

A background image of a glassblowing workshop. In the center, a glass vessel is being heated by a large, intense flame from a gas torch. To the left, another glass piece is being worked on. The scene is filled with the glow of the flames and the reflective surfaces of the molten glass.

Stölzle Lausitz

GLASS IS NOT JUST GLASS

Training on the glass series
and their characteristics

GLASS PRODUCTION

Stölzle Lausitz

WHAT TYPES OF GLASS ARE THERE?



COMPONENTS

Quartz sand, Soda, Potash, Limescale, Metal oxides

Quartz sand, Soda, Potash, Limescale, Recycled glass

Quartz sand, Soda, Potash, Limescale, Boron oxide



ADVANTAGES

High transparency, distinctive sound, high brilliance, corrosion-resistant

More affordable glass

Higher temperature delta than standard glass, thin walls



DISADVANTAGES

More fragile and prone to chipping or cracking than soda-lime glass

Depending on composition, high transparency may be possible

Less clarity and less pleasant sound than crystal glass



TYPICAL LOOK & USE

Premium tableware and stemware

Everyday glass, most common in households and restaurants

Technical glassware or double-wall mugs



HOW TO RECOGNIZE

Brilliant, high clarity, distinct "ping" sound

Thicker, less sparkle, dull tone when tapped

Thin walls, light feel, no ringing sound



CRYSTAL GLASS

- Composition: Quartz sand (2/3), soda, lime, and metallic oxides
- Key elements: Barium, Potassium, Zinc → provide higher refractive index, density, and brilliance
- At Stölzle Lausitz, crystal glass is molten for up to two days at around 1500 °C to achieve maximum homogeneity and clarity
- This material ensures exceptional sparkle, sound, and durability, making it ideal for premium glassware production

TYPES OF GLASS PRODUCTION

Machine-Blown Glass

- Molten glass is placed into a mold and blown against the mold walls using compressed air
- Once cooled, the finished glass can be removed from the mold
- The result is a uniform overall shape



Mouth-Blown Glass

- The molten glass is placed into a wooden mold and shaped by mouth-blowing
- Handles or pouring rims are then shaped and attached by hand
- Each glass is unique, which means the glass volumes may vary
 - For this reason, the fill line cannot always be placed in exactly the same position
- Distinctive feature: small air bubbles
 - These occur because less pressure is applied during manual processing than in machine-blown glass



Pressed Glass

- Viscous molten glass is placed into a mold, pressed, cooled, and mechanically removed from the mold
- Very durable, relatively thick glass walls and a visible press seam



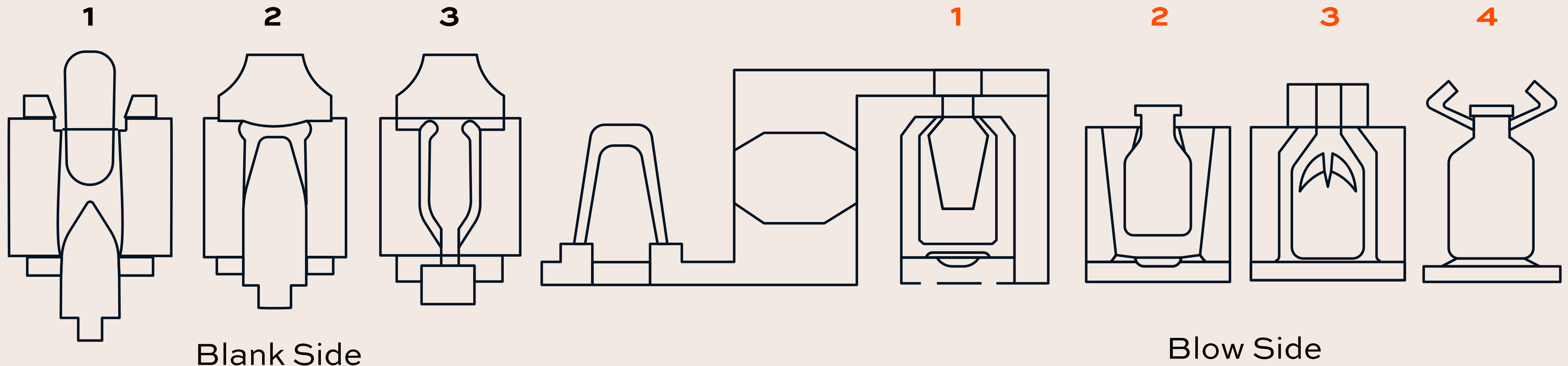
MACHINE-BLOWN GLASS: PRODUCTION METHODS AT STÖLZLE LAUSITZ

Press-Blow Method

1. A precisely measured drop of molten glass is dropped into a blank mold
2. A metal plunger presses the glass into the mold, forming the preliminary shape (parison)
3. Compressed air then expands the parison into the final mold, creating the finished product



