

G.I. APPLICATION NUMBER – 177

Application Date - 06-07-2009

Application is made by **Varanasi Glass Beads Manufacturers' Association**, D-20, Small Industrial Estate, Varanasi – 221002, Uttar Pradesh, India, facilitated by Export Commissioner, Uttar Pradesh Government, Export Promotion Bureau, PICUP Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow - 226010, Uttar Pradesh, India for Registration in Part A of the Register of **Varanasi Glass Beads** under Application No - 177 in respect of Glass Beads (Solid, Hollow & Fancy) falling in Class – 21 is hereby advertised as accepted under Sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

- A) Name of the Applicant** : Varanasi Glass Beads Manufacturers' Association
- B) Address** : Varanasi Glass Beads Manufacturers' Association,
D-20, Small Industrial Estate, Varanasi – 221002,
Uttar Pradesh, India
Facilitated by Export Commissioner, Uttar Pradesh
Government, Export Promotion Bureau, PICUP
Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow –
226010, Uttar Pradesh, India.
- C) Types of Goods** : **Class 21** – Glass Beads (Solid, hollow & fancy)
- D) Specification:**

The Handmade lamp-worked glass bead is a miniature work of art made of glass. The glass beads making is a handicraft with minimum intervention of hand held tools. The size, shape and design of a glass bead depend upon the specifications of the master glass bead in the beads catalogue. The market trend and demand decides the size, shape and design of the bead. Since this is an artistic work, no scientific parameters have been defined to be followed. However, technically the glass beads can be classified in the following three categories:

- i. Solid Glass Beads;
- ii. Hollow Glass Beads; and
- iii. Fancy Glass Beads.

The solid glass beads are mostly used in preparing artistic show pieces and ornaments. The hollow glass beads are used for ornaments, wall hangings, curtains and other such items. The fancy glass beads are used for embroidery, ornaments and other artistic items. The point-wise specification of Varanasi Glass Beads is as follows:

- i. The transparent, opaque and coloured glass beads are made using transparent, opaque and coloured solid glass tubes/sticks.
- ii. The glass beads may contain aluminium, silver or gold foil at the base or anywhere below the top surface of the glass bead.
- iii. The metal foil embedded glass beads may be opaque or transparent till the foil layer.

- iv. The objects made of metal, wood, plastic etc. may be used as embedded objects in a glass bead.
- v. The see through hole is formed of uniform diameter generally of small radius.
- vi. The glass beads are made in the flame of hydrocarbon oil fuel lamp.
- vii. The entire glass bead is made in the specified size, shape, colour scheme and design of the master bead.
- viii. The glass bead is complete handicraft work in which molten glass is rolled over a thick metal wire/stick of high melting point.
- ix. The hollow and glass beads of big see through holes are also made.
- x. The glass bead is an artistic work, so design appealing to the eyes is the only parameters for making new designs of glass beads.

E) Name of the Geographical Indication:

VARANASI GLASS BEADS



F) Description of the Goods:

Varanasi is well-known for many decades for glass beads making. The definition of bead is very wide it says anything having a through hole can be classified as a bead. Mostly beads are made of glass and are known as lamp-worked beads but it could be made of anything like metal, stone, ivory, ceramic, hide, bone, horn or even plastic. Glass Beads are used as decorative items in garland, hand band, ear rings, finger rings and beads are stitched in decorative manner on garments like jeans, tops, skirts, blouse and frock and to decorate anything like ladies purses, hand bags and other handicraft items and even bangles are made using beads.

Varanasi is well-known for its glass beads making. It contributes more than 75% of the glass beads exported from India. Firozabad, Purdilnagar (Hathras District) and Jaipur are the other beads making centres in India. The Firozabad and Purdilnagar glass beads are furnace made and therefore the through hole into the beads are quite broader to the Varanasi glass beads where the glass beads through hole is uniform and to the size of the metal stick over which it is made, which is quite narrow in comparison to the Firozabad beads.

