

GLASHÜTTE LAMBERTS



THE ART OF MAKING GLASS



Glashütte Lamberts

The Glashütte Lamberts

The Glashütte Lamberts in Waldsassen, Germany is one of the few remaining production sites of handcrafted, mouthblown sheet glasses in the world. Know-how and superior craftsmanship have been cultivated and carried on for generations. The bond with the tradition of glass making is the fundamental reason for the success of Glashütte Lamberts.

Original Lamberts glasses are highly regarded by professionals worldwide. Variety, quality, brilliance and body are characteristics unique to Lamberts glass.

Genuine Antique Glasses, Restoration Glasses, Reamies, Crackles, Flashes, Streakies, New Antique and Table Cathedral Glasses as well as Rondels, are made in traditional glass making methods and are the guarantee for first quality Lamberts flat glass.



An architectural landmark – the production hall of Glashütte Lamberts with its beamed and filigreed roof construction. Originally designed in the 19th century as an agricultural exhibit in Nurnberg, the building was moved to Waldsassen in 1907.

The Glass Production

The production process of all original Lamberts sheet glasses begins with the mixing of the glass batch. Quartz sand, soda and lime are the most important basic ingredients. Colors are determined through the addition of metal compounds such as iron, copper, silver and even gold. The Lamberts palette of glasses offers more than 5 000 varieties to choose from.

The actual process of glass making begins after the batch has melted and reached approximately 1 450° C. Depending on the final product, the glowing pot of glass will be blown into large balloon shapes, formed into small round pieces or cast and rolled on a special table.



The basic ingredients of glass are quartz sand, soda and lime.

Through the addition of metallic oxides, an infinite variety of color can be produced. It is the art and experience of the glassmelt master to formulate the proper mix.

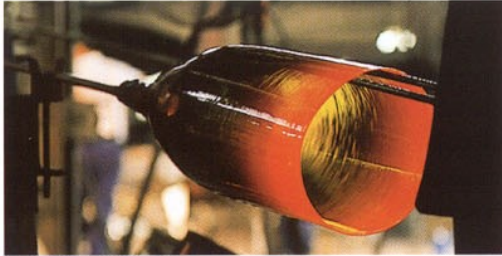


The Genuine Antique Glasses

Genuine Antique Glasses are mouthblown sheet glasses. This description encompasses glasses which are made in the traditional method of glass making. Solid color glasses, flashed, streaky glasses and reamy glasses are examples for Genuine Antique Glass.



The molten glass is removed from the furnace at the end of a blowpipe and is slowly blown into a balloon shape. The pulling, pushing and spinning in the form creates the typical surface structure known as "Hobel".



The glowing balloon shape is cut open at both ends, dilated and formed into a cylinder.

After the gather of glass is removed from the furnace, the molten mass will be blown out into large balloon shape. The balloon will then be cut open and dilated at both ends to form a glass cylinder. After a cooling phase, the cylinder is scored and cracked along its length, reheated once again, opened and ironed out into a flat sheet.

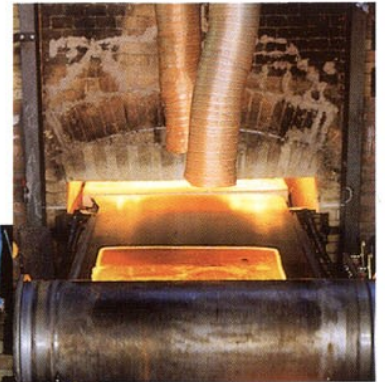


After scoring and cracking the cylinder lengthwise, the glass is once again reheated, layed open and ironed out into a flat sheet.

The Table Cathedral Glasses

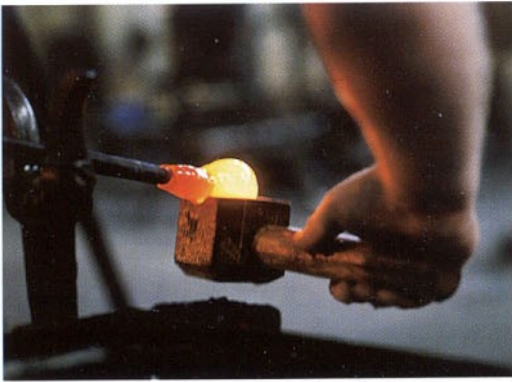
A ladle of molten glass is poured onto a special table and rolled under a metal cylinder to produce a flat sheet of glass. It requires a lot of experience and sensitivity to obtain the desired structure.

The sheets of glass are slowly cooled in a special annealing lehr to prevent tension from forming within the glass. Through this process first class cutting and workability are insured.



The molten glass is poured and rolled into a sheet. The typical surface structure of the glass is a result of the difference in temperature between the hot glass and the cooler surface of the metal table.





A small amount of molten glass is removed from the oven and shaped into a small blister.

Genuine Rondels

Molten glass is taken from the furnace with a blowpipe and blown out into a small bubble. This viscous ball is rotated with the help of special shears to make a round sheet.

Since the Middle Ages, well into the beginning of the 20th century, rondels played an important part in the glazing of private homes, as well as public buildings.

Rondels are generally used in leaded work and help create a beautiful, filigreed window.



Thereafter the blister is opened, and turned into a small, round sheet.

