THE GEOGRAPHICAL INDICATIONS OF GOODS (REGISTRATION AND PROTECTION) ACT, 1999

FORM GI-1

C

A Single Application for the Registration of a Geographical Indication in Part A of the Register for the Goods falling in Different Classes

Section 11(3), Rule 23(5)

Fee: Rs. 15,000 (For three Classes @Rs 5000 per Class)

(Logo Mark without claim on colour combination)

KHURJA POTTERY

(Word Mark)

AMENDED APPLICATION

1. Application is hereby made by for the registration in Part A of the Register of the accompanying Geographical Indication furnishing the following particulars:-

NAME OF THE APPLICANT: Export Commissioner, Uttar Pradesh Government

ADDRESS: Export Promotion Bureau, PICUP Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow, Uttar Pradesh

NAME OF THE CO-APPLICANT: Khurja Pottery Manufacturers Association

ADDRESS: Industrial Estate, Behind CGCRI Building, G. T. Road, Khurja

LIST OF ASSOCIATION OF PERSONS/PRODUCERS/ORGANIZATION/AUTHORITY: A directory of pottery manufacturers published by the Central Glass and Ceramic Research Institute (CGCRI) is enclosed herewith. **[Annexure 8]**

TYPE OF GOODS:

Class 9: Scientific (Chemistry apparatus and instruments), Circuit Breaker, Circuit Closure, Electrical Insulators like electric insulators, Cable Insulators, Dielectric Insulators, Electric Main Insulators, Insulators, Railway Track Insulators, Electric Coil Holders, Connections for electric lines

Class 11: Apparatus for lighting (like Transformer Bushings, Pressed Electrical Porcelains, Apparatus/Hollow Bushings (Standard and Anti-Fog Design), Kit-Kat fuse up to 500 Amps, industrial ceramics), heating, steam generating, cooking sanitary utensils

Class 21: Ceramic for Household or kitchen Utensils, Crockery, Earthenware, Funnels, Porcelain ware, Pots, Flower Pots, Pottery, Statues of Porcelain & Terra-Cotta, Table Plates, Tableware (other than knives, forks and spoons), Teapots, Vases, Works of Art of porcelain, terra-cotta and containers (not of precious metal or coated therewith); Porcelain and Earthenware not included in other classes.

SPECIFICATION: The pottery ware specification depends upon the parameters followed and quality of raw material used, method of making *body* and raw material and method of glazing. Though the pottery goods classification is in scientific equipments, insulators and household tableware etc, the technical specifications depends on raw material used and baking time in furnace

The stones of clay provide good results if grinded to 200 to 240 mash.

The following are the body compositions for making tableware:

Type	Stoneware Clay	Quartz	Flux	Baking temperature in degree Celsius
1	40-50	20-25	15-25	1250-1280
2	50-60	15 25	25-35	1200

Stoneware Tableware Composition

Type	Clay	Quartz	Feldspar	Lime Stone	Biscuit Temp in degree C	Glaze bake temp in degree C
1	50-55	35-45	6-12	-	1280	1120
2	50-55	35-45	-	5-10	1080	980-1120
3	75-85	15-20	0-5		1160	960-1120

Tableware earthenware Body Composition

Type	Clay	Quartz	Feldspar	Baking Temp in degree C
1	35-60	20-40	15-25	1350-1450
2	43-66	12-30	18-33	1350-1450
3	40-60	20-40	20-30	1300-1400
4	25-35	20-45	30-40	1250-1350
5	25-34	11-45	30-55	1250-1350
6	12-15	15-25	75-81	1100-1200

Porcelain Tableware Body Composition

The inspection and selection of the raw material depends on sample scaling, moisture, percentage of grit, shrinkage, plasticity, presence free calcium and magnesium carbonate, clay colour before and after baking, dry clay elasticity, porosity and absorption potential, weight loss on baking of clay, nature of mashed clay particles, Feldspar melting point and chemical analysis of clay

The specification for tableware, scientific ware and electric items (insulators) differ only in body composition and baking temperature. The rest of the methodology most or less remains the same.