1. Very uniform mouth rim thickness for perfect balance and feel
2. Precise weight control ensures consistent pouring volumes
3. Creates a refined, high-end appearance ideal for premium stemware
4. Seamless integration with pulled-stem technology for elegant transitions



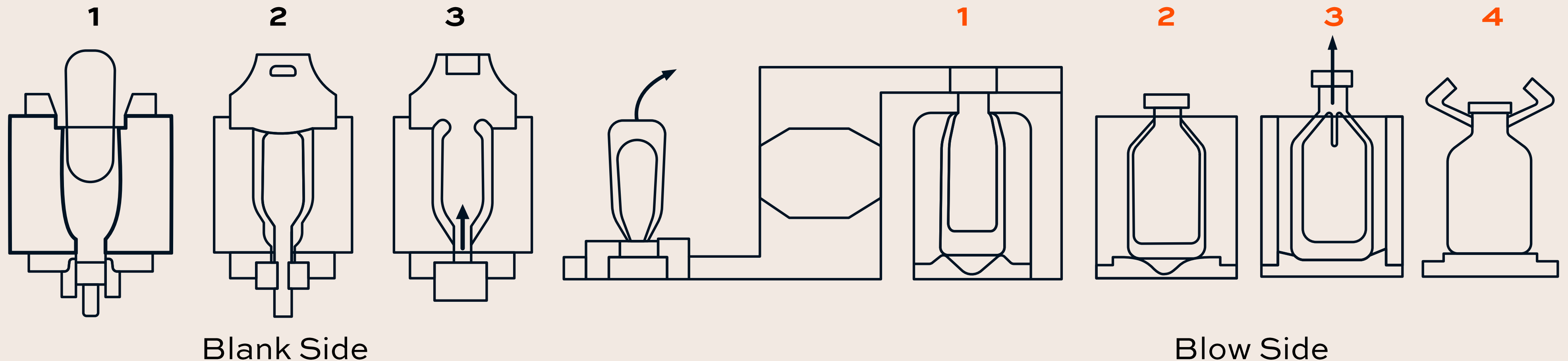
MACHINE-BLOWN GLASS: PRODUCTION METHODS AT STÖLZLE LAUSITZ

Blow-Blow Method

1. A drop of molten glass is dropped into a blank mold
2. Compressed air blows the glass to create the parison without pressing
3. The parison is transferred to the final mold and blown again to achieve the final shape



1. Efficient high-volume production with consistent quality
2. Suitable for a wide range of bowl shapes
3. Allows production of glasses with excellent clarity and durability
4. Maintains the look and feel of handcrafted glassware at scale

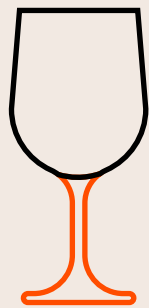


GLASS PRODUCTION



HOW IS THE STEM ATTACHED TO THE GLASS?

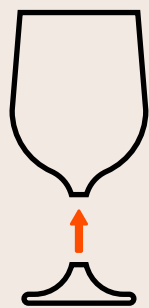
Stem glasses are produced either as a single piece or from two separately formed parts



ONE PIECES

The stem is pulled directly from the molten bowl while the base is shaped from the same gather

- Seamless transition between bowl and stem
- Visually flawless and highly stable



TWO-PIECES

The bowl and stem are fused together at high temperature (around 1,000-1,200 °C)

- A minimal transition between both parts can be felt
- Advantage: One stem design can be used for multiple bowl shapes, ensuring flexibility in production