The Variety

The variety of original Lamberts Antique Glasses is practically unlimited. More than 5 000 colors and tints, differently structured glasses, as well as a special process of superimposing several layers to form Flashed Glasses are just three examples of the variations possible.

Genuine Antique Glasses are essentially used in glass art.

Traditionally in church windows, but more and more in private as well as public buildings the beauty and brilliance of Lamberts Antique Glass is admired.



Genuine Rondel

Brilliance, structure, body and individuality of glasses made in the traditional glassmaker methods are unsurpassed.



Genuine Antique Glass

Mouthblown and handmade table glasses differ vastly from mechanically made substitutes.



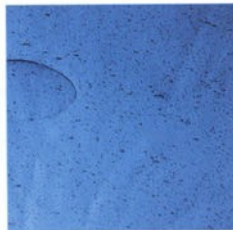
Streaky Glass

Individual production, solving of the most intricate problems and dialog with the customer are the strength of Glashütte Lamberts.

Application of Genuine Lamberts Table Glass is practically unlimited.



Flashed Glass



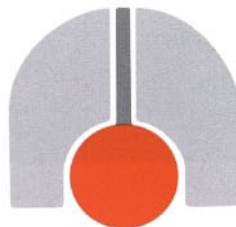
Reamy Glass



Table Cathedral Glass

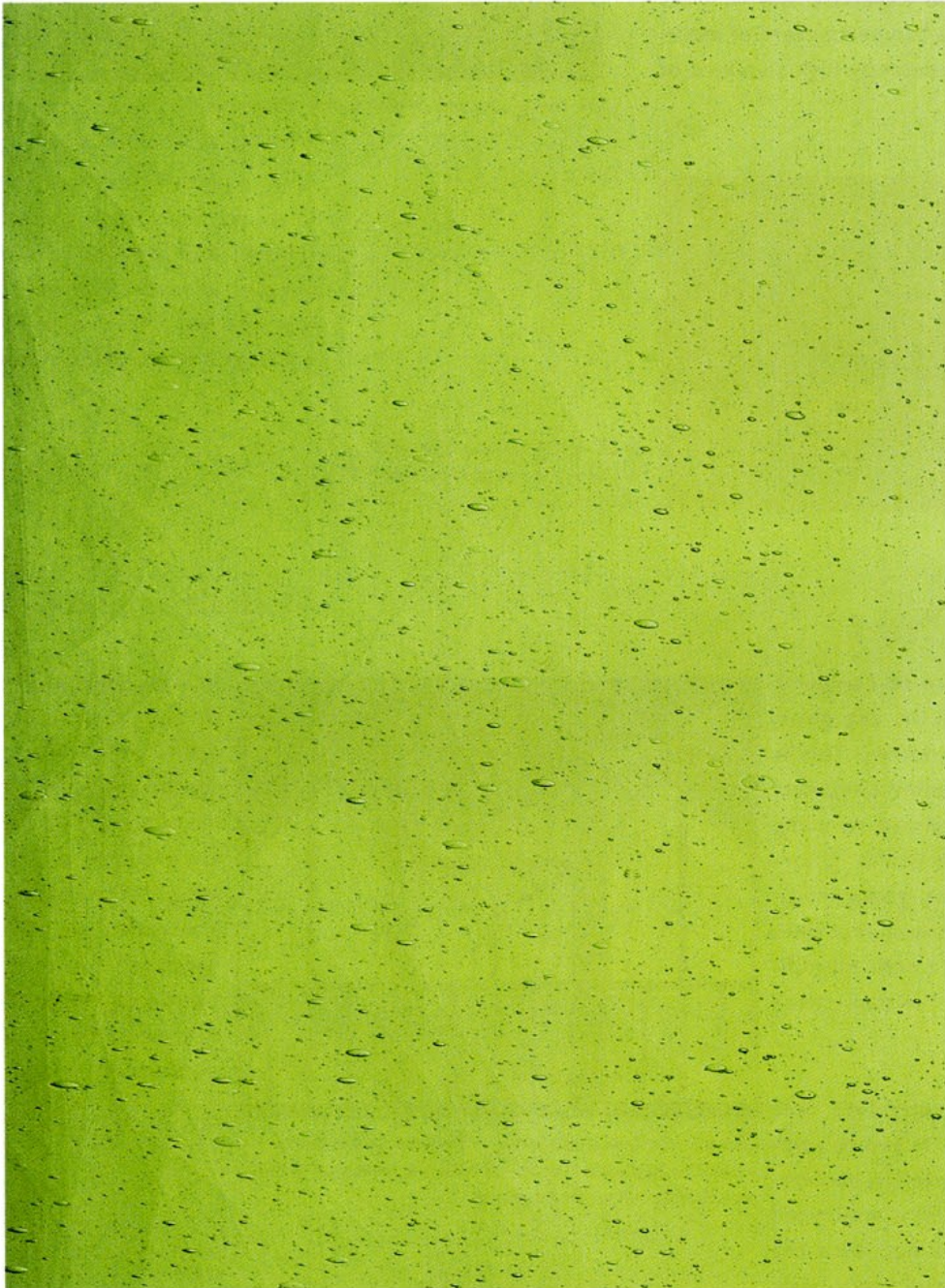


Cracked Glass



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Lamberts

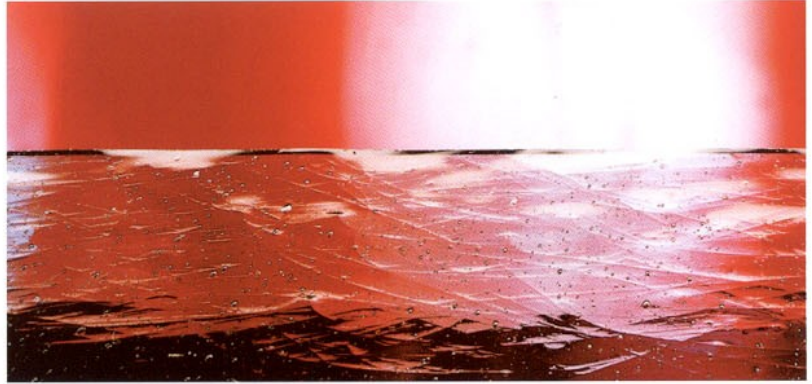
GENUINE ANTIQUE GLASS



Glashütte Lamberts

Genuine Antique Glass

Genuine Lamberts Antique Glass, made in the mouthblown method, is the finest example of the successful continuation of the centuries old glass making tradition. The brilliance, variety and structure of these precious sheet glasses can only be obtained through this production method. The technical expertise and skill acquired over Glashütte Lamberts years of experience assure the consistently high standard of its production.



The typical structure (Hobel) is easily discernible



Small bubbles (known as seeds) are one of the most important characteristics

Characteristic features of Genuine Antique Glass are the pronounced yet subtle structure (Hobel) and the small round, sometimes oval bubbles or seeds. Exposed to light, these Genuine Antique Glasses display their inimitable transparency, brilliance and body.

Applications

There is no substitute to Lamberts glass for application in art glass, church or secular windows. This is the reason why Genuine Lamberts Antique Glasses decorate so many windows around the world. Churches, mosques, banks, government and office buildings as well as private homes are beautified by the magnificent play of color within these glasses.

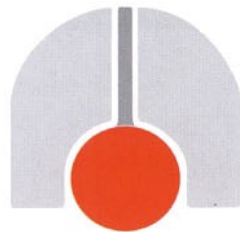
The conscientious, meticulous care given individual projects assure solutions to the most demanding requirements. The practically unlimited color selection combined with the various glass types fulfill every wish.