In the local language Glass Beads are known as Moti (Pearl). Since it is a major centre of glass beads making, gradually beads of other material also developed to meet the market demand.

It is said that Varanasi is the home of more than three lakh designs of beads. The main types of glass beads include single colour crystal beads, Painted transparent and opaque glass beads, Animal Shaped Beads, Bumpy Dotted glass beads, Venetian

Beads, Millefiori Beads, Fancy Chip Flower Bead (Millefiori Bead), Bumpy Beads, Kashmiri Beads, Soft and bumpy dotted beads, Ceramic Beads, Murano Glass Rectangle Pendant, Silver foil beads, Finger Ring shaped glass beads in vivid colours, Prayer Beads and beads made of other material like horn and hide, metal beads in different shapes and decorative beads items like wall hangings, Necklace, Necklace Pendles and bangles. The huge collection of dyes at the beads making sites mutely witnesses the big range of the glass beads made at Varanasi.

The glass blocks, rods and tubes and ceramic colours are the main raw materials. A few establishments have started making glass blocks, rods and tubes at their own.

G) Geographical Area of Production and Map as shown in page no.: 13

Varanasi District, Uttar Pradesh lies at Latitude: 25° 18' 34.9" N and 25° 18' 46.1" N and Longitude: 82° 59' 18.9" E and 82° 59' 9.24" E.

Varanasi is a district head quarter in Uttar Pradesh. Besides Varanasi town, villages like Darapur, Kanakpur, Badagoan, Kuwarikala, Barthra, Mangari, Bikapur, Ahirabir, Jaigar, Sarangpur, Madhupur, Parasnagar, Ganguar, Mainudinpur, Nuranpur, Naipur, Naradi, Bhaipur, Adithnagar, Tanoi, Kanaksarai, Suswai, Varayma, Bhopapur, Lodaan, Nandapur, Gadishpur, Ramdathpur, Kasipur, Budhwapur, Padampur, Rakhwana, Tahara, Nooranpur, Lohra, Padampur, Pampapur, Gosaipur, Tiwaripur of Varanasi Tehsil are centres of glass beads making. Even the beads making craft persons are located outside Varanasi Tehsil in the Varanasi District and in the rural pockets of the adjoining districts.

H) Proof of Origin (Historical records):

The Glass History in India can be broadly classified into two classes with respect to glass beads; ancient and modern India.

Glass has existed in India since ancient times. Archaeological surveys have unearthed glass pieces and crucibles that can be dated back 2,000 years, in which glass was made near Basti in Uttar Pradesh. The Mahabharata makes a mention of glass, as does another ancient text, Yuktie Kalpataru, which talks of the effect of drinking water out of a glass tumbler to be the same as drinking out of a crystal cup. India has a long and distinguished history of making glass beads. The country's abundant and accessible supplies of a wide range of semi-precious quartz materials such as chalcedony, agate, onyx, jasper and rock crystal won it the reputation of a major glass bead centre. Evidence shows that by 1,000 BC, glass beads were being made in north India. Small drawn glass beads were a speciality, and seem to have originated in India, after which the craft spread to East Africa and South-East Asia through AD 1000.

The archaeological findings indicate that India seems to have played a role in early glass and stone production history. India is also believed to be the first to develop the method of creating gold and silver foil beads, which they exported all over the world.

With time the glass beads craft died in the ancient India to take rebirth in the modern India. In the late of the 1930's decade Mr Henrich from Czechoslovakia came to the Ceramic Engineering Department of Banaras Hindu University to conduct a diploma course in Glass Beads making. Mr Kanhiya Lal Gupta was one of those few students who enrolled and completed the diploma course. Mr Kanhiya Lal Gupta soon after completing

the course under the guidance of Mr Henrich, began the commercial making of glass beads for the first time in Varanasi in 1940. The venture was established in the name of Banaras Beads which is still the market leader in Glass Beads making. The modest beginning of glass beads at Varanasi gradually grew and today is a source of livelihood to thousands of craft persons who make glass beads even in their houses in and around the rusty villages of Varanasi.