The following are the compositions for making chemicals for glazing:

Opaque Glaze (1200 ^{0}C-1250 ^{0}C)		**Transparent Glaze (1200 ^{0}C-1250 ^{0}C)**	
Product	**Percentage**	**Ingredient**	**Percentage**
China Clay	7	China Clay	6
Zircon	14	Zircon	*
Feldspar	46	Feldspar	56
Quartz	13	Quartz	17
Calcite	12	Calcite	13
Talc	2	Talc	*
Zinc Oxide	2	Zinc Oxide	2
Barium Carbonate	4	Barium Carbonate	6

The IS· 14179-1994 provides range of free led (Pb) in the glaze as follows:

Porcelain Crockery Ware	Presence of Led
Big Hollow Ware	1.5 mg/litre
Small Hollow Ware	4 mg/litre
Flat Ware	0.8 cubic decimetre

In the finished pottery the established standards are used. The warpage at edges and slop in flat ware should be within the following range as per specified in the IS: 14179-1994:

Grade	Warpage in mm	Slop
1	1.0	2^0
2	1.5	2^0
3	2.0	2^0

The IS: 14179 1994 provides range of Cadmium (Cd) dissolvability as follows:

Type of Porcelain Ware	Range of Cadmium
Big Hollow Ware	1.5 mg/Litre
Small Hollow Ware	4.0 mg/Litre
Flat Ware	0.8 mg/decimetre

The Impact and Chipping Resistance should be within the range as follows:

Crockery	Impact Power		Chipping Resistance	
	Type 1	Type 2	Type 1	Type 2
Cup, Mug, Sugar Pot and Milk Pot	0 22	0.25	*	*
Tea Pot, Coffee Pot and Bowl	0.25	0.30	0.22	0.28

In the Porcelain Crockery Ware the water absorption should be less than 0.3%. There should be no change in glaze of the crockery of detergent and citric acid. The Crazing Resistance in type 1 and type 2 should be 5 and 3 rounds respectively for bearing the pressure of 5 Kg/Cm^2 for an hour. The thermal shock resistance in the all kind of crockery ware of type 1 and 2 should be of 120 ^0C temperature difference five times.

NAME OF THE GEOGRAPHICAL INDICATION [AND PARTICULARS]: '<u>Khurja Pottery' Word Mark with Logo without claiming the colour combination</u>.

DESCRIPTION OF THE GOODS: The Khurja Pottery can be classified broadly into three classes, i.e., electrical goods, scientific goods and kitchen, tableware and decorative items. Khurja is the biggest ceramic goods manufacturing centre in India and is known as pottery city. Khurja is famous for its white wares and pottery for over six hundred years. Presently a large number of workers, artisans, technologists and scientists are engaged in the development and manufacturing of white wares like Crockery wares, table wares, artistic wares, sanitary wares, high tension (HT) and low tension (LT) insulators, high end electric and electronic instruments ceramic parts including Transformer Bushings (Standard and Anti-Fog Design), Pressed Electrical Porcelains, Apparatus/Hollow Bushings (Standard and Anti-Fog Design), Kit Kat fuse up to 500 Amps, industrial ceramics, chemical porcelain, bone china ware etc The common feature of almost all the products is ceramic. The insulators made in Khurja can be further classified as 11 KV Pin Insulator, 11 KV Post Insulator, 22 KV Pin Insulator, 22 KV Post Insulator, 33 KV Insulator, 33 KV Post Insulator, 45 KN, 70 KN & 90 KN Disc Insulators (Standard and Anti-Fog Design), Guy or Strain Insulator, LT Pin Insulator and LT Shackle and Spool Insulator **[Annexure 9]**

The ceramic ware can be classified into the following categories

i. Terra-cotta: The terra-cotta wares are made of common clay which on baking becomes red These wares are baked at relatively low temperature and are without glaze. The porosity of terra-cotta ware is around 8%.

ii. Earthen Ware: The earthen wares are made of white and common clay and are coated with glaze layer. The porosity of earthen wares is less than

8% and are within the range of 0.2 to 0.22 Nm impact power. Hence are prone to cracking, crazing and pealing.

iii. Stoneware: White clay made and glazed wares are known as Stoneware. The Stoneware are baked on comparatively higher temperature and have physical properties of impact capacity 0.28 Nm and less than 3% water absorbing capacity. Stoneware are of relatively stronger and of lesser porosity to the above categories

iv. Vitreous China Table Ware: These are fully baked, made of white clay and holding physical properties of less than 0.5% porosity and impact capacity in the range of 0.22 Nm to 0.25 Nm.