Glas art – the typical application of Genuine Antique Glass. In addition to the great variety of color, the subtlest of shading may be obtained within the sheets.

Technique and Colors

Individual sheets are approx. 3mm ($\frac{1}{8}$ ") thick and measure approx. 60x90 cm (24" x 36"). Genuine Antique Glasses can be made in all imaginable colors. More than 5 000 color combinations are available at Glashütte Lamberts – a far greater selection than any other glassmaker can deliver. The excellent handling characteristics of Genuine Lamberts Antique Glasses literally predestine them for use in complex and demanding installations.



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A box of approx. 200 of the most popular Lamberts colors is available as a guide for color selection. For custom colors please send your samples or descriptions.

FLASHED GLASSES



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Flashed Glasses

These carefully mouthblown glasses are not colored throughout their mass. They attain their coloration through the "flash" technique of glass blowing. One or more colored glasses are applied to a clear or colored base glass referred to as the "carrier glass". This method creates a practically unlimited variety of



A Doubleflash: Blue and Opak White on Clear glass. It is easy to see that the glass is not colored through the mass, instead the colored "flashes" lie on top of the colorless "carrier" glass.

glasses. Multicolored glasses, glasses with or without shading, gently shaded, cloudy or torn – all may be produced using this method. White "milk" glasses, available in dense "opak" or translucent "opal" densities obscure views but allow light transmission.



Shaded flashed, Red on Clear



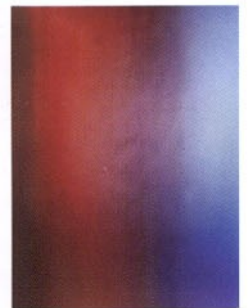
Torn open flash, Red on Clear



Torn flash, Blue on Clear



Multicolored combination flash glass



Gently shaded flash, Red on Blue

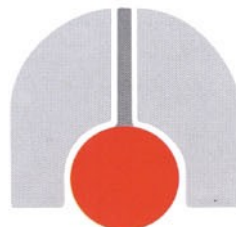
The Production

The first step is to pick up the molten flash color with the blowpipe. The shape of this initial gather determines the final appearance of the flashed glass. A round balloon results in even flashing throughout the sheet, a pear shape gentle shading and a "notched" mass creates the "torn" appearance. The base color glass is then gathered over the beginning flash color gather and blown out into cylinder shape. Throughout the process, the glassblower must consider the final intended appearance of the flash. After the blowing of the cylinder, the steps of production are identical to those of Genuine Antique Glass.

The precise control of form and color of the flash requires considerable experience as well as the skilled craftsmanship of the glassblower.