(I) Method of Production:

Lamp-working is a technique applied in the beads glasswork that uses an oil fuel burner/torch to melt rods and tubes of clear and coloured glass. Once in a molten state, the glass beads are made shaping them with a variety of tools and hand movements. It is also known as flame-working or torch-working.

A glass bead craft person uses an array of flames originating from different burners of a lamp to heat glass rods to the extent that the glass rod starts melting. Then the craft person rolls the molten glass onto a metal stick on which chalk layer is pasted beforehand to create the basic shape of the bead. The craft person holds the glass rod in front of the lamp flames to let it melt from one hand and from the other hand keeps rotating the metal stick held in the other hand to let the molten glass rolled over the metal stick's chalk portion. The chalk layer helps in not getting the bead stick to the stick and to have a smooth and uniform diameter see-through hole. The craft person then, if required, melts additional colours of glass rods to add decorations ranging from fret to dots, flowers, stringers or other appendages. The coloured lines, dots, curves are made by thin sticks of coloured glass having diameter of around 2 mm. The making of Millefiori Beads is a two-step process. First the base is made and then glass chips are applied to a molten wound glass core and made into beads. Gold and Silver foils are used for making gold and silver foil beads. The gold or silver foil is wrapped around the chalk pasted metal stick and then transparent molten glass is rolled over it and given the desired shape of bead with the help of dye. The coloured beads could be either transparent or opaque. For making the transparent coloured beads, also known as crystal beads, first desired colour glass is rolled around the chalk pasted portion of the metal stick while maintaining the size and shape with the help of flat metal sheet and dye of the desired bead. Then a layer of transparent glass is rolled over the coloured glass, which makes the bead of single transparent colour. Another example of making glass bead is of silver foiled transparent glass bead in which zigzag lines appear in a stylized manner. For making such a colourful glass bead the process starts with tightly rolling over silver foil on the chalked portion of the metal stick. Then an around 2 mm thick desired colour solid glass stick is heated in flames to let it melt and with the help of the melted glass desired design is made over the silver foil rolled over the metal stick. Then transparent melted glass is rolled over the designed silver foil. Finally the proper shape is given to the rolled over glass of the desired shape bead with the help of the dye. Another example is designing over an opaque coloured glass bead with the help of around 2 mm thick solid coloured glass stick. Another popular type of glass beads is painted glass beads. For such beads first the glass beads of the desired shape is made. Then the outline of the design is made with the help of colour and then it is painted in the desired colours. Then finally the side at which the colouring was done, is painted in the background colour. The other side of the bead shows the design painted on the other side that becomes sparkingly brighter due to the background colour and appearance of the design art from the other side of the glass. In all the above examples the solid glass beads are made.

For making the hollow glass beads, mouth blowing process is adopted. The glass rods are melted in Pot Furnace at in the range of temperature between 500 °C and 600 °C by the fuel of wood. The molten glass is taken from furnace and rolled on a tip of an iron rod and pressed into the desired shape. As soon as the glass rod starts melting, a loath of the melted glass is collected at one end of the hollow metal tube. The craft person from the other end of the glass tube blows air from his mouth to give a shape to the melted loath of glass at the other end. Once the desired size is achieved by blowing, the final shape is given with the help of dye and then the bead is cut-off from the metal tube. The Fancy beads are made by using either of the process explained above.

Once the bead is complete, it needs to be annealed, or heated to about 900 degrees F and slowly cooled for having physical qualities like consistency, texture and hardness in beads. Usually a kiln is used for this process, which will help prevent the glass from cracking. The skipping of this process makes beads prone to breaking.