v. Porcelain Tableware: This class wares are made of pure China Clay, Quartz and Feldspar. This class of ware hold the physical properties of virtually zero porosity, higher thermal absorbance and endurance. These goods are baked at relatively higher temperature to the other ware classes. **[Annexure 2]**

There are four hundred and eighty (480) small scale industries (SSI) engaged in pottery manufacturing. These units are generating annual revenue of Rs one hundred and eighty (180) crores and are generating revenue of forty five (45) crores from pottery exports. These units are providing direct employment to over 29000 artisans and 17500 workers and artisans indirectly. U.K., France, Japan, Germany, Australia, Nepal and Turkey are the major countries where pottery items from Khurja are exported. **[Annexure 1]**

According to the relevant data extracted from the data published by *Capexil* (formerly known as Chemicals & Allied Products Export Promotion Council) a sponsored agency by Ministry of Commerce & Industry, Government of India, in the years 2006 and 2007 the exports in ceramics and allied products including refractories was as per following table **[Annexure 7]**:

Description	Exports in the Year 2006 (Rs in Millions)	Exports in the year 2007 (Rs in Millions)
Insulators	2162.1	2447.2
Ceramic Products n.e.s.	759.4	874.2
Potterywares	454.9	576.7
Roofing tiles	22.3	15.5
TOTAL	**12169.8**	**13109.4**

GEOGRAPHICAL AREA OF PRODUCTION AND MAP: Khurja Sub-Division of Bulandshahar District, Uttar Pradesh. The manufacturing units are spread all across the Khurja town

Khurja is the largest ceramic goods manufacturing place in India and is known as Pottery City. **[Section I, Annexure 5]**

The Latitude and Longitude of Khurja sub-division of the Bulandshahar district are 28°,25' N and 77°, 85'E respectively. **[Annexure 3]**

A Certified Copy of Map of Bulandshahar District/Khurja is enclosed herewith **[Annexure 6]**.

PROOF OF ORIGIN [HISTORICAL RECORDS]: The history of blue pottery can be traced to the third century BC as it shows Persian influence with blue colours and designs which may be due to the trade relation with Persia. Another reason for the Persian influence should be the invasion by Alexander (326-325 BC). The meaning of Khurja in the local language means waste land The history of Khurja date backs to over 600 years when some potters' families moved from Delhi to Khurja during the reign of Mohammed-bin-Tughlak. They started with red pottery and gradually introduced blue glaze on red clay articles with *engobe* (paste of clay) of white clay, painting floral designs with cupric oxide and applying a soft glaze containing glass and borax. **[Annexure 4]**

The *Pottery Vigyan Parichay* in the *Khurja Pottery Udhyog* chapter informs that in the fourteenth century when Tamoor Lung was returning back to his home country he permitted his soldiers to stay back in India There were artisans from Egypt, Syria, Turkey and Paris in the Tamoor's army who were expert in making red clay pottery Many of them stayed back in India and settled in Jaipur, Multan and Khurja. These artisans use to make red clay pottery and pasting white clay paste over the red clay pottery. Then they use to make art over the pottery before putting glaze of borax and glass over it. Finally the pottery was baked in fire. They were invited to make a presentation of their art in London. In 1934 Prof H N. Bose was deputed by the Uttar Pradesh Government to work on white clay in Khurja During this period the Uttar Pradesh Government established a pottery unit at Khurja to make tea sets, jars, urinals and dispensary pots for the Government and army. This unit was closed due to poor quality of goods in 1946 After Second World War this unit was revived. Meanwhile Government sent Dr T N. Sharma **[Photograph 14]** to Japan for advance research in Ceramics technology. After completing the studies Dr Sharma returned to India in 1955 He advised the Government that from local raw material also porcelain matching Japanese porcelain can be made using the latest machinery and technology. The indefatigable contribution made by Dr Sharma established the modern Khurja Pottery industry He is known as father of Khurja pottery. **[Annexure 2]**