Technique and Colors

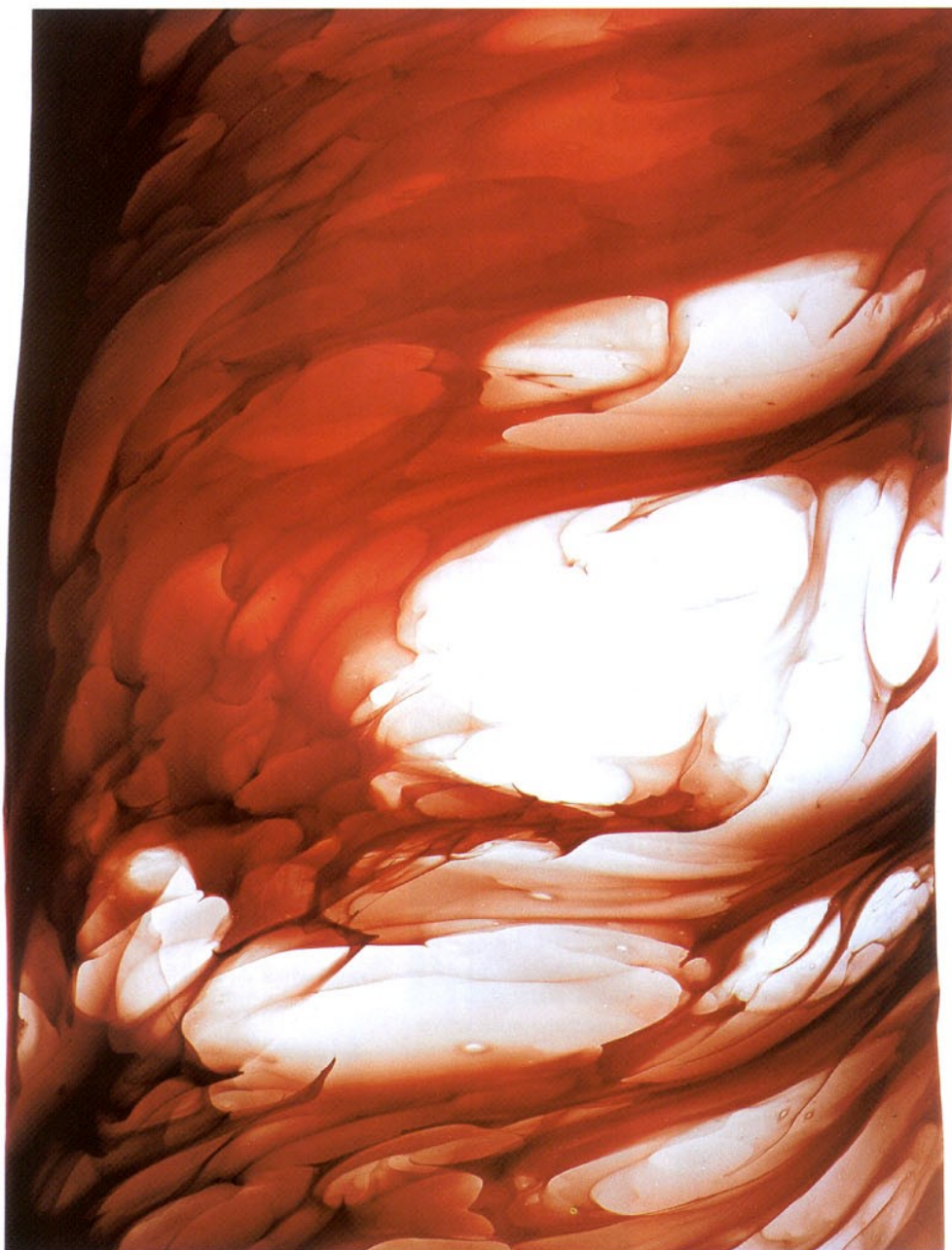
The average sheet size is approx. 60 x 90 cm (24" x 36"), thickness approx. 3mm (1/8"). The sheets are shipped with their natural, untrimmed edges. Due to the special annealing process, Lamberts' Flashed Glasses display excellent cutting characteristics and are easy to work with.



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Flashed Glasses are practically limitless in appearance and color variation. Classifications are: lightly shaded, cloudy shading and torn as well as multicolored flashes and streaky glasses.

STREAKY GLASS



Glashütte Lamberts

Streaky Glass – each sheet a work of individual craftsmanship



Above picture: The glass is blown into a ball-like form, cut open and flattened into a sheet.

Right picture: Luminous colors, brilliance and body are the essential characteristics of Lamberts Genuine Antique Glass.

Lamberts streaky glasses display a quality only achieved through the centuries-old art of glassblowing. Every sheet created by this ancient process is a work of art displaying individual character – no two sheets are alike! Living colors of unsurpassed brilliance give this glass its incomparable flair.

Our illustrations can only hint at the subtleties of movement and play of color within the actual glass sheets. They are to be used only as a general guide for your selection of these glasses. The color number represents a glass that will display a similar character, color, structure and movement from one sheet to the next. However, the painstaking methods of production bring individual variations into every sheet of this unique glass.



Streaky Glass – Varieties

Unfortunately, even modern printing technology does not allow us to illustrate the subtle distinctions between “opak” (dense), “opal” (translucent) and transparent. Therefore please pay close attention to the color descriptions. Sheets average 24”x36” (60x90 cm) and are approx. 1/8” (3mm) in thickness.



