruti K.

NID Campus, Bengaluru

#### Source:

- 1. Introduction
- 2. Tools and Raw Materials
- 3. Making Process
- 4. Products
- 5. Video
- 6. Contact Details



The thick rods are passed through rolling machine to convert them into strips.



The gold strips are further used in pressing (shaping) process.



Gold strips are inserted in the dye-pressing machine to cut into required designs.

Digital Learning Environment for Design - www.dsource.in

Design Resource

# Gold Ornaments – Belgaum Gold represents Royalty, Purity and Wealth

by

Prof. Bibhudutta Baral, Divyadarshan C. S. and Shruti K.

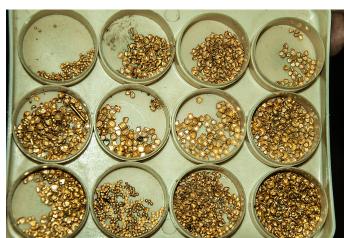
NID Campus, Bengaluru

#### Source:

- 1. Introduction
- 2. Tools and Raw Materials
- 3. Making Process
- 4. Products
- 5. Video
- 6. Contact Details



Heart shape pieces cut from the strip.



Varieties of designs are cut and stored.



Different design pieces are arranged together to form one article.

Digital Learning Environment for Design - www.dsource.in

Design Resource

### Gold Ornaments – Belgaum

Gold represents Royalty, Purity and Wealth by

Prof. Bibhudutta Baral, Divyadarshan C. S. and Shruti K.

NID Campus, Bengaluru

#### Source:

- 1. Introduction
- 2. Tools and Raw Materials
- 3. Making Process
- 4. Products
- 5. Video
- 6. Contact Details



Gas lamp is used to provide heat for soldering process.



The assembled pieces are soldered together.



The artisan checks gold articles for any changes to be made after soldering process.

Digital Learning Environment for Design - www.dsource.in

Design Resource

### Gold Ornaments – Belgaum

Gold represents Royalty, Purity and Wealth by

Prof. Bibhudutta Baral, Divyadarshan C. S. and Shruti K.

NID Campus, Bengaluru

#### Source:

- 1. Introduction
- 2. Tools and Raw Materials
- 3. Making Process
- 4. Products
- 5. Video
- 6. Contact Details



Liquid jewelry cleaner is added in the drum-polishing machine for cleaning and to remove impurities.



The machine contains of silver pins which rubs with the gold articles that helps to smoothen the rough edges and polish the articles.

Digital Learning Environment for Design - www.dsource.in

Design Resource

# Gold Ornaments – Belgaum Gold represents Royalty, Purity and Wealth

Prof. Bibhudutta Baral, Divyadarshan C. S. and Shruti K.

NID Campus, Bengaluru

#### Source:

- 1. Introduction
- 2. Tools and Raw Materials
- 3. Making Process
- 4. Products
- 5. Video
- 6. Contact Details



Final product of gold ornaments.

Digital Learning Environment for Design - www.dsource.in

Design Resource

### Gold Ornaments - Belgaum

Gold represents Royalty, Purity and Wealth by

Prof. Bibhudutta Baral, Divyadarshan C. S. and Shruti K.

NID Campus, Bengaluru

#### Source:

http://www.dsource.in/resource/gold-ornaments-belgaum/products

- 1. Introduction
- 2. Tools and Raw Materials
- 3. Making Process
- 4. Products
- 5. Video
- 6. Contact Details

### **Products**

Marriage and religious functions are major motivation in Indian culture for the use of traditional ornaments. The designs of the jewels are made according to the customers demand and different types of gold ornaments like as Jumki (earings), bendwali, necklace and rings etc. The ornaments are made both in traditional as well contemporary designs. The products have huge demand in Bagalkot and Belgaum districts and neighboring states as well. The most demanded products are Bendwali, Jumki, Matii, Mangalsutra and rings.



Pendant called as Thali (Mangalsutra) with goddess Lakshmi carved on it.

Digital Learning Environment for Design - www.dsource.in

Design Resource

# Gold Ornaments – Belgaum Gold represents Royalty, Purity and Wealth

by

Prof. Bibhudutta Baral, Divyadarshan C. S. and Shruti K.

NID Campus, Bengaluru

#### Source:

- 1. Introduction
- 2. Tools and Raw Materials
- 3. Making Process
- 4. Products
- 5. Video
- 6. Contact Details



Gold pendants of different designs are made in large number.

Digital Learning Environment for Design - www.dsource.in

Design Resource

# Gold Ornaments – Belgaum Gold represents Royalty, Purity and Wealth

Prof. Bibhudutta Baral, Divyadarshan C. S. and Shruti K.

NID Campus, Bengaluru

#### Source:

- 1. Introduction
- 2. Tools and Raw Materials
- 3. Making Process
- 4. Products
- 5. Video
- 6. Contact Details



Stunning gold pendants made of heart shape which is covered with an elaboration of swirl design.

Digital Learning Environment for Design - www.dsource.in

Design Resource

# Gold Ornaments – Belgaum Gold represents Royalty, Purity and Wealth

by

Prof. Bibhudutta Baral, Divyadarshan C. S. and Shruti K.

NID Campus, Bengaluru

#### Source:

http://www.dsource.in/resource/gold-ornaments-belgaum/video

- 1. Introduction
- 2. Tools and Raw Materials
- 3. Making Process
- 4. Products
- 5. Video
- 6. Contact Details

### Video



Gold Ornaments - Belgaum

Digital Learning Environment for Design - www.dsource.in

Design Resource

### Gold Ornaments - Belgaum

Gold represents Royalty, Purity and Wealth by

Prof. Bibhudutta Baral, Divyadarshan C. S. and Shruti K.

NID Campus, Bengaluru

#### Source:

http://www.dsource.in/resource/gold-ornaments-belgaum/contact-details

- 1. Introduction
- 2. Tools and Raw Materials
- 3. Making Process
- 4. Products
- 5. Video
- 6. Contact Details

### **Contact Details**

This documentation was done by Prof. Bibhudutta Baral, Divyadarshan C. S. and Shruti K. at NID Campus, Bengaluru.

You can get in touch with

• Prof. Bibhudutta Baral at bibhudutta[at]nid.edu

You could write to the following address regarding suggestions and clarifications:

#### **Helpdesk Details:**

Co-ordinator
Project e-kalpa
R & D Campus
National Institute of Design
#12 HMT Link Road, Off Tumkur Road
Bengaluru 560 022
India

Phone: +91 80 2357 9054 Fax: +91 80 23373086

Email: dsource.in[at]gmail.com