The mention of Khurja Pottery is also found in the ***Indian Art at Delhi 1903*** written by George Watt [ISBN No: 81-208-0278-0], published by Motilal Banarsidass, which is a Catalogue and Guide to the Indian Art Exhibition held at Delhi 'to coincide with the Delhi Darbar of 1902-03'. The book says that *originally Khurja produced a peculiar style of pottery of its own, the patterns being raised by the use of slip into slight relief. It consisted of a warm orange brown or pale claret coloured field with slightly darker floral designs picked out in white and* *blue. A little later it took to producing the same style of work in a rich green-blue [. .] Nowadays both Rampur and Khurja manufacture articles in quaint shapes such as the undulated forms of the pumpkin, the constricted melon (beggar's bowl) and the flat water bottle, etc.* **[pages 90 and 93, Annexure 10]**

With the advancement in technology the coal based down draft Kilns have been replaced by oil based shuttle and tunnel Kilns. There are 22 shuttle Kilns and 110 tunnel Kilns in Khurja pottery industry Besides that there are over 20 electric Kilns for decorative pottery ware and 550 down draft Kilns. **[Annexure 2]**

METHOD OF PRODUCTION: The raw material used in pottery industry at Khurja is mostly different types of clays as mentioned below under the categories of plastic and non-plastic raw material. These raw materials are not available locally and are imported from different parts of the country. In addition to the clays different types of chemical compounds like Zinc Oxide, Barium Carbonate, Boric Acid **[Photograph 11]**, Dolomite **[Photograph 12]**, Zircon, Copper Oxide, Cobalt Oxide, Ferrous Oxide and Magnesium Oxide are also used for glazing and colouring the pottery

The raw material for pottery can be classified into two classes, i e. (a) Plastic Raw Material and (b) Non-Plastic Raw Material.

a. Plastic Raw material consists of all those clay which are used in the pottery making. The main clays are Raj Mahal Clay **[Photograph 7]**, Bikaner Clay **[Photograph 8]**, TT 75 Clay **[Photograph 9]**, China Clay, Ball Clay, Calcite **[Photograph 10]** and Fire Clay

The following are description of the main plastic raw materials:

i. China Clay **[Photograph 1]**

The chemical formula of China Clay is $Al_2O_3\ 2SiO_2\ 2H_2O$

The Chemical composition of China Clay is as follows.

Alumina (Al_2O_3)	=	39.8%
Silica (SiO_2)	=	46 3%
Water (H_2O)	=	13.9%

Fine China Ware making needs best quality China Clay. Fine China Clay is used mainly for making porcelain ware, Low and High tension insulators and technical ceramic.

ii. Ball Clay **[Photograph 2]**

The main characteristic of the Ball Clay is its high elasticity. The ball clay becomes vitreous at 1350 ^{0}C but does not change its shape. The main components of ball clay are SiO_2, Al_2O_3, Fe_2O_3, TiO_2, CaO, MgO, K_2O, Na_2O and LIO. The per cent composition depends upon the place of origin but SiO_2, Al_2O_3 and LIO are the main components. The Ball Clay is found in Kerala, Rajasthan, Andhra Pradesh, Gujarat, Bihar, Madhya Pradesh and Tamil Nadu.

iii. Fire Clay

Fire Clay can bear very high temperature and are mainly found below coal mines. The Fire Clay is used to make high temperature bearing bricks. The chemical composition of the fire clay consists of SiO_2, Al_2O_3, Fe_2O_3, TiO_2, CaO, MgO, K_2O, Na_2O and LIO.

b. Non-Plastic Raw Material used in the pottery industry consists of Quartz, Potash Feldspar, Silica Sand, Pyrophylite, Bone Ash, Talc and Wollastonite.

i. Quartz **[Photograph 3]**

Silica Oxide (SiO_2) is the main component (>99%) in the chemical composition of Quartz. The other compounds are Al_2O_3, Fe_2O_3, TiO_2, CaO, MgO, K_2O, Na_2O and LIO.

ii. Feldspar **[Photograph 4]**

Feldspar constitutes around 60% of the mineral composition of the fire clay rocks. Feldspar is of three kinds, namely Soda Feldspar (Na_2O Al_2O_3 $6SiO_2$), Potash Feldspar (K_2O Al_2O_3 $6SiO_2$) and Lime Feldspar (CaO Al_2O_3 $2SiO_2$) Potash Feldspar is mainly used for making body composition of pottery. Soda Feldspar is used for glaze in pottery.