S 4
Lemon-yellow and opak white on clear



S 6
Green and opak white on clear



S 12
Lemon-yellow and opak white on clear



S 13
Special-yellow and opak white on clear



S 17
Opak white on clear



S 18
Violet and opak white on clear



S 19
Blue-opak and selenium-red on clear



S 20
Selenium-orange, blue-opak and opak white on clear



S 25
Lemon-yellow, selenium-orange and opak white on clear



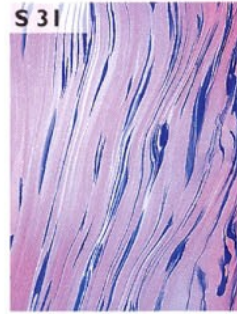
Selenium-red, selenium-orange and selenium-yellow on clear



Red on clear



Selenium-yellow on clear



Goldpink and blue on clear



Goldpink and opak white on clear



Green-opal on clear



Selenium-orange on clear



Selenium-orange and opak white on clear



Pale violet and opak white on clear



Grey and opak white on clear



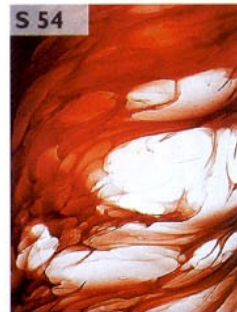
Red and opak white on clear



Waterblue and opak white on clear



Goldpink and opak white on clear



Red and opak white on clear



Blue and opak white on clear



Opal white on clear



Green-grey and opak white on clear



Blue-opak and opak white on clear



Selenium-red on clear



Special-yellow and blue on clear



S 244
Blue, red and selenium-yellow on clear



S 245
Silver-yellow and violet on amber



S 247
Green and yellow and violet on brown



S 258
Blue on turquoise



S 259
Blue on clear



S 269
Red and blue-opak on green



S 277
Selenium-red and opak white on clear



S 282
Grey-violet and opak white on clear



S 300
Goldpink on clear



S 324
Blue on blue



S 383
Goldpink, red and blue on clear



S 419
Yellow and green on clear



S 622
Goldpink, blue and yellow on clear



S 652
Goldpink and silver-yellow on clear

Variegated and Graduated Glasses

The color combinations pictured in the V- and G-series are interchangeable and may be ordered in either the V-variegated or G-graduated style. Also available in the color-combinations: opak white on clear (V/G 64), red on green (V/G 158) and opak white on grey (V/G 166).



G 157
Red on blue graduated



V 159
Red on amber variegated



V 160
Red on clear variegated



G 161
Blue on clear graduated



V 191
Opak white on amber variegated

RESTORATION GLASSES



Glashütte Lamberts

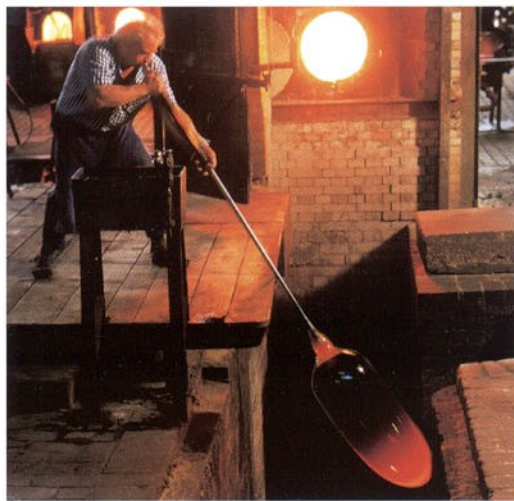
Restoration Glasses

Original Lamberts Restoration Glasses are specially intended for the renovation of historic structures, old homes and antique furniture. Like all glasses of the Glashütte Lamberts, Restoration Glasses are individually handcrafted in the traditional mouthblown method. For true restoration of historic buildings and homes, these products have no equal.



View through "Full" Restoration Glass with heavier distortion.

"Light" Restoration Glass, with less distortion.



The glassblower swings the glowing ball of the "Light" Restoration Glass over a deep pit.

The Production

Restoration Glasses are mouth-blown like the genuine antique glasses. "Light" Restoration Glass is blown and swung over a deep pit allowing a larger cylinder to be produced.

It requires a great deal of experience, know how and strength to work the large, glowing balloon of glass in smooth, even movements in order to create a uniform sheet of glass.

Specifications and Colors

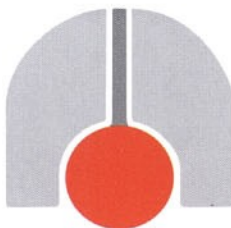
Restoration Glasses are available in two styles: Full Restoration and Light Restoration

The "Light" Restoration Glass is available in sizes up to 90 x 105 cm (36" x 41") and is approx. 2mm ($\frac{3}{32}$ ") thick. The "Full" Restoration Glass has a more intensive movement in the glass. This glass has an approximate size of 60 x 90 cm (24" x 36") and is approx. 3mm ($\frac{1}{8}$ ") thick. As a rule, these glasses are clear (colorless) however, on request any color can be made.

Both glasses may be used in insulated glass units. These glasses are outstanding to cut and work with because of the special cooling methods employed during production.