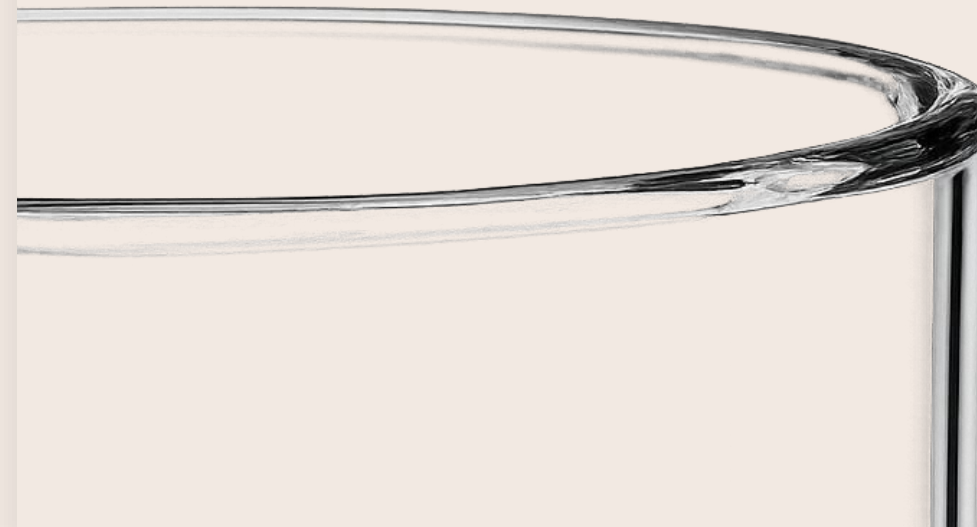
GLASS PRODUCTION

HOW ARE THE RIMS MADE?

Laser-Cut Method:

- The rim of the glass is precisely cut using laser technology
- Creates a finer, more uniform edge
- Smoother drinking experience
- Premium quality feature

STANDARD RIM:
Even edges can have
tiny irregularities



LASER RIM:
Perfectly cut for a finer,
more uniform edge



1,200 °C

The molten glass is gathered at a temperature of approximately 1,200 °C and shaped by press-blow or blow-blow techniques, depending on the glass type

ANNEALING

Every piece passes through a controlled annealing tunnel, allowing gradual cooling to eliminate internal stress

QUALITY CONTROL

Final inspection combines automated quality control with manual visual checks, ensuring optical clarity and perfect balance

OUR GLASS PRODUCTION

PRODUCTION LINES

WEIßWASSER (GERMANY)

- 4 production lines
- Flexible setup changes → suitable for both small batches & premium series
- Capable of producing a wide range: from simple tumblers to high-end stemware

WYMIARKI (POLAND)

- 2 large Blow-Blow lines
- Higher productivity due to larger machines with more stations
- Focus on classic, standard glasses with slightly thicker stems & walls

DIFFERENCES

WEIßWASSER (GERMANY)

- From simple to the most premium glasses
- Advantage: Quick line change → ideal for small & high-quality batches

WYMIARKI (POLAND)

- Mainly classic / standard glasses with slightly thicker walls
- Larger, more productive machines → more glasses per hour

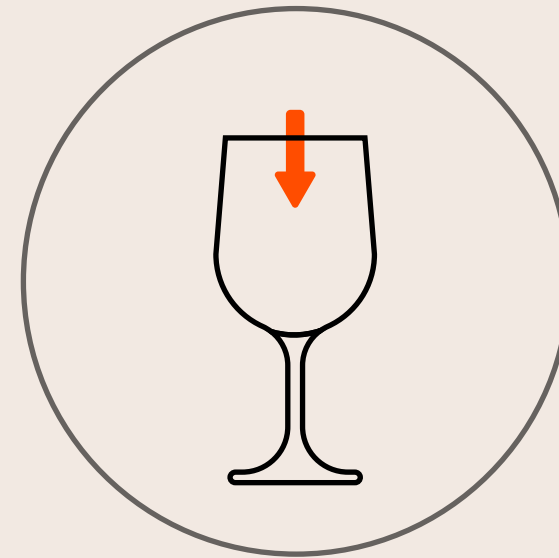
PRODUCTION METHODS (WEIßWASSER)



LINE 1 & 4: PRESS-BLOW
(PRESSED PREFORM →
BLOWN INTO SHAPE)

- Used for high-end glass series
- Main series: Power, Exquisit, Quatrophil, Experience

LINE 1 & 4



LINE 2 & 3: BLOW-BLOW
(MORE HOMOGENEOUS
WALLS)

- Used for tumblers, bar glasses and everyday glassware
- Main series: Fino, Cocoon, L'Amour

LINE 2 & 3



STEM + BASE
CONNECTION METHODS:

- Stem and base pressed together
- Short stem + pressed base → stretched during process
- Base + glass reservoir → stretched into fine, premium stems