The melting point of Feldspar lies between 1130 ^{0}C and 1200 ^{0}C.

iii. Pyrophylite

Pyrophylite is a soft and smooth natural mineral of white colour matching physical property with talc The chemical composition of Pyrophylite is K_2O $3Al_2O_3$ $6SiO_2$ H_2O The presence of Pyrophylite in the body composition provides the quality of bearing sudden temperature change to the pots made using it.

iv Bone Ash

Bone Ash is made of animal bones **[Photograph 5]** and it's chemically known as Tri Calcium Phosphate (Ca_3 $(PO_4)_2$). It is mainly used in making bone China Porcelain pottery.

v Talc **[Photograph 6]**

Talc holds white colour, soft & silky in touch and specific density between 2 7 and 2.8 cm/gram physical characteristics. Talc is also known as Steatite and Soap Stone. The chemical composition of Talc is $2MgO$ $4SiO_2$ H_2O.

vi. Wollastonite

Wollastonite is a natural mineral which is in chemical form Calcium Silicate (Ca SiO_3). In Wollastonite Calcium Oxide (CaO) and Silica Oxide (SiO_2) exist in 48.25% and 51.75%. It is used in making both glaze and body. In fast baking bodies Wollastonite plays a major role to improve the quality of the body.

Preparing the material for Shaping

The natural stones like quartz and Feldspar are grinded fine powder in a Ball Mill **[Photograph 36]** Clays which are soft do not require hard grinding and can be loaded directly in the blungers **[Photographs 92 and 93]** for mixing clays in powder format with water and making its paste. The *body* (the prepared clay for making pots) is prepared in two stages In the first stage the stone marerials are finely grinded and clay is mixed in the Ball Mill. In the second stage after proper milling the slurry is unloaded in the Agitator/Blunger. Then Filter Pressing Machine **[Photographs 94 and 95]** is used for removing excess water from the slurry. The output of the Filter Pressing Machine comes in the form of Clay cakes **[Photograph 96]** in which the moisture contents remains between 20% and 25%. The soluble salts are removed from the body which goes out through the excess water removal process The filter cakes are then sent to the Pug Mill **[Photographs 97 and 98]** for pugging. The pugging is a process by which the uniform moisture content in the whole body mass is ensured.

The ceramic wares are shaped by one of the following three methods **[Section II, Annexure 5]**:

i. Slip Casting;

ii. Jigger Jolly; and

iii Pressing

i Slip Casting: In this process the body is made in the form of suspended slip. The dyes **[Photograph 15, 16, 17 & 18]** and moulds **[Photograph 19]** are made of Plaster of Paris. The wares are casted in these Plaster of Paris moulds. Before pouring in slip, a layer of the mixture of mustered oil, detergent and water is pasted inside portion of the moulds **[Photographs 20 & 21]**. The suspended slip is poured in the mould **[Photograph 22]** The mould sucks the moisture when left in open to get dry As the pot gets dry it starts loosing the contact with the mould surface, which makes it easier to pull out the pot from the mould **[Photographs 23 to 28]**. The newly carved out pots are placed in sun for a day or two for further drying. After that, if required, the carving on the outer surface, if any, is made sharper with the help of a sharp edge object **[Photograph 29]**. Then the pots are smoothly cleaned with wet foam to make the outer surface smooth **[Photograph 30]** The most of the porcelain scientific instruments **[Photographs 100, 101 and 102]** and equipments are made using the Slip Casting method. In electrical equipments cut outs **[Photograph 91]** are made using the Slip Casting method

This method of carving pots is very slow but effective in making complicated shapes like toys and statues.

ii. Jigger Jolly **[Photograph 31]** This method is faster in comparison to the Slip Casting method but limited to give shape to hollow, round and flat wares. The hollow and flat wares like cups, mugs, flower pots etc are made using this method. Plaster of Paris moulds are used in this method also to give the outer shape to the wares. The *body* (the material used for making pots) is filled into the mould The mould filled with the body is placed upon the jolly (which is the rotating horizontal surface at an even pace). The desired shape is achieved by attaching the desired profile (blade to cut-off body in a particular fashion) to the jigger The cut-off body is peeled-off from the mould and the mould remains with the portion of body required for making the pot in its final shape **[Photographs 32, 33 & 34]**. The pot inside the mould is left for getting dry. The Plaster of Paris sucks the moisture of the moulded pot and thus helps in getting the pot dry faster. The pot shrinks a bit and becomes loose in the mould, thus could be easily pulled out of the mould **[Photograph 35]**.