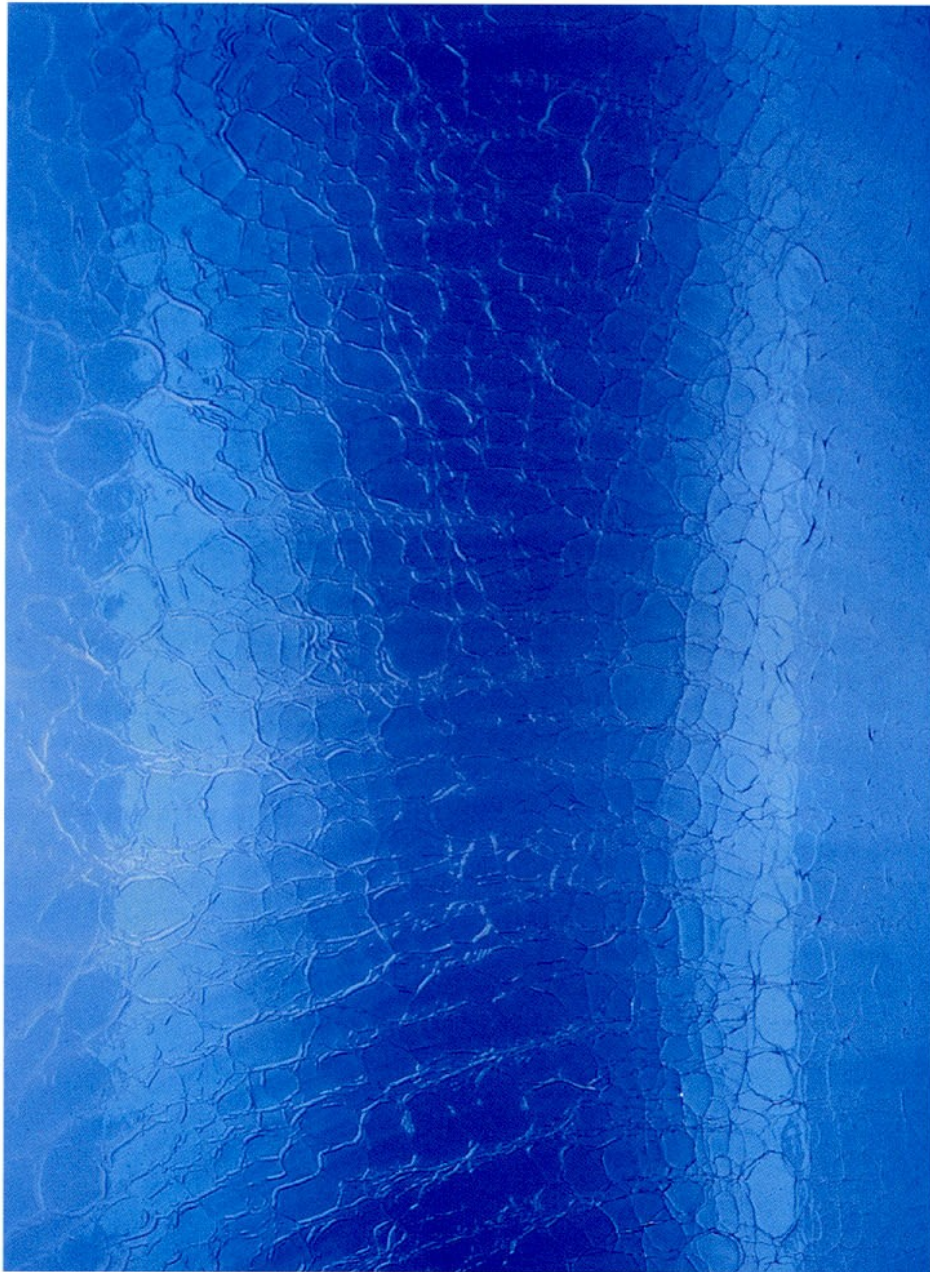


Schleissheim Castle, near to Munich, restored with Lamberts Restoration Glass.



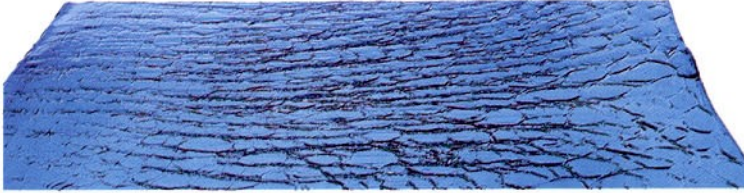
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CRACKLED AND REAMY GLASS



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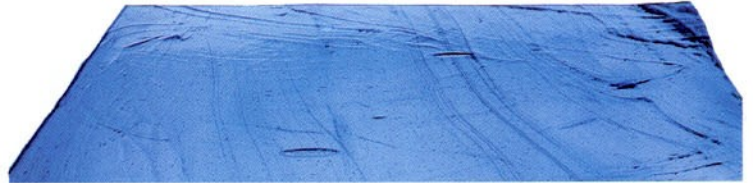
Crackled Glass



The mouthblown Crackled Glass (front page and above) differs from regular antique glass because of its crackled surface finish resembling alligator skin.