The master crafts person work on making new designs and shapes of beads and the final beads are placed in the catalogue to be replicated by the craftsmen on order. The catalogues are sent to the prospective customers for the bulk orders. The dyes beds are made of graphite because unlike metals it does not stick to melted glass.

Finally the process of lustring polishing, drum polishing facettted beads, table cuts are done to give desired shape and shine in matching shades to the glass beads.

(J) Uniqueness:

The following are the unique features of the Varanasi Glass Beads:

- i. Varanasi is the oldest Glass beads manufacturers' place in modern India;
- ii. Varanasi holds the biggest human resource of skilled craft persons for making glass beads;
- iii. Generally the size of a glass beads varies between half inch and three inches;
- iv. The see through hole is of narrow diameter ranging between 2mm and 5 mm. It depends of the diameter of the metal stick on which it is crafted. The narrow and uniform diameter hole is the distinct feature;
- v. The flames of only hydrocarbon fuel run lamps are used in glass beads making and no furnace is used;
- vi. The glass beads making is a complete handicraft where the intervention of held tools is minimal; and
- vii. No two glass beads are identical as they are made by hands only but even then have strikingly similarity.

(K) Inspection Body:

By an Office Memo of Export Promotion Bureau, Uttar Pradesh, an Inspection Body has been formed for the Varanasi Glass Beads for securing the Geographical Indication Registration. The following shall be the members of the Inspection Body:

Technical Member nominated by the Centre for Development of Glass Industries (CGCRI), Firozabad; Two local National/State Award winner expert craftsmen who would work in rotation of seniority for a year; and General Manager, District Industry Centre, Varanasi who shall work as a Convener.

The Inspection Body shall work under the coordination of Umbrella Organization for which Government Order 1273/18-4-2012-37 (Mis)/06 has been issued on July 2, 2012. The Export Promotion Bureau, U.P, shall be the Nodal Agency in this respect.

L) Others:

The Glass beads making is an artistic work for which minimum investment is required for tools. It can be done at anyplace like rusty villages. With the help of samples and raw material (glass rods) the craft persons make the glass beads in their home in rural areas. The Glass beads craft is a major source of gainful engagement for the agriculture work force in the lean sessions.

At present around 20,000 craft persons are engaged in glass beads making and 35,000 to 45,000 people in related commercial activities. There are around 8,000 micro units, 50 small units and 6 big units are involved in beads making in Varanasi area. Around 4,200 units are owned by women. The total annual glass beads production is around 105 crores out of which around 70% production is exported providing foreign exchange worth around 70 Crores. France, Spain, Italy, Belgium, Holland, U.K., Denmark and Germany are the main countries to which glass beads items from these units are exported.

GEOGRAPHICAL AREA OF PRODUCTION OF VARANASI GLASS BEADS



- JPN - JYOTIBA PHULE NAGAR
- GBN - GAUTAM BUDDHA NAGAR
- KRN - KANSHERAM NAGAR
- AMB - AMBEDKAR NAGAR
- SD - SIDDHARTH NAGAR
- SKN - SANT KABIR NAGAR
- KUS - KUSHINAGAR
- SRNB - SANT RAVIDAS NAGAR (BHADOHI)

- BOUNDARIES:**
- INTERNATIONAL..... ————
 - STATE..... ————
 - DISTRICT..... ————
 - TAHSIL..... ————
- HEADQUARTERS:**
- STATE..... *
 - DISTRICT..... *
 - TAHSIL..... *

सम्पादित / प्रमाणित
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उपायुक्त उद्योग
जिला उद्योग केन्द्र
वाराणसी



Geographical Area of Production of Varanasi Glass Beads

Varanasi District, Uttar Pradesh lies at 25° 18' 34.9" North Latitude and 25° 18' 46.1" North Latitude; and 82° 59' 18.9" E and 82° 59' 9.24" East Longitude.

Source: Administrative Atlas of India, Census of India, 2011