There is another advance type of Jigger Jolly **[Photograph 63]** for carving out electrical insulators **[Photographs 64 and 65]**. A spindle is one of the specialities of the Jigger Jolly used for carving out insulators from a loaf of clay body. A hydraulic press jigger is the other speciality of this kind of jigger jolly machine. The Body is speared from the centre into the spindle and then the horizontal platform is electrically rotated at an even pace The back arm attached to the profile is connected to the copying machine **[Photographs 66 and 67]** which decides the movement of the profile on the clay body to cut off the undesired clay to give the body desired shape of an insulator **[Photographs 68 to 72]**. Then a rod is put inside the hole created by the spindle in the carved out insulator to make the hole uniform diameter and to make a cut of the desired size on the upper surface of the insulator **[Photographs 73 and 74]**. The electrical insulators for both low and high tension are made **[Photographs 75 and 76]**. The carved out insulators are left in open to get dry **[Photograph 77]** and after that the insulators are rub with soft hands with the help of wet foam to make the outer surface smoother **[Photograph 78]**. Then the insulators are dipped into the dark brown colour liquid to colour its outer surface **[Photographs 79 to 83]**. For dark brown colour Ferric Oxide (6%), Chromium Oxide (4%), Alumina (40%) and Zinc Oxide (50%) are used. The top and of the insulator is rubbed on an even rough surface to clean the colour from it **[Photograph 84]**. The stone particles are pasted on the portion of the outer surface of the insulator from where the insulator is to be tightened to hold it **[Photograph 85]**. Then after drying the insulators in dark **[Photograph 87 and 88]** they are baked in kiln and then tested piece wise as per BIS and ISO standards **[Photographs 89, 90 and 91]** before getting packed for sell.

iii Pressing: The ceramic body is used in granular for making the wares by pressing method **[Photographs 57 to 62]**. This method is limited to giving shape to round and flat wares like kit-kat fuse etc.

Colouring and Designs on Wares

If some colour is required to be made over the ware or some designs are to be made by colours, the same is made either just after properly drying the wares or after putting on a layer of glaze **[Photographs 37 to 41]**. Even the trademarks are made at in this process only **[Photograph 42]** on the pots. A rotating table is used for colouring the round wares [**Photographs 43 to 46**].

Glazing the Wares

The dried wares are glazed before putting in kiln for firing. The wares are glazed by dipping and spraying methods. In the dipping method the pots are dipped in to the vessel containing the glaze in liquid form to put the layer of glaze on the wares. In the spraying method either the spray is used or a device which pumps the glaze liquid in the forms of small droplets to reach out the inner portions of the wares with a little force **[Photographs 47 to 51]**. Glaze is a thin layer of glass which is coated on the dried wares for making the wares impervious, mechanically stronger, hygienic and aesthetic in appearance The glaze can be divided into transparent and opaque glaze. The transparent glaze is known as SF glaze in which a thin paste of China Clay and stones is used. When Zirconium (Zr) is mixed in the SF glaze, the glaze becomes opaque. The SF glaze is used to make the designs and colours painted over the wares visible after firing in kiln. Even when the SF glaze is placed on the coloured/ designed painted pots, the designs/colours get disappear as if the glaze was opaque **[Photographs 52 and 53]**; the colours/coloured designs emerge even brighter after baking the pots in kiln.

Firing Wares in Kiln

There are three types of kilns used for firing the ceramic wares:

i. Down Draft Kiln: This is traditional fired with coal kiln. This takes a week time to complete one firing cycle. These are high in energy consumption and poor on environment parameters. This class of kilns are in process of getting replaced by better kilns.

ii. Shuttle Kiln **[Photograph 54]**: It generally completes one firing cycle in 20 to 25 hours This is comparatively energy efficient kiln This class of kilns are suitable for firing the wares requiring high temperature firing. After firing it requires to be cool down to the room temperature for unloading the wares. Therefore the productivity of this kiln is low.

iii. Tunnel Kiln **[Photographs 55 and 56]**: Tunnel kilns are much more energy efficient continuous type kilns. This is the most modern kiln in Khurja Pottery industry. This class of kilns are very useful for firing crockery wares, artistic wares, insulators, porcelain scientific wares, kit-kats etc. The wares are loaded on the kiln furniture and then the ware loaded furniture is loaded upon the trolley. The trolley is pushed inside the tunnel at fired at the desired temperature Since the trolley moves at a pre-set speed inside the tunnel at pre-set and controlled varying temperatures, more than one trolleys can be passed inside the kiln and thus improve the energy efficiency

The pots after the glazing are put on the furniture of the trolley and the trolley is send inside the kiln The baked pots come out the kiln after the pre-set time in sparklingly bright colours **[Photograph 99]**.

