

## ***Crafts, professions of excellence***

### **GLASS MAKING**

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**Workshop: Glass making Josef Tomšej**

Glassmaking in the Czech Republic has a strong tradition that dates back centuries. The country has had two important periods in glassmaking history: one in the 16th century when glass became competitive with German and Venetian glass, and another in the 20th century when Czechoslovak glass was known for its large-scale production and technological innovation.

As Czech glassmakers improved their craft during the Middle Ages, so did the material they worked with. Thanks to technological advancements, Czech glass became a sought-after product during the Alpine Renaissance. It gained a reputation equal to that of the famous Venetian glass, which is still considered the pinnacle of the glassmaking profession.

During the reign of Rudolf II, Czech glassmaking experienced a true renaissance. New technologies and processing techniques emerged, influenced by the knowledge of Italian masters. Czech engraved and cut glass became renowned, with cutting as a decorative technique primarily used on natural stone in glyptic form (especially carving into mountain crystal). Its utilization in glassmaking was unparalleled.

Czech glassmaking continued to develop, introducing new possibilities and approaches to this unique material. The reputation that Czech glass earned during the Renaissance has rightfully persisted to this day. In the modern history of glassmaking, the Czech Republic holds an integral place, with many Czech glass artists being world-class leaders in their fields. The technologies often developed or significantly improved by Czech glassmakers and glass artists are widely used around the world and enjoy great popularity (such as molten sculpture, sculptural approach to cutting, etc.).



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Tracing the origins of glass as a craft is not an easy task. The most frequently mentioned theory suggests that Egyptian glassmakers began processing glass more than 3000 years before our common era. Their technology was significantly different from what we envision as glassmaking today. Ancient glassmakers were unfamiliar with the blowpipe, and their glass was opaque and often deeply colored. Their production consisted exclusively of small objects and vessels, primarily intended for the wealthiest and most powerful members of ancient Egypt.

A major turning point in glass history was the discovery of the blowpipe, attributed to the Phoenicians around the 1st century BCE. The glassblowing technology quickly spread and completely revolutionized glass production. Not only did it streamline the manufacturing process, but it also enabled glassmakers to create larger objects. From that moment on, glassmaking became an integral part of many cultures, adorning ceremonial tables throughout history. Whether adorning the homes of Roman patricians, banquets of medieval kings, or enhancing the atmosphere of contemporary presidential residences, glass has played a significant role.

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Glass, like any other craft material, was influenced by technological possibilities as well as contemporary trends. It is through the historical development of glass that we can observe the paths taken by applied art throughout the ages. From simple Gothic vessels with minimal decoration, through intricate Renaissance and Baroque forms, to the sophistication of Art Nouveau and the strictness of functionalism. This holds true to this day. Glass in various forms remains a permanent element that complements our surroundings. Glass, shaped by modern designers, is an inherent part of our culture. It is evidence of how we have achieved a material so sophisticated that it is not only our practical companion every day but also a medium for artistic ideas and a bearer of the latest trends in modern design.



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The job requirements for glassblowers can vary depending on the specific area of glassmaking they specialize in. Skills such as working with fused sculpture, glass blowing, glass pressing, turning glass into plate material, and glass cutting are all important in

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different aspects of the industry. Talent, honesty, hard work, and meeting deadlines are also valued traits in glassmakers.

To make glass, materials such as clear granulate or crushed glass are melted down. Clear glass is often imported in granular form from Germany or Scandinavia. If color is desired, glassmakers use ingots or powders from companies in Germany or other sources to add the desired colors to the glass.

Whether the glass is colored with ingots or powder can affect its value or price, but it is not necessarily an indicator of quality. The choice to use colored glass depends on factors like client requests, available stock, and the specific design being created. Colored glass can be more costly and time-consuming to work with compared to clear glass.



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Glassmakers use various tools in production, including pliers, excavators, wooden tools, and shawl (a spoon-shaped tool for shaping glass). Furnaces, cooling ovens, and stoves are essential equipment in a glass workshop. Cooling the glass gradually is important to prevent cracking, and glass is put into a cooling oven to adapt to temperature changes slowly.

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The glass industry in the Czech Republic is connected to various sectors. Apart from art glass and designer glass, the country is a major supplier of laboratory glassware and plate glass. It also excels in the production of optical glass used for scientific and industrial applications, making components for lasers, microscopes, and other devices.



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The current market situation for the glass industry in the Czech Republic can vary depending on the specific segment. Some studios and factories face high demand and overloaded work, while others struggle with fulfilling orders and meeting client expectations. Prices have been increased in some cases without negatively affecting sales. Overall, the industry is experiencing challenges, and there is a need for technological innovation and a focus on artistic artifacts to remain competitive in the global market.

### **Sources:**

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