OUR GLASS PRODUCTION

PRODUCTION VOLUMES

- Weißwasser: Between 40–50 million glasses per year
- Wymiarki: Up to 30 million glasses per year
- Combined capacity: Up to 70 million glasses annually, depending on market demand and utilization

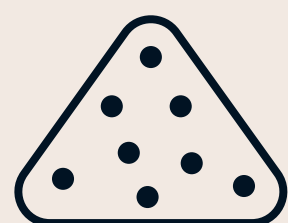
MOUTH-BLOWN GLASS

- Used for exclusive and limited editions
- Our top designs are produced according to our specifications in selected glassmaking manufactories
- Combines artisanal craftsmanship with our design standards
- Enables unique, high-quality pieces with a distinctive character

GENERAL PRODUCTION PROCESS (SIMPLIFIED)

- Raw materials: Quartz sand, soda, lime, and metal oxides
- Melting at approx. 1,500 °C for nearly two days ensures maximum homogeneity
- Forming at approx. 1,200 °C using industrial processes
- Finishing: The rim is cut using laser technology and then polished for a smooth edge
- Quality control: Every glass is visually inspected
- Recycling: All defective items are collected, crushed, and remelted → Closed recycling loop

RAW MATERIALS



Sand, Soda, lime,
barium & zinc oxides



MELTIG



1,500 °C
2 days in furnance



FORMING



Press-Blow
Blow Blowshaping



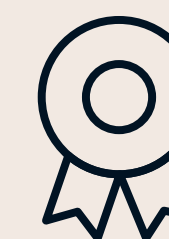
FINISHING



Laser cutting &
fire polishing



QUALITY & RECYCLING



100% hand inspection
& closed recycling loog

SPECIAL FEATURES OF STÖLZLE GLASSES

The trademark of Stölzle Lausitz are stem glasses with a stem pulled to the highest perfection. In this manufacturing process, the stem is pulled out of the goblet and melted together with the bottom plate. This creates glasses that appeal like mouth-blown and have no seam lines or tangible transitions. At the same time, these glasses are particularly shatterproof.

- Highest quality
- Environmentally friendly produced In Germany, in the Lusatian region
- Lead-free crystal glass
- 13% lead substitute in our glass batch as quality commitment. This makes our glasses higher quality, more brilliant, softer, more flexible and more durable – compared to the usual 8-10% in the industry
- High break resistance, especially glasses with pulled or fire-polished stem
- Certified dishwasher-safe

Crystal clear & high brilliance
Kristallklar & hohe Brillanz

Thin-Walled
Dünnwandig

Solid Bottom Plate
Stabine Bodenplatte



Sheer Rim
Feiner Mundrand

Beautiful sound
Schöner Klang

Pulled Stem
Gezogener Stiel

CLASSIFICATION INTO SERIES

At Stölzle Lausitz, the glasses are divided into different series, each containing various subseries. The series differ in their price positioning and in certain characteristics of the glasses.

HANDMADE – MOUTH-BLOWN

- Series: Q1
 - Highest price positioning
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PRESTIGE – MACHINE-MADE