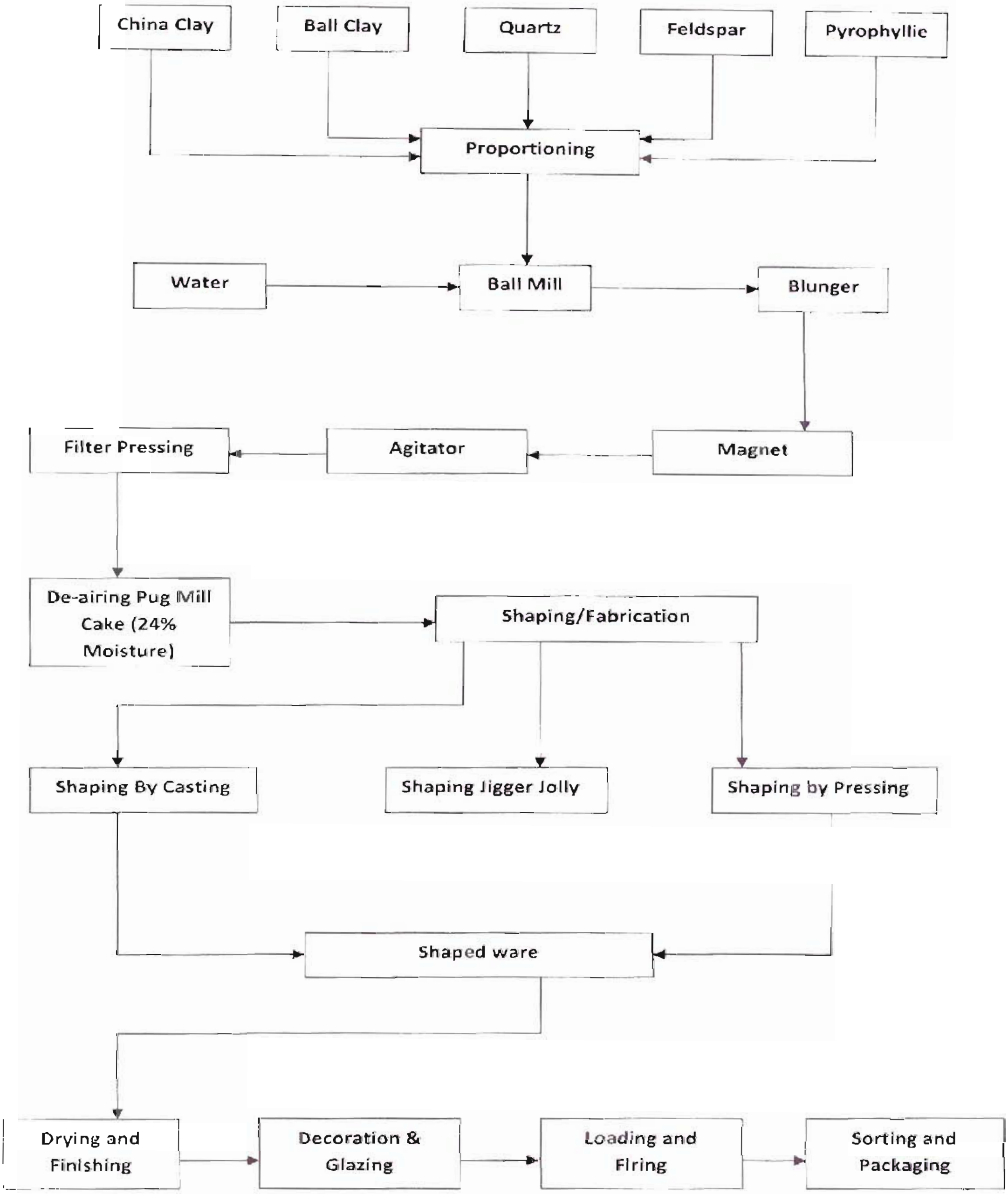
Sorting, Quality Control and Packaging

Sorting as per the set quality standard norms is done on the fired wares and the selected wares are packed for delivery.