Reamy Glass

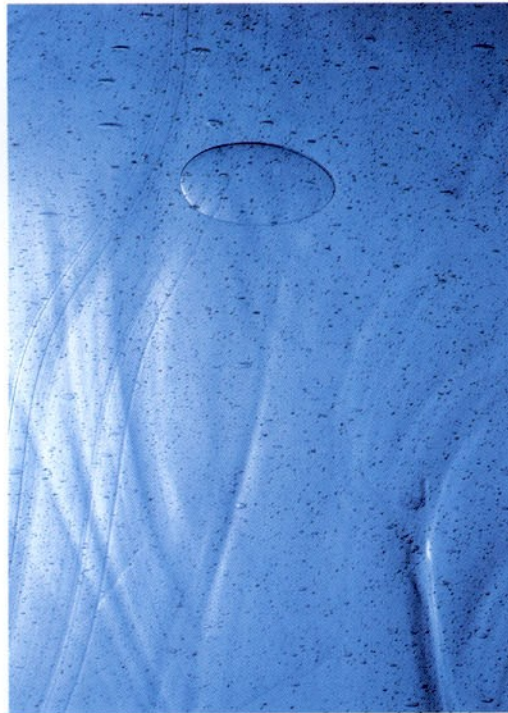
The Reamy Glass (pictured below) is a mouth-blown variation of Genuine Antique glass displaying pronounced, fluid motion throughout the sheet.



The Production

The **Crackled Glass** is blown into a glowing balloon-shaped ball of glass which is briefly plunged into cold water. The sudden temperature shock causes small fissures to appear in the surface of the glass. The glass is then reheated to close the fissures. The characteristic structure varies in appearance. Please note that sometimes small, sharp areas on the surface are unavoidable.

The very pronounced texture of the **Reamy Glass** is obtained by the addition of glass shards to the molten glass shortly before the first gather of glass is taken from the pot. The rest of the production is almost identical to that used for genuine antique glass.



Reamy Glass with strong movement in the glass and an "ox-eye" in the upper section.

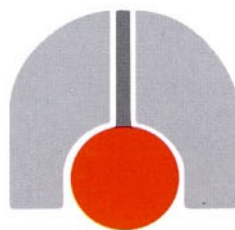
Colors and Specifications

Usually both glasses are produced in clear or light tints in order to show their texture to best advantage. However, almost any color can be produced to meet the customer's requirements. The Reamy Glass may be also varied by adding or removing the large air bubbles known as "ox-eyes".

Sheet sizes are approx. 60x90cm (24" x 36"), thickness approximate 3 mm (1/8"). All sheets are shipped with their natural edges (not squared off). Slight variations in size are to be expected because of the handmade production

Applications

Both glasses are often used in door and window openings where light and privacy are desired. They are also used effectively in the furniture industry.



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NEW ANTIQUE GLASSES



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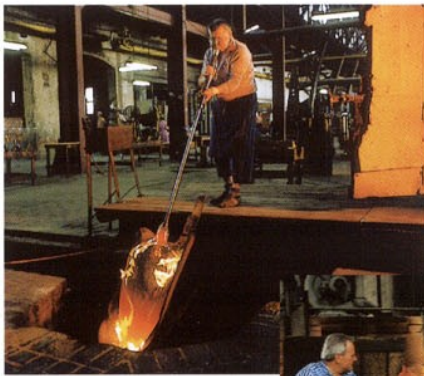
New Antique Glasses

The New Antique Glasses are part of the family of mouthblown glasses made in traditional method. They are blown larger than Genuine Antique glasses therefore making them thinner, smoother and flatter than Genuine Antique. The bubbles (seeds) are irregular and somewhat elongated (oval) in shape.

All the typical characteristics of mouthblown antique glass – structure, seeds and movement are nicely pronounced making this glass a good, economical variation of mouthblown glass.



Here it is easy to recognize the bubbles (seeds). They are well pronounced but uneven in size and placement as compared to Genuine Antique Glass.



The Production

The molten glass is removed from the oven with the blowpipe and slowly blown out into a balloon shape. The process must take place over a deep pit

because of the size of the glass balloon. Throughout the blowing process, the glass balloon must be spun in a form thereby creating the surface structure. After reaching the desired size, one end of the balloon is opened. It is broken off the pipe to create the final cylinder shape. The cylinder is scored and cracked down its length, reheated, layed open and ironed flat into a finished sheet.



Top: The blowing of the molten glass takes place over a pit.

Middle: The balloon is opened at one end.

Bottom: Examination by the glassmaster prior to breaking off the blowpipe.

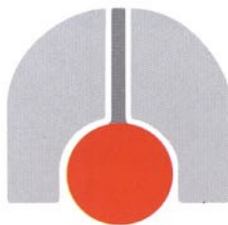
Specifications and Colors

Standard size is approx. 100 x 110cm (39" x 43"). Thickness is approx. 2mm ($\frac{3}{32}$ "). Bubbles vary within the sheet and are elongated (oval) in shape. A special cooling process makes these glasses easy to cut and very workable.

They are produced in clear and 10 light tints. The clear New Antique is offered in three degrees of seediness: light, medium and strong.

Applications

New Antique glasses are used as an alternative to regular window glass wherever windows or doors are to be upgraded. This glass is specified primarily for the private home market.



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TABLE CATHEDRAL GLASS



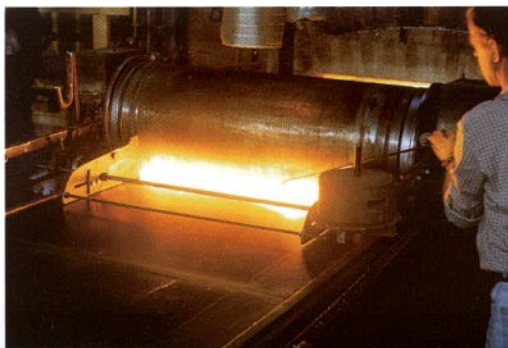
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Table Cathedral Glasses

After mouthblown antique glasses, table cathedral glass is the second traditional method of flat glass production. So named because glass is rolled out onto a table, and its earliest application was intended for the glazing of churches and cathedrals.