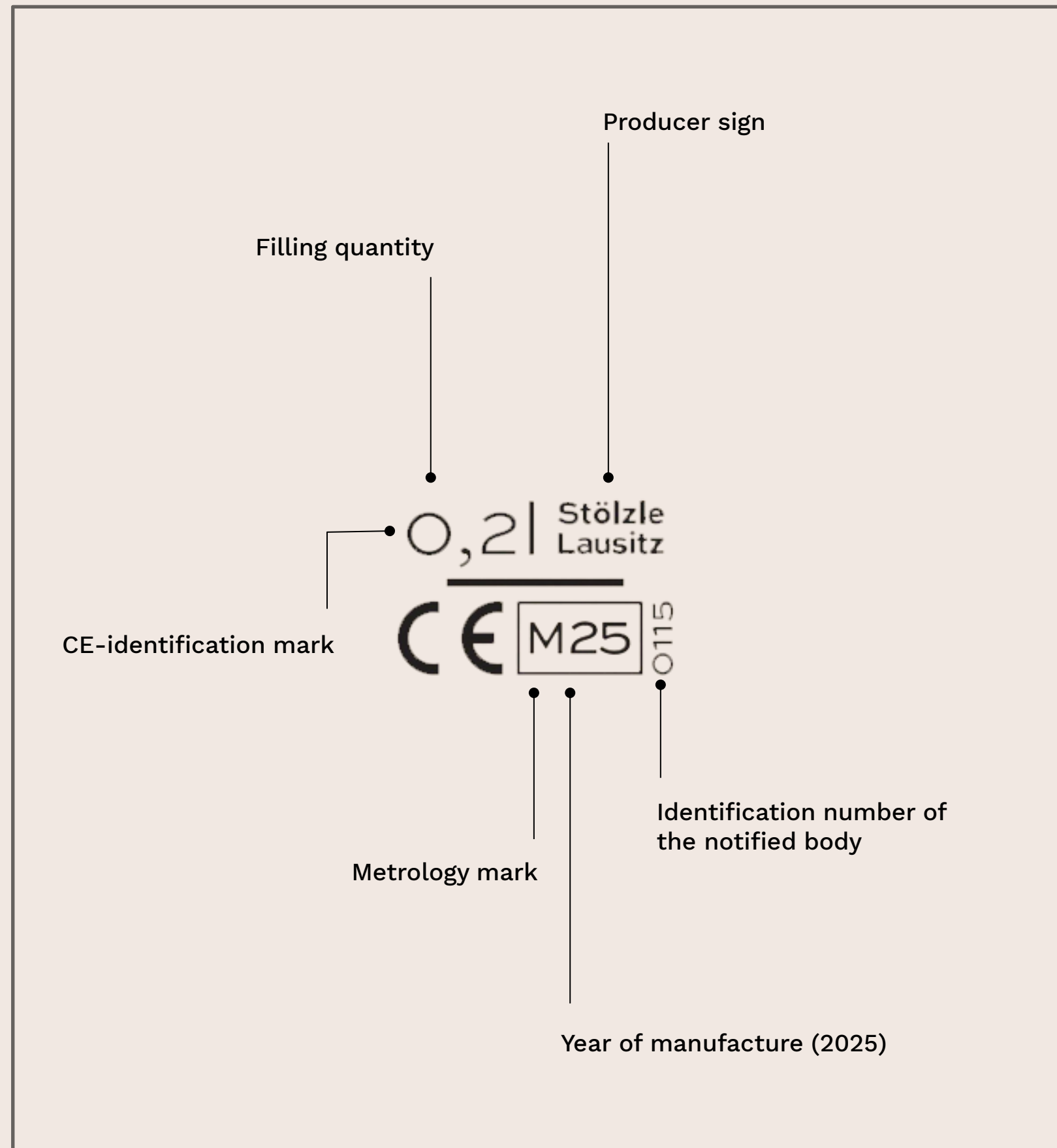
- Series: Cocoon, Fino, Starlight, Symphony, Berlin, Kyoto Bar, Soho
 - Thin and lightweight glasses with special details
 - High price positioning
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PREMIUM – MACHINE-MADE

- Series: Celestia, Quatrophil, Swing & Twist, Power, Experience, Highlight, Exquisit Royal, Manhattan, Club, Elements Metallic, Stones, Mirrors
 - Classic glass shapes with modern details
 - Mid-range price positioning
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CLASSIC – MACHINE-MADE

- Series: Exquisit, Classic, Revolution, Event, Weinland, Ultra, L'Amour, Coffee 'n More, New York Bar, Métrico, Elements, Twister
 - Classic glass shapes
 - Entry-level price range
-



WHAT DOES THE FILL MARK MEAN?

- Mandatory for all EU countries since October 2016
- Marking on serving containers in commercial catering
- Indicates the filling height for a specific volume, the so-called nominal volume
- Marking must be permanently applied to the bowl or glass base
- Guarantees the customer the correct and paid amount of the beverage
- The calibration mark must be applied horizontally and be at least 10 mm long
- Depending on the size of the glass, a certain distance from the upper rim must be maintained
- Up to three filling levels may be marked on one glass, provided the volumes can be clearly distinguished from each other
- Containers for coffee, tea, chocolate drinks, and alcoholic mixed drinks with at least three liquid ingredients are exempt from the fill mark requirement
- Additional information that must be displayed:
 - Nominal volume in numbers
 - Unit of measurement
 - Manufacturer's marking in the form of an identification number
 - CE marking – shows that European standards are being complied with

A close-up, artistic photograph of a glassblowing process. Molten glass is being poured from a vertical rod into a glass mold. A bright, intense flame from a gas torch is directed at the base of the mold, heating the glass. The background is dark and industrial, with other glassblowing equipment visible. The overall atmosphere is one of traditional craftsmanship and intense heat.

Stölzle Lausitz

BORN IN FIRE.