The above-explained method is same for all classes of goods. It is only raw material selection, body composition and baking temperature differentiation in making different product lines of different classes.

Flow Chart for manufacturing process of Ceramic ware

[p 12, Annexure 5]



UNIQUENESS: It is a well-established fact that consistent practice brings perfection. The same applies to Khurja pottery industry It is an old but consistently sustaining and growing confederation of manufacturers, artisans, workers, raw material suppliers, R&D institute (CGCRI) and necessary machinery suppliers which has its navel at Khurja.

The Khurja pottery manufactures and artisans have secured mastery in making almost all kind of goods which can be made from clay. Mastery over a vast product line in itself a uniqueness. The mastery over craft has resulted in good quality products winning recognition and acclamation among buyers. This recognition has been several times highlighted at the national level by winning national award by the Khurja pottery industry members.

The ceramic pottery manufactures usually make one or a few products lines at a time, whereas Khurja industry process all kind of product ranges running simultaneously. This can be evident from the kiln trolley over which wares of different shapes and size are loaded for firing **[Photograph 13]**. Maintaining the different product lines simultaneously without losing on quality points and maintaining the economic viability is perhaps the biggest strength of Khurja Pottery industry. The transmission of pottery craft knowledge from one generation to the next generation has developed a vast pool of human resource of ceramic craft artisans who adapt easily the technology up-gradation.

INSPECTION BODY: The quality of pottery can be assessed at each level of its making process. The quality of raw material, chemicals for colours, glaze & base material and the finished ware all can be scientifically tested at the Central Glass and Ceramic Research Institute (CGCRI) situated at Khurja as per Indian Standard (IS), BIS and ISO norms. The Pottery Development Centre of U P Government has testing and certifying facilities for insulators and State Electricity Boards of various States depend on the testing facilities and certificates of the Pottery

Development Centre before buying insulators. There are Government Officials and Government agencies to enforce the laws related to labour and environment. More provisions for the maintaining the quality, standards, reputation and goodwill of the products and safeguarding the environmental and artisans interests are proposed and are expected to take shape in the time ahead.

OTHER: The Khurja pottery industry is the biggest and centuries old in its class in the country. The Khurja Pottery industry fulfils the requirements for both the national and international markets The class, range and quality like parameters depending on various market forces

Along with the Statement of Case in:

Class 9: Scientific (Chemistry apparatus and instruments), Circuit Breaker, Circuit Closure, Electrical Insulators like electric insulators, Cable Insulators, Dielectric Insulators, Electric Main Insulators, Insulators, Railway Track Insulators, Electric Coil Holders, Connections for electric lines;

Class 11: Apparatus for lighting (like Transformer Bushings, Pressed Electrical Porcelains, Apparatus/Hollow Bushings (Standard and Anti-Fog Design), Kit-Kat fuse up to 500 Amps, industrial ceramics), heating, steam generating, cooking and sanitary utensils; and

Class 21: Ceramic for Household or kitchen Utensils, Crockery, Earthenware, Funnels, Porcelain ware, Pots, Flower Pots, Pottery, Statues of Porcelain & Terra-Cotta, Table Plates, Tableware (other than knives. forks and spoons), Teapots, Vases, Works of Art of porcelain, terra-cotta and containers (not of precious metal or coated therewith); Porcelain and Earthenware not included in other classes;

in the names of Fxports Commissioner, Uttar Pradesh Government whose address is Export Promotion Bureau, PICUP Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow (Uttar Pradesh) and Khurja Pottery Manufacturers Association having registered office at Industrial Estate, Behind CGCRI Building, G. T. Road, Khurja who claim to represent the interests of the producers of the said goods to which the geographical indication relates and which is in continuous use since in respect of the said goods.

2 The application shall include such other particulars called for in rule 32(1) in the Statement of Case. **[Annexure 11]**

3 All communications relating to this application may be sent to the following address in India

Intellectual Property Lab

2/11, Vishwas Khand-2, Gomti Nagar,

Lucknow – 226010, U.P.

Email: mail@iplab.in

Phone: +91-522-2309704

Fax: +91-522-4078338

(Amended) dated this 03 day of April 2010

Lucknow

Rahul Dutta
Agent for the First Applicant