Table cathedral glass has two different sides. The fire polished side is brilliant with a smooth to slightly wavy surface. The table side is a hammered finish. Areas of "crimping" are a tell-tale sign of the handmade manufacture of this product.

Original table cathedral glasses are of the same high quality as all other glasses made in this leading factory. The originality, brilliance and structure of table cathedral glasses can only be attained through the thorough understanding of this traditional, handcrafted technique.



For table cathedral glass molten glass is poured onto a steel table and rolled flat.



The Production

A quantity of molten glass is taken from the furnace, poured onto a special steel table and rolled out under a cylinder. Neither table nor roller lend structure to the glass. The typical surface structure of Lamberts table cathedral glass is created strictly by the temperature loss between the molten glass and the cool steel table and the consistency of the glass itself.

Specifications and Colors

Standard sheet sizes are approx. 60 x 88 cm (24" x 34") but can be produced as large as 88 x 180 cm (34" x 70"). Thickness is approx. 3mm ($\frac{1}{8}$ "). A special annealing process makes Lamberts table cathedral glasses extremely easy to cut.

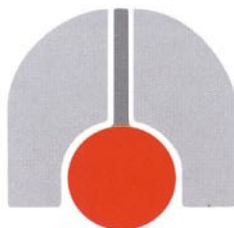
Traditionally these glasses are made in pale and off-white tints. Special colors can be made per customer's request.



The hammered structure of Lamberts table cathedral glass is easy to recognize. The lower part of the sheet shows a typical crimped area.

Applications

Most of these glasses are used for new work as well as restoration of churches and windows.



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GENUINE RONDELS



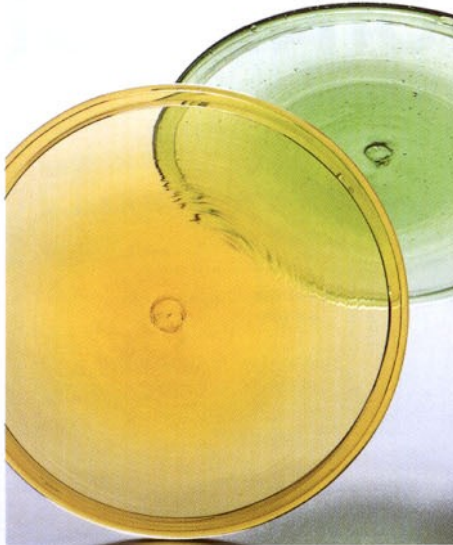
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Genuine Rondels

Glazing of windows with small, round pieces of glass was very common in the Middle Ages in private homes as well as public buildings. In old towns, some of these windows, set in lead channels, may still be found in sensitively restored buildings.

Genuine Rondels are produced one by one at Glashütte Lamberts in the traditional mouth-blown method. Every rondel is a unique piece – brilliant and alive, setting it apart from pressed or cast imitations.

Glazed in lead, rondels display the harmonic play of color and light bringing life into the window.



Technique and Colors

Genuine Rondels are made in approx. 6 – 12 cm ($2\frac{1}{2}$ " – $4\frac{3}{4}$ ") sizes. Variations in diameter of ± 0.5 cm ($\frac{3}{16}$ ") are inevitable because of the individual handmade production. The thickness will also vary within one piece. The heavier center, call the navel (which at times may be sharp) is approx. 5 mm ($\frac{3}{16}$ ") thick with the surrounding glass approx. 2–3 mm ($\frac{1}{8}$ ") in thickness.

Rondels are traditionally produced in clear or pale colors. Production of special colors to the customer's specifications is also possible.

Two Genuine Rondels. Note the easily recognizable typical structure – "the navel" in the middle and the natural lip around the edge.

The Production

Molten glass is taken from the furnace with the blowpipe. The amount of the glass gather determines the eventual size in the rondel. The molten glass is blown out into a small bubble. The circumference of the bubble is the second important factor determining the final size to be produced. The production of a uniform, high quality rondel depends on the skill and experience of the "rondelmaster". The small, still hot ball of glass will now be attached to a pontil rod and broken from the blowpipe. After reheating it is opened with a pair of shears. Using a special technique the rondelmaster then folds the edges, lending strength to the rondel, making it more workable. Spinning the glass, a small, round rondel is formed. After reaching the desired size, the rondel is tapped off the pontil rod and slowly cooled in the cooling oven.



At first a small gather of glass is taken from the oven –

this will be blown, opened and spun into a rondel.

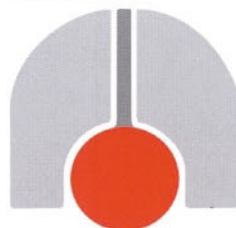


The characteristic navel, caused by breaking the glass off the blowpipe, as well as the folded edge, are unmistakable signs of a genuinely mouthblown rondel.

Applications

For the correct restoration of old rondel windows there is no substitute for Genuine Rondels. They are also widely used in new windows.

Single rondels may be installed in doors as points of interest and are also attractive in lamps.



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